

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE

MONROE, CT 06468

January 4, 1999

Mr. Jai Mistry
AlliedSignal Friction Materials
900 West Maple Road
Troy, MI 48084

Dear Jai:

Enclosed is a copy of invoice number 8450. Please note that this invoice is six months old. Perhaps it has been overlooked.

Your attention to this invoice is appreciated. Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE

MONROE, CT 06468

September 22, 1998

Mr. Jai Mistry
AlliedSignal Friction Materials
900 West Maple Road
Troy, MI 48084

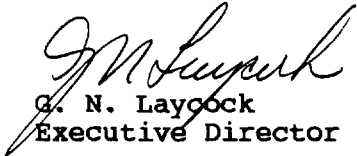
Dear Jai:

Enclosed is a copy of invoice number 8215. Please note that this invoice is one year old and this is a second reminder.

Your attention to this invoice is appreciated. Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FMSI 13661

TELEPHONE (203) 452-1877

FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.
588 MONROE TURNPIKE
MONROE, CT 06468

*** FAX *** FAX *** FAX ***

From: ~~TO:~~

Glaucia Tenay Vieira

COMPANY:

Allied Signal - Brazil

TO: ~~FROM:~~

G. Luyck

DATE:

6/11/97

NUMBER OF PAGES:

3

(Including Cover)

MESSAGE:

Please fax us your mailing address.

Thank you.

OUR ADDRESS:

AV LIBERDADE S/Nº
18001-970 - SOROCABA/SP
BRAZIL

*mailed
6/12/97*

FMSI 13662

MAYOR C.A

Item	Cantidad	FMSI No.	Drum Ø	Width	Thickness	Length
001	1000	2012	10	1 1/2"	7/32	8 7/8
002	1000	2012	10	1 1/2"	7/32	11
003	1000	2221	11 1/32	2 1/2"	15/64	9 3/8
004	1000	2221	11 1/32	2 1/2"	17/64	12 1/8
005	1000	2419	11	2	19/64	8
006	1000	2419	11	2	19/64	11 5/8
007	1000	2389	10	2 1/2"	15/64	8 1/2
008	1000	2389	10	2 1/2"	15/64	11
009	1000	2140	12	3	8/32	11 5/8
010	1000	2140	12	3	9/32	13
011	2000	2117	9 1/2	2	15/64	7 5/8
012	2000	2117	9 1/2	2	15/64	9 5/8
013	500	2165	8.86	1 1/2"	15/64	7 1/2
014	500	2165	8.86	1 1/2"	15/64	9
015	500	8104	7 7/8	1 3/8	3/32	7 9/16
016	500	8104	7 7/8	1 3/8	3/32	9

TO : GIL LAYCOCK - FMSI
FROM: GLAUCIA FERRAZ VIEIRA - ALLIEDSIGNAL BRAZIL

ACCORDING TO OUR TODAY'S PHONE CALL, PLEASE PROVIDE
US THE DRAWINGS LISTED ABOVE.

ANY DOUTBS, PLEASE CALL ME AT 0055 152 252200
FAX NR. 0055 152 251762

WITH KIND REGARDS,

Gláucia
ALLIEDSIGNAL AUTOMOTIVE LTDA
FRICTION MATERIALS - BRAZIL
GLAUCIA FERRAZ VIEIRA

Dear Mr Gil Laycock
Please resend the drawings
FMSI 2012 short and long,
as arrived here completely
unlegible.

With Best Rgds,

Gláucia
06/05/95

FMSI 13663

January 31, 1997

Mr. Gil Laycock
FMSI
588 Monroe Turnpike
Monroe, CT 06468

Dear Gil,

The purpose of this letter is to resign as the delegate for the AlliedSignal Friction Materials organization and from all of the committees on which I serve.

I have recently accepted a transferred to the AlliedSignal Aftermarket Division which already has an appointed Delegate (David Buttery) and Alternate (Arnie Thompson) to FMSI.

In my place, AlliedSignal Friction Materials has appointed the following individuals to represent the business. Michael Torpey (Applications Engineer) should be listed as the Delegate for ASFM and Jai Mistry (Design Engineer) is the Alternate. Both individuals work at the Friction Materials headquarters at 900 West Maple Road, Troy, MI 48084. Mike's phone number is (810) 362-7219 and Jai's is (810) 362-7232.

I have received assurances from the leadership team, in Troy, that ASFM will continue to be represented at the annual business meetings and will actively participate in committee assignments when called upon to serve.

I am enclosing the information that I was preparing to send to you as part of the Annual Meeting Committee site selection report. Three candidate properties have been nominated for the 1998 Annual Meeting by my committee. In the high price category: *The Phoenician*, in Scottsdale, AZ (courtesy of Bill Barton). In the mid-price range: *Kiawah Island Resort*, in Charleston, S.C.. In the economy price range: *LaQuinta Hotel & Resort*, in LaQuinta, CA.

My intention was to send these options to the Board of Directors in early March and ask for them to vote for their top two choices. At the June meeting the Board would have been asked to make a final selection between the two properties.

G. Laycock
January 30, 1997
Page 2

This year's meeting will be the first that I have missed since 1983. Please give my best wishes and fondest farewells to all of those individuals who made my association with FMSI so rewarding these many years.

Please call me if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, reading "Larry Mintman". The signature is written in a cursive, flowing style.

Larry Mintman
National Accounts Manager - Special Markets

cc: J. Mistry
T. Murray
M. Torpey



AlliedSignal Inc.
Automotive Aftermarket
105 Pawtucket Avenue
Rumford, RI 02916-2422

401 434 7000
401 431 3253 Fax

January 31, 1997

Mr. Gil Laycock
FMSI
588 Monroe Turnpike
Monroe, CT 06468

Dear Gil,

The purpose of this letter is to resign as the delegate for the AlliedSignal Friction Materials organization and from all of the committees on which I serve.

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My intention was to send these options to the Board of Directors in early March and ask for them to vote for their top two choices. At the June meeting the Board would have been asked to make a final selection between the two properties.

FMSI 13666

G. Laycock
January 30, 1997
Page 2

This year's meeting will be the first that I have missed since 1983. Please give my best wishes and fondest farewells to all of those individuals who made my association with FMSI so rewarding these many years.

Please call me if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink that reads "Larry Mintman". The signature is fluid and cursive, with the first name "Larry" and last name "Mintman" clearly distinguishable.

Larry Mintman
National Accounts Manager - Special Markets

cc: J. Mistry
T. Murray
M. Torpey

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

January 6, 1995

Mr. Larry Mintman
AlliedSignal Braking Systems
12730A Westport Road
P.O. Box 23089
Louisville, KY 40245

Dear Larry:

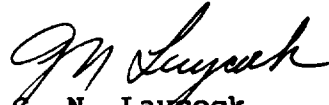
By now you should have received the notice concerning the death of Harriet G. Duschek on December 22, 1994. As a Trustee of the Trust fbo Harriet G. Duschek, this is to advise you how the trust will be terminated.

The trust is in an account with Merrill Lynch separate from the Institute Reserve. A portion of the assets of the trust is in U.S. Treasury Notes with maturity on February 28, 1995. When these Treasury Notes mature the funds go into a money market account with the balance of the funds in the account. After that happens we will transfer the balance of the funds to the Institute Reserve. This is covered in Paragraph 6 of the Trust Agreement with Harriet G. Duschek, copy enclosed.

If you have any questions, please let me know.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

FMSI 13668

*Telecommunication*

AlliedSignal Inc.
Braking Systems-North America
Troy, Michigan

TO: <u>Gil Laycock</u> (Name) <u>FMSI</u> (Firm or Division) <u>Monroe, CT</u> (City and State)	FROM: <u>Larry Mintman</u> (Name) <u>Sales (502) 241-9466</u> (Department/Telephone No.) <u>(502) 241-7132</u> (Fax No.) <u>June 7, 1995</u> (Date)
SEND VIA FACSIMILE NO.: <u>(203) 452-7951</u>	Sent by: _____ Date: _____ Time: _____

MESSAGE: Change of Address

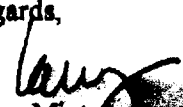
Gil,

For your information, I have moved (again). My office is (again) in my home. Here are the statistics:

Larry Mintman
123 Cherry Hills Lane
Louisville, Kentucky 40245

Business Phone: 502 241-9466
FAX: 502 241-7132
Home Phone: 502 241-1220

Regards,


Larry Mintman

LM:lm

If all pages are not received, please call: (502) 241-9466

PAGE 1 of 1

FMSI 13669

AlliedSignal Automotive, Friction Materials

Allied - Signal Inc.
P.O. Box 23089
Louisville, KY. 40245
Fax #: (502) 423-4013

FACSIMILE TRANSMITTAL COVER SHEET

TO: **GIL LAYCOCK**PAGE: **1** OF: **1** (including cover)DATE: **MARCH 30, 1993**VIA FAX: **(203) 452-7951**FROM: **LARRY MINTMAN**SUBJECT: **NAME CHANGE ... AGAIN!**

MESSAGE:

Dear Gil,**Our name has been changed to:**
capital capital**ALLIED SIGNAL AUTOMOTIVE - FRICTION MATERIALS**
(one word)
CONNECTED**DAVE BUTLER'S COMPANY IS NOW CHANGED**
to**ALLIED SIGNAL AUTOMOTIVE - AFTERMARKET****Done 4/5/93****DELEGATES, ALTERNATES, NAMES, ADDRESSES, ETC.**
remain the same.**Thanks**
Larry

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 12, 1993

AlliedSignal Inc.
Attention: Accounts Payable
Financial Shared Services
P. O. Box 537906
Livonia, MI 48153-7906

Gentlemen:

The Institute's 1993 Automotive Data Book was shipped to you in late May. One July 9, 1993, our printer, Tweddle Litho Company, invoiced you for the shipment.

We have been advised by Tweddle Litho Company that invoice number 2887 for \$684.80 is still open. It has been three months since the invoice was mailed.

In order for the Institute to clear our accounts with the printer your attention to the open invoice is appreciated. Thank you.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

cc: Mr. L. Mintman



Memorandum
Friction Materials
Louisville, Kentucky

ANNOUNCING!!!!

A NEW LOCATION

Effective September 27, 1993, I have relocated my office to my home and can be reached at a new address and phone number:

**LARRY MINTMAN
ALLIEDSIGNAL BRAKING SYSTEMS
1443 ST. ANDREWS DRIVE
SHELBYVILLE, KENTUCKY 40065**

PHONE NO.: (502) 633-4232

FAX NO: (502) 633-9855

Please change your records as soon as possible to reflect this new information.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Mintman", with a horizontal line extending from the end of the signature.

Larry Mintman
Manager - Sales / Marketing
Aftermarket

LM:lm



Memorandum
Friction Materials
Louisville, Kentucky

ANNOUNCING!!!!

A NEW LOCATION

Effective September 27, 1993, I have relocated my office to my home and can be reached at a new address and phone number:

**LARRY MINTMAN
ALLIEDSIGNAL BRAKING SYSTEMS
1443 ST. ANDREWS DRIVE
SHELBYVILLE, KENTUCKY 40065**

PHONE NO.: (502) 633-4232

FAX NO: (502) 633-9855

Please change your records as soon as possible to reflect this new information.

Sincerely,

A handwritten signature in black ink that reads 'Larry Mintman' with a long horizontal flourish extending to the right.

Larry Mintman
Manager - Sales / Marketing
Aftermarket

LM:lm

November 18, 1991

Mr. G. N. Laycock, Secretary
Friction Materials Standards Institute
588 Monroe Turnpike
Monroe, Connecticut 06468

Dear Gil:

As I am sure you have heard by now, Allied-Signal is restructuring many of its companies and divisions. As part of this reorganization, the Bendix Friction Materials Division and the Certified Brakes Division are being combined and will be known as Allied-Signal Friction Materials Group, North America.

For purposes of FMSI membership, I respectfully request that your records be changed to show Lawrence S. Mintman as the delegate and me as the alternate. Larry will be relocating his office in the Louisville area in the near future. As soon as the new address is established, I will ask him to forward this information to you. My address will remain the same. T. L. Lazarcheff has been reassigned to the original equipment area and will no longer be an active representative in our group.

Thanks for your help, and I look forward to seeing you in the near future.

Best regards,



J. W. McCool
Sales Manager-Aftermarket

JWM:em

cc: T. L. Lazarcheff
L. S. Mintman

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

March 27, 1992

Mr. Larry Mintman
Allied Signal
Friction Materials N.A.
P. O. Box 23089
Louisville, KY 40065

Dear Larry:

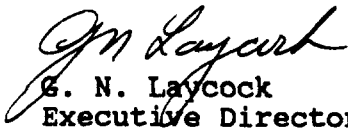
Data Book Bulletin #383 and Shoe Bulletin #165 will be distributed shortly. These are the last Bulletins in which shoe and lining information will be published separately. The future bulletins will be consolidated and will contain both shoe and lining information. The bulletin color will match the current FMSI Catalog color e.g. 1992 Catalog - red, bulletin - pink, 1993 Catalog - green, bulletin - green.

You currently receive extra copies of both Data Book (pink) and Shoe (blue) Bulletins with quantities indicated on the enclosed sheet. We ask that you review the information and indicated the quantity of the consolidated bulletins you wish to receive. Any bulletin quantities of above 25 will be charged at the same rate as the past bulletins.

Please return the enclosed sheet so that our mailing lists for bulletins can be updated. Thank you for your assistance.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

CONSOLIDATED BULLETIN

TO: FMSI
588 Monroe Turnpike
Monroe, CT 06468

SUBJECT: Bulletin Mailing List - Extra Copies

FROM: Allied Signal Friction Materials N.A.
Company Name

We currently have a standing order for:

200 Data Book Bulletins (pink)

200 Shoe Bulletins (blue)

Considering that FMSI will commence publishing consolidated bulletins with the first bulletin after the data cut-off for the 1992 Catalog, we would like to receive:

 Copies of the consolidated bulletins

Company

Signed By _____

Date _____



Allied-Signal Inc.
Friction Materials Group
20650 Civic Center Drive
P.O. Box 5029
Southfield, MI 48066-5029
Telephone (313) 827-5000

December 12, 1991

John A. [Signature]
FVI TO GIL LAYCOCK
FMSI

Dear Valued Customer:

From John Mayes

The Allied-Signal Friction Materials Group would like to announce the formation of a new business unit -- Allied-Signal Friction Materials North America. This new unit has grown out of the integration of our two previous North American divisions -- Certified Brakes, Mississauga, Ontario and Bendix Friction Materials, Troy, New York.

As a result of this integration some changes in the structure of our North American Operations will be made over the next several months. I would like to take this opportunity to share some of them with you:

- Our manufacturing operations will be consolidated into four plant locations which will be focused by product line.

TROY, NEW YORK

- SINTERED MATERIALS
- RESIN

CLEVELAND, TENNESSEE

- DRUM LININGS
- BRAKE BLOCK

LYNN HAVEN, FLORIDA

- ORIGINAL EQUIPMENT DISC

ELBERTON, GEORGIA

- AFTERMARKET DISC

- Our North American Product Engineering functions will be relocated to the Detroit area to provide closer interface with our original equipment customer base. In addition, our North American research activities will be combined with the research activities from both our European research centers and the Automotive Technology Center to form one global friction materials research group. This multinational central research group, also to be located in the Detroit area, will allow us to concentrate heavily on furthering the knowledge base required for the development of advanced friction material products and processes.
- Our sales, marketing and customer service functions will also be realigned. Specific details on changes, in the sales representatives account responsibility, customer service contacts, addresses for mailing orders, inquiries, payments, etc., will be handled via a separate correspondence in the very near future.

FMSI 13677

December 12, 1991

Page 2.

These are very challenging times in the global automotive industry but we believe that the organization we are creating will be leaner, more dynamic, more responsive and well positioned for the future.

Our Number 1 goal is to provide you, our customer with continuous improvement in all of our products and services and thereby achieving continuous improvement in your level of satisfaction with us as a supplier. We look forward to our future together.

Sincerely,

R. John Parry

R. John Parry
Vice President - Sales & Marketing

RJP:MMW

Certified

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

May 10, 1991

Cal. Brake Supply
25350 Cypress Avenue
Hayward, CA 94544

Gentlemen:

This is to advise that Friction Materials Standards Institute, Inc., grants permission to Cal. Brake Supply, for the use of Institute copyrighted materials and the Institute registered trademarks FMS® and FMSI® in your printed materials, including packages, catalogs, price lists and similar work. The Friction Materials Standards Institute, Inc., catalogs are copyrighted in the United States and Canada.

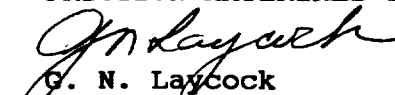
The Institute grants the permission to Cal. Brake Supply, conditioned on continued purchase of your friction materials from Certified Brakes, member of the Institute. This permission is granted during your relationship with Certified Brakes, as your supplier. This permission includes the use of the Institute's copyrighted materials including numbering system, FMSI numbers, illustrations and the listings from the Institute's catalogs and bulletins.

There should be included in all printed matter using FMSI information a copyright notation. The copyright line should read as follows:

All FMS number set forth herein are the property of and are copyrighted by the Friction Materials Standards Institute, Inc., Monroe, Connecticut 06468.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

cc: Mr. R. Lutz - Certified Brakes
Mr. L. Mintman - Certified Brakes

FMSI 13680

CERTIFIED BRAKES

Allied-Signal, Inc.
Certified Brakes Division
12730 Westport Road
P.O. Box 23089
Louisville, KY 40243
Telephone (502) 423-4000
Fax: (502) 423-4013

Facsimile: (502) 423-4013



Transmittal Cover Sheet

To: Gil Laycock

Date: 4/12/91

From: D. Lutz

Via Fax No: 203-452-7951

Sent By: D. Lutz

Page: 1 of 1 (including cover)

Subject: Cal Brake Supply

Message:

Dear Mr. Laycock you per Larry Mintman we have given Cal. Brake Supply, one of our customers, permission to use FMSI #2 in their publications

Cal. Brake Supply
25350 Cypress Ave
Hayward, Cal. 94544
415-293-9100



October 12, 1990

To: Friction Materials Group Organization

You will be pleased to learn that we have successfully negotiated the addition of a powerful new member to our global Friction Materials team. We have signed an agreement to purchase the brake friction materials business of Valeo, Europe's second ranking automotive components and systems manufacturer, for 385 million FF (about \$74 million). The transaction, which is subject to various formal approvals within Valeo and the French government, is scheduled for closing December 1.

This new addition to the Group, which consists of a French subsidiary and a Spanish operation of Valeo, will be called Bendix Friction Materials - Europe. It will be a full operating unit of FMG, joining Bendix Friction Materials Division in the United States, Certified Brake Division in Canada, Jurid Europe in Germany and Spain, Bendix Mintex in Australia, and Jurid do Brazil.

Strategically, this acquisition reinforces our ability to service our customers worldwide as the leading global producer of brake friction materials, and strengthens our position in the compact and mid-size vehicle markets of Europe. Through Jurid, we already are a leader in the full-size and luxury car segment, and in the commercial vehicle market. This acquisition also will enhance our ability to supply the European independent aftermarket and positions us to serve the developing markets of Eastern Europe.

The marketing for Bendix Friction Materials - Europe will be through its existing channels, including supplying Valeo's independent aftermarket distribution business, plus BFME will now have access to the Bendix Europe distribution channels as well, further enhancing their ability to service the European market. Their customers currently include all of the major French manufacturers plus Ford, Seat and Nissan. Our intention is to grow our relationship with all of these manufacturers, and to expand BFME's markets to include additional customers.

The businesses being acquired employ over 1,200 people, including about 100 engineers and technicians in research and development. The facilities consist of a 400,000 square foot factory in Condé-sur-Noireau, France, employing over 900 people; leased offices and technical center in St. Ouen, France, and a leased 40,000 square foot production facility in Alcala de Henares, Spain. The agreement also includes continued use of a proving grounds and other testing facilities at Mortefontaine, France.

Please join me in welcoming this new member of our global team.

Mark W. Simeyn
Vice President & Group Executive
Friction Materials Group

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

May 9, 1991

Mr. Larry Mintman
Certified Brakes
Allied-Signal
12730A Westport Road
P. O. Box 23089
Louisville, KY 40223

Dear Larry:

Enclosed are copies of:

Treasurer's Report
Investment Advisory Report
Budget Committee Report
Fee Formula Committee Report

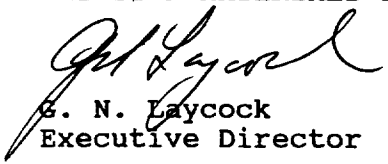
You can look them over and extract whatever you wish to include in your report. As noted in our conversation, excess of income over expenses is projected to be \$4,294.

There is a potential loss of Membership for next year. Distex Industries has advised that they intend to drop their Membership as of June 30th. They are a division of Brake Parts Inc. and will get their information through them. Bob Nelson has mentioned that Abex is considering consolidating Canparts Membership under Winchester. Heavy Duty Friction Group (FMI - Lawrence, MA) has announced their closing by October, but may carry Membership under Midland Brake.

If you need any more information, let me know.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

September 7, 1990

Certified Brakes
12730A Westport Distribution Center
P. O. Box 23089
Louisville, KY 40245
Attention : Accounts Payable

Gentlemen:

In order for the Friction Materials Standards Institute to finalize our account with Tweddle Litho Company, printers of our 1990 Automotive Data Book, all invoices must be paid. We are advised by Tweddle Litho Company that your invoice number C-3668-8 date June 29, 1990 is still open, copy enclosed.

This invoice is now over two months old. We would appreciate your giving it your prompt attention.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld
Enclosure

cc: Mr. J. Curran - Tweddle Litho Co.

FMSI 13684

SEP 07 '90 11:03

INVOICE

286 P05

JO BOJ
Curran

TWEDDLE LITHO COMPANY

24000 HARPER AVENUE • ST. CLAIR SHORES, MICHIGAN 48080 • (313) 371-3300
FAX (313) 771-0311

SOLD TO Certified Brakes
12730A Westport Dist. Center
P.O. Box 23089
Louisville, KY 40245
Attn: Accounts Payable

INVOICE NO. C-3668-8
DATE June 29, 1990

CUSTOMER'S ORDER NO.
P.O.# PDC0285
TERMS — 30 DAYS NET

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT	
1,500	1990 AUTOMOTIVE DATA BOOK			
	Freight	1.20/ea.	\$1,800	00
			221	39
		TOTAL	\$2,021	39

FMSI 13685

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

July 19, 1990

Mr. Larry Mintman
Certified Brakes
Allied Signal Inc.
12730A Westport Road
P.O. Box 23089
Louisville, KY 40223

Dear Mr. Mintman:

Our records show that we are sending you 200 copies of Data Book Bulletins and 200 copies of Shoe Bulletins. The first 25 copies are "No Charge". We have been charging \$.05 per page for quantities beyond the initial 25.

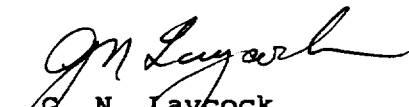
Due to the cost of "outside" printing, collating and stapling it is necessary to raise the per page cost to \$.10 effective for Bulletins after July 1, 1990. Since you may wish to change the number of copies which you receive, would you please complete the enclosed form and return it to the Institute office.

As another option, the Institute can send you single sided master copies on white paper of Bulletins if you wish to run your own copies for distribution. You may wish to consider this option.

We apologize for having to raise the prices for the Bulletins, however, we have been selling these at a loss for almost a year.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

June 19, 1990

Mr. Larry Mintman
Certified Brakes Division
Allied-Signal, Inc.
12730A Westport Road
P.O. Box 23089
Louisville, KY 40223

Dear Larry:

As newly elected President of FMSI you can (if you wish) select new Chairpersons for the various Institute Committees. As you "shanghaied" Andy Gagnon for the Golf Committee the only open chairperson spot is the Investment Advisory Committee due to Art Moore's resignation. Ron Randall is the remaining member of that Committee.

Once you have reviewed the attached list and made your changes and additions, we will poll the Chairpersons to see who they want to enlist and subsequently ask those members if they wish to serve. From their replies we will publish the Committee listing with the roster when it's done.

If you have any questions, let me know.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

COMMITTEE CHAIRPERSONS

Brake Performance Study Committee
Bill Wood

Data Book & Technical Committee
Doug Willsie

Health & Environmental Affairs Committee
Rita Grisham

Membership Committee
Rita Grisham

* As Treasurer, Rita Grisham will also read the Treasurer's Report at the Meeting.

Budget Committee
Larry Belans

Fee Formula Committee
R. E. Nelson

Nomination Committee
R. E. Nelson

Investment Advisory Committee
(Open) (A. V. Moore - resignation)
Ron Randall is the remaining member

Golf Tournament Committee
Andy Gagnon

Annual Meeting Committee
Stan Stokes

CERTIFIED BRAKES



Allied-Signal Inc.
Certified Brakes Division
12730 Westport Road
P.O. Box 23089
Louisville, Kentucky 40245
Telephone: (502) 423-4000
Telex: 213466, Fax: (502) 423-4013

January 2, 1989

Mr. Gil Laycock
Friction Materials Standards Institute
588 Monroe Turnpike
Monroe, CT 06468

Subject: Alternate Delegate

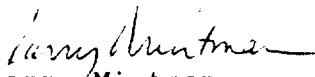
Dear Gil:

Please revise your records to show Norm Abbott as the alternate for Certified Brakes. Norm's address in Canada is as follows:

7311 Kimbel Street
Mississauga, Ontario Canada L4T 3M6
Telephone (416) 671-3700

Thank you for your cooperation.

Sincerely,


Larry Mintman
Vice-President Sales & Marketing

cc: N. Abbott

CERTIFIED BRAKES

File

Allied-Signal Inc.
Certified Brakes Division
12730 Westport Road
P.O. Box 23089
Louisville, Kentucky 40245
Telephone: (502) 423-4000
Telex: 213466, Fax: (502) 423-4013



November 2, 1989

Mr. Gil Laycock
Friction Materials Standard Institute
E 210 Route 4
Paramus NJ 07652

Dear Mr. Laycock:

Re: CANTIRE INVOICES

In reference to your letter of October 29, 1989, Certified Brakes in March of 1989 purchased selected assets only of the Cantire business segment and all liabilities remain the responsibility of the Canadian Tire Corporation of Canada.

Requests for payment and satisfaction of such liabilities should be sent to Jim Fox, the Canadian Tire Controller.

Sincerely,


Larry Mintman
Vice-President Sales & Marketing

LM/bf

OCT 23 1989

TELEPHONE (201) 845-0440

FRICION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

October 19, 1989

Certified Brakes Division
Attn: Accounts Payable
Allied-Signal Canada, Inc.
7311 Kimbel Street
Mississauga, Ontario L4T 3M6
CANADA

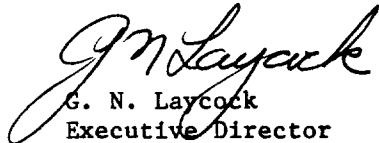
Gentlemen:

We have learned from the trade magazines that Certified Brakes Division has acquired the assets of Cantire Products Division. Did you also acquire their liabilities?

The articles we have seen did not give the date of the acquisition. We have open invoices (copies attached) from April 1, 1989, and July 1, 1989. Would you please advise if Certified Brakes Division intends to honor invoices to Cantire Products Division which pre-date the acquisition.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL/dr
Enc.

23.0.1
1.2.2.0

FMSI 13691

INVOICE

FRICTION MATERIALS STANDARDS INSTITUTE

E-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 845-0440

SOLD TO

SHIPPED TO

Mr. Roy Crichton
 Cantire Products Ltd.
 6655 Northwest Drive
 Mississauga, Ontario L4U 1L1
 CANADA

DATE	DATE SHIPPED	SHIPPED VIA	YOUR ORDER NO.	F.O.B.	TERMS	INVOICE NO.	
04-01-89					Net	005647	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
	Annual Membership Fee for the 1988-89 Fiscal Year:						
	Full Year US\$1,850.00						
	4th Quarter (April 1 - June 30, 1989) billed at this time						US\$462.50
	Payable in US Dollars						

Item # NV-R75 ©Wheeler Group Inc.

THANK YOU

INVOICE

FRICITION MATERIALS STANDARDS INSTITUTE

E-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 845-0440

SOLD TO

SHIPPED TO

Mr. Roy Crichton
Cantire Products Ltd.
6655 Northwest Drive
Mississauga, Ontario L4U 1L1
CANADA

DATE	DATE SHIPPED	SHIPPED VIA	YOUR ORDER NO.	F.O.B.	TERMS	INVOICE NO.	
07-01-89					Net	005771	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
	Annual Membership Fee for the 1989-90 Fiscal Year						
	Full Year US\$1,850.00						
	1st Quarter (July 1 - September 30) billed at this time						US\$462.50
	Payable in U. S. Dollars						

Item # NV-R75 ©Wheeler Group Inc.

FMSI 13693

↓
Certified Brakes

Allied-Signal Inc.
Certified Brakes
12730 Westport Road
Louisville, Kentucky 40223
502-423-4000



June 13, 1988

Cue

Mr. Edward W. Drislane
Friction Material Standards Institute, Inc.
E-210 Route 4
Paramus, NJ 07652

Re: Vera Imported Parts Corporation

Dear Ed,

I am writing to request permission for Vera Imported Parts Corporation to be able to cross reference FMSI numbers to their own unique part numbers in a new catalog they are preparing.

Vera has been a long time major customer of Certified's.

We feel it would be beneficial to both Certified and Vera as a method of increasing product sales.

Would you kindly send the authorization to:

Mr. Albert Cohen
Vice President
Vera Imported Parts Corporation
100 Springfield Avenue
Piscataway, NJ 08855-0218

Please send me a copy as well.

Thank you.

Very truly yours,

R. T. Lutz

R. T. Lutz
Manager, Aftermarket Sales

RTL/rmm

cc: A. Cohen
J. Holland

Sent 6/24

FMSI 13694

Certified

TELEPHONE (201) 845-0440

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

May 5, 1988

Mr. Larry Mintman
Certified Brakes
12730A Westport Road
P.O. Box 23089
Louisville, KY 40223

Dear Larry:

This relates to your question on the Ford F450, and a Dayton-Walther disc set used thereon.

I have no Ford F450 in any listing. It is not shown on the Ford spec sheet enclosed. There are Dayton Walther discs used on certain Ford F250 and F350 models, and these I understand are the FMSI 7154-D120.

You will note some Kelsey Hayes F-Super Duty brakes. These are 1988-1/2 models. Some call them F350 Super Duty, and I have heard them called F450. They are Kelsey Hayes, and as soon as I have word that the model is on the road, I will make a release. (I do not like to be trapped by "last minute" changes).

Also, there is no Ford F450 listed in the Truck Index.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

FMSI 13695

1988 LIGHT TRUCK FRONT DISC BRAKES

Ford Single Piston Pin Rail Caliper				Dayton-Walther H.D. Two Piston Pin Rail Caliper		Kelsey-Hayes H.D. Two Piston Pin Rail Caliper	
Truck Series		Aerostar, Bronco II 4x2 Ranger 4x2	Bronco II 4x4 Ranger 4x4	Bronco F-150 4x2, 4x4 E-150 Van	E-250/350 All F-250/350 4x2 All F-250 4x4 All F-350 4x4	F-Super Duty	
Maximum Axle	Front	A = 2540 BII = 2200 R = 2400	2730	F/E-4x2's — 3400 4x4's — 3550/3800	E = 4200 F = 3900/4000	250 = 3850/4600 350 = 5000	5000
Capacity Usage	Rear	A = 2790 BII = 2640 R = 2700	BII = 2640 R = 2700	3800	E/F-250 = 5300 E-350 = 6340/7400/7800 F350 = 6250/8250	250 = 5300 350 = 6250	11000
Caliper	R.H.	E47A-2B120-EA 1/	E4TA-2B120-EA	E7TA-2B120-BA	E6TA-2B120-BA	E6TA-2B120-BA	E8TA-2B120-AB 2/
Part Number	L.H.	E47A-2B121-EA 1/	E4TA-2B121-EA	E7TA-2B121-BA	E6TA-2B121-BA	E6TA-2B121-BA	E8TA-2B121-AB 2/
Outer Dia. of Rotor Braking Surface		261.2mm(10.28 in.)	276.0mm(10.86 in.)	297.7mm(11.72 in.)	319.1mm(12.56 in.)	319.1mm(12.56 in.)	326mm(12.83 in.)
Inner Dia. of Rotor Braking Surface		165.7mm(6.52 in.)	168.0mm(6.61 in.)	197.7mm(7.78 in.)	218.94mm(8.62 in.)	218.94mm(8.62 in.)	205mm(8.07 in.) Outer Srf. 202mm(7.95 in.) Inner Srf.
Swept Area Per Front Brake		56192mm ² (87.09 in. ²)	60721mm ² (94.11 in. ²)	71212mm ² (110.38 in. ²)	78129mm ² (121.1 in. ²)	78129mm ² (121.1 in. ²)	96156mm ² (149.50 in. ²)
Lining Width							
• Inboard		41.5mm(1.63 in.)	41.5mm(1.63 in.)	45.7mm(1.80 in.)	46.22mm(1.82 in.)	46.22mm(1.82 in.)	58.0mm(2.28 in.)
• Outboard		41.5mm(1.63 in.)	42.1mm(1.66 in.)	45.7mm(1.80 in.)	46.22mm(1.82 in.)	46.22mm(1.82 in.)	58.0mm(2.28 in.)
Lining Area Per Brake							
• Inboard		4432mm ² (6.87 in. ²)	5388mm ² (8.35 in. ²)	4510mm ² (6.99 in. ²)	8161mm ² (12.65 in. ²)	8161mm ² (12.65 in. ²)	10580mm ² (16.4 in. ²)
• Outboard		5258mm ² (8.15 in. ²)	5887mm ² (9.12 in. ²)	6161mm ² (9.55 in. ²)	8161mm ² (12.65 in. ²)	8161mm ² (12.65 in. ²)	10580mm ² (16.4 in. ²)
Lining Thickness							
• Inboard		9.84mm(.387 in.)	9.84mm(.387 in.)	0.342" to Rivet Head	0.405" to Discard T.	0.405" to Discard T.	.541" to Discard T.
• Outboard		9.0mm(.354 in.)	9.00mm(.354 in.)	0.246" to Rivet Head	0.405" to Discard T.	0.405" to Discard T.	.541" to Discard T.
Rotor Width		22.1mm(.87 in.)	22.1mm(.87 in.)	30.1mm(1.18 in.)	31.75mm(1.25 in.)	31.5mm(1.24 in.)	38.05mm(1.50 in.)
Rotor Type		Vented	Vented	Vented	Vented	Vented	Vented
Caliper Type		Pin-Rail	Pin-Rail	Pin Rail	Pin Rail	Pin Rail	Pin Rail
No. of Piston(s) Per Brake		One	One	One	Two	Two	Two
Caliper Piston Diameter		65.95mm(2.59 in.)	65.95mm(2.59 in.)	73.02mm(2.875 in.)	55.37mm(2.18 in.)	55.37mm(2.18 in.)	60.00mm(2.36 in.)
Effective Radius		107.14mm(4.22 in.)	115.14mm(4.53 in.)	124.96mm(4.92 in.)	136.90mm(5.39 in.)	136.90mm(5.39 in.)	134.29mm(5.29 in.)

1/ — Aerostar Caliper Part No. RH = E69A-2B120-EA; L.H. = E69A-2B121-EA.

2/ — F-Super Duty Caliper Used for Front and Rear Disc Brake.

712SA-D387

788-D360,
7264-D315

7054-D120

Now k/d

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

September 16, 1986

Mr. R. J. Bracali
Tweddle Litho Company
24000 Harper Avenue
St. Clair Shores, MI 48080

Dear Ron:

Would you please make two shipments from our stock of 1986 Automotive Data Books. They are as follows:

✓ CERTIFIED BRAKES, LOUISVILLE, KY

Please ship 972 copies (18 cartons, each with 54 copies) to:

Certified Brakes
Lear-Siegler Company
12730A Westport Road
Louisville, KY 40223

Mark: P.O. P-211604

Please ship prepaid by ABF Freight.

NUTURN CORPORATION, SMITHVILLE, TN

Please ship the exact same number of 972 copies (18 cartons, each with 54 copies) to:

Nuturn Corporation
725 Allens Chapel Road
Smithville, TN 37166

Mark: P.O. 25745

Please ship prepaid by Truck.

* * * * *

When these shipments are made, please advise freight charges, carrier and date shipped. Then bill us for the charges.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

(B)

FMSI 13697



CERTIFIED BRAKES™
A LEAR SIEGLER COMPANY

ORIGINAL

PURCHASE ORDER

PURCHASE ORDER NO. PAGE

P211604

1

ORDER DATE

BUYER NUMBER AND NAME

9-16-86

Larry Mintman

ORIG. ORD.

CONF.

DO NOT INSURE

ACCOUNT NO.

SHIP VIA

F.O.B.

SHOW PURCHASE ORDER OR RELEASE NUMBER ON ALL
PACKAGES, INVOICES AND BILLS OF LADING

VENDOR NUMBER

TERMS

YES

SALES TAX

NO

REQUIRED DELIVERY DATE

ASAP

ITEM	QUANTITY	PART NO.	DESCRIPTION	UNIT PRICE	PRICE EXT.
	972	FMSI Books	Per Thou TAX	958.00	933.12 46.66 979.78

SELLER WILL COMPLY WITH SECTION 202 OF EXECUTIVE ORDER 11246 DATED SEPTEMBER 24, 1965 AND/OR TEXT OF TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 AND THE
IMPLEMENTING RULES & REGULATIONS ISSUED BY THE SECRETARY OF LABOR AND/OR THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION CREATED BY TITLE VII.

SHIPMENT OF ALL OR ANY PART THEREOF OF THIS ORDER WITHOUT PRIOR WRITTEN NOTICE TO THE CONTRARY CONSTITUTES ACCEPTANCE OF ALL TERMS & CONDITIONS
HEREIN WITHOUT RESERVATION.

PACKING LIST WITH P.O. NUMBER MUST ACCOMPANY ALL SHIPMENTS

☐

CONFIRMING

☐

NON-CONFIRMING

SHIP TO:

☐

STEWARTS LANE, DANVILLE, KENTUCKY 40422
PHONE 606/236-8224

☐

12730 WESTPORT ROAD
LOUISVILLE, KY 40223
PH. 502-423-4000 TELEX 213466

REQUISITIONED
BY _____

APPROVED
BY _____

FMSI 13698

INVOICE

FRICITION MATERIALS STANDARDS INSTITUTE

6-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 248-0440

SOLD TO

Certified Brakes
Lear-Singler Co.
12730A Westport Road
P.O. Box 23089
Louisville, KY 40223
Attn.: Larry Mintman

SHIPPED TO

Certified Brakes
Lear-Singler Co.
12730A Westport Road
Louisville, KY 40223
Attn.: Larry Mintman

DATE	DATE ORDERED	SHIPPED VIA	YOUR ORDER NO.	F.O.B.	TERMS	INVOICE NO.	
10-06-86	09-25-86	AMF Freight	P.O. P-211604	St. Clair, MI	Net	005056	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
972 copies	1986 Automotive Data Book					.96 ea.	\$933.12
	AMF Freight Charges						142.30
	Total						\$1,075.42
	Shipment of 1 skid with 18 cartons, 54 copies each carton, made from St. Clair Shores, MI on 9-25-86. Order placed in by Mr. Larry Mintman.						

Item # NV-R75 ©Wheeler Group Inc.

THANK YOU



ALLIED Automotive

News Release

Allied Corporation
Automotive Sector
World Headquarters
P. O. Box 5029
Southfield, MI 48086

February 19, 1987

Dear Customer:

This is to advise that Certified Brakes has now become a division of Allied-Signal, Inc.

We wish to assure you that our existing sales relationship and product line will remain in effect with Louisville continuing to serve the U.S. in the areas of sales, marketing, and distribution. We apologize if you have experienced recent service disruptions during the transfer of ownership. We want to stress that Allied management's top priority, as well as those of us here at Certified, is to quickly improve our "customer service" in terms of order fill and order turnaround.

Thank you for your past business and understanding. We look forward to demonstrating our commitment to you for a stronger, future relationship.

Sincerely,

Larry Mintman
Manager, National Account/Rebuilder Sales

LM/ta

World Headquarters
20650 Civic Center Drive
P.O. Box 5029
Southfield, MI 48086

FMSI 13700

MAILING LIST CHANGE

Certified Brakes
Member Lear Siegler Co.

Date 12-4-86

This change affects the following lists:

Board of Directors	☐	Historical Sales	☐
Delegates and Alternates	☒	Brake Performance SC	☐
Regional - US Dues	☐	Data Book Committee	☐
Regional - Regular	☐	HEA Committee	☐
Licensees	☐	Data Book Bulletin	☐
List A (Regulations)	☐	Shoe Bulletin	☐
List B (Factory)	☐	Ledger Card	☐
List C (Catalogs)	☐	Other _____	☐
List D (Cross Reference)	☐	(Describe)	

Change List as Follows:

Change Delegate and Alternate as follows:

Larry Mintman - Delegate

James R. Schmelzer - Alternate

(Both at same Larry Mintman address in Louisville)

Source of Change: Larry Mintman, phone 12-4-86

Requested By:

Change Made By:

Name	Date
<u>LM</u>	<u>12/4/86</u>
<u>JS</u>	<u>12/4/86</u>

Continued

MAY 08 1986

CERTIFIED BRAKES - LEAR SIEGLER

Mr. Larry Mintman advised on 5/8/86 on some changes (losses) up
at Martin Grove Road.

Tony Vacca is gone
~~Bob Glaysher is gone~~ (Bob Glaysher still there 5/21 - per G. Jelen)
Mike Teng is gone

Marvin Spingel formerly at Danville is gone (now with Nuturn)

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

June 26, 1984

Mr. Larry Mintman
Certified Brakes
Stewarts Lane
Danville, KY 40422

Dear Larry:

I have a note to send you copies of the historical sales results.
Enclosed are copies of the last two reports:

3 months ending March 31, 1984

Full Year (12 months) ending December 31, 1983

The reports are sent by the Accountants directly to Bob Mighton in
Toronto.

It was nice seeing you again at LaCosta, and I will shortly add your
name to our Board of Directors mailing list.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e

FMSI 13704

TO

FMSI

ATTN: ED DRISLANE



CERTIFIED BRAKE PRODUCTS DIVISION
LEAR SIEGLER, INC.
STEWARTS LANE, DANVILLE, KENTUCKY 40422
800-238-8224

SUBJECT:

DRUM BRAKE LINING PRINTS

DATE:

7-2-85

FOLD

PLEASE SEND PRINTS FOR THE FOLLOWING:

2044A - LONG (SECONDARY) & SHORT (PRIMARY)

2080AT

"

"

"

"

2081AT

"

"

"

"

2129TT

"

"

2137

"

"

"

"

PLEASE REPLY TO ►

SIGNED:

Jack Brindley

Sent 7/9

DATE:

SIGNED:

GEN-105 2M-3-29-84

FMSI 13705

TO FMSI
ED DRISLANE



CERTIFIED BRAKE PRODUCTS DIVISION
LEAR SIEGLER, INC.
STEWARTS LANE, DANVILLE, KENTUCKY 40422
606-236-8224

SUBJECT: SHOE ASSEMBLY PRINTS

DATE: 6-12-84

FOLD WHEREVER AVAILABLE, PLEASE SEND A PRINT
SHOWING THE LOCATION OF THE LINING ON THE SHOE,
FOR THE FOLLOWING NUMBERS: 356, 359, 360, 373,
407, 411, 441, 444, 447, 467, 480 & 508. I UNDER-
STAND THAT SUCH A PRINT IS NOT ALWAYS AVAILABLE.

THANK.

PLEASE REPLY TO ►

SIGNED:

Jack Brundage

Sent 6/26/84

DATE:

SIGNED:

GEN-105 2M-3-29-84

FMSI 13706

FRICION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

April 13, 1984

Mr. Jack Grunden
Certified Brakes
Stewarts Lane
Danville, KY 40422

Dear Jack:

This is in response to your letter of April 10, 1984 asking for FMSI Shoe Numbers on certain linings and crossover to certain EPE Numbers.

First, the Institute during the 50's and early 60's did not assign shoe numbers to most foreign cars (except Volkswagen). So there may have been many FMSI Numbers for linings in those days where Shoe Numbers were not assigned.

In reviewing your list, I do not believe that those 800 and 8000 numbers are valid FMSI Numbers. For example, we have no 834A or 834F (only 834). 882B is not valid (highest suffix was 882A). We had no 801A (only 801). The highest we went on the 8000 Series was 8132 (you show 8138, 8157, 8154, 8143 and 8149). I am able to cross to certain EPE Numbers and that crossover follows:

<u>EPE Number</u>	<u>FMSI Shoe No.</u>
10046	218
10077	166
10172	478
10216	440
10219	412
10283	498
10286	505
10287	494
10298	535
10306	532
10307	517
10308	527
10166	342

That is the best I can do, and I'm not 100% sure on these.

Sincerely,

E. W. Drislane
Executive Director

EWD/e

FMSI 13707



CERTIFIED BRAKES
LEAR SIEGLER, INC.

APRIL 10, 1984

FRICTION MATERIALS STANDARDS INSTITUTE
PARAMUS, NJ 07652

ATTN: ED DRISLANE

DEAR ED:

I NEED SOME DATA THAT I HOPE WILL BE IN YOUR FILES. I NEED FMSI SHOE NUMBERS FOR SEVERAL ITEMS FOR WHICH I HAVE WHAT APPEARS TO BE THE LINING NUMBER. I ALSO HAVE THE EPE NUMBER WHICH I UNDERSTAND IS WIDELY USED IN THE INDUSTRY;

LINING (?) No.	EPE No.	FMSI SHOE No.
834F	10044	?
834A	10046	
882B	10077	
8001	10160	
8002	10161	
8089	10172	
8042	10174	
801A	10216	
818	10219	
8129	10283	
8138	10286	
8130	10287	
8157	10298	
8154	10306	
8143	10307	
8149	10308	

THERE ARE ALSO THREE ITEMS FOR WHICH I HAVE THE VEHICLE APPLICATION AND EPE No.:

TOYOTA COROLLA 1965-68
MERCEDES BENZ 18D 1953-59
JENSEN-HEALY (AUS.) 1973-75

EPE No. 10166
10179
10251

ANY HELP YOU CAN GIVE ME IN TYING AN FMSI SHOE
NUMBER TO THESE ITEMS WILL BE GREATLY APPRECI-
ATED.

YOURS TRULY,
Jack Brunden

Lear Siegler

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

May 5, 1983

Mr. Larry Mintman
Certified Brakes
Lear-Siegler Company
Stewarts Lane
Danville, KY 40422

Dear Larry:

Mr. Bob Mighton, who is the Delegate from Certified Brakes, called this morning to advise that he would not be able to attend our June Meeting because of a conflict with an APRA Board Meeting. He indicated that you would attend in his place.

So that you could also vote in his place, you were named the Alternate from Certified Brakes. I've enclosed a notice of the Annual Meeting. Could you please review this, fill in the Reservation Blank and send it along with your check for \$10 per person planning to attend the Institute's reception for Members on Tuesday June 14. Details are in the notice.

I'd appreciate it if you could get this back to me no later than May 16. I'll look forward to seeing you in June.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e

Copy to: Bob Mighton

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

June 18, 1990

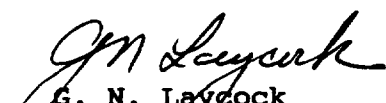
Mr. T. L. Lazarcheff
Bendix Friction Materials Division -
Allied Signal
P.O. Box 238
Troy, NY 12181

Dear Mr. Lazarcheff:

This is to acknowledge receipt of your application for Membership in the Institute. Since the application must be reviewed by the Membership Committee, Board of Directors and the full Active Membership, the process will take about 6-8 weeks. We will advise you of the outcome.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

June 18, 1990

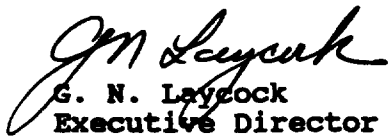
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FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

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EX. 12
~~FRANCK~~ CORRESPOND
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~~FRANCK~~ FILE
ALLIED
SIGNAL

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

September 5, 1990

Mr. T. L. Lazarcheff
Allied Signal, Inc. Bendix FMD
P. O. Box 238
Troy, NY 12181

Dear Mr. Lazarcheff:

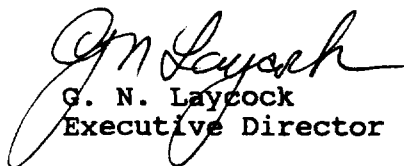
We are pleased to advise you that the Members have voted Allied Signal, Inc. Bendix FMD into Active Membership in the Institute. Your membership application was approved by the Membership Committee, the Board of Directors and the full Active Membership of the Institute.

In order to keep our accounting simple, your Membership will officially start as of January 1, 1991. We bill Active Members semi-annually. With your prepayment of dues received, your dues will be paid through December 31, 1991. However, we will put you and Mr. J. W. McCool on our mailing list immediately. We will be publishing an FMSI Roster in the near future and Allied Signal, Inc. - Bendix FMD, will be shown as an Active Member.

If there is anything which the Institute can supply to assist you, do not hesitate to ask.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

NEW MEMBER CHECK LIST

Name and Address: BENDIX FRICTION MATERIALS DIV.
ALLIED SIGNAL INC
PO BOX 238
TROY, NY 12181

Delegate: T.L. LAZARCHEFF

Alternate: J.W. McCool

Type of Membership: ACTIVE Folder: Active-Green
Regional-Yellow
Licensee-Blue

If Regional (US Dues, Regular): _____

- | | <u>Initials</u> | <u>Date</u> |
|--|--|---------------|
| 1. Write letter advising new Member of acceptance | <u>gms</u> | <u>9/4/90</u> |
| 2. Set up ledger card for new Member in Accounts Receivable | <u>LD</u> | <u>9/5/90</u> |
| 3. Make up file folder for new Member with index tab | <u>LD</u> | <u>9/5/90</u> |
| 4. Add name and address for new Member on address label matrix | <u>LD</u> | <u>9/5/90</u> |
| 5. Add name and address for new Member in appropriate Data Book and Shoe Bulletin matrix | <u>LD</u> | <u>9/5/90</u> |
| Data Book Bulletins ☒ | Shoe Bulletins ☒ | |
| 6. Post prints to be mailed with new bulletins to mailing chart | | |
| Disc Linings ☒ | Drum Linings ☒ | |
| Brake Blocks ☒ | Clutch Facings ☒ | |
| Disc Shoes ☒ | Drum Shoes ☒ | |
| 7. File appropriate correspondence on gaining Membership in file folder or ballot folder | _____ | _____ |
| 8. Advise Membership of acceptance of new Member | _____ | _____ |

*Look Also Put
J. GERMANO ALLEN
on membership list
for Bulletin
Some members*

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APPLICATION FOR MEMBERSHIP

TO THE BOARD OF DIRECTORS OF
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Gentlemen:

The undersigned hereby applies for membership in the FRICTION MATERIALS STANDARDS INSTITUTE, INC., as an Active Member, and certifies to the following:

1. Name of Applicant: Allied Signal - Bendix Friction Materials Division
2. State of Incorporation: Delaware
3. Principal Office: Bendix Friction Materials Division - Troy, N.Y.
4. Date of Incorporation: 1920
5. Length of time dealing with friction materials: 60 Years
6. Do you manufacture friction materials from the basic materials or do you buy partially finished products from other companies? Manufacture friction material from basic materials.
7. Type of friction materials manufactured, and approximate annual capacity of plant (Pieces or Tons): Asbestos, asbestos-free, ceramet linings, pucks, segments, block and cups for pass cars, lt. truck, med/hvy truck, aircraft brake and clutches.
8. State approximate amount of said materials now manufactured in commercial quantities (Pieces or Tons): Total pieces of product in CY89 - 105,000,000.
9. Is the distribution of your product national, international or local or in how many states? International, all states, Japan and Korea.
10. Do you list the materials you manufacture in catalogs or in some other form? If so, please furnish us with a copy of same: Other Allied-Signal Divisions catalog our products. ASABD and BHVS, copy attached, along with other literature.
11. Reference as to financial strength in relation to operations (Assets, Liabilities and Gross Sales, or Bank Reference): See Allied Signal for company financials. Copy of year end '89 report attached.

12. Is plant owned by applicant or leased? Owned

The undersigned hereby acknowledges receipt of a copy of the Constitution and By-Laws of the Institute and agrees that, if elected to membership, it will accept and be bound by the said Constitution and By-Laws, together with any amendments that may from time to time be made thereto.

The undersigned hereby designates T.L. Lazarcheff
as its delegate and J.W. McCool as its alternate
delegate, to represent it at any meeting of the membership.

By: 

(Signature)

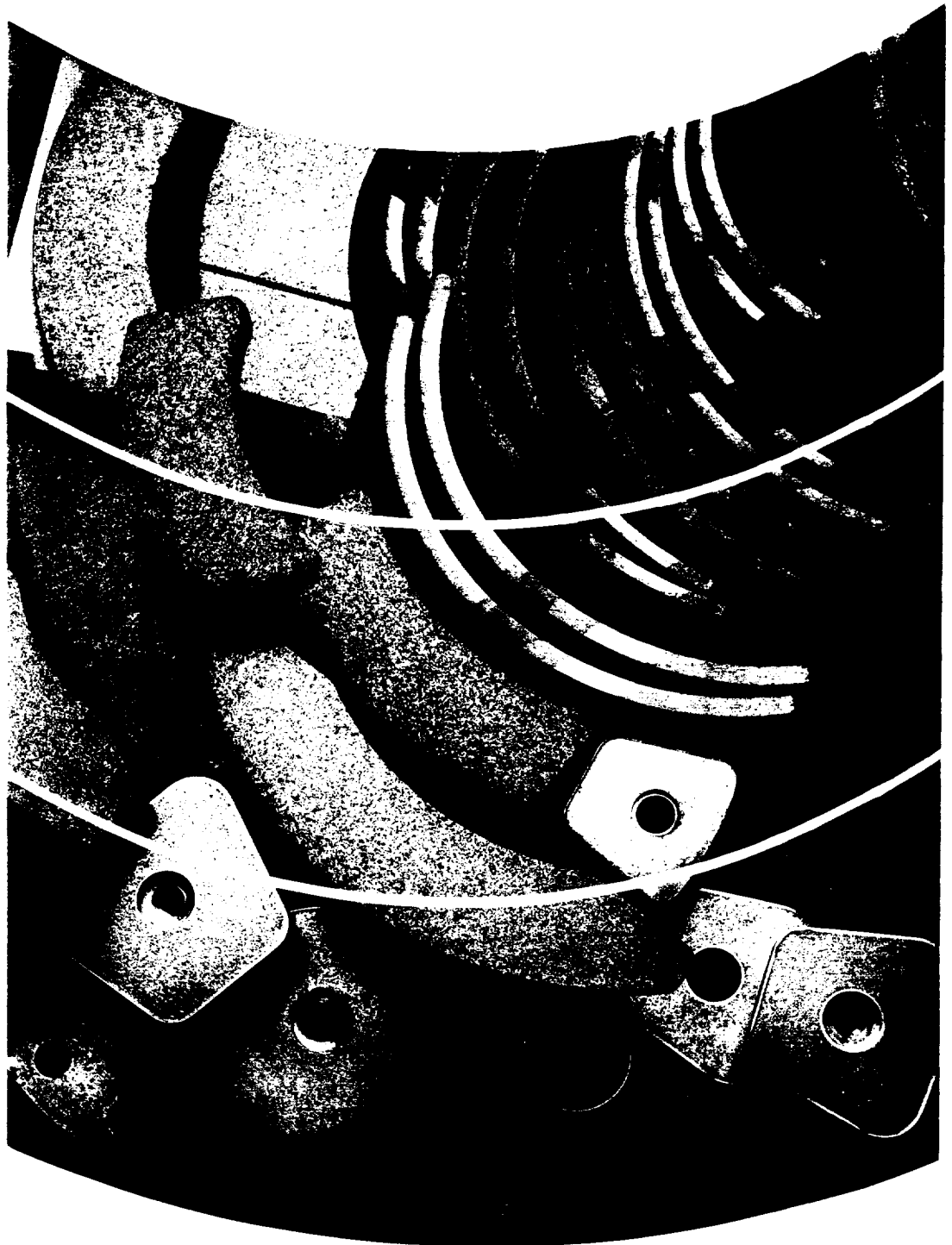
T.L. Lazarcheff - V.P. Sales

(Please Print or Type Name, Title)

Company: Allied Signal, Inc. - Bendix FMD

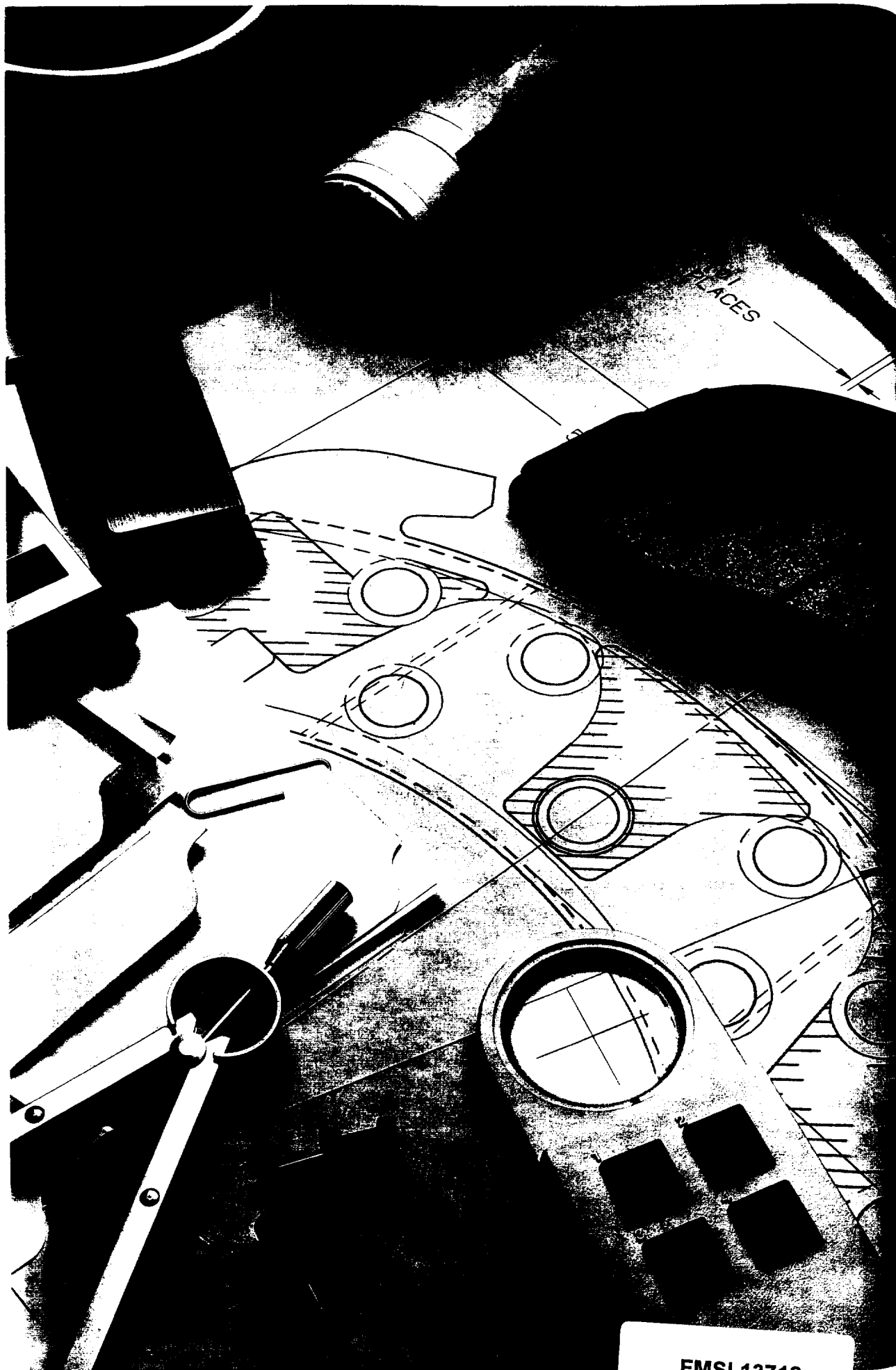
Bendix Brakes for Quality

Bendix Friction Materials Division



 **ALLIED** Automotive

FMSI 13717



FMSI 13718

How well the automotive industry will perform and prosper in the years ahead will depend largely on the contributions of automotive suppliers. At Bendix Friction Materials Division (BFMD), we're ready for the challenge. And that's only natural, since we're the largest independent supplier of friction materials to today's automotive market.

BFMD's high performance brake linings provide safe and reliable stopping for vehicles ranging from city subcompacts to 18 wheel truck and trailer combinations. When it's time to replace brake linings, millions of automotive aftermarket users will settle for nothing less than Bendix quality. And we don't just provide stopping power to the automotive market, either. Today, BFMD is helping to stop everything from golf carts to jumbo jets.

BFMD is a member of Allied Automotive, the largest independent supplier of automotive brake components in the world.

The Allied Automotive commitment to the automotive industry has been forged from experience, beginning when Vincent Bendix first introduced the four wheel braking systems to America in 1929.

Today, the Bendix name continues to stand for engineering excellence, product innovation, and leadership, both to the automotive industry and the general public alike.

And when it comes to friction materials, Bendix really stands out. Our strong international presence has positioned us to best meet the challenge of providing brake linings that satisfy the demands of an increasingly homogeneous world automotive market.

Technological exchanges between worldwide divisions allow BFMD to offer more research and development capabilities than its competition. With divisions in Germany, Brazil and Australia, and licensees around the world, BFMD can provide parts that can be manufactured and sold worldwide as they fit the need of our customer in multiple markets and manufacturing locations.

Our friction material products include disc pads, drum segments, brake blocks and the sintered metallic ceramic (Cerametalix[®]) that we developed for heavy duty clutch applications. BFMD markets these products worldwide for applications

in original equipment passenger cars, light, medium and heavy trucks, recreational vehicles, agriculture vehicles, commercial aircraft as well as the unique braking needs of today's competitive automotive aftermarket.



All of our customers need a supplier who is not only solving today's problems, but also has a head start on tomorrow's solutions. Only a supplier with technical resources like Bendix can really do that.

We know that maintaining our leadership means offering only friction materials of the highest quality and performance. Moreover, our products must be readily available and easily integrated into existing manufacturing operations.

Because it's important, BFMD is the company which can be counted on to respond quickly. We have the engineering, the new friction materials and the technical support that you require in order to offer braking reliability, safety and longer service life.

And that's why BFMD is your best choice for brake linings, because we offer the best total friction materials technology available. From design and engineering through production and distribution, Bendix quality has become the standard of excellence for today's friction materials industry.



FMSI 13720

When you buy Bendix, you get a lot more than just products — you get value.

With BFMD, you get a wide range of friction material compositions and configurations for virtually any braking needs. Plus, you get the superior quality and responsive service that keeps us at the forefront of the friction materials industry.

Superior friction materials begin with expert compounding. Three basic materials comprise the core of our product line.

Organic Materials are manufactured for disc pads, drum segments and brake blocks used in most automotive applications. Based on a phenolic resin compound, Bendix organic materials are fortified by a fiber matrix and modified by the addition of organic and inorganic modifiers for optimal properties. Organic friction materials maintain excellent friction, wear and noise properties at low to moderate temperatures.

Moreover, as we approach our goal of eliminating asbestos in all organic applications, BFMD has established itself as an industry leader in high performance asbestos free friction materials. Yesterday's corporate foresight allows us to provide today's customers with the widest available selection of asbestos free products on the market.

Semi-metallic disc pads were developed by BFMD in the late 1960's for use in police cars and taxicabs. Today they are universally used in the front brake systems of automobiles, offering better fade resistance, reduced noise, improved rotor conditioning and high energy absorption capabilities.

The basic steel fiber iron powder base material, bound by phenolic resin, is modified by additional organic and inorganic modifiers to optimize desired properties. Heat transfer is greatly enhanced with the addition of metal. The result is excellent friction and wear properties at high temperatures, as well as within the low to moderate range.

Cermetalix[®] friction materials are composites of metal powders and modifiers that are pressed and sintered at high temperatures to alloy the metal. Cermetalix[®] materials are used in aircraft braking and heavy duty clutch applications.

BFMD's extensive line of friction material products is comprised of five basic groups:

1. Disc Pads. Each year we supply more than 30 million semi-metallic disc brake pads for applications in passenger cars and light, medium and heavy trucks.

2. Drum Segments. We supply organic drum brake segments for all sizes of cars, trucks and leisure-light commercial vehicles in quantities exceeding 50 million per year.

3. Brake Blocks. We manufacture brake blocks in sizes up to 20 inches in diam. for heavy duty trucks and buses.

4. Cermetalix[®] Clutch Buttons. These thin profile, trapezoidal shaped buttons of high performance sintered metallic ceramic material are used in both clutches and aircraft brakes.

5. Resins. As a manufacturer of quality specialty liquid and powder resins, BFMD provides materials for saturating air or oil filter media, coating or bonding abrasives, and saturating resins for stiffening and bonding glass fiber materials. In order to assure better quality control and improved processability, we use our own resins in manufacturing friction materials. Our in-house resin lab also significantly increases our ability to tailor friction products to meet specific customer needs.



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In today's highly competitive automotive industry, BEMD is setting new standards for engineering excellence and testing capabilities. The design and development of new products is virtually continuous, yet our original goal remains unchanged: to provide a quality product that meets or exceeds customer standards for stability, safety, performance, dependability and price.

Toward this end, BEMD has invested millions of dollars to create a state-of-the-art laboratory complex in Troy, New York that is, without a doubt, the finest in the industry.

In our fully equipped materials development laboratory, chemists use advanced analytical techniques to develop sophisticated binders and composites for special applications.

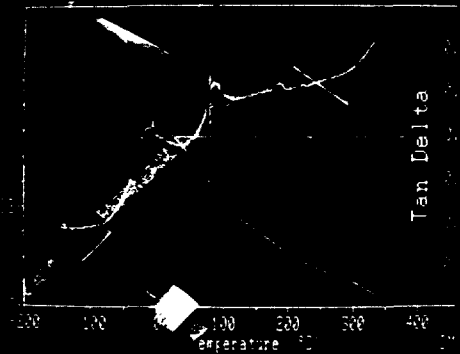
Gas Chromatography allows us to identify even the most minute quantities of molecular components in organic compounds. Through spectrophotometry, we decipher the composition of insoluble compounds, while advanced thermal analysis equipment reveals how chemical substances respond when subjected to high braking temperatures.

In our metallurgical labs, engineers employ sophisticated microscopy equipment including a scanning electron microscope with X-ray chemical analysis capabilities. In our compound labs, new processes and processes and products are exactly engineered for prototype testing.

Fully computerized full brake dynamometers are employed to closely evaluate friction materials under a variety of simulated braking situations ranging from minus 50°F to the searing heat of high speed high deceleration stops. No product from the smallest auto disc pad to the largest truck brake block, is too small or too big for our sophisticated equipment.

BEMD's aggressive testing procedures are primarily designed to prevent problems, not merely detect them. If they develop in our ongoing quest for superior performance, we are doing pioneering research at all levels of development.

In noise testing laboratories, for example, BEMD is breaking new ground in noise technology and analysis. In order to engineer quieter lining compounds, advanced testing equipment has been developed to map where noise occurs and analyze

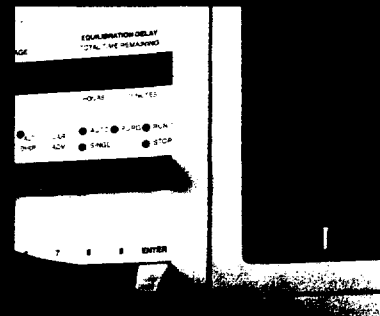


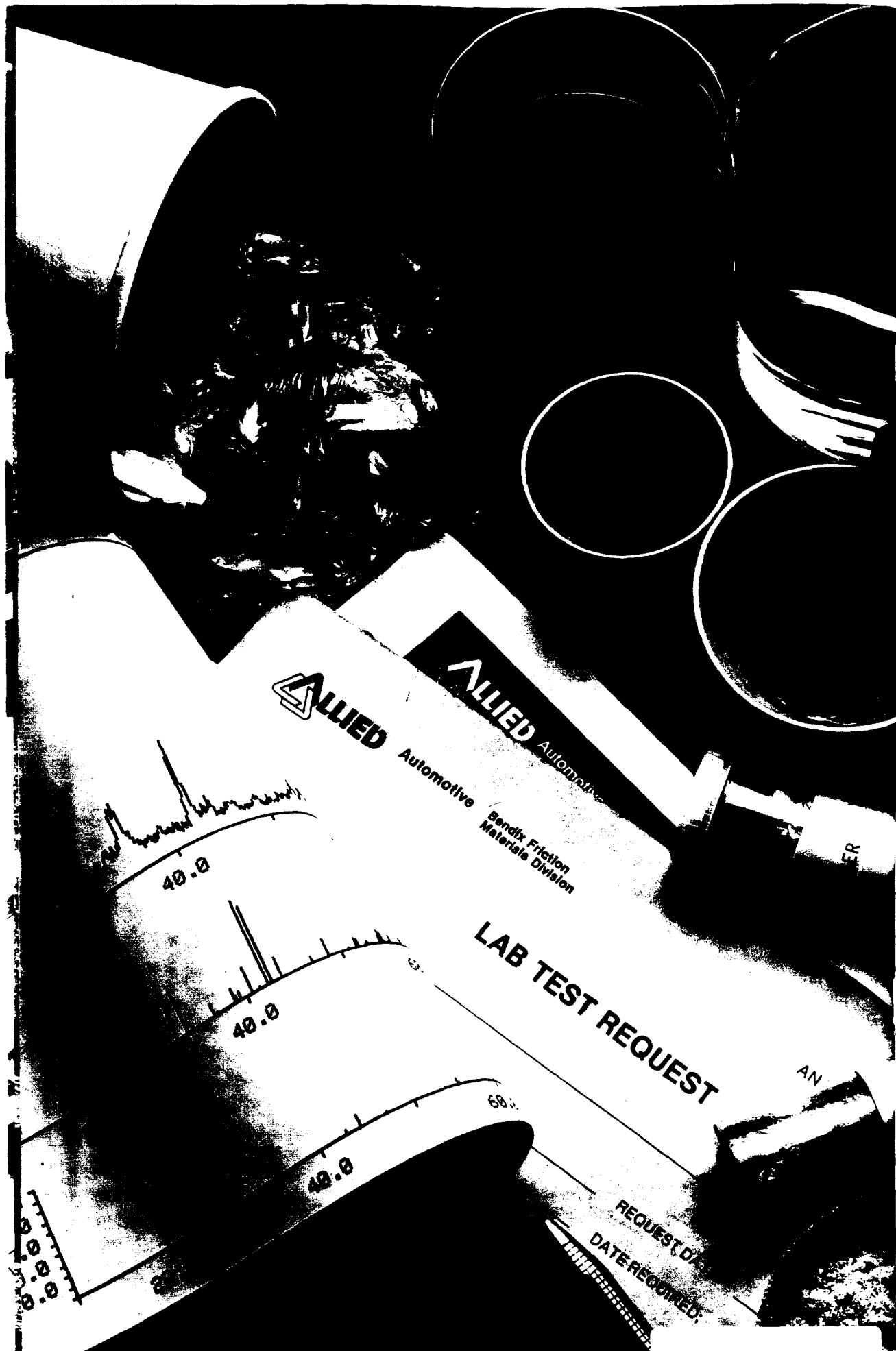
its characteristic frequencies. This sophisticated procedure provides quantitative numbers under controlled laboratory conditions, thereby facilitating continual improvements in overall brake performance.

Ultimately, vehicle testing is the final and most confirming test ground for friction materials. When we test our products in prototype vehicles, their performance, durability and reliability must measure up to all expectations—both ours and yours. Toward this end, BEMD maintains a test fleet of over 30 vehicles for city traffic, mountaintop and environmental testing.

Test vehicles are ordered to meet specific requirements and are modified to reflect advanced design prototype configurations. Each vehicle is instrumented for complete and accurate data recording.

Success is ultimately measured by our ability to solve your friction materials problems. The list of proprietary new materials that BEMD has examined under microscopes, evaluated on dynamometers and actively road tested is long and getting longer. We understand our friction materials and what they must—and can—do for you!





FMSI 13724

We want you to have our products when you need them. That's why BEMD is dedicated to meeting both your delivery requirements and your quality standards.

To keep our customers steadily supplied, we maintain flexible and fully equipped manufacturing facilities in Troy, New York, Cleveland, Tennessee, and, most recently, at our new state-of-the-art manufacturing plant in Lynn Haven, Florida.

The showcase facility in Lynn Haven is tangible evidence of our ongoing investment in quality. Through computerized integrated manufacturing and robot assembly, BEMD is able to assure better coordination of all manufacturing operations. The payoff is unparalleled quality control, increased productivity and dependable product uniformity.

In order to make top quality traction materials, BEMD maintains a certain amount of secrecy. Nearly all our processing is proprietary, using production equipment either developed at BEMD or made to our specifications by others. Superior processes are yet another reason why Bendix has maintained product leadership.

Not even bigger secret is our people. Many have been at their jobs for 20, 30 and even 40 years. They know quality first hand, and they know how to produce it. And they take pride in teaching our younger employees how to do what it takes. We back up their interest with incentives, over training, in-house seminars and training facilities for on-related education in order to help our people keep pace with today's rapid technological strides.

The involvement and craftsmanship of our employees show makes us feel that in a very real way each worker is his or her own quality control inspector, providing BEMD the ability to satisfy the standards of even the most demanding customer. Thanks largely to the experience and dedication of our people, BEMD has been the recipient of such prestigious quality awards as Ford's Q1E and GM's Superior.

Engineers are constantly testing new production techniques in our process labs. For promising techniques, prototype production equipment is constructed and tested under factory-like conditions. Once

engineers determine that a specific process is the best way to manufacture a product, its prototype operation is used as a model for full scale factory operation.

The result of all this exacting process research is a manufacturing operation keyed to efficient and consistent production. Through exacting statistical process control, BEMD is able to guarantee unparalleled product uniformity and value.

BEMD has also taken steps to move quality control standards farther upstream in the manufacturing process—to our raw material suppliers themselves. We work closely with suppliers to establish criteria and help them implement independent statistical process control systems. Our goal is to further ensure the consistency of materials entering our facilities by achieving self certification status for all BEMD suppliers.



Throughout the manufacturing process, we test to ensure BEMD's standards are being met or exceeded. This is evidenced by electronic controls and automated inspection devices which are built right into our processing equipment. Increasingly, adaptive feedback signals are being used to make automatic adjustments in processing, assuring even higher quality control.

In process control includes mixing checks, full scale control charting, physical and chemical predictive testing and a regular program for tool gauging.

Final testing can include hardness, density, dimensional checks and, on a sampling basis, pyrolytic gas chromatography (PGC), infrared analysis (IR) and friction assessment screening tests (FAST). PGC and IR testing confirm formulation and process characteristics. FAST confirms friction and wear properties.

A personal, 100% visual inspection completes the quality control process. We perform this inspection on every part before it is shipped. It helps assure that every BENDIX product you buy will live up to the reputation of the Bendix name.

Thorough service goes beyond prompt, accurate quotations and people working with you across a conference table. Service is an attitude, an environment. It's something built into a product right from the beginning.

Service means producing materials that meet, and often exceed, your high standards. It's a problem solving orientation, and an ability to anticipate trends within the brake industry. And it means total engineering support, from the drawing board to the factory floor.

A state-of-mind commitment to quality, combined with state-of-the-art technology, has placed BENDIX at the hub of the world's friction materials industry. Together with our associate divisions in the Bendix Automotive Group, we offer the leadership in products and services that comes from a long tradition of quality engineering and innovation. We're proud to be setting new standards of excellence as we design the friction materials of tomorrow today.



UNITED STATES	Bendix Friction Materials Division - Troy, New York, Lynn Haven, Florida, and Cleveland, Tennessee	Drum Segments, Disc Pads, Heavy Truck Blocks, Clutch Buttons, Aircraft Buttons	Allied Automotive - Friction Materials Group
MEXICO	Manufacturera Mexicana De Partes De Automoviles, S.A. MexPar, Mexico City, Mexico	Drum Segments, Disc Pads, Truck Blocks	Licensee
AUSTRALIA	Bendix Mintex Pty. Ltd. Ballarat, Victoria	Drum Segments, Disc Pads, Truck blocks, Clutch Facings	Subsidiary
NEW ZEALAND	REPCO, New Zealand Auckland, New Zealand	Drum Segments, Disc Pads, Truck Blocks	Licensee
WEST GERMANY	Jurid Werke, GmbH Hamburg, W. Germany	Drum Segments, Disc Pads, Railway and Truck Blocks, Clutch and Aircraft Facings	Allied Automotive - European Operations Friction Materials Group
	Energol, GmbH Stuttgart, W. Germany	Drum Segments, Disc Pads, Railway and Truck Blocks	Subsidiary
SPAIN	Jurid Iberica, S.A. Barcelona, Spain	Drum Segments, Disc Pads, Railway and Truck Blocks	Subsidiary
GREECE	Andreadis, S.A. Athens, Greece	Truck Blocks	Distribution and Trademark Agreements
	BIFA, S.A. Athens, Greece	Truck Blocks	Distribution Agreement
YUGOSLAVIA	Varteks Strojoteks Varazdin, Yugoslavia	Disc Pads	Licensee
JAPAN	Kayaba Industry Co., Ltd. Tokyo, Japan	Clutch Buttons, Aircraft Buttons	Licensee
ARGENTINA	Industrias Bendix, S.A.I.C. y C. Buenos Aires, Argentina	Disc Pads, Truck Blocks	Allied Automotive - Latin America Operations
BRAZIL	Jurid do Brasil Sorocaba, Brasil	Drum Segments, Disc Pads, Truck Blocks	Allied Automotive - Friction Materials Group
CHILE	Indubal S.A.C. Santiago, Chile	Drum Segments, Disc Pads, Truck Blocks	Licensee
COLOMBIA	Industria Colombiana de Asbestos, S.A. (Incolbestos) Bogota, Colombia	Drum Segments, Disc Pads, Truck Blocks, Clutch Facings	Licensee



ALLIED Automotive

Bendix Friction Materials Division

P.O. Box 238

Troy, NY 12181

Telephone (518) 273-6550

Fax No. (518) 783-5745

Telex No. 710-444-4957

WANTED:

THE
BENDIX
ASBESTOS-FREE
ULTRAVAR
LINEUP

Bendix

The Air Brake Experts



FMSI 13729

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Bendix**ULTRAVAR PREMIUM
brake block**

UV 4515 D FE RATED

A killer when it comes to ruggedness and high caliber performance. Use it for heavy-duty service on highway trucks, transit buses and tractor/trailers with S-Cam or wedge-type brakes. Particularly suited for gravel/coal haulers, liquid haulers, line haul applications and local pickup and delivery vehicles where a premium asbestos-free material is desired. Performance characteristics include: twice the lining and drum life of asbestos products; stability through a wide range of temperatures; and superior resistance to swell and growth at high temperatures.

Bendix**ULTRAVAR
PREMIUM**

Asbestos Free Brake Block

Bendix**ULTRAVAR II
heavy-duty brake block**

UVD 4515 D FF RATED

A tough cost robber known for its longer performance for less. Rugged enough for medium to heavy duty service on trucks and tractor/trailers with S-Cam and wedge-type brakes. Excellent for line haul operations, general freight haulers, and wherever repeated high speed braking is encountered. Performance characteristics include: minimum drum and lining wear in over-the-road operation; long life; excellent dependability; and stable friction through all normal braking temperatures.

Bendix**ULTRAVAR II**Heavy Duty
Asbestos Free Brake Block**Bendix****ULTRAVAR III
standard brake block**

UVS 4515 D EE RATED

Your basic bandit for regular wear and tear. An excellent choice for medium and heavy-duty trucks operated under normal conditions in less than 100,000 miles. Available in S-Cam, wedge, and air brake systems. Performance characteristics include: minimum drum and lining wear; dependability; and economy.

**ULTRAVAR III**Standard
Asbestos Free Brake Block

Bendix ULTRAMET brake block

MET 4515 D FF RATED

A metallic mugger that hits hard when the heat is on for heavy-duty wear. Metallic asbestos-free Ultramet is a tough block for highest heat applications. Ultramet is ideal for severe duty applications in dump, cement, liquid, steel, logging and lowboy hauling where repeated braking in rugged terrain is necessary. Performance characteristics include: repeated sure stops without excessive heat fade or loss of friction; exceptional drum and lining life; and cold braking performance.



Bendix ULTRAVAR segments

UV 1308 D GF RATED

This mean but lanky, truck set hit man specializes in medium-duty jobs on buses and trucks, as well as all vacuum, hydraulic, air-over-hydraulic and air brake systems. Performance characteristics include: high temperature tolerance with friction stability; smooth, quiet, safe service; and long life.



Why Asbestos-Free?

The Ultravar line is part of a new generation of asbestos-free materials with superior friction properties. Developed by Bendix research engineers, the unique formulas eliminate the potential health hazard attributed to asbestos, while providing improved braking performance and operating economies. Better performance and better economy... now there's no reason not to buy asbestos-free materials, for your safety and the safety of those who maintain your truck.

What Kind of Asbestos-Free?

Fiberglass, metallics, Kevlar® ceramics... much has been made over which of these makes the best asbestos-free friction material. At Bendix, we think the best ingredients are those that produce the best results. We're committed to performance, not product makeup. This leaves us free to continually refine and improve our formulas. Whether it's fiberglass, Kevlar®, metallics, ceramics, mineral fibers, or something yet to be discovered by our R&D department, if it's Bendix it's the best it can be for your application.



THE ONLY LINE OF ASBESTOS-FREE BRAKE BLOCKS AND TRUCK SETS GOOD ENOUGH TO CARRY THE BENDIX NAME.

Nobody knows brakes like Bendix. And we've got over fifty years in the friction materials business to prove it. Fifty years of making brakes for everything from bicycles to the 747 jet. Fifty years of research and ongoing product development. Since 1929, working consistently on the leading edge of brake technology to give you the leading edge in brake performance and protection.

At the Bendix Engineering Facility in Troy, New York, our friction materials expertise is equalled only by our technical equipment dedicated to heavy-duty friction materials development. The Bendix R&D lab uses such state-of-the-art equipment as an Inertia State Dynamometer, a Link Inertia Friction Tester, a scanning electron microscope, an X-ray diffractometer and vehicle-mounted computer data acquisition systems... all, equipment few others in the industry can claim. And all indicative of the technical and practical knowledge behind every Bendix brake block you buy.

Now we're offering you a full line of asbestos-free Bendix brake blocks and truck sets. Products with the proper mix of quality, economy, stability and strength.

Products fleet-tested over thousands of hours and millions of miles for lining wear, friction level, friction fade, drum wear and noise. Proven products reliable enough to join the Bendix family and be backed by the Bendix name and reputation.

So if you want the best product for your application, buy from the world's largest supplier of friction materials: Bendix Heavy Vehicle Systems.

For more information on asbestos-free brake blocks and truck sets, see your local Bendix distributor, or write: Bendix Heavy Vehicle Systems, 901 Cleveland Street, Elyria, Ohio 44036.

Bendix

The Air Brake Experts

ALLIED Automotive

BW-1403
10/86
Printed in U.S.A.

FMSI 13732

Profile in brake leadership



**Friction Materials
Division**

FMSI 13733



FMSI 13734

Brake leadership results from the wide range of Bendix capabilities.



Photo courtesy of the Frederick C. Crawford Auto/Aviation Museum Library of the Western Reserve Historical Society, Cleveland, Ohio.

How well the automotive industry will perform and prosper in the years ahead will depend largely on the contribution made by automotive suppliers. At Bendix Friction Materials Division, we're ready for the challenge. And we should be, since we're the largest independent supplier of friction materials to the automotive market.

Widely recognized for high performance, Bendix brake linings play a key role in stopping vehicles safely and reliably from the tiniest subcompact to the largest "18-wheeler". When it's time to replace brake linings, millions of automotive aftermarket users will settle for nothing less than Bendix quality. And we don't just provide automotive stopping power, either. We also help stop everything from golf cars to jumbo jets.

Bendix commits its expertise to the automotive industry.

The Bendix Friction Materials Division is part of the Bendix Automotive Group, the world's leading independent supplier of brake components to the automotive market. The Bendix Corporation's commitment to the automotive industry has been forged from 50 years experience beginning when Vincent Bendix first introduced the four-wheel braking systems to America. We are proud that today the Bendix name continues to stand for engineering excellence, product innovation and

leadership, both to the automotive industry and the general public alike. And we plan on continuing to uphold this reputation in the future.

In braking, Bendix supplies everything from the brake pedal to the point of friction; hydraulic or air actuators, master cylinders, system components, brakes and brake linings. Bendix is also a leader in engine fuel management and supplies air and fuel filters, sparkplugs and windshield wipers. Virtually every auto made in the western world has a bit of Bendix in it... or soon will have.

Especially when it comes to friction materials, Bendix can help. Our friction materials products include disc pads, drum segments, brake blocks and the sintered metallic ceramic (Cerametalix[®]) that we developed for heavy-duty clutch applications. The Friction Materials Division sells these products direct to OE manufacturers for passenger cars, light, medium and heavy trucks; leisure vehicles, and agricultural vehicles. Other Bendix divisions sell friction materials to both the automotive aftermarket and the aircraft industry.

We're solving problems for you that don't yet exist.

Original equipment manufacturers need a supplier who is not only solving today's problems, but also is working to solve tomorrow's. And only a supplier with technical resources like Bendix can do it. We know that maintaining our leadership means offering only friction materials of the highest quality and availability. Moreover, our products must be both available and also easy to integrate into existing manufacturing operations. We feel it's important for Bendix to be the company which responds quickly to your new brake designs; the company which has the engineering, the new friction materials and the support you'll need to meet your requirements of reliability, fuel economy, service life and environment. And that's why it pays to deal with Bendix: because we offer the best total friction materials technology you can find.



FMSI 13736

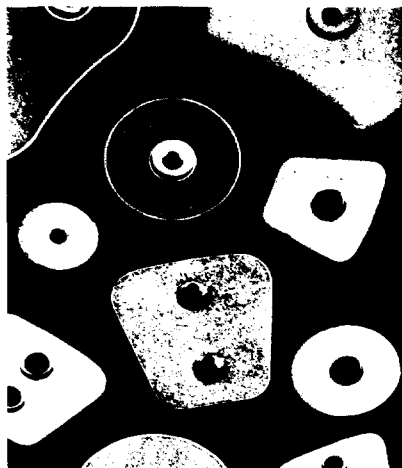
Proper friction materials means value in brakes for any situation.

When you buy Bendix, you get a lot more than just product – you get value. With Bendix, you get a wide range of friction material compositions and configurations for nearly every braking situation. Plus you get the superior quality and responsive service that will keep us in the forefront as a supplier of reliable friction materials.

Bendix basic friction material products.

Our products can be summarized into five primary areas:

1. *Disc Pads.* We supply organic and semi-metallic brake pads for disc brake systems in passenger car and light, medium and heavy truck ap-



plications – more than 50 million pads a year.

2. *Drum Segments.* We supply organic drum brake segments for all sizes of cars, trucks, and leisure/light commercial vehicles; again, in quantities exceeding 50 million per year.

3. *Brake Block.* We make brake block in sizes up to 20 inch for heavy-duty trucks and buses.

4. *Cerametalix® Friction Material.* These thin-profile buttons of high-performance sintered metallic ceramic material are used in both clutches and aircraft brakes.

5. *Resins.* As a manufacturer of quality specialty liquid and powder resins, we provide materials for saturating air or oil filter media, coating or bonding abrasives, and saturating resins for stiffening and bonding glass-fiber materials. In order to assure the quality of our brake linings we use our own resins in manufacturing our friction materials.

Superior friction materials start with expert compounding.

Three basic friction materials form the heart of our business:

Organic – Organic materials are used for disc pads, drum segments, and brake blocks in most automotive applications. Based on a phenolic-resin compound, Bendix organic materials are strengthened by a fiber matrix and modified by the addition of organic/inorganic materials for optimal properties. Organic materials have good friction, wear, and noise properties at low to moderate operating temperatures.

Semi-Metallic – These materials were developed more than a decade ago for police and taxi use by the Bendix Friction Materials Division. This type material is currently used in both solid and vented-rotor applications in passenger cars and in many light, medium and heavy-duty trucks. Also bound by phenolic resin as in organic, this steel-fiber/iron powder base material is modified by additional organic/inorganic materials to optimize properties. The addition of metal greatly enhances heat-transfer properties. The result is excellent friction and wear properties, not only at low and moderate temperatures, but also particularly in the high temperature range. By offering

greatly improved high-temperature lining life, semi-metallic materials can be used as a substitution for organic materials in major brake redesigns where both reduced weight and improved performance life are sought.

Cerametalix® Friction Material – These materials are composites of metal powders and modifiers that are pressed and sintered at high temperatures to alloy the metal. Cerametalix® friction materials are used in aircraft braking and enjoy a growing acceptance in heavy-duty clutch applications. They also show exciting potential for many automotive clutch applications in small cars and light trucks.

We like new challenges.

To us at Bendix, success means that we've been able to apply our materials expertise and capabilities to solve your friction materials problems. The list of proprietary new materials that we have examined under the microscope, compared on our dynamometers and actively road tested is long and getting longer.

One of our most recent examples of friction material solutions had to do with the applications of semi-metallic materials. They were developed to solve complex high-temperature braking problems. We combined our experience with organic and Cerametalix® friction materials, extracting the best properties of each to form a new temperature-resistant material. By solving a customer's specific problem, we were able to make a major contribution to the friction materials industry.

Another example of the right combination of engineering goals, processing experience and knowledge of customer needs is resin. Our friction materials expertise naturally evolved into the related field of resin manufacturing. Bendix now manufactures and supplies resin to abrasive manufacturers for coating sandpaper and bonding abrasive wheels and to filtermakers for saturants that extend filter paper life.

There are many more examples. They all add up to expanded, multi-faceted capability which Bendix is able to offer. We know our friction materials, and we know what they must do for you.



FMSI 13738

Bendix quality is assured through engineering and extensive testing.

The Bendix name on a product means that it contains the maximum in engineering excellence combined with the latest technology available. Our products and advancements result from the concentrated efforts of some of the most experienced and dedicated friction material engineers, technicians and support personnel in the industry.

But it takes more than qualified people to insure quality products. In Troy, New York we have one of the world's largest and best equipped laboratory testing facilities for friction materials with the following capabilities:

Chemical—Our fully equipped resin chemistry laboratory research-

es and develops new friction material resins and composites. The lab utilizes such advanced analytical techniques as chromatography, thermal analysis, and spectro-photography.

Metallurgical—Our materials analysis lab has complete facilities for microscopy, metallography, Micro-trac® analysis, hardness testing, and metallurgical analysis.

Processing—A fully equipped process lab evaluates new manufacturing procedures and provides samples for customer testing and evaluation.

Data Analysis—Our engineering department has a stand-alone computer system that is devoted 100% to engineering programs.

Dynamometry—Our full brake dynamometers, both single and dual ended, can evaluate materials in a complete brake environment. We can test brake sizes from the smallest passenger car to the largest heavy truck brakes on the road today, and beyond. Our own sample dynamometers screen materials and establish friction codes. Our modern electronic systems monitor dynamometer control and data reduction. We even have one of the few dynamometers designed exclusively for clutch testing.

This professional Bendix engineering team and test equipment has helped us to maintain our leadership position in friction material technology. In testing, we go beyond the basic SAE-established friction-materials requirements to respond to a wide variety of customer testing requests. Because of our pioneering approach, we lead in the development of semi-metallic materials. We were also an innovator in Cerametalix® friction materials. And when the friction materials of the future arrive, Bendix will be the leader that brings them to the automotive world.

The most critical test of all.

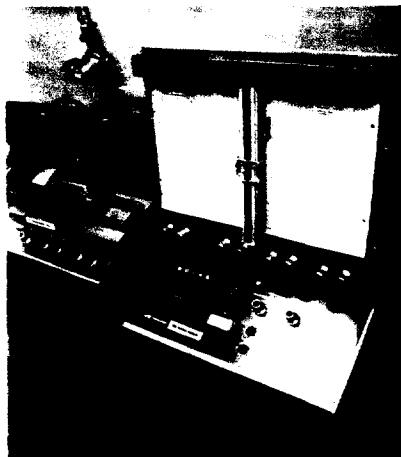
Even with the finest materials technology, Bendix testing can only go so far in the lab. The final step, road testing, often proves to be the most significant and revealing. When we test our friction materials in prototype vehicles the resulting performance, durability, and reliability must

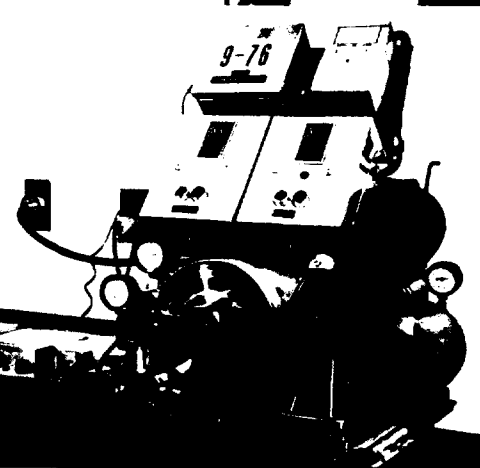
measure up to all expectations—both ours and yours.

To road test properly, we have fully equipped garage facilities and a test fleet of over 30 vehicles, primarily located at Troy, New York. Our vehicles also travel to key sites for city traffic, mountain-fade, and environmental/climatic testing. These test vehicles are ordered to meet specific requirements and then are modified to reflect advanced design prototype configurations. Each vehicle is highly instrumented for complete data recording.

The advantages of our affiliations.

Beyond our testing and engineering capabilities at Troy, New York, we can also draw on additional capabilities from our affiliates within The Bendix Corporation, both domestic and abroad. Bendix Research Labs in Southfield, Michigan provide us with the latest in advanced automotive materials research. Access to both the Bendix Automotive Proving Grounds at New Carlisle, Indiana (650 acres for torture testing) and the Jennerstown, Pennsylvania, Mountain Test Station add a considerable dimension to the types of endurance and performance road testing we can accomplish. Finally, our interaction with Bendix subsidiaries and licensed affiliates worldwide, and the many technological exchanges that result, keep us at the center of brake material technology worldwide. A specific example is our relationship with Jurid Werke, a wholly-owned Bendix subsidiary and a leading producer of friction materials in Europe. Through such affiliates we gain the unparalleled depth of engineering experience that assures Bendix customers that they are dealing with the friction material headquarters of the world.





THE OIL SHIP CORPORATION
PRODUCTION MATERIALS DIVISION

FAST HEAVY DUTY PROCEDURE

High quality is useful only when it's available and consistent.



We want you to have our products when you need them. That's why Bendix is dedicated to meeting your delivery requirements as well as your quality requirements. To keep you steadily supplied, we make friction materials at two facilities - Troy, New York and Cleveland, Tennessee. Working in tandem for most major product lines, each plant is capable of supporting the other should production be interrupted for any reason.

The secrets behind dependable manufacturing.

The only way we can make top-quality friction materials is with a certain amount of secrecy. Nearly all our processing is proprietary, using production equipment either invented on-site, or made to our specifications by others. Our superior processes are only one reason Bendix has maintained product leadership.

An even bigger secret is our people. Many have been at their jobs for 20, 30 and even 40 years. They know quality and they know how to produce it. And they don't mind showing our younger employees how to produce it, either. We back up their interest with training programs, seminars and financial help toward any schooling that will directly contribute to their job skills and career advancement. And we strongly solicit ideas throughout The Bendix Corporation for our on-going cost-reduction programs.

Maybe this encouragement is why our employees take such pride in their work. Maybe it's because they know that some of the Bendix products they make will go into their own personal cars and trucks. Whatever the reason, the involvement and craftsmanship our employees show make us feel that, in a way, each one is his own quality control inspector. And we think this is evident in the Bendix products that you buy.

Your assurances of quality.

Uniformity of product is the goal of all quality control. The initial design quality level must be continually maintained. The quality control people also must have the full and independent authority to act. To ensure this autonomy, our head of QC carries weight equal to counterparts in manufacturing management.

Quality control at Bendix Friction Materials Division begins with vendor certification on each shipment of material we receive. Next, we run engineering tests to ensure our specifications have been met. This may include infrared spectrophotometry, gas chromatography, and computerized particle size and shape analysis. In resins particularly we can exercise the best possible control of quality, because we make our own.

All through manufacturing, we test to ensure that our standards are being met or exceeded. In-process control includes mixing checks, full-scale control charting, physical and chemical predictive testing and a regular program for tool gauging. Final testing can include hardness, density, dimensional checks and, on a sampling basis, pyrolytic gas chromatography (PGC), infrared analysis (IR), and frictional assessment and screening tests (FAST). PGC and IR testing confirm formulation and process characteristics. FAST confirms friction and wear properties. Records of all three tests are maintained.

A personal 100% visual inspection completes the quality control process. We perform this inspection on every part before it is shipped. It helps assure that every Bendix product you buy will live up to the reputation of our name.

Thorough service must be more than just an afterthought.

Thorough service goes beyond prompt, accurate quotations and people working with you across a conference table. Service is an attitude, an environment: it's something built into a product right from the beginning. Service means producing materials that meet your requirements and, in many instances, exceed them. It means providing total engineering from advanced R&D that's years away to tackling a problem you need solved by tomorrow. And it means quickly adapting to testing and qualifying needs to help you meet new braking requirements.

We at Bendix Friction Materials Division are proud to be at the hub of a worldwide network of expert experience where we can offer you the kind of quality and service we believe in. Together with our associate divisions in the Bendix Automotive Group, we offer the leadership in products and services that can only come from a 50 year tradition of quality engineering and innovation. It's a tradition that was built on excellence. And it's a tradition on which you can depend, today and in the future.





FMSI 13743

Bendix

The Bendix Corporation
Friction Materials Division
Troy, New York 12181
(518) 273-6550

FMSI 13744

WHO WE ARE, WHAT WE DO



FMSI 13745

ALLIED

It's been said that success is a journey, not a destination. At Allied that journey began more than 60 years ago.

No period in the Corporation's history, however, has been as fast-paced or as dynamic as the early 1980s during which Allied diversified into new businesses, industries and markets, more than doubled its sales, expanded its technological capabilities and became a multinational organization with operations, interests and personnel around the world.

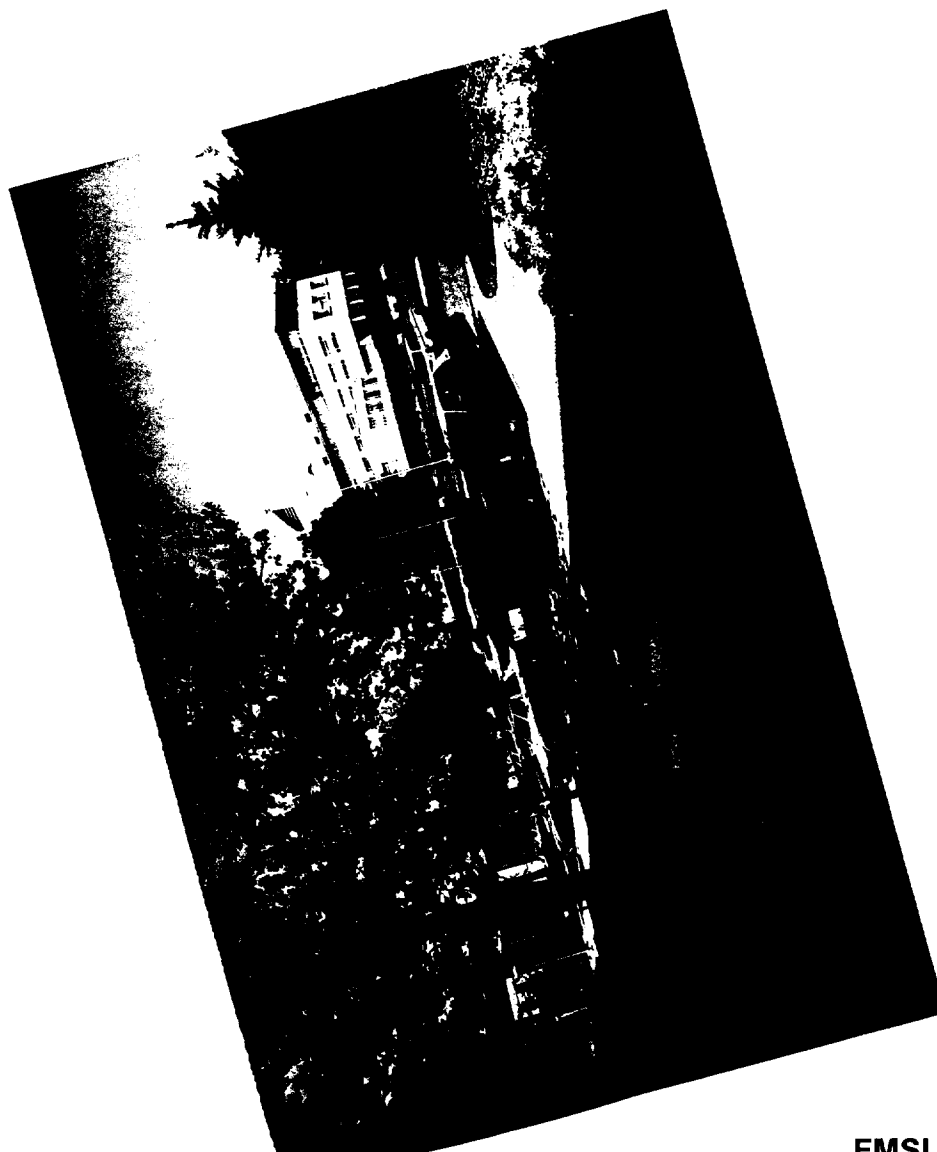
Allied is proud of its heritage and the major role it plays in the world of business.

Cover

A schematic of a computer chip, magnified hundreds of times, is symbolic of Allied's interest in the electronics industry which several of its businesses now serve. Electronic-related product sales have passed the \$2 billion mark.

Product and service references in "italics" with initial capitals represent trademarks, service marks or brand names owned by or associated with Allied Corporation.

ALLIED CORPORATION: A PROFILE



Allied's Corporate headquarters, Morris Township, New Jersey.

Allied Corporation, with its worldwide headquarters in Morris Township, New Jersey, is a diversified manufacturer serving a broad spectrum of industries through its more than 40 businesses, which are grouped into five sectors: Chemical, Oil and Gas, Automotive, Aerospace, and Industrial and Technology.

A "blue chip" company since its founding more than 60 years ago as the Allied Chemical & Dye Corporation, Allied Corporation—as it is simply called today—is one of the nation's 30 largest industrial organizations. Some 115,000 employees work in more than 600 locations in over 30 countries around the world. Allied has been included in the 30 companies comprising the Dow Jones Industrial Average since the Corporation was founded in 1920.

While chemicals, fibers and plastics are still major sales and profit contributors, today they represent but one-fifth of Allied's product portfolio.

It was in the early 1960s that the Corporation acquired Union Texas Petroleum and began to move beyond its traditional chemical manufacturing base. By the end of the decade Allied had begun its global search for oil and gas. The outstanding success of that venture, with its substantial return on investment, enabled the organization, in part, to develop and implement a new strategy for growth.

Entering the 1980s, Allied launched a multi-billion dollar program to acquire companies in high-growth, high-potential markets and to accelerate the research and develop the new products and technologies from which future success will come.

Allied's diversification program has taken it into such exciting new industries as health and scientific products and electronics. Today the Corporation, through several of its businesses, both old and new, realizes some \$2 billion in sales from its electronic-related products alone.

Allied's most significant acquisition, however, was The Bendix Corporation in 1983. It brought to Allied's portfolio profitable new businesses in automotive and aerospace components, systems, subsystems and services.

Over the past five years the Corporation has also invested more than \$900 million to fund its research, development and engineering activities and it is expected that RD&E spending will reach a five-year cumulative total of \$2.7 billion by 1988.

For Allied, the basic goals are to grow in profitability to give shareholders a high return on their investment; to provide customers with high-quality products and services; to be a good corporate citizen, responsive to public concerns and to create a stimulating and rewarding work environment where employees' careers may flourish.



CHEMICAL

Chemicals are the bedrock of Allied, the foundation on which the Corporation was built when, in 1920, five independent companies merged to form what was then the largest chemical concern in the nation—Allied Chemical & Dye Corporation.

Today, Allied's Chemical Sector is as large as some Fortune 500 companies—a \$2.3 billion operation which produces industrial and specialty chemicals as well as synthetic fibers and plastics for a multitude of industries.

Allied is the largest producer of nylon 6, hydrofluoric acid (HF) and fluorine in the world; the largest producer of soda ash and water treatment chemicals in North America; the second largest producer of fluorocarbons and tar products in the United States and a major producer of electronic chemicals, sulfuric acid, chrome chemicals and fine chemicals.

In the chemicals area, much of Allied's success comes from the production and marketing of its fluorine-based chemicals. The Company has both proprietary technology and a favorable raw material position, manufacturing, for example, its own sulfuric acid used in the production of HF.

HF, a basic raw material used by the steel, aluminum and oil refining industries, is, in turn, the base on which Allied has launched six different businesses.

Among these are fluorocarbons used as refrigerants, solvents and plastic foam expansion agents; sulfur hexafluoride, a gas used by the electric utility industry as an insulator; and electronic chemicals which include high-purity acids, etchants and strippers used in the manufacture of integrated computer chips.

Other fluorine-based chemicals include water treatment chemicals and polymers used by municipalities to treat both potable and waste water and by the paper industry as a sizing agent.

Allied also has a strong backward integration in nylon manufacturing. The Company produces caprolactam which, through polymerization and state-of-the-art spinning methods, is transformed into synthetic fibers. The Company also makes its own phenol, the principal raw material in caprolactam production.

The Company began production of nylon fibers in the mid-1950s and today both its process and product technologies are recognized as among the best in the industry.

Allied's *Anso IV* nylon fibers, for example, set new standards for carpet fibers excellence when they were first introduced in 1980. The fibers feature built-in stain-, soil- and

static-resistant qualities, and they are used by the nation's leading manufacturers for both residential and commercial carpeting.

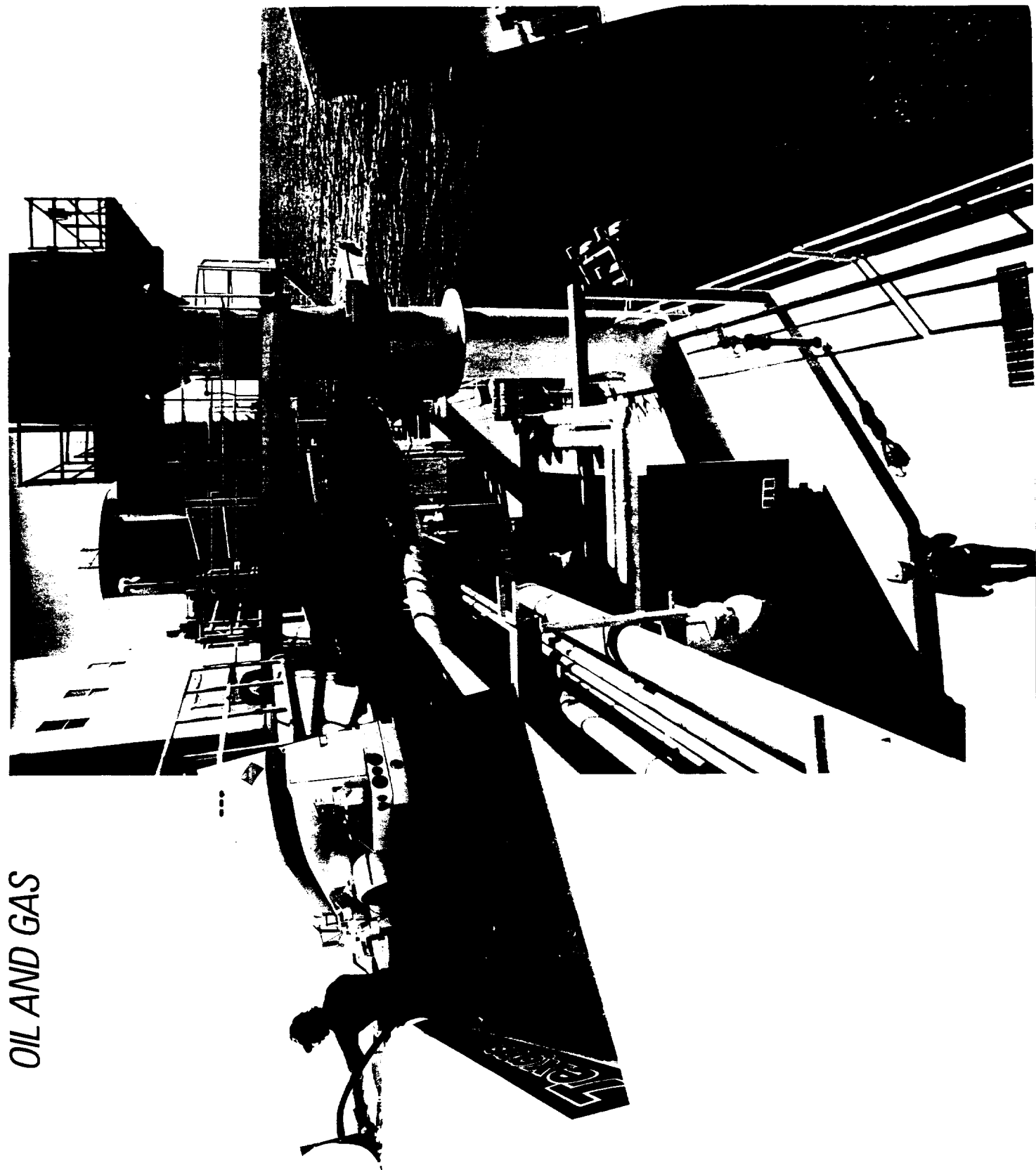
Allied's apparel fibers are used in the manufacture of lingerie and sports outerwear such as ski jackets, while its nylon and polyester industrial fibers find application in such products as tires, seat belt webbing, hoses, conveyor belts, fishnets and outdoor furniture.

In the plastics area, Allied produces high-density polyethylene used for myriad applications including milk and food containers, automotive parts and toys. Allied's films are used to package foods, pharmaceuticals and records. The Company's engineered plastics, which are replacing many traditional materials such as ferrous metals and aluminum, are used as wire and cable insulation as well as in the fabrication of automotive parts and power tools. And Allied's low-molecular-weight polyethylene is used as an additive in hundreds of applications, from adhesives to textiles.

Headquartered in Morris Township, New Jersey, Allied's Chemical Sector operates 75 plants, 42 sales offices and five research facilities, staffed by some 14,000 employees in 25 states, four Canadian provinces and six foreign countries.



Among the hundreds of products manufactured by Allied are plastic film, fluorinated carbon for lithium battery applications and fibers for carpeting.



OIL AND GAS

Allied's energy businesses are managed by its wholly-owned subsidiary, Union Texas Petroleum, which is the nation's largest independent oil and gas company.

Union Texas explores for and produces oil and gas both onshore and offshore the United States and in 17 countries around the world. It also processes, transports and markets petroleum products through its hydrocarbon products businesses.

The worldwide search for oil and gas is a costly one. Through aggressive exploration programs and acquisitions, the company strives to boost its reserves to replace production. Since 1979, Union Texas has replaced 105 percent of its produced reserves, a key benchmark for energy companies. That figure compares to an average of 88 percent for a representative group of 44 domestic petroleum companies, both independents and majors.

As Union Texas seeks to increase its reserves in the United States, the company has greatly expanded its exploratory properties offshore in selected high reserves areas such as the Gulf of Mexico and near Alaska's North Slope and onshore in several basins in Wyoming and other western states. In addition, Union Texas continues to be active in several mature basins, including the Gulf Coast in Texas and Louisiana,

West Texas' Permian Basin. New Mexico's San Juan Basin and the Williston Basin of Montana and North Dakota. To supplement its domestic exploration programs, Union Texas is seeking to increase its long-life oil and gas reserves through acquisitions in regions where the company is now active.

Overseas, Union Texas participates in exploration and production projects in a number of selective areas which have high oil potential and stable political and economic environments. In key producing areas such as the British North Sea and Indonesia, the company is pursuing opportunities for development drilling to delineate additional reserves. In East Kalimantan, Indonesia, natural gas produced by a joint venture is liquefied at a government-owned liquefied natural gas plant and then shipped to Japanese industrial and utility customers.

Elsewhere internationally, Union Texas has exploration and production interests in Pakistan and Spain. In addition, new ventures are under way in other producing areas, including South America. By improving the company's geological diversification, Union Texas seeks to establish production in several basins abroad to provide additional income sources.

Union Texas ranks among the top 20 gas processors in the United States. The company processes natural gas through 13 company-owned plants.

Union Texas also operates an extensive storage and distribution system for petroleum products. Located along the Texas and Louisiana Gulf Coast and the Mississippi River, Union Texas' five company-owned terminals and several leased facilities have the capacity to store more than 19 million barrels of product for customers.

Near Baton Rouge, Louisiana, the Geismar olefins plant, in which the company has a 42 percent interest, can produce up to 720 million pounds of ethylene yearly, which is used by Allied's Chemical Sector and other firms to manufacture high-density polyethylene.

Texgas Corporation, a wholly-owned subsidiary, is one of the 10 largest retail propane marketers in the United States. Texgas sells propane to more than 250,000 customers, primarily east of the Mississippi River, for home heating and motor fuel and for agricultural, commercial and industrial uses.

Headquartered in Houston, Texas, Union Texas has more than 3,000 employees and operates 13 exploration and production field offices worldwide, 19 plants and terminals and 127 propane retail outlets throughout the United States.



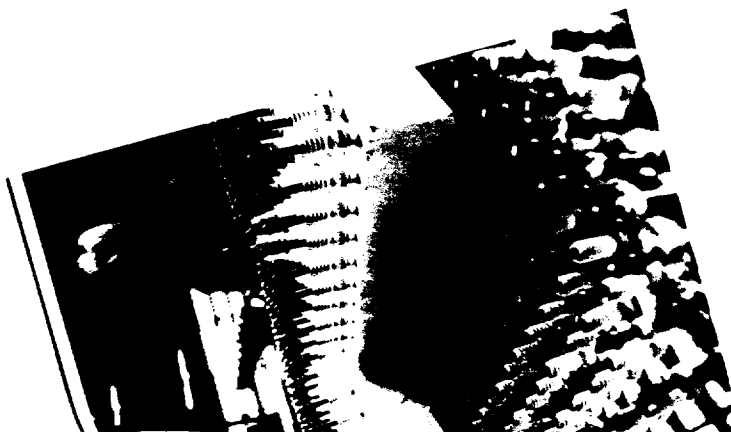
Allied's energy operations include LP gas marketing, oil and gas production in the U.S. and abroad, and international and domestic exploration for new reserves.



AUTOMOTIVE



FMSI 13752



Allied manufactures a wide array of components and systems for the worldwide automotive market including air filters, wheel cylinders and spark plugs.

Allied is one of the world's largest independent suppliers of automotive components and systems. Serving the international automotive industry, its products are used as original equipment by vehicle manufacturers and as aftermarket replacement parts. The products are marketed under such brand names as *Bendix*, *Fram*, *Autolite*, and *Prestolite*.

Products marketed under the *Bendix* label include a wide array of parts for passenger cars as well as light, medium and heavy trucks.

For passenger cars and light trucks, Allied manufactures drum and disc brakes, power brake boosters, master cylinders and hydraulic valves.

For medium and heavy trucks, *Bendix*-branded products include a full range of air and hydraulic brake actuation components, air and hydraulic drum and disc brakes and power steering systems. These products are manufactured for both original equipment and the aftermarket. Allied is the world's leading independent truck brake supplier because it alone provides actuation systems and foundation brakes for both air-braked and hydraulically-braked vehicles.

The *Bendix* brand name also appears on an array of friction materials for automotive applications, including disc brake pads, drum brake

linings, brake blocks and clutch facings. Allied also produces friction materials for aircraft, agricultural, railway and industrial applications.

Fram is one of the leading brands of automotive filters serving the worldwide aftermarket. It is chosen more often by U.S. drivers who service their own cars than any other brand of filter. A 1984 joint venture with FIAAM of Italy makes Fram the second largest filter manufacturer in Europe.

Autolite spark plugs, manufactured for all gasoline engine vehicles and powered equipment, are the third largest selling spark plug in North America.

Both *Fram* and *Autolite* products are available through all aftermarket channels, from traditional warehouse distributors to mass merchandisers.

Allied Automotive also provides *Prestolite* brand electrical products and *Bendix* electronic engine management controls which foster fuel efficiency and improved environmental performance. These products, serving original equipment manufacturers, include electronic fuel injection systems, sensors, actuators, ignition components, electronic transmission controls, speed

controls, electric motors, wiring sets, air cleaners and cooling modules. Allied is also the leading independent seat belt manufacturer in North America.

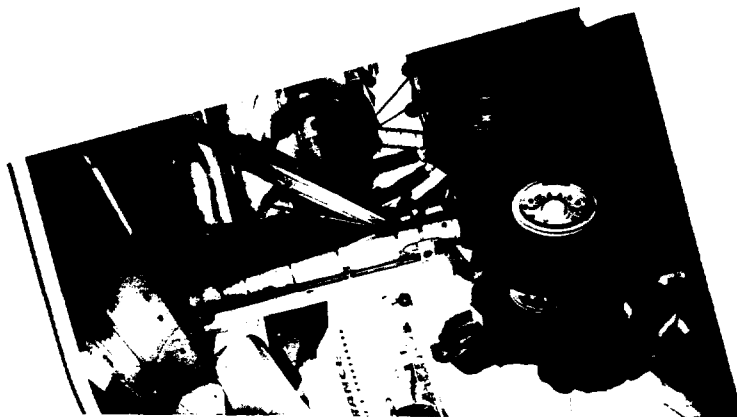
From its headquarters in Southfield, Michigan, near the heart of the U.S. automotive industry, Allied Automotive, with more than 40,000 employees, supervises operations at 87 plants, 113 sales offices and 23 engineering centers on four continents. Its subsidiaries include Bendibraca in Spain; Benditalia in Italy; Bendix Limited in England; D.B.A. in France; Jurid Werke in West Germany; Bendix do Brasil in Brazil; Industrias Bendix in Argentina; Bendix Mexicana in Mexico; Bendix Mintex in Australia, and three Fram operations in Brazil, Argentina and New Zealand. In addition, Allied Automotive is represented in 13 other countries by major licensees, and its products are distributed in more than 100 countries.

This international presence gives Allied a competitive strength in an industry which is constantly moving closer to a global orientation and realization of "world car" and "world truck" concepts. Automotive manufacturers now reach across national boundaries to serve new markets, putting greater demands on suppliers to provide parts which may be used and serviced interchangeably in multiple markets and manufacturing locations.



AEROSPACE

FMSI 13754



Allied's Aerospace businesses provide services for U.S. government agencies such as NASA and manufacture a wide range of instruments and systems for aviation, including weather radar and aircraft wheels and brakes.

Allied's Bendix Aerospace businesses provide highly specialized, sophisticated systems, subsystems and components for military and civil aircraft, as well as for air traffic control, missiles and spacecraft, military land vehicles and anti-submarine warfare.

In addition, the Sector provides technical and managerial services to governments and private industry throughout the world.

One of Allied's most important customers is the United States government, which it serves through such agencies as the Department of Defense, the Department of Energy and the National Aeronautics and Space Administration (NASA).

Allied's major aviation market is the U.S. military, which includes fighter and attack aircraft, trainers, tankers, transports, bombers and helicopters. Aerospace businesses provide these aircraft with communication, navigation and identification systems; weather radar; cockpit instrumentation systems; automatic flight controls; wheels and brakes; flight control actuators; ignition and fuel control systems; electric power systems; test equipment, and other engine- and flight-related apparatus.

Most of this equipment is built in different versions for the civil aviation market, which consists of air transport aircraft seating 80 or more passengers, and for general aviation aircraft, which encompasses the multi-engine piston, lightweight turbo-prop, and turbo-jet aircraft used for business and personal flying, as well as commuter aircraft and helicopters.

Recent new product introductions include long-life, lightweight carbon composite brakes for commercial transport aircraft and multi-color electronic cockpit displays of flight and engine data.

A long-time supplier of both ground-based and airborne air traffic control systems, Allied Bendix Aerospace also has the capability to provide the microwave landing system that the Federal Aviation Administration (FAA) has chosen to replace the present instrument landing system at all airports.

For the missile and space markets, Allied provides a number of sophisticated components. In the missile area principal products are gyroscopic devices, advance guidance and control systems, and fusing devices for certain tactical missiles.

The space market includes both civil and military satellites and ground tracking stations for which Allied supplies gyroscopic devices, space pointing and control systems and technical services.

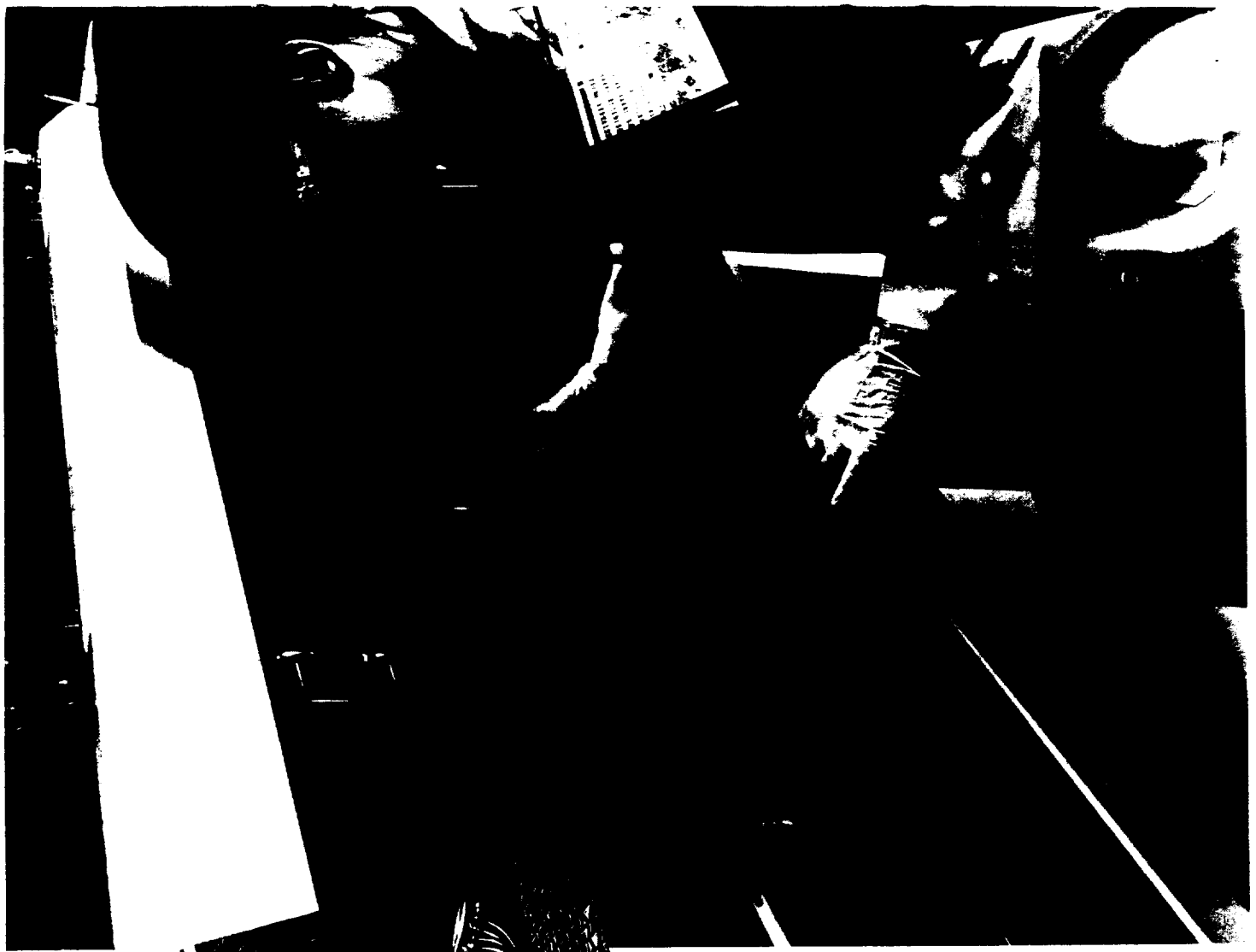
Through the Bendix Field Engineering Corporation (BFEC), Allied provides technical and managerial services under contract to the U.S. government, international governments and private industry throughout the world.

The North American Air Defense Command in Colorado depends on observations and data gathered by BFEC from several tracking stations. BFEC also serves NASA's Goddard Space Flight Center, both on space-flight tracking and data acquisition.

Allied Bendix Aerospace's participation in the oceanic market focuses on anti-submarine warfare. The Sector is the free world's primary supplier of helicopter dip sonar, and its technology is applied to mine detection, neutralization and counter-measure systems designed to meet increasingly sophisticated threats.

With headquarters in Arlington, Virginia, and its technology center in Columbia, Maryland, Allied's Aerospace Sector employs some 30,000 people in 27 plants, 35 sales offices and 13 product support facilities worldwide.

**INDUSTRIAL
AND TECHNOLOGY**



Diverse operations make up Allied's Industrial and Technology Sector and some, such as electronic connectors and health and scientific products, represent the Company's commitment to new, advanced technology markets with long-range high growth potential.

Comprising businesses that, for the most part, have been added to the Corporation's portfolio through acquisitions, the Sector serves a broad spectrum of industries through five business units: Amphenol Products, Health & Scientific Products, Mergenthaler Linotype, Industrial Products and Bunker Ramo Information Systems.

Amphenol Products, the second largest connector manufacturer in the world, makes and markets, worldwide, the industry's widest variety of electrical, electronic and fiber optic connectors, as well as associated cable and cable assemblies and other interconnection devices.

Virtually all of Amphenol Products' output is used as components or subsystems of larger products, such as commercial and military aircraft, missile systems, telecommunications installations and data processing and industrial process control equipment. Amphenol is the leading worldwide producer of coaxial, circular and fiber optic connectors.

The Health & Scientific Products unit includes Fisher Scientific Company and Instrumentation Laboratory Inc. (IL).

Fisher Scientific manufactures, sells and services a broad range of products used in industrial, medical, educational and government laboratories. Its product line, totaling more than 60,000 different items, include essentially everything that is needed to establish and run a laboratory and related quality control responsibilities in manufacturing operations.

IL manufactures and markets biomedical instruments and related supplies for the fast growing diagnostics portion of the clinical laboratory market. IL's product line consists mainly of instruments and diagnostic tests which analyze blood in order to detect disease or monitor body function.

Mergenthaler Linotype is a leading international organization manufacturing, selling and supporting image processing systems, including hardware and software, for the newspaper, commercial typesetting and in-plant typesetting markets. One of Mergenthaler's most renowned assets is its 1,500-font digital typeface library.

The Industrial Products unit includes:

- North American Refractories Company (NARCO), which manufactures refractory brick and specialty products used for furnace linings in high-temperature processes.
- C&D Power Systems, which manufactures industrial batteries, chargers and power systems.
- Semi-Alloys, which manufactures and markets parts and components for use by the semiconductor industry to seal and protect integrated circuits.
- Prestolite Battery, which manufactures and distributes a full line of lead-acid starting, lighting and ignition batteries for automobiles and other vehicles.
- Bendix Transportation Management Corporation, which transports Allied/Bendix internal freight, as well as that of other companies.

Bunker Ramo Information Systems provides electronic transaction systems and services to the brokerage and banking segments of the financial services industry.

The Sector, headquartered in Morris Township, New Jersey, employs over 24,000 people in 66 plants, 157 sales offices and 17 research and development facilities around the world.



Sophisticated electronic connectors, laboratory equipment and state-of-the-art typesetting equipment are among Allied's portfolio of products.

**RESEARCH,
DEVELOPMENT
AND ENGINEERING**



New and improved products and processes are the focus of Allied's research, development and engineering (RD&E) efforts, which are carried out by both the Corporate Technology organization and comparable units within the operating groups.

Many of the programs are cooperative, with corporate and sector scientists combining their skills and resources to advance the state of Allied technology.

Corporate Technology is also responsible for monitoring, coordinating, reviewing and evaluating all of Allied's technical efforts, shaping and channeling those with promise to complement and enhance the Corporation's overall strategic plans, as well as the strategic plans of the individual businesses.

The blending of Allied and Bendix RD&E capabilities offers many potential benefits, stemming from Allied's strength as a developer and supplier of high-performance materials and Bendix' strength as a developer and supplier of devices that use those materials.

For example, Allied's *Merglas* amorphous alloys are a new class of engineering materials that were discovered by corporate scientists and initially used in experimental anti-theft devices and in transformers.

An outgrowth of this research—microcrystalline high strength aluminum alloys—is undergoing tests by Bendix Aerospace engineers for use in aircraft brake and landing gear components.

In polymer research, Allied's membranes are now finding exciting new applications in biomedical sensors that can track levels of chemicals in the body, and high-strength polymer fibers are being tested as reinforcement for plastics as well as for the fabrication of extraordinarily strong and durable rope, bulletproof vests and other products. And in other parts of the Corporation, researchers are experimenting with toughened ceramics for such diverse applications as auto exhaust gas sensors for better fuel management, ceramic valves for aircraft fuel controls, and ceramic clutch discs which will give improved wear.

With laboratories throughout Allied working independently of one another but often in complementary fields, several forums exist to foster communications between the units. A Core Technology Program was initiated through which 12 core technologies were identified. Core councils were formed for those

technologies which cross sector boundaries and today they serve to address common problems as well as potential product synergism.

There are also technical exchange conferences where engineers and scientists interested in a given technology come together to exchange views and respond to the technological needs of the entire Corporation.

The Corporate Technology organization also includes a Commercial Development Group which provides the business path for Allied's new technologies. Its mission is to decide which of Allied's proprietary technologies have the best chance for commercial success and to establish a business framework for their introduction which may include licensing, joint venture, or acquisition.

Allied corporate and sector research, development and engineering facilities number over 75 with some 5,000 scientists and support staff. Their efforts over the years have resulted in the granting of more than 22,000 patents by the end of 1984.

RD&E spending has soared in the past few years, rising from \$70 million in 1979 to \$394 million in 1983, reflecting the acquisition of The Bendix Corporation in January 1983.



Scientific investigation at Allied covers a broad spectrum, including development of new diagnostic methods, materials and manufacturing processes.



Allied Corporation
Corporate Publications
Public Affairs Department
Box 2245R
Morristown, New Jersey
07960-2245

FMSI 13760

**From the first name in quality comes
the latest innovation in clutch facings:**

FRONTALIX II

CERAMETALIX II: BENDIX QUALITY AND PERFORMANCE AT A COMPETITIVE PRICE

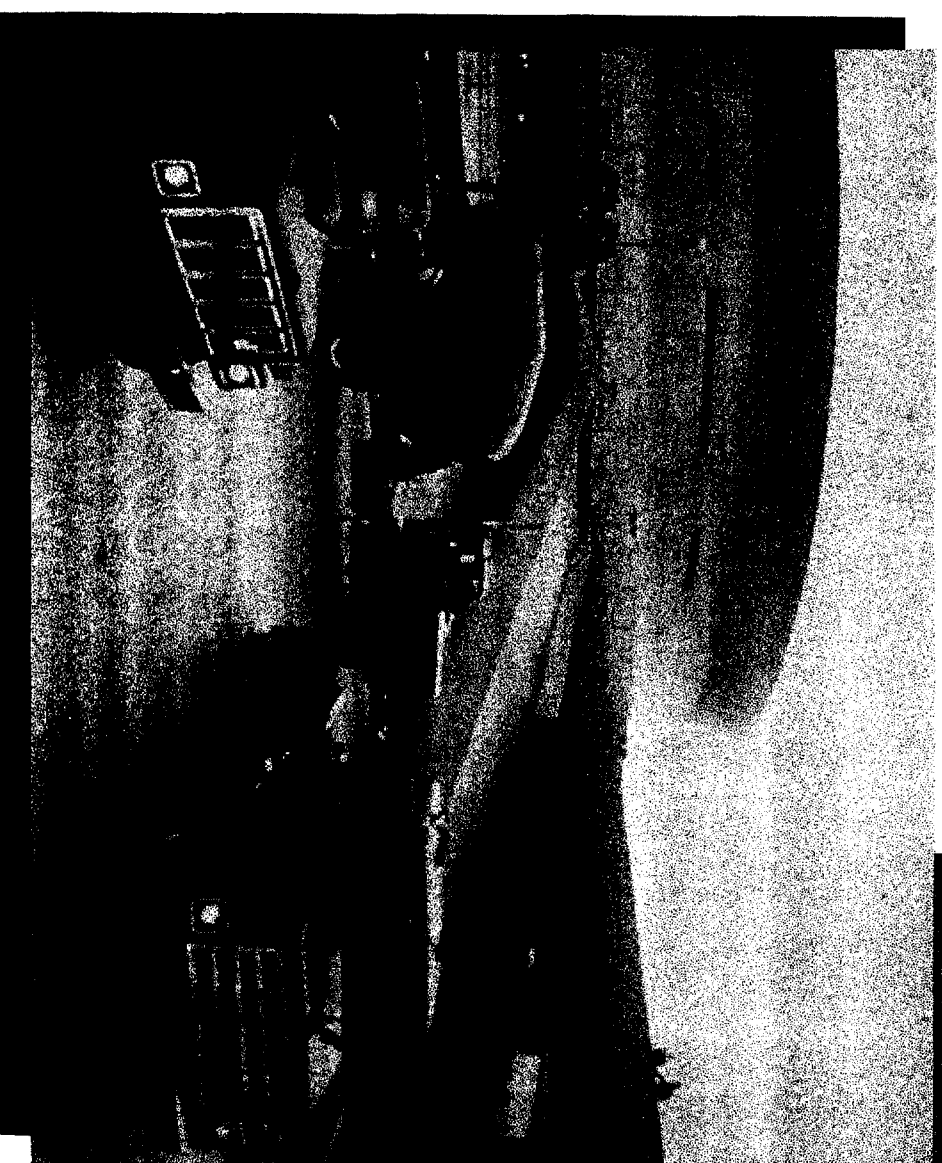
Cerametlix II is the ideal choice for replacement clutch facings on medium and heavy duty vehicles. Cerametlix II provides smooth clutch engagement that is kind to both vehicle and driver. It's priced for the competitive demands of today's aftermarket. And best of all, it's from Bendix Friction Materials Division (BFMD) — the most trusted and widely recognized name in friction material products.

BUILT TO TAKE THE HEAT

Under high temperatures, Cerametlix II clutch facings will work up to four times longer than organic facings, and at least twice as long as full-ring metallic facings. That's why Cerametlix II is the smart choice for replacement facings in vehicles where clutch facings work hardest.

Formulation is the key to Cerametlix II's longer life under high temperatures. It is made

from a controlled mixture of ceramics, powdered metals, and other heat-and wear-resistant materials. The unique perforated cup design ensures maximum adhesion of material to backing, providing an extra measure of security not found elsewhere for the aftermarket. The result is a long-lasting product that is able to resist damaging heat build-up within the clutch system.



CERAMETALIX II: DESIGNED FOR SUPERIOR PERFORMANCE

Cerametlix II delivers a smooth clutch engagement which minimizes wear and tear on vehicles as well as their operators. In fact, when it comes to heavy duty performance, Cerametlix II is unsurpassed.

- **Longer Life.** In heavy clutches, Cerametlix II provides up to four times the life of organic or full ring metallic facings. That means fewer adjustments and less down time.
- **No Fade.** At extreme temperatures, there is no loss of strength or variation in friction level.
- **Even Wear.** Cerametlix II minimizes scoring on pressure plates and flywheels because it absorbs the heat.
- **No Warpage.** The trapezoidal design eliminates the warpage and distortion common in full ring facings.
- **Effective Heat Absorption.** Better absorption of heat allows the flywheel and pressure plate to run cooler, minimizing heat checking and spotting.
- **Wide Range Torque Capacity.** BFMD has trapezoidal shapes and sizes to service all clutches, from six inches in diameter and up. They are designed for pressures of 100 pounds per square inch, regardless of size.

Cerametalix II has all the quality and performance features you would expect from the recognized leader in friction materials. The Bendix name stands for product excellence in both the automotive industry and among the general public as well.

With a reputation like that, you might expect to pay more for Cerametalix II by BFMD — but you won't.

Cerametalix II clutch facings are competitively priced to meet the needs of today's aftermarket buyers and distributors. Quality, performance and price... Why settle for anything less?

Cerametalix was first developed by BFMD engineers soon after World War II because the increasing demands on aircraft braking systems had overtaken the capabilities of organic friction materials. The BFMD ceramic-metallic composite performed well and showed a substantial improvement in wear capabilities when tested at extreme temperatures.

After the successful introduction of Cerametalix to the brake market, the BFMD

engineers continued to work towards other applications. The advent of heavier, off-the-road equipment brought with it severe heat-related clutch problems.

With design changes, modifications, laboratory tests, and vehicle tests, the material proved as unique to the heavy duty vehicle clutch market as it had to heavy duty aviation braking systems.

And now BFMD Introduces Cerametalix II — comparable in quality (virtually equivalent in application) and designed to meet the special needs of today's competitive aftermarket.

Equipment manufacturers and replacement part distributors recognize Bendix as a company that meets changing demands by providing products that work better and last longer.

Bendix Friction Materials Division
P.O. Box 238
Troy, New York 12181
Tel: (518) 270-0200
Telex: 710-444-4957

**From the first name in quality comes
the latest innovation in clutch facings:**

FMSI 13764

CERAMETALIX II: BENDIX QUALITY AND PERFORMANCE AT A COMPETITIVE PRICE

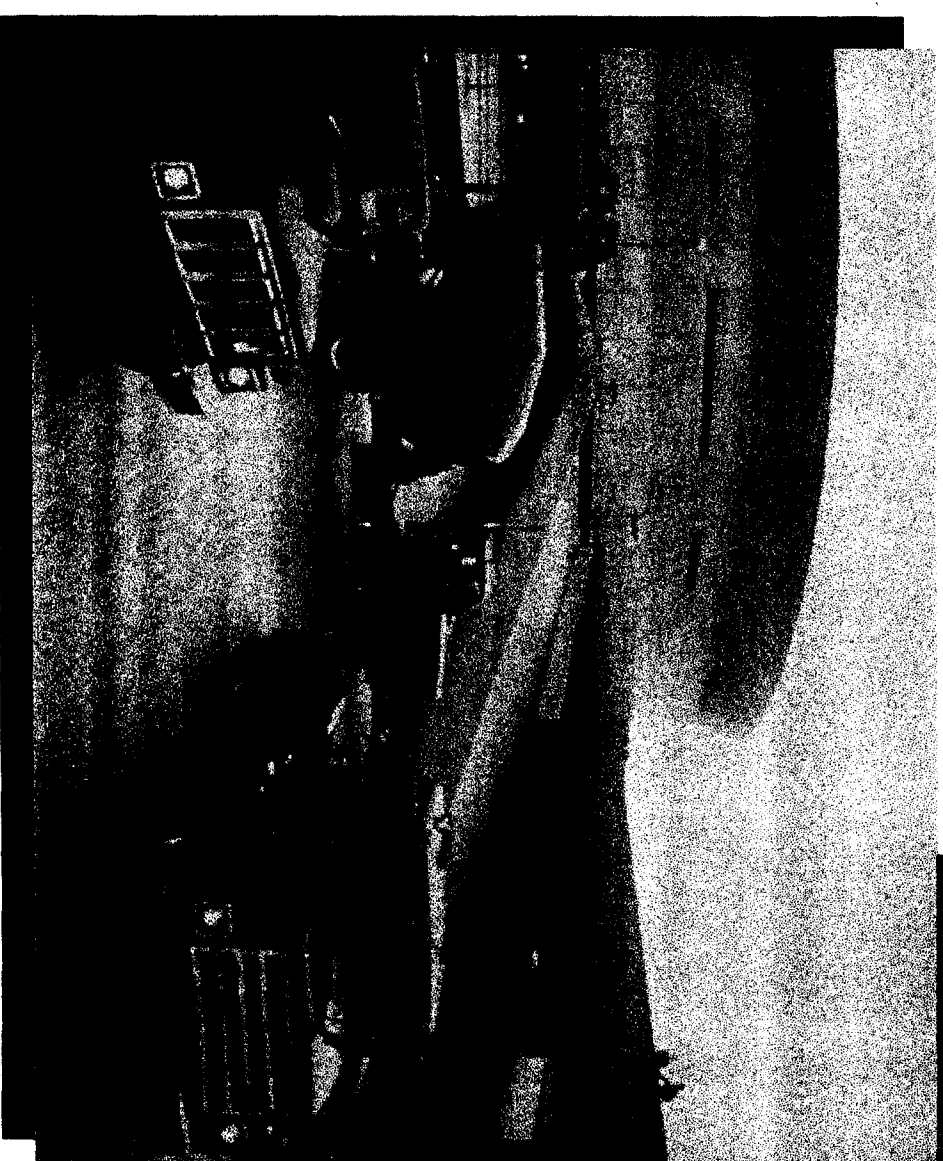
Cerametalex II is the ideal choice for replacement clutch facings on medium and heavy duty vehicles. Cerametalex II provides smooth clutch engagement that is kind to both vehicle and driver. It's priced for the competitive demands of today's aftermarket. And best of all, it's from Bendix Friction Materials Division (BFMD) — the most trusted and widely recognized name in friction material products.

BUILT TO TAKE THE HEAT

Under high temperatures, Cerametalex II clutch facings will work up to four times longer than organic facings, and at least twice as long as full-ring metallic facings. That's why Cerametalex II is the smart choice for replacement facings in vehicles where clutch facings work hardest.

Formulation is the key to Cerametalex II's longer life under high temperatures. It is made

from a controlled mixture of ceramics, powdered metals, and other heat-and wear-resistant materials. The unique perforated cup design ensures maximum adhesion of material to backing, providing an extra measure of security not found elsewhere for the aftermarket. The result is a long-lasting product that is able to resist damaging heat build-up within the clutch system.



CERAMETALIX II: DESIGNED FOR SUPERIOR PERFORMANCE

Cerametalex II delivers a smooth clutch engagement which minimizes wear and tear on vehicles as well as their operators. In fact, when it comes to heavy duty performance, Cerametalex II is unsurpassed.

- **Longer Life.** In heavy clutches, Cerametalex II provides up to four times the life of organic or full ring metallic facings. That means fewer adjustments and less down time.
- **No Fade.** At extreme temperatures, there is no loss of strength or variation in friction level.
- **Even Wear.** Cerametalex II minimizes scoring on pressure plates and flywheels because it absorbs the heat.
- **No Warpage.** The trapezoidal design eliminates the warpage and distortion common in full ring facings.
- **Effective Heat Absorption.** Better absorption of heat allows the flywheel and pressure plate to run cooler, minimizing heat checking and spotting.
- **Wide Range Torque Capacity.** BFMD has trapezoidal shapes and sizes to service all clutches, from six inches in diameter and up. They are designed for pressures of 100 pounds per square inch, regardless of size.

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Bendix Friction Materials Division
P.O. Box 238
Troy, New York 12181
Tel: (518) 270-0200
Telex: 710-444-4957

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

January 4, 1999

Mr. A. Thompson
AlliedSignal
Automotive Aftermarket
105 Pawtucket Avenue
Rumford, RI 02916

Dear Arnie:

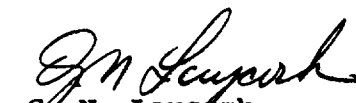
Enclosed are copies of invoice numbers 8285 and 8520. Please note that these invoices are one year old and six months old, respectively. This is a third request for invoice 8285.

On June 4, 1998, we were asked to combine invoices 8285 and 8520 onto one invoice. We did so on invoice 8443 (enclosed). If that is easier you may pay invoice 8443 instead of paying invoices 8285 and 8520 separately.

Your attention to these invoices is appreciated. Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE

MONROE, CT 06468

June 2, 1998

Mr. David BATTERY
AlliedSignal
Automotive Aftermarket
105 Pawtucket Avenue
Rumford, RI 02916

Dear Sir:

Enclosed is a copy of invoice number 8285. Please note that this invoice is five months old. Perhaps it has been overlooked.

Your attention to this invoice is appreciated. Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FMSI 13768

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

Catalog orders

588 MONROE TURNPIKE
MONROE, CT 06468

*Formerly HVSG
Now turbochargers & ~~turbo~~ ~~chargers~~
Brake Systems*

FAX - FAX - ☒ FAX

To: MS PAT GRUNTOWSKI

Allied Signal Inc

From: G. LAYCOCK

*ELYRIA OHIO
PHONE 216 329 9000
FAX 329 9612*

Date: 3/29/94

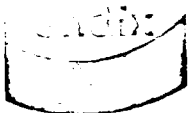
Number of pages : 3

(Including cover)

Message:

OUR FAX 203 452 7951
BUTLER REQUESTS ORDERS BY 3/31/94
→ BY 4/8/94 WILL STILL BE OK
IF YOU HAVE ANY QUESTIONS LET ME KNOW

GLAYCOCK



Heavy Vehicle
Systems

LITERATURE ORDER FORM

VENDOR NAME AND ADDRESS:

MACOMB PRINTING

DATE:

3/27/91

BENDIX
PART NO.

DESCRIPTION

QUANTITY

SHIP TO

BW1531

1991 Automotive Data Book
Supplement
(5 hole punch)

2000

Elyria Graphics
561 Turner St.
Elyria, OH

PREPARED BY:

hs Fehleman

10-14-88 LSF:078

FMSI 13771

Nº 37601

49586

BEHOIX HEAVY VEHICLE SYSTEMS
901 CLEVELAND STREET
ELYRIA OH 44036

5/31/91	2000 Automotive Data Books @ \$400.00/m	800.00
	Sub Total	800.00
	Postage & Freight	36.60
	Invoice Total	836.60

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

May 4, 1990

Mr. Randall Petresh
Bendix HVSG
401 N. Bendix Drive
P.O. Box 4001
South Bend, IN 46634-4001

Dear Mr. Petresh:

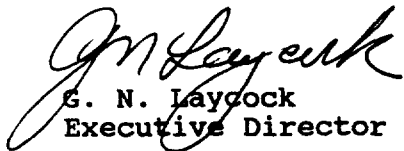
Mr. Bill Wood of Carlisle Corporation has advised us that you would be available to give a short update on the status of SAE Recommended Practice J1802 and the NHTSA Evaluation. Our Membership Meeting is scheduled for Tuesday, June 12th p.m. and Wednesday, June 13th a.m.

There is a reception scheduled for Monday evening and a reception and dinner scheduled for Tuesday evening. The enclosed Notice of Meeting is self explanatory. Indian River Plantation has requested reservations be made by May 9th, however, there is generally not a problem getting a room in Florida in June.

If you have any questions, please let me know.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FMSI 13773

Bendix Elyria

TELEPHONE (201) 845-0440

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

December 14, 1988

313-771-0311

Mr. R. J. Bracali
Tweddle Litho Company
24000 Harper Avenue
St. Clair Shores, MI 48080

Dear Ron:

Would you please make the following shipment for me: 1 carton (210 copies) of the 1983 Brake Block Identification Catalog(832). This is the black cover job which you did several years ago. It is my understanding that the cartons you have in inventory each have 210 copies. Please ship them to:

Bendix Heavy Vehicle Systems Group
(Attention: Tom Martineau)
901 Cleveland Street
Elyria, OH 44036

Please mark shipment P.O. 420230

Please ship by United Parcel Service prepaid, and then bill us for the freight. When you have the freight charges, please advise: (1) date shipped, and (2) UPS charges. Thank you.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Daislane
Executive Director

PL 2/13/89

⑤

FMSI 13774

INVOICE

FRICITION MATERIALS STANDARDS INSTITUTE

E-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 848-0440

SOLD TO

Bendix Heavy Vehicle Systems Group
 (Attn.: Accounts Payable)
 901 Cleveland St.
 Elyria, OH 44036

SHIPPED TO

Bendix Heavy Vehicle Systems Group
 (Attn.: Tom Martinson)
 901 Cleveland St.
 Elyria, OH 44036

DATE	DATE RECEIVED	SHIPPED VIA	YOUR ORDER NO.	F.O.B.	TERMS	INVOICE NO.	
12-29-88	12-19-88	UPS	P.O. 428230	Detroit	Net	005500	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
210	1983 Brake Block Identification Catalogs (Catalog 832)					\$1.28	\$268.80
	UPS Charges Prepaid						<u>4.83</u>
	Total						\$273.63
	Shipped in one carton with 210 copies						
	Purchase Order by phone from Elyria (copy of P.O. not received at FMSI)						

Item # NV-R75 ©Wheeler Group Inc.

FMSI 13775

Bendix

Bendix Heavy Vehicle Systems
901 Cleveland Street
Elyria, OH 44036
Telephone (216) 329-9000

**Allied
Signal**

April 24, 1987

FMSI Inc.
Attn: Mr. Drislane
E. 210, Route 4
Paramus, NJ 07652

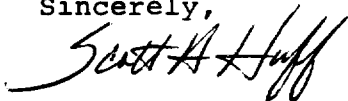
Dear Mr. Drislane:

Per our conversation on Thursday, April 23, 1987, you suggested I write to you requesting dimensions of FMS #'s that are not published in your 1984 Brake Lining, Brake Shoe Automotive Data Book (green cover).

Could you please write or call me (216-329-9602) at your convenience with the lining diameter, width, thickness and length for the FMS numbers listed below. Thank you in advance for your cooperation.

644	1172	1224	1261
654	1191	1234	1269
659	1192	1240	1285
1127	1193	1258	2137TTD
1139B	1196	1259	4211
1139	1198	1260	4442

Sincerely,



Scott A. Huff
Assoc. Marketing Representative

SHH:ca

sh003.287

FMSI 13776

FMSI Number	Drum Diameter	Width	Thickness	Length	
644	14	2	1/4	14-5/8	
654	16	3	1/4	18-1/8	
659	16	2-1/4	5/16	16-3/4	
1127	16	2-1/2	1/4	18	
1139B	16-1/4	3-1/2	3/8	17-1/4	
1139	16-1/4	3-1/2	3/8	17-1/4	
1172	14	2	1/4	10-3/4	(2)
				15-1/2	(2)
1191	14-1/8	3	3/8	14-7/8	
1192	15	3	3/8	15-7/8	
1193	15	4	3/8	15-7/8	
1196	16	5	3/8	16-7/8	
1198	15	4-1/2	3/8	15-7/8	
1224	14-1/8	2	1/4	15	
1234	15	2-1/4	5/16	16-5/8	
1240	15	3-1/2	3/8	15-7/8	
1258	16	2-1/4	1/4	11-3/4	(2)
				16-7/8	(2)
1259	16-1/2	4	3/8	17-1/2	
1260	16-1/2	5	3/8	17-1/2	
1261	16-1/2	5	3/8	17-1/2	
1269	16	2-1/2	1/4	16-7/8	
1285	15	3	3/8	14-5/8	
2137*	12	3	1/4	11-5/8	(2)
				13	(2)
4211	17-1/4	4	3/8	17-3/4	
4442	12	6	1/2	11	

*We have no record of an FMSI 2137TTD (or 2137TT). Data is shown for FMSI 2137.

Mr. Bob Elliott, Bendix Heavy Vehicles Systems

1987

Now Sales Rep for North Carolina, South Carolina

2420 Quail Lake Drive
Charlotte, NC 28210

704-554-6586

Date: March 7, 1994
To: Gil Laycock
From: David Buttery 
Subject: **ALLIEDSIGNAL F.M.S.I. MEMBERSHIP**

Please revise your records to show the following:

AlliedSignal F.M.S.I. Member, Delegate - David Buttery
AlliedSignal F.M.S.I. Member, Alternate - Arnie Thompson

These changes reflect the latest changes within our organization.

DB/sp

cc: A. Thompson
S. Zinno



AlliedSignal Inc.
Automotive Aftermarket
105 Pawtucket Avenue
Rumford, RI 02916-2422

401 434 7000
401 431 3253 Fax

March 3, 1994

Mr. Gil N. Laycock
Friction Materials Standards Institute
588 Monroe Turnpike
Monroe, CT 06468

Dear Mr. Laycock:

Attached is a copy of our purchase order for 3,000 1994 Automotive Data Books.
Shipping instructions are included with the purchase order.

If there are any questions, please call at (401) 431-3328.

Sincerely,

A handwritten signature in cursive script that reads 'Terri Rogers'.

Terri Rogers
Associate Marketing Administrator
Catalog Department

cc: N. Beltram
K. McKeever

FMSI 13780

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 14, 1993

Mr. Arnie Thompson
AlliedSignal Automotive Aftermarket
105 Pawtucket Avenue
East Providence, RI 02916

Dear Arnie:

During the Institute's Annual Meeting, Doug Willsie, Chairman of the Data Book and Technical Committee, reviewed a listing of those who were contributors of data to the Institute over the past year. Your name was high on the list and specifically noted as a major contributor. On behalf of the Officers, Board of Directors, Membership and myself, I would like to thank you for your excellent work.

One can only hope that all members of the Institute would be as cooperative and forthcoming with data as you, however, in any group there will be leaders and followers. Through the efforts of your company and more specifically your contributions, you are definitely one of the leaders in the industry.

As we start into the gathering of 1994 data, we look forward to your continued excellent work.

Again, I would like to add my own personal thanks for your cooperation.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld

cc: Mr. D. BATTERY

FMSI 13781

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 14, 1993

Mr. Steve Loiselle
AlliedSignal Automotive Aftermarket
105 Pawtucket Avenue
East Providence, RI 02916

Dear Steve:

During the Institute's Annual Meeting, Doug Willsie, Chairman of the Data Book and Technical Committee, reviewed a listing of those who were contributors of data to the Institute over the past year. Your name was high on the list and specifically noted as a major contributor. On behalf of the Officers, Board of Directors, Membership and myself, I would like to thank you for your excellent work.

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Again, I would like to add my own personal thanks for your cooperation.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

cc: Mr. K. McKeever

FRICION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

February 13, 1992

Mr. Kevin McKeever
Allied Signal
Aftermarket Brake Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Mr. McKeever:

This is in response to your phone inquiry of February 13, 1992, concerning the use of FMS® and FMSI® numbers. The designations FMS® and FMSI® are registered trademarks of the Institute and our Catalogs and Supplements are copyrighted in the United States and Canada. However, a friction material manufacturer who is a member of the Institute is permitted full use of the copyrighted numbers, illustrations and trademarks. This includes work contracted by a member from a third party, such as market studies.

Additionally, should a member have a customer who is purchasing friction material from them and wishes to use the FMSI part numbers in their cataloging, price sheets, etc., the Institute will grant, upon request, conditional permission for that customer to use the FMSI numbers contingent upon the continued purchasing of friction material from that member.

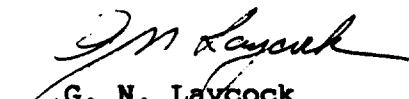
There should be included in all printed matter using FMSI information a copyright notation. The copyright line should read as follows:

All FMS® and FMSI® numbers set forth herein are the property of and copyrighted by the Friction Materials Standards Institute, Inc., Monroe, Connecticut 06468.

If you have any further questions do not hesitate to ask.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

December 20, 1991

Mr. Keith Friedman
Navistar
5 Westbrook Corporate Center
Westchester, IL 60154

Dear Mr. Friedman:

Based on a request made by Mr. James W. McCool of Allied Signal Inc., Bendix Friction Materials Division, this is to advise that Friction Materials Standards Institute, Inc., grants permission to Navistar, for the use of Institute copyrighted materials and the Institute registered trademarks FMS® and FMSI® in your printed materials, including packages, catalogs, price lists and similar work. The Friction Materials Standards Institute, Inc., catalogs are copyrighted in the United States and Canada.

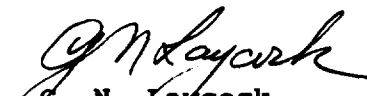
The Institute grants the permission to Navistar, conditioned on continued purchase of your friction materials from Allied Signal Inc., Bendix Friction Materials Division, member of the Institute. This permission is granted during your relationship with Allied Signal Inc., Bendix Friction Materials Division, as your supplier. This permission includes the use of the Institute's copyrighted materials including numbering system, FMSI numbers, illustrations and the listings from the Institute's catalogs and bulletins.

There should be included in all printed matter using FMSI information a copyright notation. The copyright line should read as follows:

All FMSI number set forth herein are the property of
and are copyrighted by the Friction Materials Standards
Institute, Inc., Monroe, Connecticut 06468.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

cc: Mr. J. W. McCool - Allied Signal Inc., BFMD
Mr. W. McKinley - Navistar

FMSI 13784

Bendix



James W. McCool
Sales Manager - Aftermarket

Allied-Signal Inc.
Bendix Friction Materials Division
3146 Mary Drive
Marietta, GA 30066
Telephone (404) 977-9446
FAX (404) 977-9481

FMSI 13785

Bendix

Bendix Friction Materials Division
P.O. Box 238
Troy, NY 12181
Telephone (518) 273-6550

Allied
Signal

December 13, 1991

Mr. G. N. Laycock, Secretary
Friction Materials Standards Institute
588 Monroe Turnpike
Monroe, Connecticut 06468

Dear Gil:

This letter will confirm our telephone discussion today regarding my request on behalf of Navistar to use select FMSI part number identifications. These part numbers will be supplied by the Bendix Friction Materials Division and are intended to be used as the primary product identification for the sale of disc pad sets into the aftermarket. The part numbers involved at this time are as follows: F7108-D184, F7141-D224, F7142-D225, and F7149-D236.

Please advise at your earliest convenience whether or not the use of the above-mentioned numbers is acceptable to FMSI.

Thanks for your help, and have a safe and happy holiday season.

Best regards,



J. W. McCool
Sales Manager-Aftermarket

JWM:em

cc: Keith Friedman (Navistar)
Bill McKinley (Navistar)

FMSI 13786

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 30, 1991

Mr. Kevin McKeeever
Allied Signal, Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Kevin:

I just though I should let you know that the Aftermarket Brake Division Catalog Department has been and continues to be of tremendous assistance to me. Any questions that I have for either Jim Dunning, Rob Halsall, Steve Loiselle, Joe Pimentel or Bob Vinacco are quickly answered.

The assistance that your Catalog Department provides is greatly appreciated. I only wish there were more companies who are as helpful as Allied Signal, Aftermarket Brake Division.

Thank you.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE

MONROE, CT 06468

October 30, 1991

Mr. Bob Vinacco
Allied Signal, Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Bob:

As you receive the 1992 parts micro-fiche and review them would you fill in the blanks on the enclosed sheets and send them back to me. Your assistance is greatly appreciated. I have enclosed blank sheets for the following vehicles:

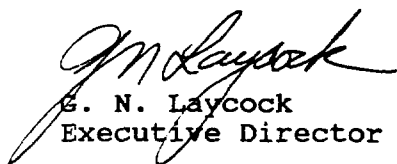
Alfa-Romeo
Daihatsu
Saab
Yugo

I realize that sometimes the initial micro-fiche may contain partial information. But partial information is better than no information.

Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


E. N. Laycock
Executive Director

GNL:ld
Enclosures

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 30, 1991

Mr. Joe Pimentel
Allied Signal, Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Joe:

As you receive the 1992 parts micro-fiche and review them would, you fill in the blanks on the enclosed sheets and send them back to me. Your assistance is greatly appreciated. I have enclosed blank sheets for the following vehicles:

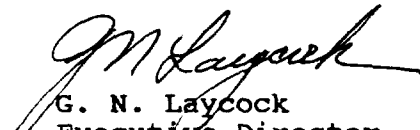
Ford
Lincoln
Mazda
Mercury
Subaru

I realize that sometimes the initial micro-fiche may contain partial information. But partial information is better than no information.

Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 30, 1991

Mr. Steve Loiselle
Allied Signal, Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Steve:

As you receive the 1992 parts micro-fiche and review them would you fill in the blanks on the enclosed sheets and send them back to me. Your assistance is greatly appreciated. I have enclosed blank sheets for the following vehicles:

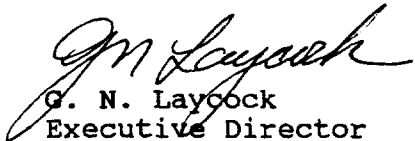
Audi
BMW
Chrysler
Dodge
Eagle
Jeep
Mitsubishi
Plymouth
Porsche
Volkswagen

I realize that sometimes the initial micro-fiche may contain partial information. But partial information is better than no information.

Thank you for your assistance.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 30, 1991

Mr. Rob Halsall
Allied Signal, Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Rob:

As you receive the 1992 parts micro-fiche and review them would you fill in the blanks on the enclosed sheets and send them back to me. Your assistance is greatly appreciated. I have enclosed blank sheets for the following vehicles:

GEO
Isuzu
Lexus
Saturn
Suzuki
Toyota

I realize that sometimes the initial micro-fiche may contain partial information. But partial information is better than no information. I have not included Buick, Cadillac, Chevrolet, GMC, Oldsmobile and Pontiac, as I get this information from Delco Chassis Division.

Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 30, 1991

Mr. Jim Dunning
Allied Signal, Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Jim:

As you receive the 1992 parts micro-fiche and review them would you fill in the blanks on the enclosed sheets and send them back to me. Your assistance is greatly appreciated. I have enclosed blank sheets for the following vehicles:

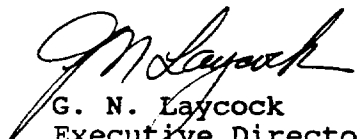
Acura
Honda
Hyundai
Infiniti
Jaguar
Mercedes
Nissan
Range Rover
Volvo

I realize that sometimes the initial micro-fiche may contain partial information. But partial information is better than no information.

Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures



Allied-Signal Inc.
Aftermarket Brake Division
105 Pawtucket Avenue
E. Providence, RI 02916
Telephone: (401) 434-7000



February 13, 1991

FRICTION MATERIALS STANDARDS
INSTITUTE, INC.
588 Monroe Turnpike
Monroe, CT 06468

To Whom It May Concern,

In reference to the enclosed annual membership fee, please change your records to reflect the named delegate to David Buttery. (See enclosed memo.) Future invoices and FMSI information should be sent to me.

If you have any questions, please feel free to contact me at (401) 431-3058.

Sincerely,

ALLIED-SIGNAL, INC.
AFTERMARKET BRAKE DIVISION

David J. Buttery
Engineer
Brake Engineering

DJB:mal

Enclosures

FMSI 13793

Memorandum



Allied-Signal Inc.
Aftermarket Brake Division
E. Providence, RI 02916



Date: November 7, 1990
To: Larry Mintman
From: S.L. Stokes
Subject: DELEGATE FOR ALLIED-SIGNAL AFTERMARKET BRAKE DIVISION

Larry:

This is to advise you that effective immediately David Buttery will be the delegate for the Allied-Signal Aftermarket Brake Division. David, as you know, is responsible for all of the ABD Friction Engineering activities. He has a good background in friction, and I am sure will do well for FMSI and ABD in this position.

I would recommend that Ron Randall replace me as Chairman of the Annual Meeting Committee.

It has been a pleasure on my part to be active in FMSI for the last three plus years. I will continue to look forward to maintaining the relationships with the others in FMSI as I have done in the past.

Please feel free to call upon me if I may be of assistance in the future.

S.L. Stokes

SLS:mal

cc: R. Boggia
G. Laycock (FMSI)
J. Teal
S. Zinno

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

September 7, 1990

Allied Signal, Inc.
Bendix Friction Materials Division
21 British American Blvd.
Latham, NY 12110
Attention : Accounts Payable

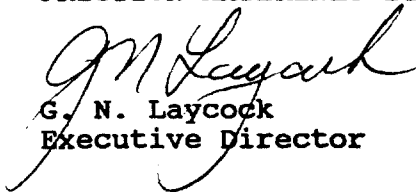
Gentlemen:

In order for the Friction Materials Standards Institute to finalize our account with Tweddle Litho Company, printers of our 1990 Automotive Data Book, all invoices must be paid. We are advised by Tweddle Litho Company that your invoice number C-3668-3 date June 29, 1990 is still open, copy enclosed.

This invoice is now over two months old. We would appreciate your giving it your prompt attention.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld
Enclosure

cc: Mr. J. Curran - Tweddle Litho Co.

SEP 07 '90 11:05

INVOICE

185 PDS

SU 002
Curran

TWEDDLE LITHO COMPANY

24000 HARPER AVENUE • ST. CLAIR SHORES, MICHIGAN 48080 • (313) 371-3300
FAX (313) 771-0311

SOLD TO

Allied Signal, Inc.
Bendix Friction Materials Div.
21 British American Blvd.
Latham, NY 12110
Attn: Accounts Payable

INVOICE NO. C-3668-3

DATE June 29, 1990

CUSTOMER'S ORDER NO.
P.O. #A02787

TERMS — 30 DAYS NET

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT	
200	1990 AUTOMOTIVE DATA BOOK	1.20/ea.	\$240	00
	UPS		33	76
		TOTAL	\$273	76
Tax Exempt: Out of State				
Enclosure: Receipts				

COMPUTERIZED PHOTO COMPOSITION • WEB and SHEET-FED LITHOGRAPHERS

FMSI 13796

Memorandum



Allied-Signal Inc.
Aftermarket Brake Division
E. Providence, RI 02916



Date: November 7, 1990
To: Larry Mintman
From: S.L. Stokes
Subject: DELEGATE FOR ALLIED-SIGNAL AFTERMARKET BRAKE DIVISION

Larry:

This is to advise you that effective immediately David Buttery will be the delegate for the Allied-Signal Aftermarket Brake Division. David, as you know, is responsible for all of the ABD Friction Engineering activities. He has a good background in friction, and I am sure will do well for FMSI and ABD in this position.

I would recommend that Ron Randall replace me as Chairman of the Annual Meeting Committee.

It has been a pleasure on my part to be active in FMSI for the last three plus years. I will continue to look forward to maintaining the relationships with the others in FMSI as I have done in the past.

Please feel free to call upon me if I may be of assistance in the future.

S.L. Stokes

SLS:mal

cc: R. Boggia
D. Buttery
G. Laycock (FMSI)
J. Teal
S. Zinno

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

August 21, 1990

Mr. Stan Stokes
Allied Signal - Aftermarket Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Stan:

At the June 1989 Annual Membership Meeting a Rivet Pattern Subcommittee of the Data Book and Technical Committee was established. Your name was submitted as a possible participant on this Committee.

A number of concerns were also expressed by several members of the Institute concerning the function of the Committee and its effect upon the Institute. After obtaining a legal opinion from the Institute counsel, reviewed by the Board of Directors and a careful reading of the Institute Constitution, it was decided that the Committee function to "Recommend" Rivet Patterns was not in the best interest of the Institute. It also did not concur with Article II, Section d of the Institute's Constitution which reads in part:

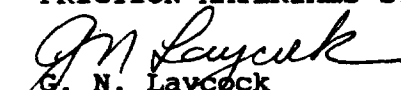
The object of this Institute shall be to collect, assemble and disseminate to members of the said industry, scientific, engineering, technological, statistical and other relevant information...

The decision to disband this Committee was made by the Board of Directors at the 1990 June Annual Meeting on June 11th and presented to those members present at the Membership Meeting on June 12th. This decision is detailed in the Minutes of the Membership Meeting which will be distributed shortly.

The Institute would like to thank you for your willingness to participate on this Committee and support of the Institute. We look forward to your continued support. Thank you.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

August 21, 1990

Mr. David Buttery
Allied Signal - Aftermarket Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear David:

At the June 1989 Annual Membership Meeting a Rivet Pattern Sub-Committee of the Data Book and Technical Committee was established. Your name was submitted as a possible participant on this Committee.

A number of concerns were also expressed by several members of the Institute concerning the function of the Committee and its effect upon the Institute. After obtaining a legal opinion from the Institute counsel, reviewed by the Board of Directors and a careful reading of the Institute Constitution, it was decided that the Committee function to "Recommend" Rivet Patterns was not in the best interest of the Institute. It also did not concur with Article II, Section d of the Institute's Constitution which reads in part:

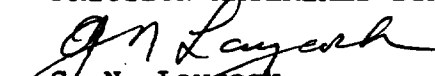
The object of this Institute shall be to collect, assemble and disseminate to members of the said industry, scientific, engineering, technological, statistical and other relevant information...

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The Institute would like to thank you for your willingness to participate on this Committee and support of the Institute. We look forward to your continued support. Thank you.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

July 31, 1990

Mr. Jim Dunning
Allied Aftermarket Division - Allied Signal
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Jim:

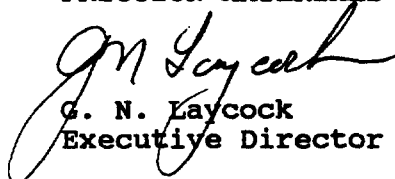
Enclosed is a copy of the last O.E. part to FMSI Cross Index published last fall. I have marked corrections which have been noted since it was published.

During my conversation with Bob Vinacco I mentioned the Truck Index Books which we get. I have copied a few pages from the Diesel Truck Index as a sample of what is contained in them as well as the cover pages from each; Diesel, Gasoline and Import. I have included an order form should you wish to order copies.

I would like to thank you and Rob Halsall, Steve Loiselle, Joe Pimentel and Bob Vinacco for your efforts during my visit last Friday. There are only a few Institute members who are as willing to share information as Allied. Your efforts and assistance are appreciated. If there is anything we can do to assist you, do not hesitate to ask.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Attachments

cc: K. McKeever - AAD

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

July 31, 1990

Mr. David Buttery
Allied Aftermarket Division - Allied Signal
105 Pawtucket Avenue
E. Providence, RI 02916

Dear David:

As discussed last Friday, enclosed is a copy of the key dates related to the EPA Asbestos Ban as prepared by Ms. Rita Grisham of Nuturn and presented at the FMSI Annual Meeting last June. I'm sure if you have any questions she will be willing to answer them.

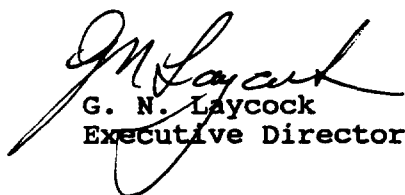
Concerning your project to demonstrate the "completeness" of your line, if there is anything which we can do to assist you do not hesitate to ask, although the Institute Cataloging does not reflect any consolidations or supersessions.

I have not had an opportunity to thoroughly investigate the samples which we inspected. I believe it is a new material assignment due to thickness change. At first look the steels may still be D200 and D431.

I would like to thank you, Ray Boggia and Arnie Thompson for your assistance with these parts. If, in the future, you need assignments with a quick turn around just let me know and we will process the parts as quickly as possible.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld
Attachment

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

June 5, 1990

Mr. Raymond Boggia
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02914

Dear Ray:

Referring to the 14 x 2 1/2 GM shoes which you sent (GM set number 156 18194). In my opinion the shoes are not 109R and they are not 299, but they are both 109R and 299. So much for my riddle. Please refer to the enclosed drawings.

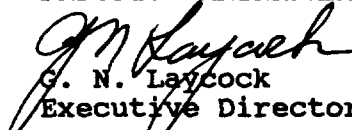
- 109R Shoe - Has a .382/.377 diameter hole in the reinforced section and no .386/.382 diameter hole 2.34" below center line of shoe towards adjuster end.
- 299 Shoe - Has a .386/.382 diameter hole 2.34" below center line of shoe towards adjuster end and no .382/.377 diameter hole in the reinforced section.

Your sample shoes have both of the holes that make the 109R and 299 unique.

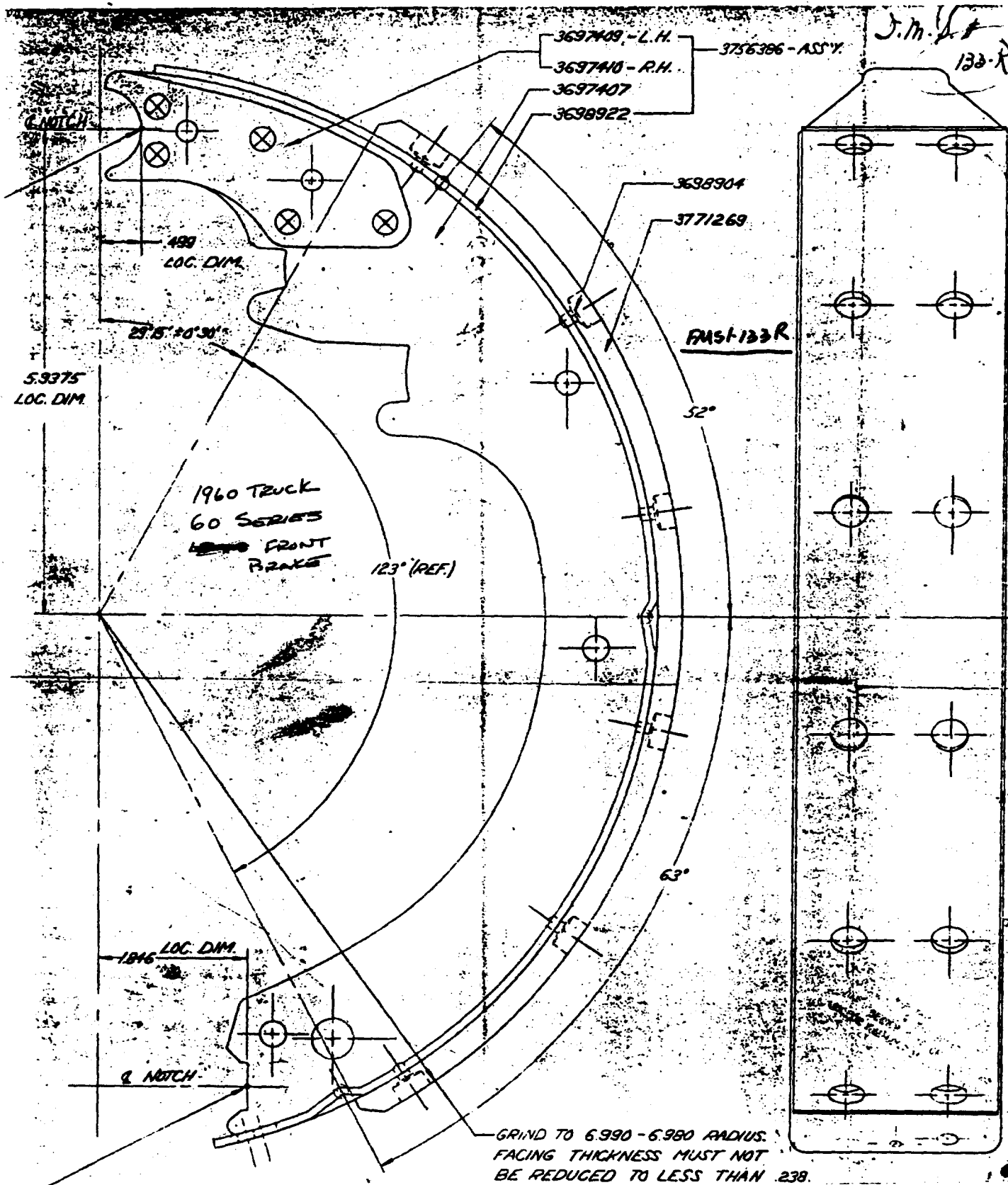
In the strict interpretation it is not 109R and it is not 299. It is a new assignment which will possibly retrofit both 109R and 299 applications. I checked with Doug Willsie at ITT Parts Supply and the shoes which they are selling as 109R have both holes which are in your sample shoes. I also checked with Uni-Bond Brake who are making the O.E. shoe. They are sending me a copy of the print for the shoe. We will make a new assignment using the application information which you provided with the samples.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure



FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE

MONROE, CT 06468

May 24, 1990

Mr. Arnie Thompson
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Arnie:

Re your note on Suzuki Samurai D359 vs D444. You are correct in that the D359 and D444 are interchangeable parts. However, the rules that the Institute operates on say that if the steel shoe changes in anyway it is a different part. The D359 has a "D" lug on the inner and the D444 has a round lug and a slot. Thus they are different.

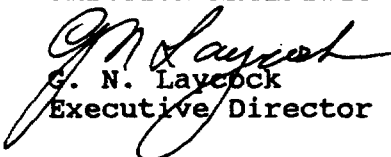
We do occasionally publish retrofit or consolidation information such as we show on brake shoe 522, 553, 518, 521 and 552 drawings. However, this information came to us directly from Delco Moraine Division of General Motors, but we continue to show the application listings as the parts were added by model year.

The Institute has always shown the original application information and has not attempted to do supercessions or consolidations in recent years. We have left the consolidation and supercessions to the aftermarket suppliers who do their homework and at that even those who do their homework handle the consolidation and supercessions differently. Some suppliers want the latest parts numbers to use as retro fit in older parts and some will use the old parts as a carry forward to cover new numbers. The Institute will show both numbers such as we have for D359 and D444. But, we will note as we did on the D444 drawing the possibility of consolidation without giving a preference of which way to go.

Incidently, do you have any information on the rear shoe for the Samurai for Late-88, 89 and 90?

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

Archie A. Freeman, D.V.
E. Drew R.I.

TO: GIL LAYCOCK
FROM: ARNIE THOMPSON
SUBJECT: FMSI ASSIGNMENT

DATE: 05/07/90

HERE ARE EIGHT SAMPLES SENT FOR NUMBER ASSIGNMENT. I HAVE ALSO INCLUDED A COPY OF I.R. 6399-1638 WHICH REFERENCES THE SUZUKI SAMURAI FRONT DISC PAD SET. THROUGH CONFIRMATION WITH ONE OF OUR LOCAL DEALERS, THIS NEW NUMBER WILL RETRO-FIT BACK TO 1986.

IF YOU NEED ANY ADDITIONAL INFORMATION, PLEASE CALL ME AT (401) 431-3408.

THANKS,
ARNIE



FMSI 13807

ORIGINAL

MAT'L:

SAE 1010 HPDS #5 BA (.187-)

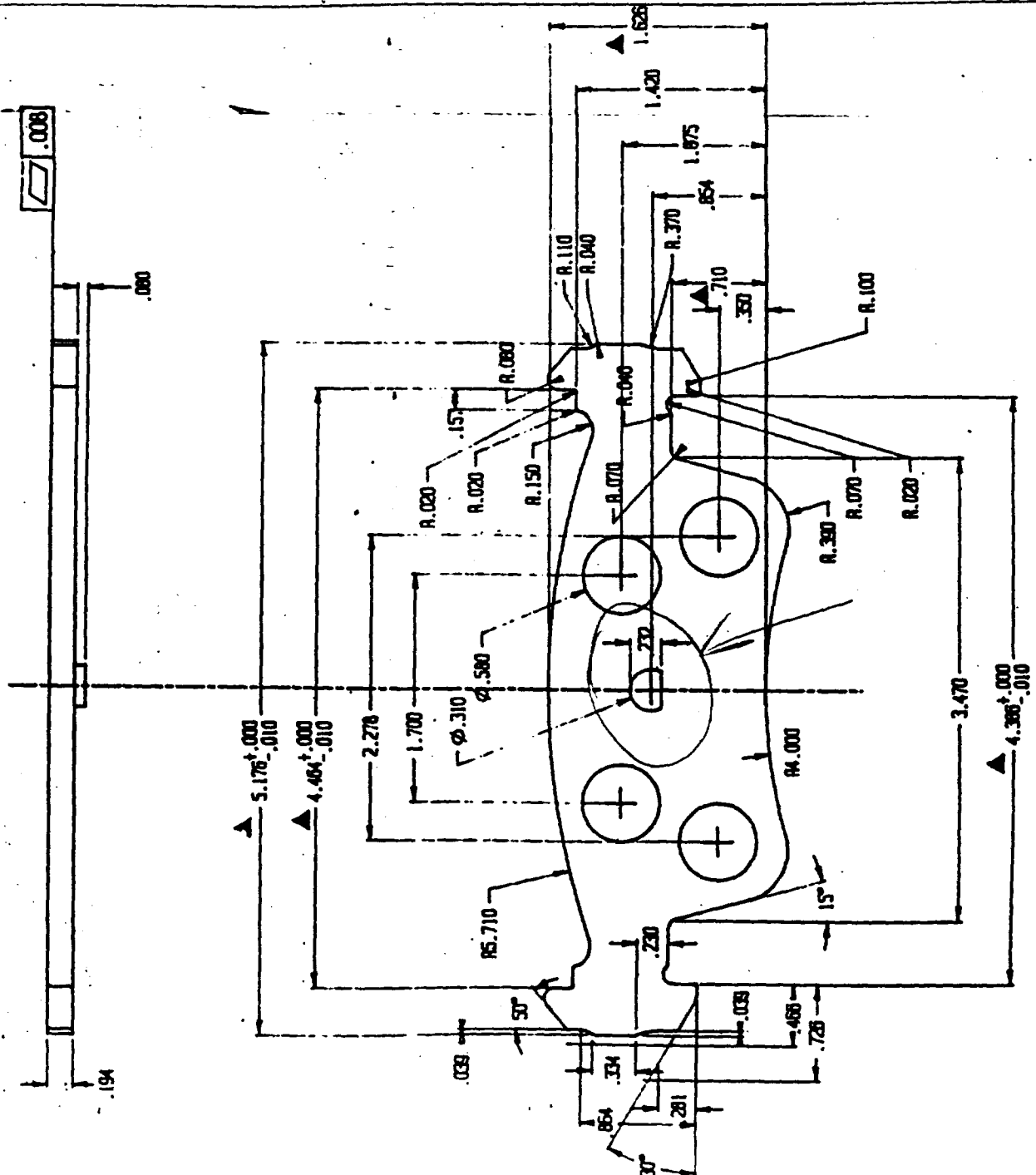
NOTES:

1. PART TO BE SYMMETRICAL ABOUT C WITHIN .005
2. PART TO BE FREE OF BURRS & SHARP EDGES.
3. TOLERANCES UNLESS OTHERWISE SPECIFIED:
ANGULAR $\pm 1^\circ$
4. ▲ CRITICAL DIM'S

SHOE FMS D359

Assembly: FMSI 7250-D359
1987-86 Suzuki Samurai

"D" Lug on inner only

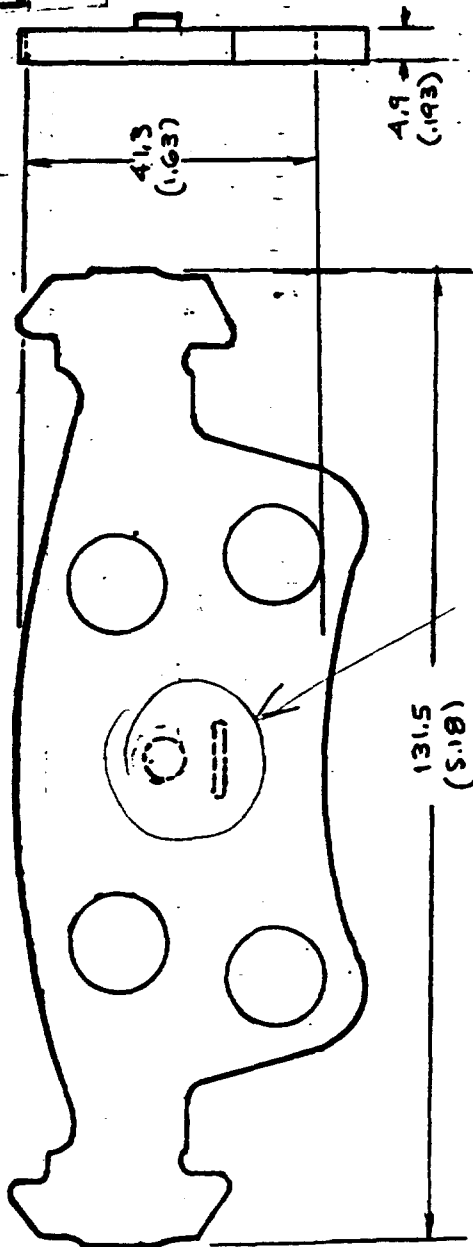


FMSI 13808

REVISION #	BY	APP	DA
REVISION #			
REVISION #			
ORIGINAL DESIGN	87-05-21	JBM	
 DISTEX-IND INC. VILLE D'ANNOU - QUEBEC			
FMSI SUZUKI SAMURAI UNLESS OTHERWISE SPECIFIED MAINTAIN THESE LIMITS FRACT. $\pm 1/32$ 1.00 $\pm$.020 1.000 $\pm$.010 REF. TMS			
SCALE 1:1			

ORIGINAL

SHOE FMS D444



Similar to FMS D359. See D359 for more dimensional details. D359 has D shaped lug for anti-rattle clip.

FMS D444 has round lug and locating slot beneath for clip positioning.

1. Two shoes in set have lug and slot for clip attachment.
2. Two shoes with no clip take insulators glued to steel.

Assembly: FMSI 7250-D444
Application: 1989-88(late), Suzuki Samurai fronts
OEM Number (Set of lined pads): Suzuki 55200-83810

This drawing was prepared from a sample. It may not have sufficient detail to be used for manufacturing purposes.

When dimensioned in millimeters, inches are shown parenthetically.

FMSI and FMSI® are registered trademarks of the Friction Materials Standards Institute.

SHOE FMS D444

JUN 12 1989



BRAKE FRICTION INVESTIGATION REQUEST

NPA # 90-00746

IN 6399	DATE 1638	NAME N/A
DATE N/A		DATE 1638

PART NO. 11 SUZUKI 55200-83810	PART NAME DISC PADS	PART ID ✓	CONSOLIDATION	OTHER
PART NO. 8 SUPPORTING DOCUMENTS OE SAMPLE				
SPECIFIC APPLICATIONS				
1990-86 SANYUAI (Front)				
SUPERCEDES 55110-83300, 55170-83300 (FMSI D359)				
Looks Like a carryover of D359. Is this a semi met friction?				
FMSI says D359 for 86-88. However the # crosses to FMSI 7250-D444. I don't see any difference!				
ORIGINATOR Rob Halsall	TELEPHONE 3145	DATE 4/5/90	NEW PART ✓	EXISTING PRODUCT CONSOLIDATE
		OTHER		
PART NUMBER / FMSI		RECOMMENDATION		
7250-D444?		7250-D359 (NAD359)		
FRICTION TYPE (EDGE CODE)		SEMI MET		
I/M or RIVETED		I/M		
HARDWARE ATTACHED		INBOARD CLIP		
HARDWARE SUPPLIED		BLUE GLUE (NO SHIM NOT)		
NOTES This o.v. sample will retrofit back to 86. Our D359 will serve this application with a semi metallic friction. F.M.S.I. shows 7250-D444 which is identical to our D359 Plate Design				
BENDIX O.E.	YES NO	VEHICLE POPULATION	PRODUCT MANAGEMENT REJECT	DATE
			LINDSEY D. P. HALL	

FRICION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

May 10, 1990

Mr. Raymond Boggia
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Ray:

Should you happen to take a trip down this, enclosed is a map with directions to the Institute office from either the Merritt Parkway (Route 15) or Connecticut Turnpike (I-95). It is a little over 125 miles from E. Providence to the Institute office.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

April 25, 1990

Mr. Ray Boggia
Allied Aftermarket
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Ray:

On your listing of samples which you were going to sent to me, you had a Volvo part 271179-4, your IR number 6399-1399. Don't bother to send sample. I have one. But, could you send me the complete application information. I believe it was an O.E. supersession or retro fit. Thank you.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

April 19, 1990

Mr. Stanley Stokes
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916

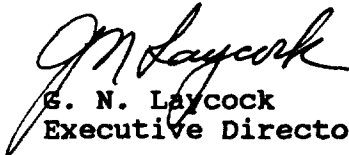
Dear Stan:

It is now less than seven weeks to the annual meeting. Have you and Larry Mintman had an opportunity to select our choices for next years annual meeting site, or do you want to re-submit Lake Tahoe.

In either case could you write your Annual Meeting Committee Report and send or fax it in to the Institute office. We will get it ready to include in the Meeting Report Book.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


E. N. Laycock
Executive Director

GNL:ld

cc: Larry Mintman - Certified Brakes

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

February 9, 1990

Mr. D. Fenn - Purchasing
Allied-Signal Inc.
Bendix Friction Materials Division
P.O. Box 238
Troy, NY 12181

Dear Mr. Fenn:

Attached please find a copy of your purchase order A-01609 for 200 - 1989 Supplements to the 1988 Automotive Data Book and a copy of Tweddle Litho Company Invoice C-2852-4 for the shipment of the 200 Supplements on May 31, 1989.

Tweddle Litho Company advises that they have not received payment for their invoice. Perhaps the reason is that your Purchase Order was made out to Friction Materials Standards Institute, Inc. and the invoice came from Tweddle Litho Company. (It should have been made out to Tweddle Litho Company and sent to Friction Materials Standards Institute, Inc.)

Would you please check your records and advise?

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
G. N. Laycock
Executive Director

GNL:ld
Attachment

cc: Mr. Jim Curran - Tweddle Litho Co.

Handwritten notes:
HARRIS 3/6/90
T.P. [unclear]
FAXED COPY OF INVOICE
RETURN PHONE MARCH 1990
RETURN PHONE T. BUCHANAN 3/1/90
will send check
follow up w/ FAX 4/1/90
4/3 FAX DAVIES
BILL HAS BEEN PAID
REBATE - TIME

FMSI 13814

FMSI 13815

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

FAX - FAX - FAX

To: MARTHA (T BUCHANAN'S office) Allied Signal
From: G. LAYCOCK - FMSI FMD
Date: 3/23/90
Number of pages : 2 (Including cover)

Message:

FMSI 13815



INVOICE

SJ 609
Curran

TWEDDLE LITHO COMPANY

24000 HARPER AVENUE • ST. CLAIR SHORES, MICHIGAN 48080 • (313) 371-33
FAX (313) 771-03

SOLD TO Allied-Signal Inc.
Bendix Friction Materials Div.
P.O. Box 238
Troy, NY 12181
Attn: Accounts Payable

INVOICE NO. C-2852-4
DATE May 31, 1989

CUSTOMER'S ORDER NO. P.O.A 01609
Vendor No. 05129
TERMS — 30 DAYS NET

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
200	1989 SUPPLEMENT TO DATA BOOK		
	UPS	.36/ea.	\$72 00
			8 16
		TOTAL	\$80 16
pk	Tax Exempt: Out of State		
	Enclosures: Receipts		

COMPUTERIZED PHOTO COMPOSITION • WEB and SHEET-FED LITHOGRAPHERS

We hereby certify that these goods were produced in compliance with all applicable requirements of Section 6, 7 and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.

FMSI 13816

FRICION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

February 26, 1990

Mr. Stan Stokes
Allied Aftermarket Brake Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Stan:

Thank you for the return of the Historical Sales reporting recruitment letter. I have a comment and a question.

1. We formerly obtained information from Ms. Monica Johnson in East Providence. We will drop Ms. Johnson from our mailing and add Ms. Priscilla Risco to our mailing for Historical Sales.
2. On your comments attached you note that "your input will include FMD's also". We do solicit and obtain sales info from Mr. Michael Hickey at FMD - Troy. Could you co-ordinate this so that we do not duplicate reporting.

Thank you.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

February 8, 1990

Mr. Raymond Boggia
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Ray:

You provided a sample for the 1990 Jeep Cherokee 4x4, Commarche 4x4 Wagoneer (4x4) and Wrangler front disc P/N 5252531 which we have assigned FMSI P/N 7358A-D477.

The above models also have, what we believe is, a new rear brake. It is 9 x 2 1/2 and the segments are made at FMD in Troy. Their P/N's are 66202 and 66101 for the primary and secondary segments. Have you investigated this set and do you have a sample?

I believe the set fits the 4x2 as well as the 4x4 models. The rear set replaces the 2012FT-267 (10 x 1 3/4) used in 1989. If you have it and we can make an assignment in time for the 1990 Catalog it will fill a large hole in the Jeep listing.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

TALKED 2 Jim Knoll @ Chrysler
VOYAGER-CARAVAN 9x2 1/2 ALSO USED ON JEEP (New for 90)
* DAKOTA (New) Truck

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

February 9, 1990

Mr. D. Fenn - Purchasing
Allied-Signal Inc.
Bendix Friction Materials Division
P.O. Box 238
Troy, NY 12181

Dear Mr. Fenn:

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Would you please check your records and advise?

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Attachment

cc: Mr. Jim Curran - Tweddle Litho Co.



INVOICE

SJ 609
Curran

TWEDDLE LITHO COMPANY

24000 HARPER AVENUE • ST. CLAIR SHORES, MICHIGAN 48080 • (313) 371-3300
FAX (313) 771-0311

SOLD TO

Allied-Signal Inc.
Bendix Friction Materials Div.
P.O. Box 238
Troy, NY 12181

Attn: Accounts Payable

INVOICE NO. C-2852-4

DATE May 31, 1989

CUSTOMER'S ORDER NO. P.O.A 01609
Vendor No. 05129

TERMS — 30 DAYS NET

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
200	1989 SUPPLEMENT TO DATA BOOK		
	UPS	.36/ea.	\$72 00
			8 16
		TOTAL	\$80 16
pk	Out of State		
	Enclosures: Receipts		

COMPUTERIZED PHOTO COMPOSITION • WEB and SHEET-FED LITHOGRAPHERS

We hereby certify that these goods were produced in compliance with all applicable requirements of Section 8, 7 and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.

FMSI 13820

BendixALLIED-SIGNAL INC.
Bendix Friction Materials DivisionP.O. Box 238
Troy, New York 12181

PURCHASE ORDER NO. A01609

PURCHASE ORDER DATE 03/16/89

VENDOR NO. 05129

VENDOR

FRICTION MATERIALS STANDARD
INSTITUTE INC.
E.210 ROUTE #4
PARAMUS, N.J.

07625

SHIP TO

BENDIX F.M.D
GREEN ISLAND PLANT
CONDOES RD. & TIBBITS AVENUE
GREEN ISLAND, NEW YORK
ATTENTION: RECEIVING 12183VENDOR CODE NO. AND OUR ORDER NO. MUST APPEAR ON EVERY INVOICE
PACKING SLIP AND PACKAGE. RENDER ALL INVOICES IN DUPLICATE
ATTN: ACCOUNTS PAYABLE DEPT.PAYMENT TERMS: Net bills 1-15 paid 25th following month. Net bills 16-31 paid 10th second follow
month. Discount bills 1-15 paid 25th; Discount bills 16-31 paid 10th following month.

MYER		EXPEDITER		DEPT.		CONFIRMING TO		TAXABLE	
D. FENN		K. SCHILLINGR				SALES		TAX ALLOW	
O.B. POINT		SHIP VIA		PREPAID		PAYMENT TERMS			
DESTINATION		UPS		FRT PAID		SEE ABOVE			
NE EM	QUANTITY	U/M	DESCRIPTION			UNIT PRICE		AMOUNT	
	200	EA	1989 SUPPLEMENT TO THE 1988 AUTOMOTIVE DATA BOOK.-TO BE 5 HOLE PUNCHED SHIP TO: T.M. BUCHANAN ALLIED SIGNAL, INC.- BENDIX FRICTION MATERIALS DIVISION 21 BRITISH AMERICAN BLVD. LATHAM, NY 12110 VENDOR DELIVERY DATE 04/15/89 ROUTING DS7 ACCOUNT NUMBER 010097433900000669 ACKNOWLEDGEMENT REQUIRED CONFIRMING ** DO NOT DUPLICATE			.412		82.40	
						TOTAL AMOUNT		82.40	

Your acceptance of this order is subject to all the terms and conditions on the face and reverse side hereof.

NOTICES: When Material is forwarded advise us full forwarding, including
Purchase Order Number, Requisition Number and Description of
Material. Failure to do so WILL result in demurrage charges
being charged to your account.

No drafts for purchases made by this company will be honored.

ROUTING: Deviation from Routing Instructions issued by our Traffic
Section, can result in excess charges being charged to yourALLIED-SIGNAL INC.
Bendix Friction Materials Div.Raymond J. Hart
Manager Of Purchasing and Traffic

RIVER

CONTROL NO.

52431

FMSI 13821

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

January 29, 1990

Mr. Raymond Boggia
Allied-Signal Inc.
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916

Dear Ray:

Concerning the sample of Ford No. E7RY-2200A rear brake for Merkur Scorpio 7271-D382 sample which you sent. The FMSI drawing did have some errors, particularly the 7271 drawing we have made the following changes:

Shoe FMS D382 - Revised plate thickness from 4.9 (.193) to 4.5 (.177)

FMSI 7271 - (The pad length was shown in two places - we disagreed with both)

- 1. Revised pad length (on drawing) from 87.5 (3.45) to 88.4 (3.48)
- 2. Revised pad length (in tabulation) from 62 (2.44) to 88.4 (3.48)
- 3. Revised plate thickness from 4.9 (.193) to 4.5 (.177)

Copies of the revised drawings are enclosed.

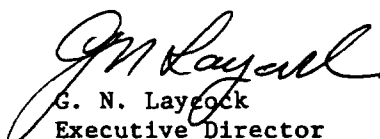
We agree that the material call-out should be organic.

Incidentally, John Mayer sent us, at the same time, a sample of Ford No. E7RY-2200D for 1989 Merkur Scorpio rear. The steel is identical. However, the assembly is different in that the sensor probe goes through the material in an IM hole rather than inserted into the inside radius on the bottom of the pad. The new FMSI puck number is 7354; assembly 7354-D382. You will be getting a copy of it this week with your preliminary shoe bulletin.

Attached ~~is a~~ copy of the update we sent Dave Buttery last Friday. We are working on your samples. We are also doing the year end tax returns, issuing W-2 statements and putting the 1990 Catalog together at the same time.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

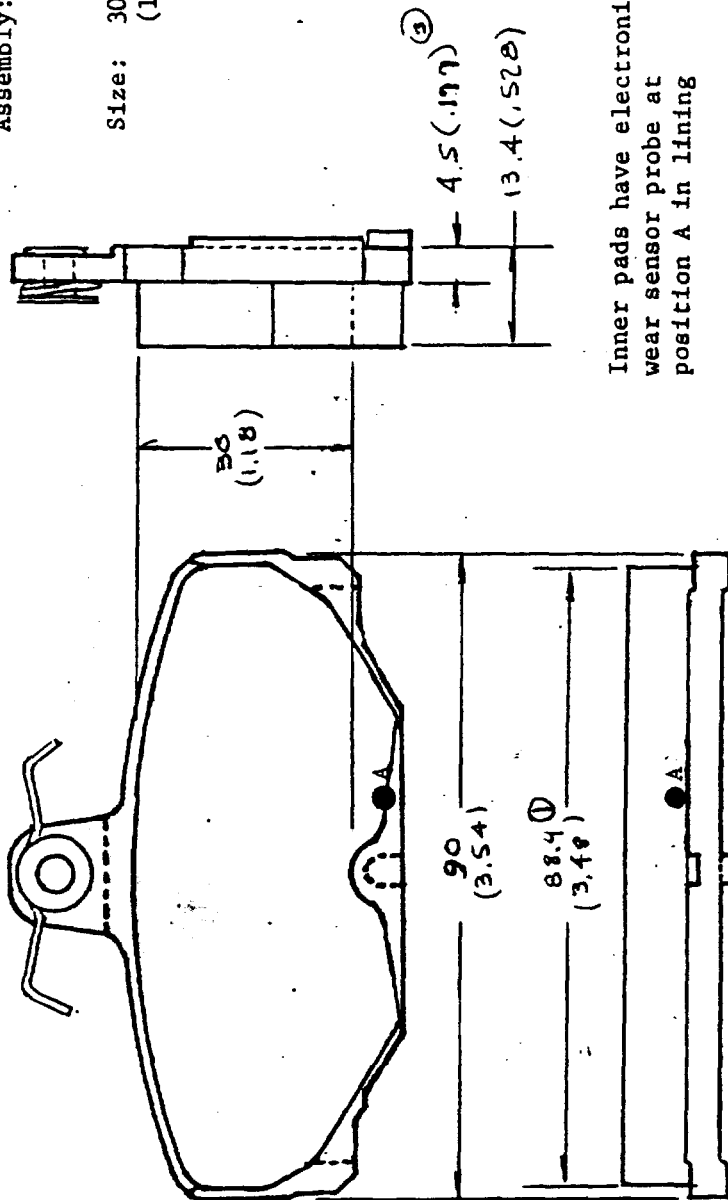
FMSI 13822

62.6.121

FMSI 7271

Assembly: FMSI 7271-D382

Size: 30 x 13.4 x 86.4
(1.18 x .528 x 3.48)



Inner pads have electronic wear sensor probe at position A in lining

Assembly: FMSI 7271-D382
Application: 1988 (Mercury) Merkur Scorpio disc rears
OEM Number (Set of lined pads): Ford E7RY-2200A
Original Equipment material is semi-metallic.

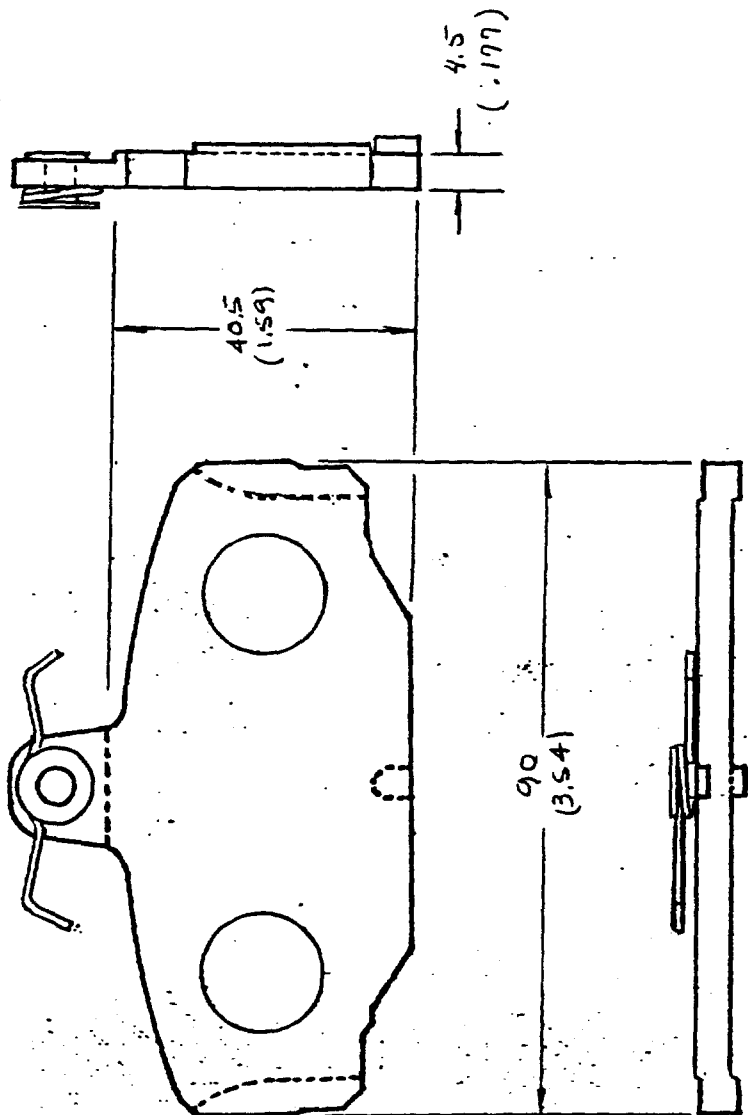
When dimensioned in millimeters, inches are shown parenthetically.

FMSI and FMSI® are registered trademarks of the Friction Materials Standards Institute, Inc.

FMSI 7271

ORIGINAL

SHOE FMS D382



Assembly: FMSI 7271-D382

Application: 1988 Mercury Merkur Scorpio disc rears

OEM Number (Set of lined pads): Ford E7RY-2200A

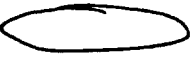
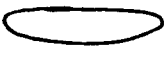
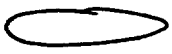
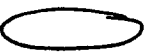
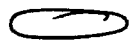
When dimensioned in millimeters,
inches are shown parenthetically.

FMSI® and FMSI® are registered
trademarks of the Friction Materials
Standards Institute, Inc.

SHOE FMS D382

① REVISED PLATE THICKNESS WAS 4.9 (.193) 1/24/90

DEC 15 1987

<u>IR Number</u>	<u>Part</u>	<u>Manufacturer</u>	<u>OE Part Number</u>	<u>Date Sent</u>
6319-1221	Disc	Nissan 7341-D461	44060-43P85	12/19/89
6399-1287	Drum	Honda 1429-S627	43153/43155-SM4-A01	12/07/89
6399-1381	Drum	Chrysler 	4423236 BX MAT'L-DWG?	12/07/89
6399-1378	Disc	Chrysler 	5252531 BX MAT'L-DWG?	12/07/89
6399-1339	Disc	Chrysler 	4423314 BX MAT'L-DWG?	12/07/89
6399-1289	Disc	Honda 7233-D374	43022-SH3-G01	12/07/89
6399-1351	Disc	Mitsubishi 	MB587285	12/07/89
6399-1288	Disc	Honda 	45022-SH3-A02	12/07/89
6399-1290	Disc	Honda 7345-D465	45022-SM4-A00	12/07/89
6399-1367	Drum	Isuzu/GEO 	8-97011437-0	12/19/89
6399-1197	Disc	Nissan 7349-D469	41060-32R93	12/19/89
6399-1292	Disc	Toyota 	04491-50010	12/19/89
6399-1368	Disc	Isuzu/GEO 7348-D468	8-97011892-1	12/19/89
6399-1366	Disc	GM 7339-D459	12321454	12/19/89
6399-1222	Disc	Nissan 7340-D460	41060-30P91	12/19/89
6399-1399	Disc	Volvo 	271179-4	
6399-1388	Disc	Volvo 	271182-8	
6399-1384	Disc	Subaru 7350-D470	26296-AA020	
6399-1377	Disc	Eagle 	4423662	
6399-1333	Disc	240SX 	41060-G8191	
6399-1393	Disc	Isuzu 7347-D363	8-94335-787-0	
6399-1222	Disc	Nissan See Above	41060-30P91	
6399-1163	Shoe	Hyundai 1400-578	58305-31020	

1990 Subaru/Legacy (rear) CBD submitted.

DAVE.

THREE Items HAVE BX MATERIAL
 Could You Supply DRAWINGS?
 G. L. Laycock



Allied-Signal Inc.
Allied Aftermarket Division
105 Pawtucket Avenue
East Providence, RI 02916
Telephone: (401) 434-7000



December 7, 1989

Mr. Gilbert Laycock
FRICTION MATERIALS STANDARDS INSTITUTE
588 Monroe Turnpike
Monroe, CT 06468

Dear Gil:

I am sending you a sample of Ford No. E7RY-2200-A (rear brake -- 1988 Merkur Scorpio) so that you may compare it with drawings FMSI 7271 and FMS D382. As compared to the sample, the friction and plate lengths are wrong, plus the statement "Original Equipment Material is Semi-Metallic" is wrong.

A correction to these drawings and Bulletin No. 942 will be required if you find the sample that I have submitted to be correct.

Please reply at your earliest opportunity because I am releasing this product to our line as an organic formulation; and if that is incorrect, I would like to correct the error before any product is manufactured.

Thank you for your assistance. Please call if you have any questions.

Very truly yours,

ALLIED-SIGNAL, INC.
AFTERMARKET BRAKE DIVISION

Raymond J. C. Boggia

Raymond J. C. Boggia
Engineering Technologist
Brake Engineering

RB:mal

cc: D. Buttery

Plate due .180

3.485

3.49

Plate

3.48

FRIC

3.540

OK

FMSI 13826



ONE
E7RY-2200-A
SHOE & LINING KIT
SE W/O 029028
CONTENTS MADE IN BELGIUM

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

September 13, 1989

File
Ray

Mr. Ray Boggia
Allied Aftermarket Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Ray:

Re: 338 Shoe (Re: Bendix drawing 323354)

Here is a better drawing to replace your pencil sketch

Your right, its wrong, or at least I cannot explain why a shoe shows a drum diameter of 11-1/8" when the lining used on the shoe shows 11-1/32" drum diameter. It has been that way for 13 years.

Prior to 1984, shoes and linings were in separate Catalogs. The 338 shoe shows up first in 1970 Brake Shoe Catalog with 11 inch drum diameter and stayed that way through 1973. In 1974 and 1975 it was shown with 11-1/32" drum and in 1976 the 338 shoe showed an 11-1/8" drum diameter. The 11-1/8" drum diameter carried through the current Catalog.

The linings 2153T, 2121TT, and 2163T have all listed 11-1/32" for the drum diameter since they first appeared. I also checked with one of your competitors to see what the nominal drum diameter is for the drum used with the 338 shoe. It is 11-1/32" drum diameter.

We will change the size shown for the 338 shoe from 11-1/8" to 11-1/32" drum diameter.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

Gil
G. N. Laycock
Executive Director

GNL/dr

P.S. Copy of Drawing that was faxed to you - Attached.

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

November 1, 1989

  Mr. Ed Koss
Allied Automotive
Bendix Friction Materials Div.
P. O. Box 238
Troy, NY 12181

Dear Ed:

Here is a copy of the Institute's Industrial Friction Material Catalog. I think it is the only version ever printed. It was the first and last printing.

Also, enclosed is a Raybestos-Manhattan Industrial Catalog from 1971. The Catalog was used by Raybestos and Grey Rock with different covers. There were other comparable Catalogs at the same time from S. K. Wellman and Johns-Manville, but I don't know where you would find them.

If you need any information on the part number designations or materials, give me a call.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
Executive Director

GNL/dr
Encls.

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

October 12, 1989

Mr. Craig Larson
Allied Automotive
Bendix Friction Materials Div.
P. O. Box 238
Troy, NY 12181

Dear Mr. Larson:

Enclosed is a copy of Ms. Rita Grisham's report to the Annual FMSI Membership Meeting. Rita is the Chairperson of the Institute's Health and Environmental Affairs Committee. I am sure she would be happy to give you more information about the committee than I can. She can be reached at 615-834-3800. Her address is:

Nuturn Corporation
570 Metroplex Drive
Nashville, TN 37211

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
Executive Director

GNL/dr
Enc.

September 27, 1989

Mr. Gilbert N. Laycock
Friction Materials Institute
E. 210 Route No. 4
Paramus, New Jersey 07652

Dear Mr. Laycock:

After nearly 45 years of service to the Bendix Friction Materials Division, Eugene Rogers has decided to retire at the end of September to "enjoy the fruits of his labors" and a less hectic lifestyle.

Although we are sad to see Gene leave, we are pleased to advise you that Mr. Edward R. Koss will assume the responsibilities of licensee liaison and technical correspondent on 10/2/89.

Ed has been a member of the "Bendix" family for 6 years. In addition, he worked in the "friction industry" for over 30 years. His experience prior to joining Allied-Signal includes service at Chrysler's Chemical Division (Cycleweld adhesives and brake lining), Ford Motor Company, Nuturn and private consulting. Mr. Koss is a member of SAE and FMSI's Brake Performance Study Committee.

I know that you will join with me in wishing Gene well in his retirement and Ed success in fulfilling his new responsibilities.



Charles M. Brumhofer
Vice President of Engineering

CMB/nh 0927CMB1.

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

File

September 13, 1989

Mr. Ray Boggia
Allied Aftermarket Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Ray:

Re: 338 Shoe (Re: Bendix drawing 323354)

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We will change the size shown for the 338 shoe from 11-1/8" to 11-1/32" drum diameter.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
Executive Director

GNL/dr

August 25, 1989

Mr. G. Laycock
Friction Materials Standards Institute, Inc.
Bergen Mall Office Center
#. 210 Route 4
Paramus, New Jersey 07652

Dear Gill:

Will you please add Steve Zinno as the alternate delegate
for FMSI and remove Dick Fasteson. We have had a re-
organization and Steve and I are now in the Allied
Signal Aftermarket Brake Division and will be handling
this aspect.

Very truly yours,

Allied Aftermarket Division



S. L. Stokes
SLS/jms
encl.

cc: R. E. Fasteson
S. Zinno
J. Teal
D. Buttery
R. Boggia

6/10
9/6/89

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

August 17, 1989

Mr. Ted Lazarcheff
Bendix Friction Materials Div.
Allied Automotive
P. O. Box 238
Troy, NY 12181

Dear Mr. Lazarcheff:

We have been advised that your company has an interest in membership in the Institute. Friction material manufacturers who are manufacturing from basic raw materials and are producing parts in commercial quantities are eligible for Active Membership (United States Membership) in the Institute. The complete eligibility requirements for membership are spelled out in our Constitution.

For background, I am enclosing copies of the following:

Constitution and By-Laws
EXHIBIT A - Services to Members
Application for Membership Form - Active Member (2)
List of Institute Membership

ANNUAL FEE FORMULA

The annual fee is based on four categories in which the Member participates: (1) Disc Brake linings; (2) Drum Brake linings; (3) Brake Blocks; (4) Clutch Facings. The fee is calculated with a basic charge of \$1,600, with an additional category charge of \$250 for each of the first two categories in which a member participates, with an additional category charge of \$500 for each of the next two categories. Essentially, this comes to:

One Category:	\$1,850/year
Two Categories:	2,100
Three Categories:	2,600
Four Categories:	3,100

APPLICATION FOR MEMBERSHIP

If you were to apply for Active Membership, you should complete the "Application for Membership" Form enclosed. As regards the question on "financial strength", copies of financial statements, or bank references, or trade references such as domestic customers/suppliers would suffice. The application should be signed by a principal of the applicant - Officer, Sales Manager, or someone in similar capacity. The application should be accompanied by a pre-

payment of the first year's annual fee. Assuming the application were accepted, this deposit would be applied to the fee for 12 months from date of acceptance. It normally takes about 6 to 8 weeks to process an application for Active Membership. In the unlikely event that the application is not accepted, the prepayment would be returned.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
Executive Director

GNL/dr
Encls.



Allied-Signal Inc.
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916
Telephone: (401) 434-7000



Jim
June 13, 1989

Mr. Gil Laycock
FMSI
Bergen Mall Office Center
E210 Route 4
Paramus, NJ 07652

Dear Gil:

According to Volvo microfiche, the application for 740/760/780 series are as follows:

88-89	740-760 Series w/Girlinging System	<u>Bendix Equivalent</u>
	270887-3 Std. Life	MKD255
	270195-1 Long Life	
	w/DBA System	
	270886-5 Std. Life	MKD270
	270194-4 Long Life	
	780 Series w/Girlinging System	
	270887-3 Std. Life	MKD255
	270195-1 Long Life	
	w/DBA System	
	(272827-7) 271179-4 Std. Life	MKD270
	(270194-4) 271182-8 Long Life	

If you have any questions, please contact me.

Sincerely,

ALLIED-SIGNAL, INC.
AFTERMARKET DIVISION

Jim Dunning
Jim Dunning
Research Editor
Catalog Department

JD/tmr

cc: Frank D'Agostino
Kevin McKeever

fc: MKD255 / MKD270

FMSI 13836

FRICITION MATERIALS STANDARDS INSTITUTE, INC.**BERGEN MALL OFFICE CENTER****E. 210 ROUTE 4****PARAMUS, N. J. 07652**

June 9, 1989

Mr. Steve Loisel
Allied Aftermarket Division
105 Pawtucket Avenue
East Providence, RI 02916

Dear Steve:

During my visit last month when we were going through Volvo, you gave me a series of part numbers for the front axle of the 780/760/740 Series. You noted that all 5 part numbers were the same pad and steel. However, comparing those part numbers to prior information from other sources, I have crossed them to three FMSI Assignments. They are as follows:

<u>System</u>	<u>Volvo P/N</u>	<u>FMSI</u>
Girling	270 887-3	7161 - D255
"	270 195-1	7161 - 255
DBA	272 827-7	7174 - D270
"	270 886-5	7278 - D270
"	270 194-4	7278 - D270

While the 7174-D270 and 7278-D270 could be covered in the aftermarket by making a set to the 7278-D270 thickness of 16.1 mm. The 7161-D255 is a completely different brake.

I have included copies of the FMS sketches for your reference. This is for your information.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
Executive Director

GNL/dr
Enc.

FMSI 13837

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

May 10, 1989

Mr. Denis Chadwick
 Allied Aftermarket
 105 Pawtucket Ave.
 E. Providence, RI 02916

Dear Denis,

This is a follow-up to Ed Drislanes' letter of April 14, 1989. We have worked on the samples which you sent and below are our assignments for the shoes and linings:

<u>Part Number</u>	<u>Application</u>		<u>FMSI Number</u>
410390415	1989-86 International Truck 700 Series Front		1422-S617
	1989-86 Nissan Truck Model CPB 12	Front	
4406090171	1989-86 International Truck 700 Series Rear		1419-S614
	1989-86 Nissan Truck Model CPB 12	Rear	
94154773	1986 Chev/GMC Truck W4S042	F & R	1416-S612
	1986 Isuzu Truck Model NPR	F & R	
94049962	1989-87 Chev/GMC Truck W4S042	F & R	1417-S612
	1989-87 Isuzu Truck Model NPR	F & R	
94042177	1989-84 Chev/GMC Truck W7R042	F & R	1418-S613
	1989-84 Isuzu Truck Model FTR	F & R	
94050863	1989-87 Chev/GMC Truck W6R042	Front	1421-S616
	1989-87 Isuzu Truck Model FSR	Front	
94050862	1989-87 Chev/GMC Truck W6R042	Rear	1420-S615
	1989-87 Isuzu Truck Model FSR	Rear	

These assignments will be published in a forthcoming BULLETIN. If you are anxious to get the shoes back we can ship them to you or we can bring them with us when we visit E. Providence in the next several months. Please advise.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

G. N. Laycock
 Executive Director

FMSI 13838



Allied-Signal Inc.
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916
Telephone: (401) 434-7000



March 27, 1989

Mr. Gil Laycock
FMSI
East 210
Paramus, NJ 07652

Dear Gil:

On February 10, 1989, I sent seven brake shoe samples to Ed Drislane for his use in assigning FMSI numbers. I have since obtained the enclosed prints from Bendix Mintex (Australia). Perhaps these drawings will assist you in your efforts.

If discrepancies exist, please let me know. Also enclosed are copies of my correspondence with Ed.

Very truly yours,

ALLIED AFTERMARKET DIVISION

Denis Chadwick
Research Editor
Catalog Department

DC:mal

cc: F. D'Agostino
B. Vinacco

FMSI 13839

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

January 13, 1989

Mr. Denis Chadwick
Allied Aftermarket
105 Pawtucket Ave.
E. Providence, RI 02916

Dear Denis:

This is to advise that the seven lined shoe assemblies (Nissan, Isuzu) which you sent earlier this week have been received here.

In order to get these into our system, I will have to prepare drawings from the samples. This will take time as I have other work that I must get out. If at all possible, this job would be a lot simpler if there were loose drilled lining segments from which we could prepare drawings. If you have access to drilled lining segments please send them to me.

In the meanwhile, when we have worked on these parts, we will return them to you.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director



Allied-Signal Inc
Allied Aftermarket Division
105 Pawtucket Avenue
E. Providence, RI 02916
Telephone: (401) 434-7000



January 10, 1989

Mr. Ed Drislane
FMSI
East 210
Route Four
Paramus, NJ 07652

Ed:

This will serve as the packaging list for the Nissan and Isuzu brake shoes that we discussed on January 9, 1989.

I am sending one each of the following part numbers:

410390415
4406090171
94050863
94049962
94154773
94042177
94050862

Please inform me of your FMSI assignments for the above and return the samples to me.

Denis Chadwick

DC:sja

cc: F. D'Agostino

FMSI 13841

March 23, 1989

Mr. E.W. Drislane
Friction Materials Standards Institute Inc.
Bergen Mall Office Center,
210 Route 4
Paramus, NJ 07652

Dear Ed:

I am supplying you with the drawing of Bendix number 3209675 that you requested in your letter of March 8, 1989. Also included are some drawings that I came across for the 7281-D393 set. I hope they prove to be useful to you.

Recently we have been doing some microscopic examination of disc pad friction materials in an attempt at developing a method for determining the contents of the various compositions. Example: asbestos, non-asbestos organic, and various material structures in the semi-mets. Although in the early stages of development, we feel that the process could prove to be a valuable tool. I will be happy to share with you any information and procedures that we may develop. I am very interested in knowing if you have any knowledge or experience on this subject.

As always Ed, it is a pleasure doing business with you. If I can be of any additional service, please do not hesitate to ask.



Raymond J.C. Boggia
Brake Engineering
RB/jo

cc: D. Buttery
S. Stokes



FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

March 28, 1989

Mr. Ray Boggia
Allied Aftermarket Division
105 Pawtucket Ave.
East Providence, RI 02916

Dear Ray:

Thank you for your letter of March 23 with which you sent a drawing of Bendix 3209675 and the drawings for FMSI 7281-D393.

As regards your second paragraph in which you ask if I have any knowledge or experience on the subject of determining the contents of various compositions, my answer follows. I worked for Bendix Friction Materials in Troy, NY from 1948 through 1965. I worked in both organic friction materials and with sintered metallics. I was a Test Engineer on organics from 1948 through 1959, and was in charge of sintered metallics (Cerametallix) from 1959 through 1965. During the latter work, we did the first work on organic-bound metallics (iron powder, chopped steel fiber) that were the predecessors of semi-metallics. My background is all hands-on and not theoretical. I can recognize a truly semi-metallic from others but I cannot tell an asbestos-organic from a non-asbestos organic, and except for spectrographic or other destructive analysis, I don't believe others can. However, my background was over 20 years ago and while it has been used in recent years examining various samples at the Office here, it may be that there are newer techniques that can assist in determining content with which I am not familiar.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

Copy: S. Stokes

FMSI 13843

Allen Ben

TELEPHONE (201) 845-0440

FRICTION MATERIALS STANDARDS INSTITUTE, INC.
BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PARAMUS, N. J. 07652

November 18, 1988

Mr. Peter Rosenberg
Allied Automotive
Bendix Friction Materials Division
P.O. Box 238
Troy, NY 12181

Dear Peter:

This is with reference to the 1988-89 Dodge Truck application information that we talked of yesterday. Reference on your Form 1151290 would be to sheets 9 and 10.

This would add in certain models that were formerly serviced with linings manufactured by Chrysler Chemical Division in Trenton, Michigan. I was advised that Bendix Friction Materials Division was now sourcing these linings. My chart enclosed crosses over the B1, D1 etc. to the Dodge Truck models. I don't have any cross over for the T4 that is shown on your page 10, but this may be export, or a chassis only.

Thank you for your help on the 1989 information.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

Copy:
Carol Carlow

JAG DASHI - BX, Tray 1

FMSI 13844

1989 Dodge Truck

		<u>Front</u>	<u>Rear</u>
B1	B150 Van, Wagon	7179A	2025T
B2	B250 Van, Wagon	7179A	2025T
B3	B350 Van, Wagon	7179A, 7019A	2146AT, 2140AT
D1	D100, D150 Pick-up	7179A	2025T
D2	D250 Pick-up	7179A	2146AT
D3	D350 Pick-up	7179A, 7019A	2146AT, 2140AT
D4	AD150 (Sport Utility)	7179A	2025T
D5	W100, W150 (4WD) Pick-up	7179A	2025T
D6	W250 (4WD) Pick-up	7179A, 7081A	2146AT
D7	W350 (4WD) Pick-up	7081A	2146AT, 2140AT
D8	AW150 (4WD) (Sport Utility)	7179A	2025T
N1	Dakota	7237A	2168T, 2089T
N5	Dakota	7237A	2168T, 2089T

NOV 18 1988

Allied Automotive - Fram Division

SEP 30 1987

105 Pawtucket Avenue
East Providence, RI 02916

401-434-7000

I-95 North to Massachusetts line
Exit at Route 1A South
Newport Avenue (Pawtucket)

Go 1-1/2 to 2 miles South on Route 1A
On the right a Burger King - Across the Street a McDonalds

Go to the Traffic Signal - Uncle Tony's Pizza on the corner
This will be New Road
Take a right on New Road, about 1/4 mile to Fram

Stan Stokes
Frank D'Agostino Catalogs
~~Mr. Woody Woodward~~

~~Mark Santos - Catalogs~~
Jim Dunning "
Steven Loiselle "

Bruce Kennedy - Motorcycles

Dennis Chasler

5/89

✓ Audi ✓
BMW (D 89) ✓
Saab (N 89) ✓
Sterling ✓
Volkswagen ✓
Volvo ✓
Yugo (N 89) ✓
MARCOES ✓

ACURA ✓
Honda ✓
Hyundai ✓
Isuzu ✓
Mazda ✓
Mitsubishi ✓
Nissan ✓
Subaru ✓
Suzuki ✓
Toyota ✓

Geo
Spectra ✓ MATCO ✓
Pezini ✓ TRACKER ✓
Sidelbeck ✓
Tracer ✓
Fiat ✓
Probe ✓
Markus ✓
Scorpio ✓

Premier ✓
Summit ✓
Colt ✓
Metall ✓
Premier ✓

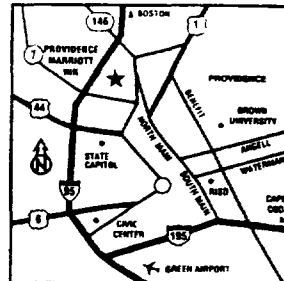
Tim Manion 9/87:

Off I-95 at Exit 23 Right off I-95, then a right, then a left

Manion home 401-884-7635

7:00 PM at Capriccio's

RHODE ISLAND Providence



Providence Marriott Inn

Charles at Orms 02904

(401) 272-2400

TWX: 710-381-6422

Rooms: 350 **Restaurants/Lounges:** *Providence Provisions Company Restaurant*, superb dining for breakfast, lunch and dinner. *Cahoots Lounge*, entertainment and dancing nightly.

Recreational Facilities: Heated year-round indoor/outdoor pool, hydrotherapy pool, health club, exercise room, saunas, game room. Golf and tennis facilities nearby. Short drive to beaches, fishing, sailing. Five minutes from Lincoln Downs Dog Tracks. **Transportation to Hotel:** Commercial airport limousine, taxi service. **Location:** Just off I-95 Exit 23, adjacent to Route 146 in Randall Square downtown. 15 minutes from Green State Airport, 40 minutes from Newport. **Rates:** Single \$60 to \$85. Double \$70 to \$95.

FMSI 13849

ALLIED / RENDIX

JUN 27 1988

Allied-Signal buys 49% of Korea firm

SEOUL, South Korea — Allied-Signal Inc. has acquired a 49 percent interest in Hankuk Brake Industrial Co. Ltd., a manufacturer of friction materials and parts for hydraulic brake systems.

According to a Hankuk Brake official, Allied-Signal's investment "is around \$8 million."

With the new partnership, Hankuk Brake will expand into the manufacturing of hydraulic brake systems and air brakes for heavy-duty vehicles. The Hankuk Brake official expressed hope for manufacturing anti-lock braking systems within three years.

Hankuk Brake currently employs about 500 persons in its Yongin plant. The company exported \$2 million worth of friction materials and brake shoe linings to the United States last year.

MR. JIM BUNNING

ALLIED AFTERMARKET DIV

105 PAWNCLET AVE

E. PROVIDENCE, RI 02916

Int 6/24

D315	D339	564
D317	D341	565
D318	D342	568
D319	D344	573
D320	D345	574
D322	D347	575
D325	D348	576
D328	D352	577
D329	D359	580
D331	D360	581
D332	D371	583
D333	D375	584
D334	D385	589
D337		

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

May 27, 1988

Ms. Jackie Barbato
Allied Aftermarket Division
105 Pawtucket Ave.
East Providence, RI 02916

Dear Jackie:

Enclosed are copies of our latest bulletins on semi-metallic brake pad usage.

Essentially, all GM passenger and light truck are semi-met. Chrysler passenger and light truck are all semi-met with exception of the full sized cars (Fifth Avenue, Diplomat, Gran Fury). These latter are semi-met in Police/Taxi options. Ford is a majority semi-met discs, but they still have organic on several. AMC/Renault was all semi-met disc. You will have to look individually at the imports.

Essentially, whatever disc pads are not on the enclosed bulletins would be organic. As with any data of this kind, there could be errors or changes of which we are not aware.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

FMSI 13852

FRICION MATERIALS STANDARDS INSTITUTE, INC.
BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PARAMUS, N. J. 07652

March 14, 1988

Mr. Ray Boggia
Allied Aftermarket Division
105 Pawtucket Ave.
East Providence, RI 02916

Dear Ray:

Per our phone conversation, I am enclosing drawings for drilled steel for the D162 and D214 shoes. I am also enclosing a note as concerns the drilled D214 steel.

Also, as background, I'm enclosing copies of the following two bulletins which covered our early work on certain drill patterns where the original equipment was un-drilled. They are:

BULLETIN NO. 855
BULLETIN NO. 874

June 11, 1986
December 9, 1986

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

Allied Automotive - Fram Division

SEP 30 1987

105 Pawtucket Avenue
East Providence, RI 02916

401-434-7000

I-95 North to Massachusetts line
Exit at Route 1A South
Newport Avenue (Pawtucket)

Go 1-1/2 to 2 miles South on Route 1A
On the right a Burger King - Across the Street a McDonalds

Go to the Traffic Signal - Uncle Tony's Pizza on the corner
This will be New Road
Take a right on New Road, about 1/4 mile to Fram

Stan Stokes
Frank D'Agostino Catalogs
Mr. Woody Woodward

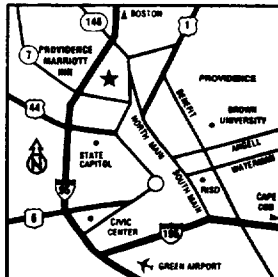
Mark Santos - Catalogs
Jim Dunning "
Steven Loiselle "

Bruce Kennedy - Motorcycles

1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".

Manion home 401-884-7635
7:00 PM at Capriccio's

1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".



(401) 272-2400

TWX: 710-381-6422

Rooms: 350 **Restaurants/Lounges:** *Providence Provisions Company Restaurant*, superb dining for breakfast, lunch and dinner. *Cahoots Lounge*, entertainment and dancing nightly. **Recreational Facilities:** Heated year-round indoor/outdoor pool, hydrotherapy pool, health club, exercise room, saunas, game room. Golf and tennis facilities nearby. Short drive to beaches, fishing, sailing. Five minutes from Lincoln Downs Dog Tracks. **Transportation to Hotel:** Commercial airport limousine, taxi service. **Location:** Just off I-95 Exit 23, adjacent to Route 146 in Randall Square downtown. 15 minutes from Green State Airport, 40 minutes from Newport. **Rates:** Single \$60 to \$85. Double \$70 to \$95.

Allied Automotive - Fram Division

SEP 30 1987

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Stan Stokes
Frank D'Agostino Catalogs
Mr. Woody Woodward

AUG 14 1987

Bendix/Fram Contact

Jay Osborn, Bendix-Jackson (retires 8/31/87) 901-422-0558

Woody Woodward, Fram-Providence

He is moving up to Providence from Jackson. 401-434-7000

He works for Stan Stokes.

Noly Kerr will remain at Jackson. He has some 901-422-0559
knowledge of shoes, but worked on hydraulics.

Stan Stokes at Providence 401-434-7000

GONE

MAILING LIST CHANGE

Member Alfred - Bandy Date 6-12-87

This change affects the following lists:

Board of Directors	☐	Historical Sales	☐
Delegates and Alternates	☒	Brake Performance SC	☐
Regional - US Dues	☐	Data Book Committee	☒
Regional - Regular	☐	HEA Committee	☐
Licensees	☐	Data Book Bulletin	☐
List A (Regulations)	☐	Shoe Bulletin	☐
List B (Factory)	☐	Ledger Card	☒
List C (Catalogs)	☐	Other _____	☐
List D (Cross Reference)	☐	(Describe)	

Change List as Follows:

Remove Ron Mickelley name and replace with
Stanley L Stokes (Stanley L. Stokes)
 in address

Source of Change: SL Stokes phone 6/12/87

	<u>Name</u>	<u>Date</u>
Requested By:	<u>WJ</u>	<u>6-12-87</u>
Change Made By:	_____	_____

4-7-87

Mr. Frank D'Agostino
Allied Automotive
Fram Division
105 Pawtucket Ave.
East Providence, RI 02916

401-434-7000 (X368)

Mr. D'Agostino is Catalog Manager. He takes over Gene Monroe's responsibilities for Bendix.

December 3, 1986

Mr. E.W. Drislane
Friction Materials Standards Institute, Inc.
Bergan Mall Office Center
E 210 Route 4
Paramus, New Jersey 07652

Dear Ed,

Enclosed are the lining prints for the 12 1/8" x 3 1/2"
E-350 and F-350 along with the lining prints for the
10 x 2 1/2" Aerostar you asked for.

Sincerely,

A handwritten signature in dark ink, appearing to be "Jay" followed by a stylized flourish.

JGO:vb

Enclosure

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

November 25, 1986

Mr. Jay Osborn
 Bendix Aftermarket Brake Division
 1094 Bendix Drive
 P.O. Box 1632
 Jackson, TN 38302-1632

Dear Jay:

Among the information you sent earlier on new Bendix drum brake shoes for 1987 was that for the rears of the Ford Truck E-350, F-350, Aerostar. You showed the primary shoe and secondary shoe as follows:

Size 12-1/8 x 3-1/2	3,209,675	Primary (E-350, F-350-DRW)	
	3,209,676		2171T
	3,209,667	Secondary	
	3,209,668		
Size 10 x 2-1/2	3,208,888	Aerostar	2038AT
	3,208,889		

12-1/8 x 3-1/2 Size

We have no FMSI drilled lining prints for this size. I was up to Bendix FMD yesterday, and they did not show a 12-1/8 x 3-1/2 size. Would you have drilled lining prints for this brake? If so, could I have copies?

10 x 2-1/2

While that lining also appears to be sourced at other than Bendix FMD, we do have an FMSI 2089AT lining that has gone to Ford for passenger cars, and may be the same size and drilling as that used on the Trucks. Could you check the drilled linings for the Aerostar brakes, and send me prints if different from the FMSI 2089AT. OK

Many thanks for your help on the Ford Truck.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
 Executive Director

FMSI 13861

Bendix

TELEPHONE (201) 845-0440

FRICION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

October 15, 1986

Mr. Ron Miskelley
Allied Automotive
Fram Division
105 Pawtucket Ave.
East Providence, RI 02916

Dear Ron:

I'm enclosing a copy of our Invoice 4947 which billed Allied Automotive for the Membership Dues for the July 1 - December 31, 1986 period. As shown, this Invoice was mailed to Mr. Fran Messier at Jackson, TN on July 1. Ordinarily, Allied-Bendix would have paid this within about 45 days of billing.

With all the changes which took place this year I had asked Mr. Messier where I should follow-up on the invoice. He advised that this was probably forwarded to East Providence for payment. Could you please look into this and advise. If Allied needs a replacement invoice, or if you need more information on the billing, please let me know.

Also, it would be my intention to send future billing for the Membership Fee to your attention. If you wish that changed, please let me know how I should bill this fee. Thanks.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

FMSI 13862

Allied Automotive
Fram Division
105 Pawtucket Ave.
East Providence, RI 02916

7/86

401-434-7000

Richard F. Tasteson (X455)
Ronald Miskelley (X694)

Fasteson works on OE Sales
Miskelley works for Ayers

For invoicing, probably mail Miskelley

Ms. Davina Villanueva handles certain business transactions - possibly
billing (at Providence)

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

August 12, 1986

Mr. Gene Monroe
Allied Automotive
Bendix Aftermarket Brake Div.
P.O. Box 1632
Jackson, TN 38301

Dear Gene:

Enclosed are some shoe prints per our telephone conversation.

Included are FMSI 570 as well as all shoes from the SHOE BULLETIN NO. 130 of June 6, 1986. Also enclosed are those you asked for today:

206, 213, 214, 215, 217, 233

I will have Jay Osborn replace Gordon Smith for distribution of prints.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

Old English Inn Lodge
2267 N. Highland
Jackson, TN 38305

901-668-1664

Coming from Memphis, continue on I-40 past the Holiday Inn Exit to the next exit. This will be Highway 45, or locally Highland Avenue. Go south on Highland. Old English Inn will be on the right a few miles in towards Jackson.

Fran Messier home phone 901-668-4551

Located at Street off Hartland (Address 15 Wright)

^A
Bendix Address:

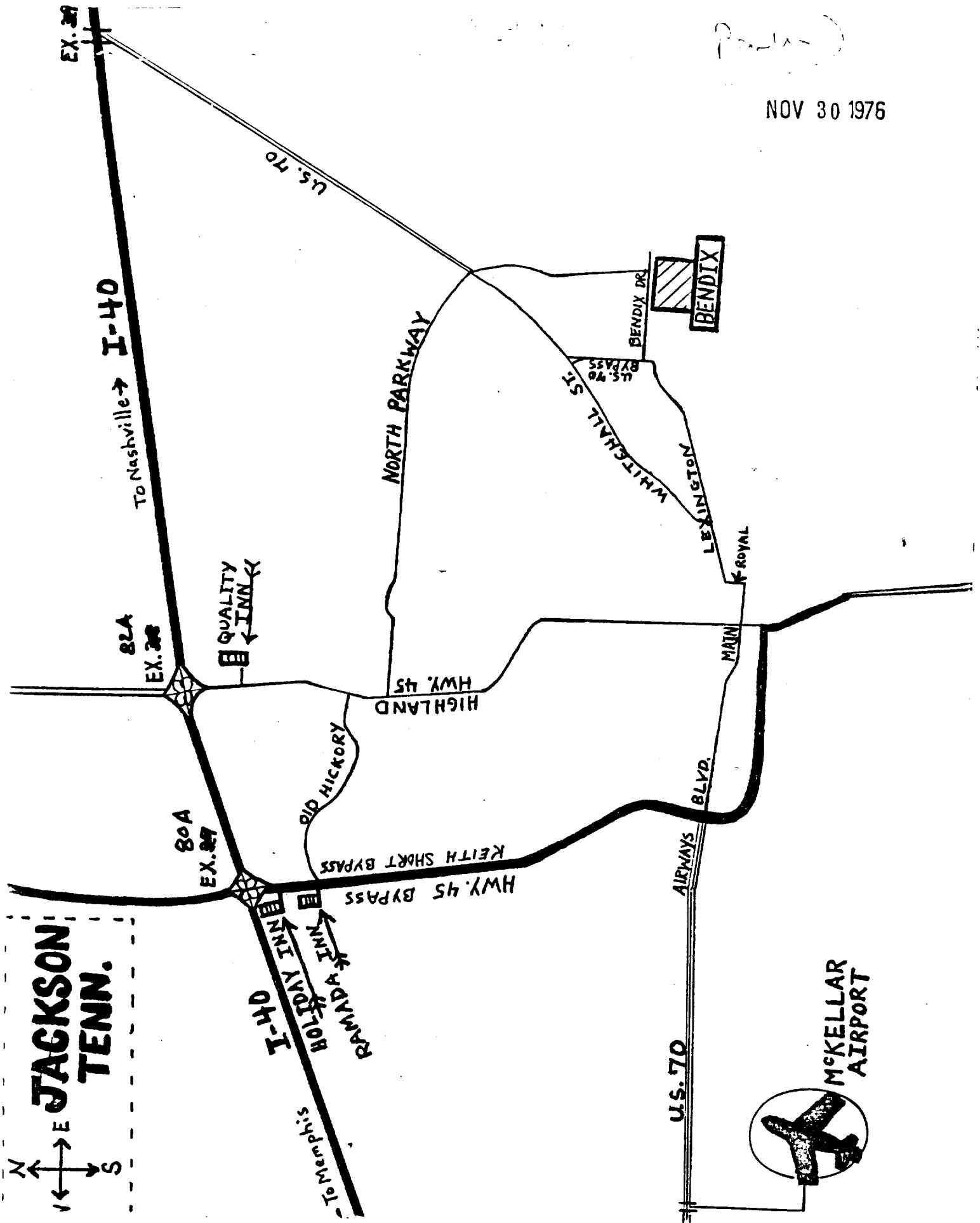
Go down North Parkway off Highland to Bendix Drive

Bendix Phone: 901-423-1300

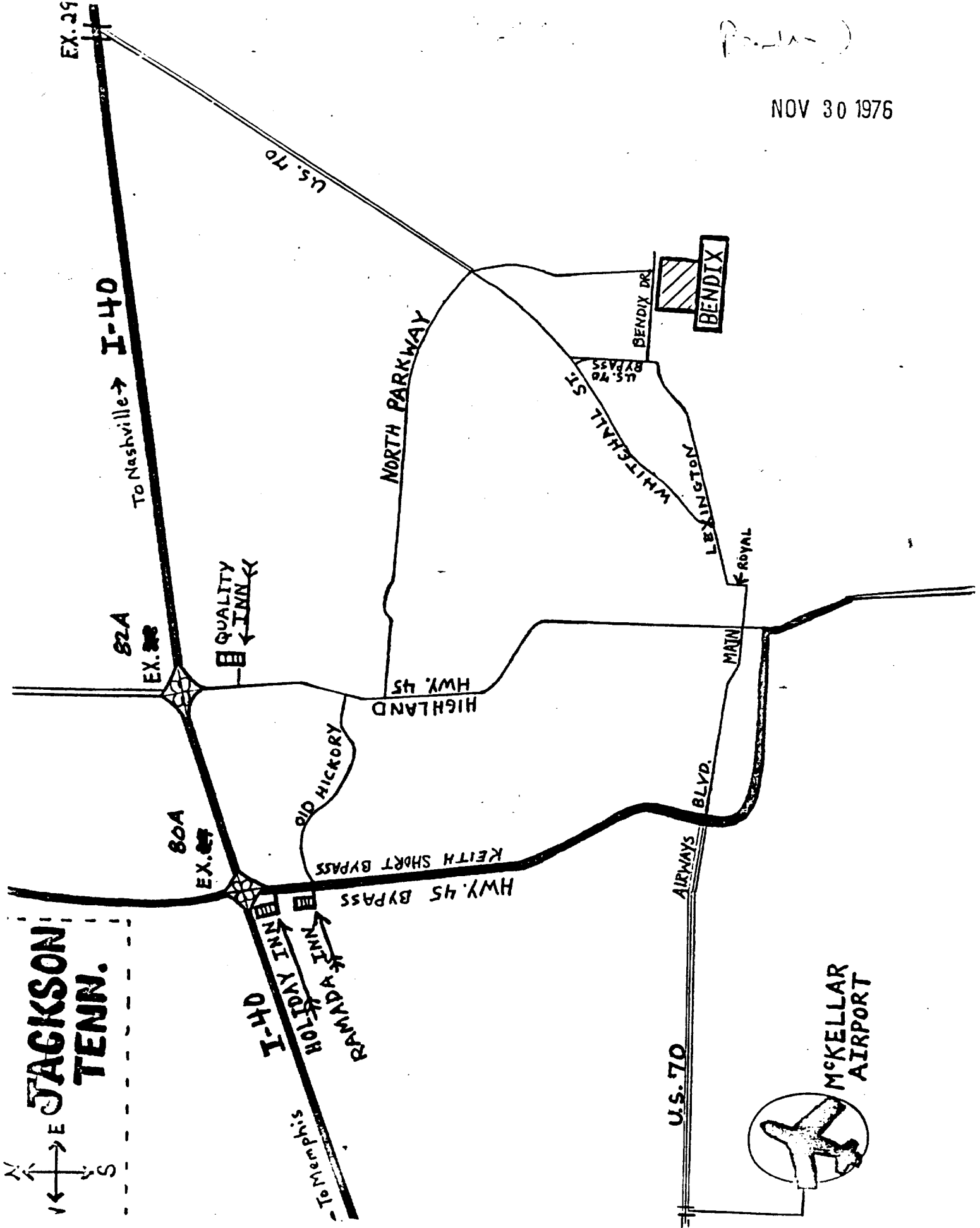
Fran Messier Mailing Address as of 8/86:

Mr. F. E. Messier
P.O. Box 2767 - Suite 126
Jackson, TN 38302

NOV 30 1976



NOV 30 1976



FMSI 13867

4/17/86

Mr. Richard E. Fasteson
Allied Automotive
Fram Division
105 Pawtucket Ave.
East Providence, RI 02916

401-434-7000 (X 455)

Steve McGinnis
Bendix FMD Troy, NY

FMSI 13868

INVOICE

FRICITION MATERIALS STANDARDS INSTITUTE

E-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 848-0440

SOLD TO

Allied Automotive
Bendix Friction Materials Division
P.O. Box 238
Troy, NY 12181

SHIPPED TO

Allied Automotive
Bendix Friction Materials Division
Tibbets Ave. & Cohoes Road
Green Island, NY 12183

DATE	DATE SHIPPED	SHIPPED VIA	YOUR ORDER NO	F.O.B.	TERMS	INVOICE NO.	
05-23-86	05-06-86	UPS	707125	St. Clair Shores Mich		004923	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
100	1986 Automotive Data Books with 5 hole punch					\$.958	\$95.80
	UPS Charges						19.73
	Total						\$115.53

Item # NV-R75 ©Wheeler Group Inc.

THANK YOU

**Automotive Bendix Friction
Materials Division**

P.O. Box 238
Troy, New York 12181

PURCHASE ORDER NO. **T07125**

PURCHASE ORDER DATE	03/31/86
---------------------	----------

VENDOR NO.

VENDOR CODE NO. AND OUR ORDER NO. MUST APPEAR ON EVERY INVOICE.
PACKING SLIP AND PACKAGE. RENDER ALL INVOICES IN DUPLICATE.
ATTN: ACCOUNTS PAYABLE DEPT.

VENDOR

FRICITION MATERIALS STANDARDS
INSTITUTE, INC.
E. 210 ROUTE 4
PARAMUS, N.J.

07652

SHIP TO

BENDIX F.M.D
GREEN ISLAND PLANT
COHOES RD. & TIBBETTS AVENUE
GREEN ISLAND, NEW YORK
ATTENTION: RECEIVING 12183

PAYMENT TERMS: Net bills 1-15 paid 25th following month. Net bills 16-31 paid 10th second following month. Discount bills 1-15 paid 25th. Discount bills 16-31 paid 10th following month.

BUYER J. CONNORS		EXPEDITER C. WUNNING		DEPT.	CONFIRMING TO	TAXABLE TAXABLE
F.O.B. POINT ORIGIN		SHIP VIA UPS		PREPAID FRT PAID	PAYMENT TERMS NET 30	
01	100	EA	1986 DATA BOOK AUTOMOTIVE VENDOR DELIVERY DATE 04/07/86 ROUTING E29 ACCOUNT NUMBER 010097897900000684 ACKNOWLEDGEMENT REQUIRED		.958	95.80
				<i>Don Turner 5/17</i> <i>Per 2 7/17/86</i>		
				TOTAL AMOUNT		95.80

Your acceptance of this order is subject to all the terms and conditions on the face and reverse side hereof.

NOTICES: When Material is forwarded advise us full forwarding, including Purchase Order Number, Requisition Number and Description of Material. Failure to do so WILL result in demurrage charges being charged to your account.

No drafts for purchases made by this company will be honored.

ROUTING: Deviation from Routing Instructions issued by our Traffic Section, can result in excess charges being charged to your account.

REFER ALL CORRESPONDENCE TO ATTENTION OF: BUYER

G. H. Longrove

Director Of Purchasing and Traffic

JE Connor BUY

BUYER

ORIGINAL



OGC GP/ALL-G 8/00 (REV. 8/00)

FMSI 13870

C. To the extent this contract is not terminated pursuant to subparagraphs A or B above, Seller shall continue performance.

NOTICE OF LABOR DISPUTES: Whenever Seller has knowledge that any actual or potential labor dispute is existing or threatens to impair the timely performance of this order, Seller shall immediately notify Buyer in writing of all such information with respect thereto to Buyer for ~~10~~ 15 days prior to the date of the shipment of the goods, including this sentence, in any purchase order or subcontract hereunder.

PATENT, TRADE-MARK AND COPYRIGHT NOTICE: Seller shall indemnify Buyer from against all damages and costs finally awarded for infringement of any United States

COOPERATION POLICY AND INSURANCE. Buyer will indemnify and hold Seller harmless from and against all liability, damages, claims, costs, damage and expenses for reason or on account of products, property, liability and personal injury or death, whether or not caused in whole or in part by the negligence of Seller, arising out of or in connection with the performance of this order which is occasioned by the actions or omissions of Seller or its suppliers. Seller will maintain and carry liability insurance which will cover the above obligations of Seller. Seller agrees to provide Buyer with a copy of the policy and a copy of the certificate of insurance, and no amounts are to be paid thereon in excess of amounts acceptable to Buyer but in no event shall such amounts be less than minimum statutory requirements. If any Seller or its suppliers is requested by Buyer to furnish certificates of statutory requirements, it may, Seller or its suppliers, furnish certificates of insurance indicating the foregoing coverage.

CASH DISCOUNT PERIODS: Cash-discount periods will be commensurate from either the date of delivery and acceptance of the items ordered or the date of receipt of correct and correct invoice presented in accordance with the terms of this order. Seller's is later.

DESIGN CHANGES: Deviating performance of this order. Seller shall not make any changes in the design or type to be furnished by Seller under this order without advance notification to and approval of the Buyer.

ASSIGNMENT: Any assignment of this order or the work to be performed, in whole or in part, or by any other interest hereunder without Buyer's written consent, except an assignment confined solely to monies due or to be received due hereunder shall be void. Any such assignment of monies shall be void to the extent that it attempts to impose

CHOICE OF LAW: The construction interpretation and performance hereof and all transactions hereunder shall be governed by the law of the state where Buyer's place of business residing this order is located.

DISPUTES: Except as otherwise specifically provided in this order, any dispute concerning a violation of this order arising under this order which is not disposed of by agreement of the parties shall be decided by a court of competent jurisdiction. Pending settlement or final disposal of any such dispute, Seller shall continue diligently with the performance of this order in accordance with the description of the Buyer.

SUBCONTRACTING: Seller agrees not to subcontract for any complete or substantially complete materials, supplies and/or service, called for by this order, without the prior

[illegible]

1. The following information was obtained from the records of the FBI, New York City, dated 10/10/68:



Automotive

Ben

Memorandum

Bendix Friction Materials Division
Troy, New York

Date: December 17, 1985

To: Distribution

From: The Social Secretary

Subject: Reminiscing

Why: It's time for "Ole Timers" to have another "good time" and to discuss the pros and cons of retirement.

When: Tuesday Evening, January 14, 1986.

Where: In the Century House "Red Room" at 6:00 P.M. for hors d'oeuvres and at 7:00 P.M. for dinner (from the menu).

Who: The "Distinguished" Personnel eligible for attendance are:

F. W. Aldrich	F. E. Messier
R. J. Blair	W. F. Messier
J. B. Clancy	J. J. Mezera
C. W. Cowan	J. A. Riopelle
R. E. Degnan	E. L. Rogers
E. W. Drislane	J. E. Sellers
J. S. Fountain	H. Stolar
A. J. Jacobsen	D. E. Stone
B. W. Klein	W. M. Talbot
J. R. Lamb	W. R. Tarr
G. H. Lovegrove	J. A. Ziter
C. N. Menz	E. F. Zlotnick

How: Make a reservation with the writer by January 7, 1986.

E. L. Rogers
E. L. Rogers

ELR:cr1

ad 12/27

ID-R118

FMSI 13872

Friction Materials-Worldwide

MAR 01 1985

	Friction Company	Products Manufactured	Relationship
NORTH AMERICA	UNITED STATES	Bendix Friction Materials Division Troy, New York and Cleveland, Tennessee	Allied Automotive — North American Operations
	MEXICO	Manufacturera Mexicana De Partes De Automoviles, S.A. (Mexpar) Mexico City, Mexico	Licensee
AUSTRALIA	AUSTRALIA	Bendix Mexco Pty. Ltd. Ballarat, Victoria	Subsidiary
	NEW ZEALAND	Eady Brake Services Ltd. Auckland, New Zealand	Licensee
EUROPE	WEST GERMANY	Jurid Werke, GmbH Hamburg, W. Germany	Allied Automotive — European Operations
		Energit, GmbH Stuttgart, W. Germany	Subsidiary
	SPAIN	Jurid Iberica, S.A. Barcelona, Spain	Subsidiary
	GREECE	Andreadis, S.A. Athens, Greece	Distribution and Trademark Agreements
		BEFA, S.A. Athens, Greece	Distribution Agreement
		Varteks-Strojoteks Varazdin, Yugoslavia	Licensee
	YUGOSLAVIA		

ALLIED Automotive

JAPAN/FAR EAST	Friction Company	Products Manufactured	Relationship
JAPAN	Kayaba Industry Co., Ltd. Tokyo, Japan	Clutch Buttons, Aircraft Buttons	Licensee
TAIWAN	Goshen Industry, Inc. Taipei, Taiwan	Drum Segments	Licensee
SOUTH AMERICA			
ARGENTINA	Industrias Bendix, S.A.I.C.yF. Buenos Aires, Argentina	Disc Pads	Allied Automotive — Argentine Operations
BRAZIL	Jurid do Brasil Sorocaba, Brasil	Drum Segments, Disc Pads, Truck Blocks	Allied Automotive — Brazilian Operations
CHILE	Indubal S.A.C. Santiago, Chile	Drum Segments, Truck Blocks, Disc Pads	Licensee
COLOMBIA	Industria Colombiana de Asbestos, S.A. (Incolbestos) Bogota, Colombia	Drum Segments, Disc Pads, Truck Blocks, Clutch Facings	Licensee

PLEASE SEND INQUIRIES TO:

Director Marketing & Business Development
Friction Materials Group
P.O. Box 238
Troy, New York 12181
U.S.A.





**Bendix Friction
Materials Division**

Troy, NY 12180
Tel (518) 273-6650
Cleveland, TN 37311
Tel 615-472-7151

WE HAVE A NEW NAME!
AND
A NEW PURCHASING, ACCOUNTS PAYABLE SYSTEM

Please note in your current records that:

THE BENDIX CORPORATION
FRICTION MATERIALS DIVISION

Has changed its name to:

ALLIED AUTOMOTIVE
BENDIX FRICTION MATERIALS DIVISION

Our address and phone number at each location remain the same.

Beginning in October, the NEW AUTOMATED P.O./A.P. System will be implemented incorporating a new P.O. form with a vertical format, and name change.

This system will have the capability of quicker P.O. entry, vendor evaluation, and reporting. It will enable us to efficiently process orders, and pay you for material.

A requirement of each of our suppliers will be to mark all documents for material with your vendor number, P.O. number, and release number if applicable. Without these numbers, material and invoices will be returned for correction.

During this transition period you may see both names as we phase out old documents. Please be assured, we are still the same Friction Materials Division.

Thank you.

R. J. Hart
PURCHASING MANAGER

G. H. Lovegrove
DIRECTOR PURCHASING & TRAFFIC

An Equal Opportunity Employer M/F

FMSI 13875



**Bendix Friction
Materials Division**

Troy, NY 12180
Tel (518) 273-6650
Cleveland, TN 37311
Tel 615-472-7151

WE HAVE A NEW NAME!
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Please note in your current records that:

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Thank you.

R. J. Hart
PURCHASING MANAGER

G. H. Lovegrove
DIRECTOR PURCHASING & TRAFFIC

An Equal Opportunity Employer M/F

FMSI 13876

Bendix

TELEPHONE (201) 845-0440

FRICION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

March 12, 1984

Mr. Gene Monroe
Bendix Automotive Aftermarket
P.O. Box 1632
Jackson, TN 38301

Dear Gene:

I'm enclosing sketches of the D257-Inner and Outer that I sent to the artist, along with enlargements of the poor original prints I have on file. The drilling is the same as that used on the 7106A-D179. Outlines are similar to D179 except for the lug locations and design as well as the squared ears on the D257-Inner.

I hope these help.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e

FMSI 13877

Ben in
1/23/84

Chrysler execs add duties as Day quits to join Allied

DETROIT. — John W. Day, 60, has resigned as an executive vice president of Chrysler Corp. to join the Automotive Sector of Allied Corp. as president of the newly formed Bendix Brake and Systems Group.

Day was in charge of corporate staff and international at Chrysler. His departure brought additional duties for three of Chrysler's top people, although Chrysler avoided mention of Day's resignation in announcing the changes.

At Chrysler, Day's job was split among Harold E. Sperlich, president of North American Automotive Operations, and Executive Vice Presidents R. S. Miller Jr. and Bennett E. Bidwell.

Sperlich takes on responsibility for Chrysler Mexico to integrate Mexican production and supply capabilities with North American operations.

Miller becomes executive vice president of finance and administration. He adds responsibilities for industrial relations, quality and productivity, Japan operations and corporate services. He retains his former duties of executive vice president-finance.

Bidwell will take charge of international sales, which includes the sale of North American-built vehicles in international markets.

In Bidwell's organization, D. L. Davis, previously responsible for Import Operations, was appointed general manager of Import/Export Operations. He reports to E. T. Pappert, vice president of U. S. automotive sales.

Day's appointment was part of a realignment of Allied Corp.'s automotive operations, according to J. Mason Reynolds, Automotive Sector president.

Day will head the Bendix Brake and Systems Group, and Thomas J. Busch will head the Fram Group. Busch formerly was vice president and general executive - worldwide business strategy and marketing. He succeeds Andre Laus, who resigned.

Allied Automotive consists of the former Bendix Corp.'s Automotive Group, which includes Fram and Autolite, plus Prestolite, North American Seat Belts and Woodstock Die Casting.

Reynolds said the sector has been realigned into the Bendix and Fram Groups "to permit us to focus more attention on our strategic goals and to better align our operating organizations to be consistent with worldwide strategies and product line identification."

The new Bendix Group basically consists of the four operating organizations which produce original equipment for vehicle manufacturers, while the Fram Group consists primarily of those operations serving the aftermarket.

Day has been with Chrysler since 1957, serving in financial, international, defense and diversified products posts. He was elected a vice president of the corporation in 1976.

He was appointed executive vice president - defense and international in 1981 and became executive vice president - corporate staff and international last year after Chrysler sold its defense business.

Busch joined Bendix in 1968 as marketing director for the Brake and Steering Division and became vice president and group executive of worldwide business strategy and marketing in 1981. He held the same position with the Allied Automotive Sector.



John W. Day

Thomas J. Busch

120	16 x 3 x 1/4	4280	16 x 3-1/2 x 3/8
124	16 x 3-1/2 x 1/4	4247	12 x 5 x 1/2
153	16 x 2-1/4 x 1/4	4250	18 x 7 x 3/4
184	14 x 2 x 1/4	4283	17-1/4 x 4 x 7/8
		4284	18 x 7 x 3/4
		4285	16-1/2 x 6 x 45/64
644	14 x 2 x 1/4	4286	17-1/4 x 3 x 3/8
647	14 x 2-1/2 x 1/4	4288	16 x 5-1/2 x 3/4
648	14 x 1-1/2 x 3/16	4307	16-1/4 x 3 x 1/2
654	16 x 3 x 1/4	4311	16-1/2 x 7 x 3/4
659	16 x 2-1/4 x 5/16	4312	16-1/2 x 5 x 3/4
662	16-1/4 x 3 x 3/8	4324	16-1/2 x 7 x 3/4
665	15-1/8 x 2-1/2 x 1/4	4327	16-1/2 x 5 x 3/4
1104	16 x 3-1/2 x 1/4	4329	14-1/2 x 4 x 1/2
1107	17-1/4 x 4 x 5/16	4333	14-1/2 x 6 x 1/2
1139	16-1/4 x 3-1/2 x 3/8	4339	17-1/4 x 5 x 3/4
1173	17-1/4 x 3 x 5/16	4340	17-1/4 x 8 x 3/4
4014	17-1/2 x 5 x 3/8	4343	14-1/2 x 7 x 3/4
4055	17-1/4 x 4 x 3/4	4355	12 x 3 x 1/2
4057	16-1/4 x 4 x 11/16	4357	16-3/8 x 2-1/4 x 1/2
4106	16 x 6 x 3/4	4398	14-1/2 x 5 x 3/4
4112	9 x 4 x 3/4	4420	16 x 3-1/2 x 3/8
4148	17-1/4 x 4 x 3/4		
4149	17-1/4 x 6 x 3/4		
4152	17-1/4 x 5 x 3/4		
4157	17 x 3 x 3/4		
4159	20 x 4 x 3/4		
4170	11-3/4 x 4 x 1/2		
4182	16 x 4-1/2 x 3/4		
4185	17-1/4 x 4 x 3/4		
4188	17-1/4 x 3 x 3/4		
4189	16-1/2 x 4 x 3/4		
4190	16-1/2 x 5 x 3/4		
4192	16-1/4 x 4 x 1/2		
4195	16-1/2 x 5-1/2 x 3/4		
4199	17-1/4 x 4 x 3/4		
4203	18-5/8 x 3-1/4 x 5/8		
4204	16-1/4 x 3 x 1/2		
4211	17-1/4 x 4 x 3/8		
4214	17 x 3-1/4 x 3/4		
4226	16-1/2 x 6 x 3/4		
4227	14-1/2 x 4 x 3/4		
4228	14-1/2 x 6 x 3/4		
4232	16-1/2 x 5 x 3/4		
4244	11 x 6 x 5/8		
4245	11 x 5 x 5/8		

<u>Beaver Bus</u>	124	4211		
	153	4327		
	659	4329		
	1104	4280		
	1107			
<u>Beck Bus</u>	153	4211		
	654	4280		
	659	4327		
	4188			
<u>Dittmar Bus</u>	120	4055		
	153	4286		
	659			
<u>Flxible</u>	153	4188	4357	
	644	4211	4420	
	654	4280		
	659	4327		
<u>Ford Bus</u>	648			
	665			
	4227			
<u>Gar Wood Bus</u>	120	648		
	184	659		
	647	4280		
<u>Mack Bus</u>	4014	4185	4232	4324
	4106	4192	4288	4339
	4152	4195	4307	4340
	4157	4199	4311	
	4182	4204	4312	
<u>Southern Coach</u>	4188			
	4327			
<u>Superior</u>	124	1139	4327	
	153	1173	4357	
	659	4188		
	1104	4280		
	1107	4286		
<u>Twin Coach</u>	4057	4250		
	4148	4283		
	4170	4284		
	4227	4285		
<u>Yellow Coach</u>	120	4148	4214	4247
	153	4149	4226	4329
		4159	4227	4333
	654	4189	4228	4343
	662	4190	4244	4355
	4112	4203	4245	4398

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

October 24, 1983

Ms. Jeanne M. Beyer
Bendix Corporation
Friction Materials Division
P.O. Box 238
Troy, NY 12181

Dear Jeanne:

While I believe this subject was resolved when I was in Green Island last week, one of my notes says to send you a copy of my release for the Dayton-Walther 2.88 pads provided for Ford Truck by Raybestos. This was our FMSI 7149-D236 set which was incorrectly listed in our 1983 Catalog as an Air Brake System.

I noted this error after you asked for the assignment for the hydraulic discs for this 2.88 Dayton Walther brake. A copy of my drawing for this application is enclosed.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e

FMSI 13881

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

October 24, 1983

Ms. Jeanne M. Beyer
Bendix Corporation
Friction Materials Division
P.O. Box 238
Troy, NY 12181

Dear Jeanne:

First, before I get into this letter on replacement equipment and non-compliance with Federal Motor Vehicle Standards, I have done some of the things I mentioned when I was up to Green Island last week. I have put your name on the mailing list for our technical bulletins. I sent, under separate cover, copies of bulletins we issued earlier on the usage of semi-metallic disc brake linings, and I've added you and Gene Rogers to that mailing list.

While I thought there was some more specific wording on not replacing an item of motor vehicle equipment with an article not complying to a federal motor vehicle safety standard, I cannot find that wording. What I have enclosed is a copy of Public Law 93-492 which amended the National Traffic and Motor Vehicle Act of 1966, which was the original law setting up NHTSA. This 1974 amendment broadened applicability of the requirements of manufacturers from just the vehicle manufacturers to manufacturers of equipment. Where that equipment was part of the original equipment used on a vehicle, the reporting and notification requirements were still the responsibility of the vehicle manufacturer. The extension of the requirement to manufacturers of replacement equipment is on page 1 of the copy of the act enclosed--Section 151. (Ignore the underlining--it is not mine). You will see that it states where an "item of replacement equipment does not comply with an applicable Federal motor vehicle safety standard" that a manufacturer must notify the government of this "failure to comply." It was this 1974 extension of the applicability of the notification requirements to items of replacement equipment which do not comply with standards that is my basis for saying that replacement brake lining is indirectly covered by the standards and law. In other words it indicates to me that if a brake lining manufacturer knew that substitution of his lining in a brake system would cause that system to not comply with DOT 105, that he would be required to notify the government. And to me it implies that a manufacturer should test his replacement material to assure its compliance.

In addition to that weak copy of the 1974 amendments, I am enclosing a copy of the regulations that were subsequently issued to put the intent of Congress into written form. This is the notice of December 30, 1976 entitled Defect and Noncompliance Notification Regulation. Prior to this, there was only defects notification. This established defect and non-compliance notification.

October 24, 1983

This is the best I can do on that subject. It would probably require that a Lawyer review this to interpret the act and regulations. But I remember the discussion at the time of the changes in the act and the issuance of regulations, and my interpretation was held by others involved at that time.

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e

Copy: E.L. Rogers



**Automotive
Aftermarket**

1094 Bendix Drive
P O Box 1632
Jackson, Tennessee 38301
Tel (901) 423-1300
The Bendix Corporation

Mr. E. W. Drislane
Friction Material Standards Institute, Inc.
Bergan Mall Office Center
E210 Route 4
Paramus, NJ 07652

October 20, 1983

Dear Ed:

Enclosed is a list of the vehicles for which Bendix has the O.E.M. 1984 production for. This list shows the existing FMSI number, the Bendix number, size and known vehicle application for drum and disc brake.

If we can be of further service, please advise.

Sincerely,


Jay Osborn

Enclosure

cc: Gordon Smith
Frank Watkins



October 20, 1983

Page 1

FORD PASSENGER CAR

<u>FMSI</u>	<u>SHOE NO.</u>	<u>SIZE</u>	<u>APPLICATION</u>
500	3206744 3206752	180 x 32MM	Escort & Lynx 3DR Sedan - Rear
501	3206674	203 x 34MM	Escort & Lynx 5DR Sedan, Station Wagon & Sport Coupe - Rear
474	3205797	9 x 1 3/4	LTD, Marquis, Mustang, Capri, T-Bird, XR-7 - Rear
151	315099	10 x 1 3/4	LTD, Marquis Wagon - Rear
481	3206215	10 x 2 1/2	Ford, Mercury Sedan, Lincoln & Mark VI - Rear
482	3206269	11 x 2 1/4	Ford, Mercury Station Wagon - Rear

FORD TRUCK

263	316267	11 x 2 1/4	F & E100, 150 & Bronco - Rear
474	3205797	9 x 1 3/4	Ranger & Bronco II - Rear
316	3204376-7 3204378-9	12 x 2 1/2	F250 - Rear - F & E250 Snow Plow Option - Rear
169	3201927	10 x 2 1/2	Sierra - Rear & Ranger H.D. - Rear
314	3204692-3 3204698-9	12 x 3	E & F250, E & F350 - Rear

AMERICAN MOTORS

267	321470	10 x 1 3/4	Eagle, MMX/GT - Rear
501	3206674		AMC/Renault Alliance - Rear

AVANTI

10	41717		Avanti - Rear
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October 20, 1983

Page 2

AMC

<u>FMSI</u>	<u>SHOE NO.</u>	<u>SIZE</u>	<u>APPLICATION</u>
267	321470	10 x 1 3/4	CJ - Rear & XJ Jeep - Rear
432	3203576	9 x 2 1/2	1/4 Ton Post Office - Front
433	3203569	9 x 2	1/4 Ton Post Office - Rear

DODGE TRUCK

357	322475-6 322481-2		D200, B, CB, MB300, W200 - Rear
358	322502-3 322506-7		RD200, D400 and D300 - Rear
402	320878	15 x 4	M600 - Rear
355	322961	14 x 3	M375 - Rear

FORD DISC BRAKE

D150	2238658 2238698	Outer Inner	Ford & Mercury Police - Front
D200	2238919-20 2239837	Outer Inner	Lincoln Continental/Mark VII - Front
D199	3207368-9 3208960	Outer Inner	Ford, Mercury, Lincoln/Mark - Front
D249	3206962 3206968	Inner Outer	Ranger - Front
x D150 D50	2230150 2238257	Outer Inner	F150, F250 4 x 2 & 4 x 4, Bronco, E150 - Front

CHEVROLET TRUCK

D149	2230363 2238706	Outer Inner	JB-8, JF-9, CPGK-300 - Front
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October 20, 1983

Page 3

DODGE TRUCK

D149	2230363	Outer	W-300, W-200 Snow Fighter - Front
	2238706	Inner	

I.H.C.

D184	4150392	Outer	Medium and Heavy Truck - Front and Rear
	4150397	Inner	

D225	4150848	Outer	Medium and Heavy Truck 9-12K Front, 19K Rear
	4150397	Inner	

GMTC

D225	4150848	Outer	9-12K Front - 17.5
	4150397	Inner	

Bendix

**Automotive
Aftermarket**

1094 Bendix Drive
P O Box 1632
Jackson, Tennessee 38301
Tel (901) 423-1300

The Bendix Corporation

Mr. E. Drislane
Friction Material Standards Institute Inc.
Bergan Mall Office Center
E210 Route 4
Paramus, NJ 07652

July 26, 1983

Dear Ed:

Enclosed is a Bendix print #3206961-2 (FMSI D205I) that was revised by our Engineering Department. They have removed the two insulator nibs from the plate.

Originally there was a metal coated insulator that was placed over the nibs and then the nibs were peened down.

Engineering stated that if the nibs were not peened down that adversely they could damage the caliper dust boot.

Sincerely,


Jay Osborn

Enclosure

D147-2

*Nibs could tear boot if not removed. Insulator
nibs were removed 3/8/83. Note by Toledo Pressed
Steel.*

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

June 23, 1983

Mr. Tom Hernon
Bendix Automotive Aftermarket
P.O. Box 1632
Jackson, TN 38301

Dear Tom:

I'm enclosing our check in amount of \$20.00 as a refund of the Registration Fee for your and John Ayers' attendance at our Annual Meeting.

As you had cancelled on a timely basis, I had no problem with Sawgrass on that change. If the check should be a personal check to either you or John Ayers, please return this check and I will make out our check as you suggest. Sorry you couldn't make it to Sawgrass.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e



**Automotive
Aftermarket**

1094 Bendix Drive
P O Box 1632
Jackson, Tennessee 38301
Tel (901) 423-1300
The Bendix Corporation

**Friction Materials Standard Institute
Bergen Mall Office Center
E. 210 Route 4
Paramus, NJ 07652**

October 11, 1982

Attn: Mr. E. W. Drislane

Dear Ed:

Attached are the 1983 vehicle listings for drum brake shoe and disc pads that Bendix has the OEM business.

We are also enclosing drawings for the new GMTC heavy duty vehicles using disc brakes front and rear. GMTC number for the disc pad package is 15514582. Also the inner plate is the same as D184 inner.

Sincerely,


Jay Osborn

Enclosure



October 11, 1982

Page 1

FORD PASSENGER CAR

<u>FMSI</u>	<u>SHOE NO</u>	<u>SIZE</u>	<u>APPLICATION</u>
474	3205797	9 x 1 3/4	Fairmont, Zepher Sedan, T-Bird XR7, Granada, Cougar, Mustang & Capri & Marquis - Rear
500	3206744 3206752	180 x 32MM	Escort & Lynx 3 Door Sedan - Rear
501	3206674	203 x 34MM	Escort & Lynx 5 Door Sedan, Station Wagon & Sport Coupe. 1983 1/2 Tempo, Topaz - Rear
481	3206215	10 x 2 1/2	Ford & Mercury Sedan, Lincoln, Mark VI - Rear
482	3206269	11 x 2 1/4	Ford & Mercury Station Wagon - Rear
151	315099	10 x 1 3/4	Fairmont, Zepher Police LTD, Marquis Wagon - Rear

FORD TRUCK

263	316267	11 x 2 1/4	F100, F150, E100, E150 & Bronco - Rear
474	3205797	9 x 1 3/4	Ranger & Bronco II - Rear
316	3204376-7 3204378-9	12 x 2 1/2	F250, E250 - Rear
314	3204692-3 3204698-9	12 x 3	F350, E350, & F350 D50 - Rear

GM TRUCK

451	3204664	13 x 2 1/2	3/4 Ton
452	3204663	13 x 3 1/2	1 Ton

AMERICAN MOTORS

433	3203569	9 x 2	Spirit & Concord 4 & 6 Cylinder - Rear
267	321470	10 x 1 3/4	Eagle & AMX/GT - Rear
501	3206674	203 x 32MM	AMC/Renault Alliance - Rear

FMSI 13891



October 11, 1982

Page 2

AVANTI

<u>FMSI</u>	<u>SHOE NO</u>	<u>SIZE</u>	<u>APPLICATION</u>
10	41717	11 x 2	Avanti - Rear

DODGE TRUCK

357	322475-6 322481-2	12 x 2 1/2	D200, B, CB, MB300, & W200 - Rear
358	322502-3 322506-7	12 x 3	RD200, D400, & D300 - Rear
402	320878	15 x 4	M600 - Rear
355	322961	14 x 3	M375 - Rear

AMC

267	321470	10 x 1 3/4	CJ - Rear
432	3203576	9 x 2 1/2	1/4 Ton Post Office - Front
433	3203569	9 x 2	1/4 Ton Post Office - Rear
62	48827	12 x 2	R6000, 7000 GVW Gladiator - Rear



October 11, 1982

Page 3

FORD DISC BRAKE

D150	2238658	- O	Ford & Mercury Police - Front
	2238698	- I	
D200	2238919-20	- O	Lincoln Continental Town Car - Front
	2239837	- I	
D199	3207368-9	- O	Ford, Mercury, Lincoln/Mark - Front
	2238960	- I	
D205	3206966	- O	Ranger - Front
	3206960	- I	
D50	2230150	- O	E100, E150, F100, F150 & F150 4 x 4 Bronco - Front
	2238253	- I	

CHEVROLET TRUCK

D149	2230363	- O	JB-8, JF-9, CPGK-300 - Front
	2238706	- I	

DODGE TRUCK

D149	2230363	- O	W300, W200 Snow Fighter - Front
	2238706	- I	

IHC TRUCK

D184	4150392	- O	Medium and Heavy Truck - Front
	4150397	- I	

GMTC

?	4150848	- O	Medium and Heavy Truck - Front
	4150397	- I	

Bendix

October 11, 1982

Page 1

FORD PASSENGER CAR

<u>FMSI</u>	<u>SHOE NO</u>	<u>SIZE</u>	<u>APPLICATION</u>
474	3205797	9 x 1 3/4	Fairmont, Zepher Sedan, T-Bird XR7, Granada, Cougar, Mustang & Capri & Marquis - Rear
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501	3206674	203 x 34MM	Escort & Lynx 5 Door Sedan, Station Wagon & Sport Coupe. 1983 1/2 Tempo, Topaz - Rear
481	3206215	10 x 2 1/2	Ford & Mercury Sedan, Lincoln, Mark VI - Rear
482	3206269	11 x 2 1/4	Ford & Mercury Station Wagon - Rear
151	315099	10 x 1 3/4	Fairmont, Zepher Police, LTD, Marquis Wagon - Rear

FORD TRUCK

263	316267	11 x 2 1/4	F100, F150, E100, E150 & Bronco - Rear
474	3205797	9 x 1 3/4	Ranger & Bronco II - Rear
316	3204376-7 3204378-9	12 x 2 1/2	F250, E250 - Rear
314	3204692-3 3204698-9	12 x 3	F350, E350, & F350 D50 - Rear

GM TRUCK

451	3204664	13 x 2 1/2	3/4 Ton
452	3204663	13 x 3 1/2	1 Ton

AMERICAN MOTORS

433	3203569	9 x 2	Spirit & Concord 4 & 6 Cylinder - Rear
267	321470	10 x 1 3/4	Eagle & AMX/GT - Rear
501	3206674	203 x 32MM	AMC/Renault Alliance - Rear

FMSI 13894

Bendix

October 11, 1982

Page 2

AVANTI

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AMC

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Bendix

October 11, 1982

Page 3

FORD DISC BRAKE

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D200	2238919-20	- O	Lincoln Continental Town Car - Front
	2239837	- I	
D199	3207368-9	- O	Ford, Mercury, Lincoln/Mark - Front
	2238960	- I	
D205	3206966	- O	Ranger - Front
	3206960	- I	
D50	2230150	- O	E100, E150, F100, F150 & F150 4 x 4 Bronco - Front
	2238253	- I	

CHEVROLET TRUCK

D149	2230363	- O	JB-8, JF-9, CPGK-300 - Front
	2238706	- I	

DODGE TRUCK

D149	2230363	- O	W300, W200 Snow Fighter - Front
	2238706	- I	

IHC TRUCK

D184	4150392	- O	Medium and Heavy Truck - Front
	4150397	- I	

GMTC

?	4150848	- O	Medium and Heavy Truck - Front
	4150397	- I	



Bendix

**Automotive
Control Systems
Group-North America**

401 N Bendix Drive
P O Box 4001
South Bend, Indiana 46634
Tel (219) 237-2100

The Bendix Corporation

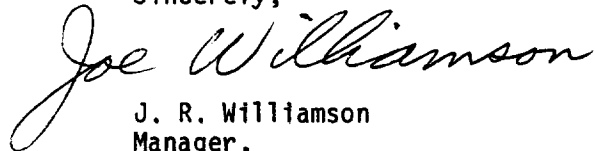
Friction Materials Standards Institute, Inc.
E210 Route 4
Paramus, NJ 07652
Attention: Mr. Ed Drislane

August 23, 1982

Dear Ed:

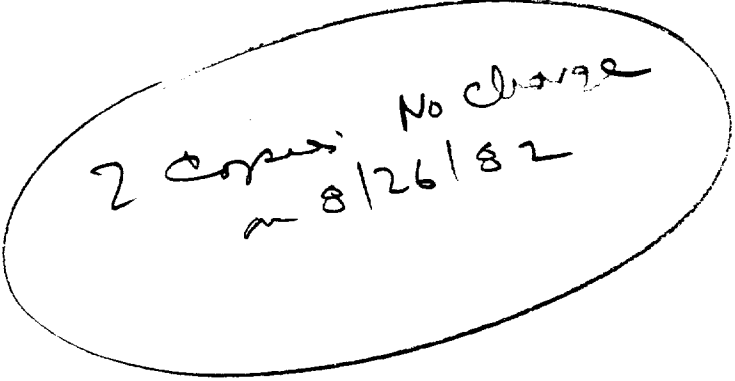
Please send me two copies of the 1982 Brake Shoe Identification Catalog. Let me know the cost and we will forward a check.

Sincerely,



J. R. Williamson
Manager,
International Engineering Liaison

JRW/lj



2 copies, No charge
~ 8/26/82

An Equal Opportunity Employer M/F

FMSI 13897

FRICTION MATERIALS STANDARDS INSTITUTE, INC.
BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PARAMUS, N. J. 07652

August 17, 1982

Mr. Andre A. Laus
Fram Corporation
Automotive World Trade Division
Providence, RI 02916

Dear Andre:

Congratulations and Best Wishes on your new Position at Fram.

Welcome back to our side of the business, and perhaps we'll
talk you into coming to one of the FMSI Meetings sometime along
the way.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/e

FMSI 13898

Laus appointed Fram president

SOUTHFIELD, Mich. — Andre A. Laus will become president and chief operating officer of Fram Corp., a Bendix Corp. subsidiary, effective Sept. 13.

Laus will be nominated a corporate vice president at the September meeting of the Bendix board of directors. He will report to Fram Chairman, Paul F. Hartz, until Jan. 1, 1983. At that time, Laus will become chief executive officer, and Hartz will continue as chairman.

Laus has been with Federal-Mogul Corp., Southfield, as vice president and group executive, responsible for worldwide automotive aftermarket operations.



**Automotive
Aftermarket**

1094 Bendix Drive
P O Box 1632
Jackson, Tennessee 38301
Tel (901) 423-1300
The Bendix Corporation

Friction Material Standards Institute
E210 Route 4
Paramus, NJ 07652

Feb. 11, 1982

Attn: Mr. E. Drislane

Dear Ed,

Attached is a copy of Chrysler Service Bulletin which I believe will effect your FMSI 498 listing on the Ram 50 and the Arrow Pick-ups since they are going to reinforced shoes.

Sincerely,

Jay Osborn
Product Coordinator

Attachment

Shave 5'5

October 27, 1981

Mr. E. L. Rogers
Bendix Corporation
Friction Materials Division
P. O. Box 238
Troy, NY 12181

Dear Gene:

Enclosed is a copy of my notes concerning the change in General Motors designations for their passenger cars. (The G Body designations being used on 1982 cars that up through 1981 were A Cars).

I'm also enclosing a copy of a sheet I received from Dodge Truck marketing with 1982 vehicle and brake size information. I usually use this sheet to make my vehicle application assignments for Dodge Truck. It might help with assignment information on Dodge Truck per page 5 of your 1151290 Sheets. Dodge Truck designated all their trucks and vans with the "add 50" pattern in 1981. That is 150, 250, 350 instead of 100, 200 and 300. While I assume the vehicle assignments for the specific sizes are correct, I cannot guarantee it.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

EWD/erc
Enc:

E. W. Drislane
Executive Director

FMSI 13903

Bendix

October 29, 1981

Mr. J. G. Osborn
Bendix Corporation
Automotive Aftermarket Operations
P. O. Box 1632
Jackson, TN 38301

Dear Jay:

I'm enclosing a copy of the shoe information you gave me last year for the 1981 models. This listing indicated the FMSI Shoe Numbers, the Bendix Number, the size and gave application data.

Could you look this over and update it for 1982. I have some of the application information, but I'm trying to be sure I have the correct FMSI Shoe Number for the sizes involved.

Also, if you have anything that would help with assignment of disc brake shoe numbers, it would be helpful. I'm getting most of the lining information now, and should have most general application data in the next few weeks.

Many thanks for your help.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

EWD/erc
Enc:

E. W. Drislane
Executive Director

FMSI 13904

**Bendix**

FEB 27 1981

FRICION MATERIALS - WORLDWIDE

North America			
United States	Friction Materials Division Troy, New York Cleveland, Tennessee	Drum Segments, Disc Pads Heavy Truck Blocks Clutch Buttons Aircraft Buttons	Domestic Operating Division of The Bendix Corporation
Europe			
West Germany	Jurid Werke, GmbH Hamburg, W. Germany Energit, GmbH Stuttgart, W. Germany	Drum Segments, Disc Pads Railway & Truck Blocks Clutch Facings & Buttons Aircraft Buttons	Wholly Owned Subsidiary of The Bendix Corporation
Spain	Jurid Iberica, S.A. Barcelona, Spain Plastex, S.A. Madrid, Spain	Drum Segments, Disc Pads Railway & Truck Blocks Drum Segments Truck Blocks	Wholly Owned Subsidiary of Jurid Werke, GmbH Licensee of Friction Materials Division
Greece	Andreadis, S.A. Athens, Greece BEFA, S.A. Athens, Greece	Truck Blocks Truck Blocks	Distribution & Trademark Agreements with The Bendix Corporation Distribution Agreement with The Bendix Corporation
Yugoslavia	Varteks-Strojoteks Varazdin, Yugoslavia Azbest Ploce, Yugoslavia	Disc Pads Railway & Truck Blocks Clutch Facings	Licensee of Friction Materials Division Licensee of Jurid Werke, GmbH

For further information, contact: Group Director - Friction Material Products, Automotive Group
The Bendix Corporation, Bendix Center, Southfield, Michigan 48037

FMSI 13905



FRICTION MATERIALS - WORLDWIDE

Australia / Japan / Far East				
Australia	Bendix-Mintex Pty. Ltd. Ballarat, Victoria	Drum Segments, Disc Pads Truck Blocks Clutch Facings	Managing Control by The Bendix Corporation	
New Zealand	Eady Brake Services Ltd. Auckland, New Zealand	Drum Segments, Disc Pads Truck Blocks Clutch Facings	Licensee of Bendix-Mintex Pty. Ltd.	
Japan	Akebono Brake Industry Co., Ltd. Tokyo, Japan	Drum Segments, Disc Pads Truck & Railway Blocks Clutch Facings	Affiliate of The Bendix Corporation	
Sri Lanka	Dimo Colombo, Sri Lanka	Drum Linings	Licensee of Jurid Werke, GmbH	
Latin / South America				
Argentina	Industrias Bendix, S.A.I.C.yF. (Induben) Buenos Aires, Argentina	Disc Pads	Wholly Owned Subsidiary of The Bendix Corporation	
Brazil	Jurid - Material De Friccao Ltda. Sao Paulo, Brazil	Drum Segments, Disc Pads Truck Blocks	Wholly Owned Subsidiary of Jurid Werke, GmbH	
Mexico	Manufacturera Mexicana De Partes De Automoviles, S.A. (Mexpar) Mexico City, Mexico	Drum Segments Disc Pads Truck Blocks	Licensee of Friction Materials Division	
Colombia	Industria Colombia De Asbestos, S.A. (Incolbestos) Bogota, Colombia	Drum Segments Disc Pads Truck Blocks	Licensee of Friction Materials Division	
Venezuela	Frenos Venezolanos Caracas, Venezuela	Truck Blocks Clutch Facings	Licensee of Jurid Werke, GmbH	



**Automotive
Aftermarket**

1094 Bendix Drive
P O Box 1632
Jackson, Tennessee 38301
Tel (901) 423-1300
The Bendix Corporation

Friction Materials Standard Institute, Inc.
Bergan Mall Office Center
E. 210 Route 4
Paramus, NJ 07652

September 19, 1980

Attention: Mr. E. W. Drislane

Dear Ed:

With reference to your letter of September 15, 1980, we are enclosing Bendix prints for 1981 Ford Excort/Lynx rear drum brake shoes:

3206674 N.S.F.S. - 203.2 x 34.0
3206744 N.S.F.S. - 180.0 x 32.0 - Leading
3206752 N.S.F.S. - 180.0 x 32.0 - Trailing

Since these vehicles have not had their introduction to the public, would you please wait until after the Ford introduction to make distribution of the drawings. We would appreciate notification as to what the new FMSI numbers will be.

Also, I am enclosing the lining prints for you to look at in the interim of receiving FMD Troy drawings. Please use the FMD drawing when making your distribution of prints.

The 180.0x32.0 brakes use bonded lining on the forward and reverse shoes.

If I can be of further service, please advise.

Sincerely,

Jay Osborn
Tech Service Supervisor

JO/pr

Encl.

FMSI 13907

September 23, 1980

Mr. J. C. Osborn
Bendix Automotive Aftermarket Operation
1094 Bendix Drive
P.O. Box 1632
Jackson, Tennessee 38301

Dear Jay:

I received copies of the Bendix prints for the 1981 Ford Escort/Lynx rear drum brake shoes. Thank you for these drawings. Just as a matter of information, my FMSI assignments will be as follows:

Passenger car 7 x 1-1/4" brake, lining FMSI 1349
shoe FMSI 500

Station wagon 8 x 1-11/32" brake, lining FMSI 1350
shoe FMSI 501

This gives us lined shoe assembly numbers #1349-500 and #1350-501 for the 7" and 8" sizes respectively. Thank you for your help with these assignments.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

EWD/lmc

E. W. Drislane
Executive Director

FMSI 13908

BENDIX - FMD

B

APR 25 1980

LEE HENRY IS NOW ALL THREE DIVISIONS

BILL KING NEW GM AT TROY

BILL STAZON NOW HEADS MARKETING (REPLACING
BILL QUINN)

(ALL FROM BENDIX HVSG)

ED D

April 20, 1976

TO: Officers and Board of Directors

SUBJECT: Bendix Corporation Acquisition of Jurid Werke, GmbH

The Bendix Corporation, through its Friction Materials Division, is a long time Active Member of the Friction Materials Standards Institute. Jurid Werke, GmbH of Reinbek Germany had been a Regional Members of the Institute up till 1970 when it resigned. It rejoined the Institute in 1974.

Bendix for sometime has had a part ownership in Jurid. Early in 1976 Bendix acquired all the outstanding stock in Jurid Werke, GmbH. As of now Jurid Werke is fully owned by Bendix.

The Bendix Corporation has now asked that since Jurid is fully owned, that Jurid be entitled to the benefits of membership through Bendix Corporation, and that hence Jurid would not have to pay separate annual fees. Jurid now pays the dues schedule of an Active Member in consideration of rights to use the copyrighted FMSI numbers in marketing their products in the United States.

I indicated to Bendix that I did not know the answer but that I would refer this to the Board of Directors.

In reviewing this it appears that Bendix is correct and that their Jurid Werke is entitled to participate--through Bendix--in rights and services of the Institute. While the Bendix corporate name is not there, it would appear that Jurid now is similar to:

Raybestos-Manhattan, GmbH (Germany)
Abex Pagid (France)
H. K. Porter Co. (G.B.) Ltd. (Great Britain)

These foreign subsidiaries of members can use our copyrighted FMSI numbers. Some have received bulletins and information through their parents. Their parents in some cases import their subsidiary's products and market them using the copyrighted FMSI numbers.

The foregoing is my interpretation of the Bendix ownership of Jurid. I bring this up now as I believe it can best be handled at the June Board of Directors meeting. There is one thing additional, and that has to do with ARTICLE IX, Section 5. Cessation of Participation:

Any Member, Regional Member or Licensee may withdraw from participation in the Institute at any time upon payment of its annual fees for the current fiscal year and all rights to participate shall cease as of such date.

I believe the foregoing is applicable to Jurid if it were to resign. The fourth quarter (4/1 - 6/30) dues would be due. Also, from July 1 on, all mailings etc. would have to be ordered by Bendix.

The foregoing will be an agenda item at the June 15, 1976 meeting of the Board of Directors.

E. W. Drislane
Executive Director

FMSI 13910

Cooper Industries
Moog Automotive
P.O. Box 7224
St. Louis, MO 63177

September 10, 1998



Mr. Gil Laycock
Friction Materials Standards Institute, Inc.
588 Monroe Turnpike
Monroe, CT 06468

Dear Gil:

This is in response to our earlier conversations and your letter to me dated July 27 regarding payments due FMSI by companies that are now a part of Moog Automotive.

Rolero-Omega

As a current business unit of Moog Automotive, Rolero's membership should be consolidated such that any dues paid by Moog cover Rolero, as well as Abex Friction Products, Wagner Brake, and EIS Brake Parts.

Since prior notification apparently was not given, please let this letter serve to apprise you of this consolidation, accordingly.

EIS Brake Parts

EIS Brake Parts made a conscious decision prior to its purchase by Cooper Industries to discontinue a number of its memberships and ties with key associations, including FMSI.

Since the time frame of the invoice we are trying to collect pre-dates the purchase of EIS by Cooper, this receivable on FMSI's books should revert to Standard Motor Products, the parent company of EIS at the time of this billing.

I have contacted Mr. Larry Mucherino, Controller-EIS, to discuss this matter. He did not offer a great deal of encouragement that we would succeed in collecting from Standard Motor Products, but he offered to assist us.

Please fax a copy of EIS' invoice to Larry's attention at 860/828-6702 for further action. You might mention that he and I discussed this several weeks ago. I will be interested in learning the outcome of this effort.

I apologize for the delay in getting back to you. As you know, we are currently preparing for the sale of our company to Federal-Mogul. I will try to keep you informed as new developments arise that concern business with FMSI.

Very truly yours,

A handwritten signature in black ink, appearing to read "Walter R. Britland".

Walter R. Britland
Director Brake Marketing

WRB/brs

6565 Wells Avenue
St. Louis, MO 63133
314 977-0300

moog auto companies, FMSI, 9-10-98



FMSI 13911

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE

MONROE, CT 06468

June 2, 1998

Mr. John Nodson
EIS Brake Parts
129 Worthington Ridge Road
Berlin, CT 06037

Dear Sir:

Enclosed is a copy of invoice number 8298. Please note that this invoice is five months old. Perhaps it has been overlooked.

Your attention to this invoice is appreciated. Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FMSI 13912

109 Worthington Bridge
P.O. Box 1315
Berlin CT 06037

Phone: (860) 828-8290 ext. 111
Fax: (860) 828-0832

EIS Brake Parts

Fax

To: Gil Laycock From: Sean McVey
Fax: 203-452-7951 Pages: 1
Phone: 203-452-1877 Date: 1/7/98
Re: FMSI Mailing List CC:
☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

Gil,

Please Remove Eric Long (EIS, Berlin, CT) from your
FMSI Bulletin Mailing List and add Joyce Tobias
(EIS - Berlin, CT) to the list.

Thanks,

Sean
1/7/98

FMSI 13913

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

January 3, 1996

Mr. Sean McVey
EIS Brake Parts
Division of Standard Motor Products, Inc.
P.O. Box 1315
129 Worthington Ridge
Berlin, CT 06037

Dear Sean:

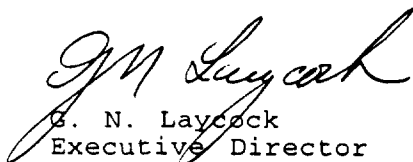
We are pleased to advise you that the Membership Balloting now shows a majority in favor of accepting the application filed by EIS Brake Parts for Active Membership in the Institute. Prior to the Membership Ballot the application had been reviewed by the Membership Committee and the Board of Directors.

For accounting purposes we will consider your Membership effective as of July 1, 1995, because of your prior status as a Licensee Member. Your prepaid Membership Dues submitted with your application will run through June 30, 1996. After June 30, 1996 we will bill for Membership Dues on a semi-annual basis (July 1 and January 1).

We will send all bulletins with new assignments and correspondence to your attention. Regarding past assignments, copies of FMSI assignment drawings are available. In quantities up to five assignments there is no charge. In quantities over five at a time the charge is \$1.00 per identity. If there is anything the Institute can do to assist you, do not hesitate to ask.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

December 4, 1995

TO: Delegates & Alternates

SUBJECT: Application for Active Membership Filed by
EIS Brake Parts, Division of Standard Motor
Products Inc.

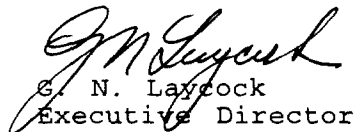
An application for Active Membership has been received from EIS Brake Parts and has been reviewed by our Membership Committee and Board of Directors. They have voted in favor of its acceptance. The complete address of the applicant is:

EIS Brake Parts
Division of Standard Motor Products, Inc.
P.O. Box 1315
129 Worthington Ridge
Berlin, CT 06037

Ballots are being sent to both Delegate and Alternate. Return envelopes are with Delegate's copy only. If the Delegate will not be able to cast his ballot we ask that the Alternate return the completed ballot.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

M E M B E R ' S

B A L L O T

TO: FMSI
588 Monroe Turnpike
Monroe, CT 06468

My vote on the application for Active Membership filed by EIS
Brake Parts is:

ACCEPT

☐

DO NOT
ACCEPT

☐

BY: _____

COMPANY: _____

DATE: _____

November 9, 1995

TO: Officers and Board of Directors

SUBJECT: Application for Active Membership Filed by
EIS Brake Parts, Division of Standard Motor Products, Inc.

Enclosed is a copy of the Application for Active Membership filed by EIS Brake Parts.
The complete address of the applicant is:

EIS Brake Parts
Division of Standard Motor Products, Inc.
P.O. Box 1315
129 Worthington Ridge
Berlin, CT 06037

The Membership Committee has now completed its review of the application and recommend its acceptance. A copy of the application is enclosed. Would you kindly review the application, and return the enclosed ballot to the Institute office.

Ballots are enclosed with Directors copies only. Postage paid return envelopes are enclosed with U.S. Directors copies only.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

Friction Materials Standards Institute
588 Monroe Turnpike
Monroe, CT 06468

Gentlemen:

My vote on the application for Active Membership filed by EIS Brake Parts is:

Accept

☐

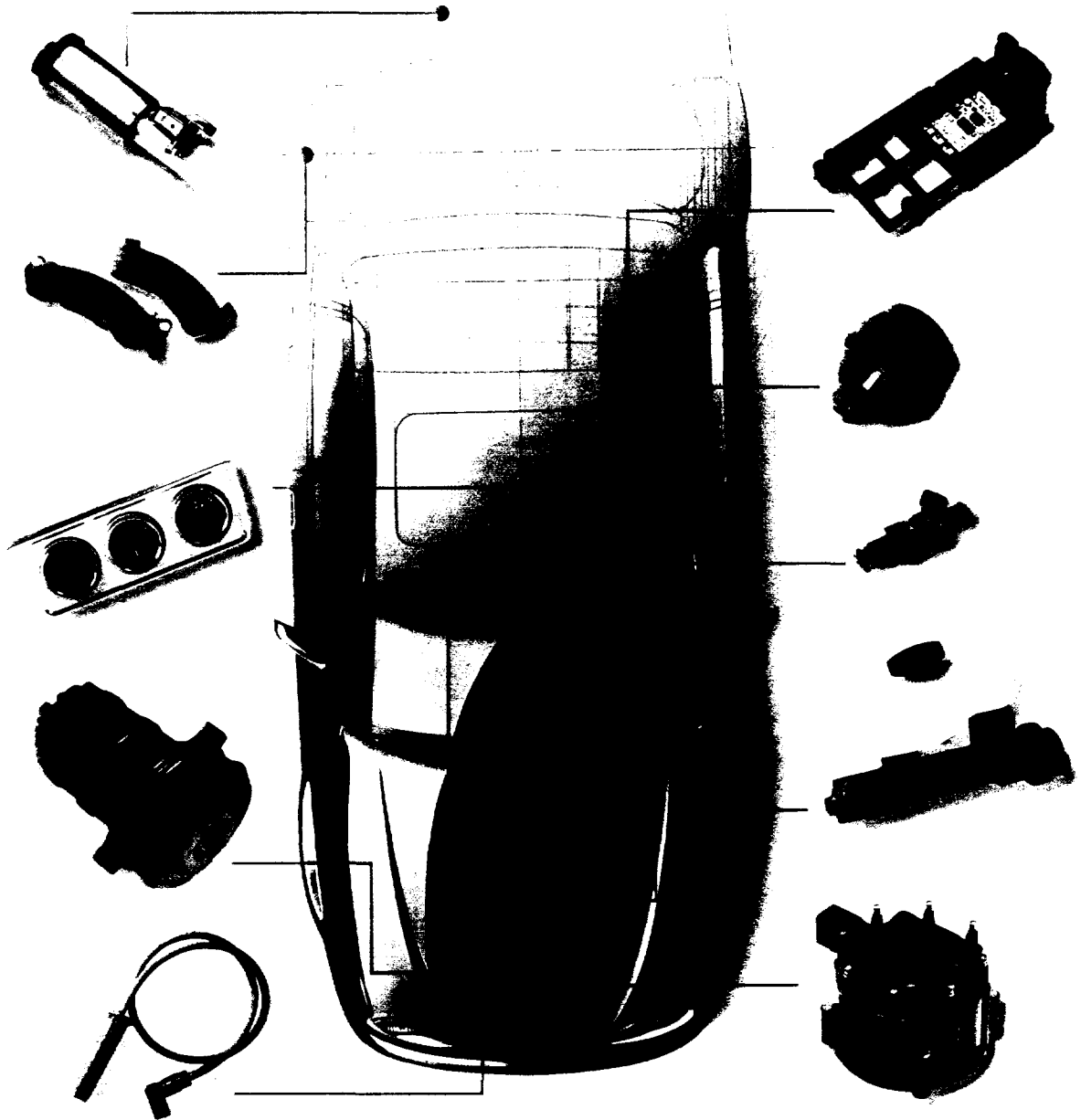
Do Not
Accept

☐

By:

Company:

Date:



STANDARD MOTOR PRODUCTS, INC.
1994 ANNUAL REPORT



ABOUT THE COVER

Standard Motor Products supplies functional replacement parts and accessories for cars, trucks, and buses, as well as equipment and supplies for auto repair shops. These parts are usually unseen by the vehicle owner. This view shows the locations of some of the Company's key parts. Clockwise from top right: distributorless ignition module, distributor rotor, fuel injector, brake master cylinder, distributor cap, ignition wire, air conditioning compressor, gauge panel, disc brake pads, electric fuel pump.

The Company's products are sold throughout the United States and in many other countries. The Company employs 3,300 people at its offices, factories and distribution centers in the United States, Canada, Puerto Rico and Hong Kong.

ANNUAL STOCKHOLDERS MEETING

Standard Motor Products, Inc. stockholders' annual meeting will be held on May 25, 1995 at 2:00 pm at the Chemical Bank, 270 Park Avenue, New York, NY 10017. A notice of this meeting, together with a proxy statement, is being mailed to all stockholders on April 25, 1995.

STANDARD MOTOR PRODUCTS, INC. AND SUBSIDIARIES

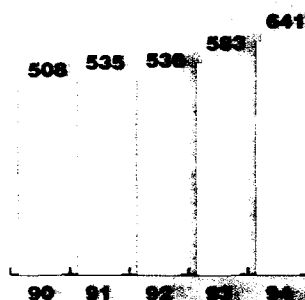
Financial Summary

(Dollars in thousands, except per share amounts)

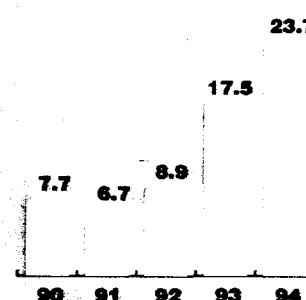
	Years Ended December 31,		
	1994	1993	1992
Net Sales	\$640,810	\$582,851	\$535,553
Operating Earnings before Taxes	46,449	37,501	22,462
Earnings before Taxes and Cumulative Effect of Changes in Accounting Principles	35,397	26,805	10,820
Earnings before Cumulative Effect of Changes in Accounting Principles	23,665	18,598	8,878
Net Earnings	23,665	17,508	8,878
Average Number of Common and Common Equivalent Shares	13,165,567	13,226,678	13,130,733
Per Share:			
Earnings before Cumulative Effect of Changes in Accounting Principles	\$1.80	\$1.41	\$.68
Net Earnings	1.80	1.32	.68
Dividends	.32	.32	.32
Market Value at Year-End	19.625	26.375	13.375
Net Earnings as a Percent of:			
Sales	3.7%	3.0%	1.7%
Average Equity	12.7%	10.3%	5.6%
At Year-End:			
Assets	\$462,351	\$433,354	\$384,616
Stockholders' Equity	195,089	178,183	161,128
Total Debt to Capitalization	41.2%	44.1%	48.5%

NET SALES
(In millions)

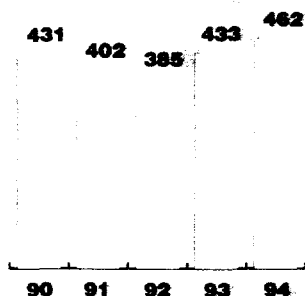
94 - \$641
93 - \$583
92 - \$536
91 - \$535
90 - \$508

**NET EARNINGS**
(In millions)

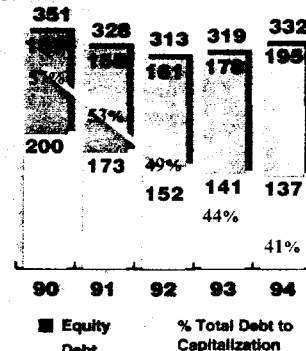
94 - \$23.7
93 - \$17.5
92 - \$ 8.9
91 - \$ 6.7
90 - \$ 7.7

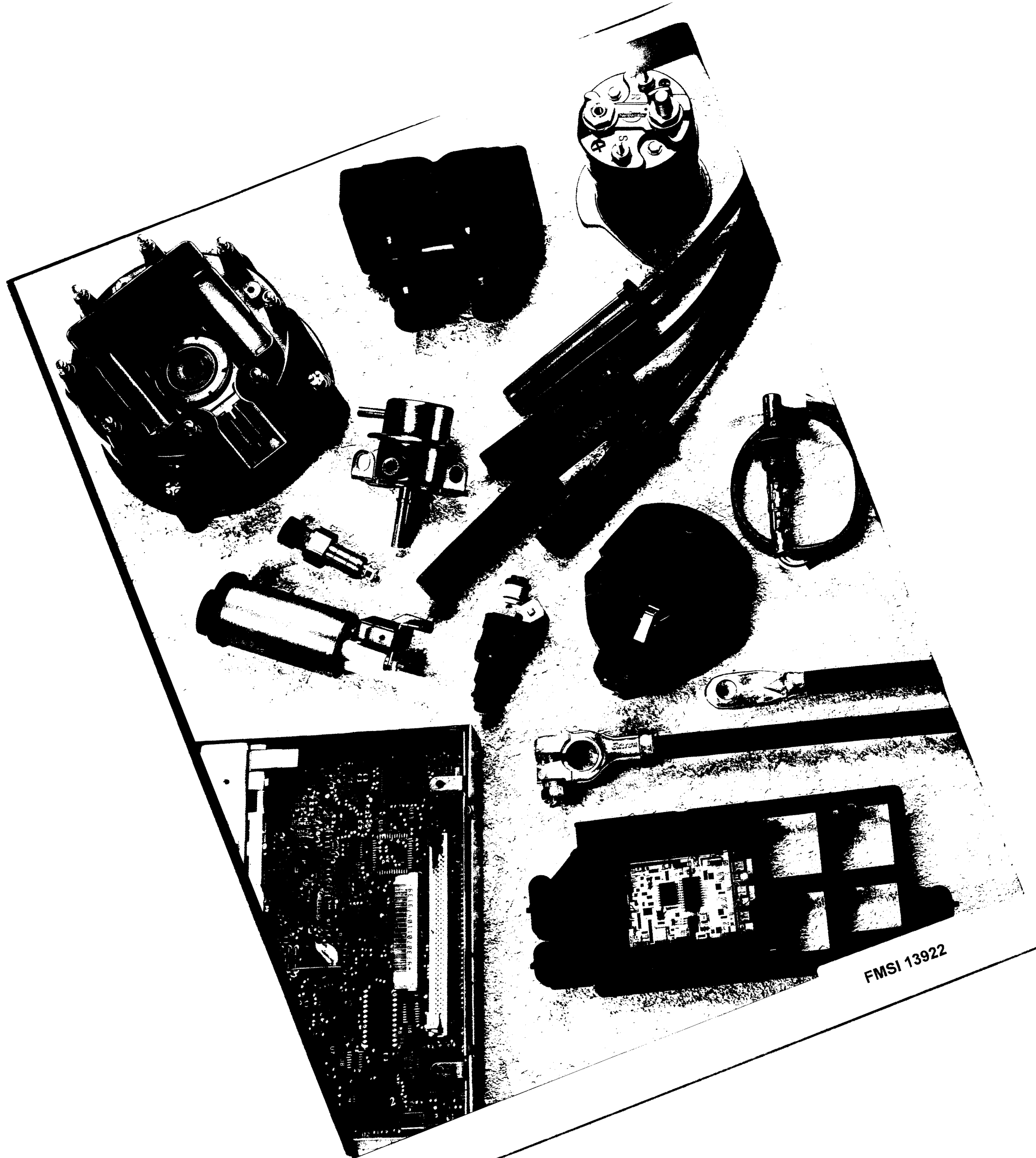
**TOTAL ASSETS**
(In millions)

94 - \$462
93 - \$433
92 - \$385
91 - \$402
90 - \$431

**CAPITALIZATION**
(In millions)

94 - \$332
93 - \$319
92 - \$313
91 - \$328
90 - \$351





FMSI 13922

PRESIDENT'S LETTER

To Our Shareholders

I am very pleased to report that both sales and profits for Standard Motor Products reached record levels for 1994. 1994 sales of \$640.8 million increased by 9.9%, or \$58 million, over 1993. Net income for 1994 was \$23.7 million, or \$1.80 per share, compared to \$17.5 million or \$1.32 per share for 1993. 1994's net income exceeded 1993 by 35.2%, continuing the trend of significant annual profit improvements since 1991.

These improved results are attributable to a combination of strong sales performance and internal cost reductions. On the sales front, weather admittedly was a factor, as harsh winter weather aided engine management sales, and a hot summer spurred the air conditioning business. More important, customers we have added in the past few years grew at a faster rate than the industry as a whole. These include Carquest, American Parts, and a host of retailers — AutoZone, Pep Boys, Advance, Northern, Hi-Lo, O'Reilly and others. Our marketing and sales efforts of recent years have begun to reap benefits.

Perhaps most significant, the improvements in sales and profits were



*L. I. Sills
President*



*B. Fife N. Sills
Co-Chairmen of the
Board of Directors*

achieved in the face of price reductions in several of our product lines. The traditional aftermarket has seen pressure for lower prices in the past few years. The increased presence of auto parts retailers has forced traditional distributors to buy better, to operate more efficiently, and to pay greater heed to incentives. Responding to these pressures, every Company Division endured price reductions of one form or another in 1994 — either lower actual prices, increased discounts to customers, or the introduction of a second lower-priced product line.

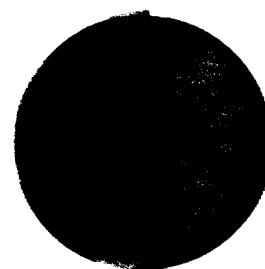
Despite these price reductions, we were able to achieve our profit growth through a successful program of cost reduction. Realizing that we were facing price erosion, each of our Divisions was given a cost reduction goal. Many of our employees participated personally — by far the best way — and the result was that we exceeded our goal by 100%. Principal

areas of improvement were in overhead, including a 3% salaried head count reduction, and material cost savings. There were also a host of smaller but



Ignition Wire

Standard is a basic manufacturer of ignition wire sets, ignition modules, fuel pumps, and most other engine management parts. Ignition wires are fabricated on automated equipment in the Edwardsville plant.



Ignition parts 56%

Emission controls 14%

Wire & Cable 16%

Fuel system 14%

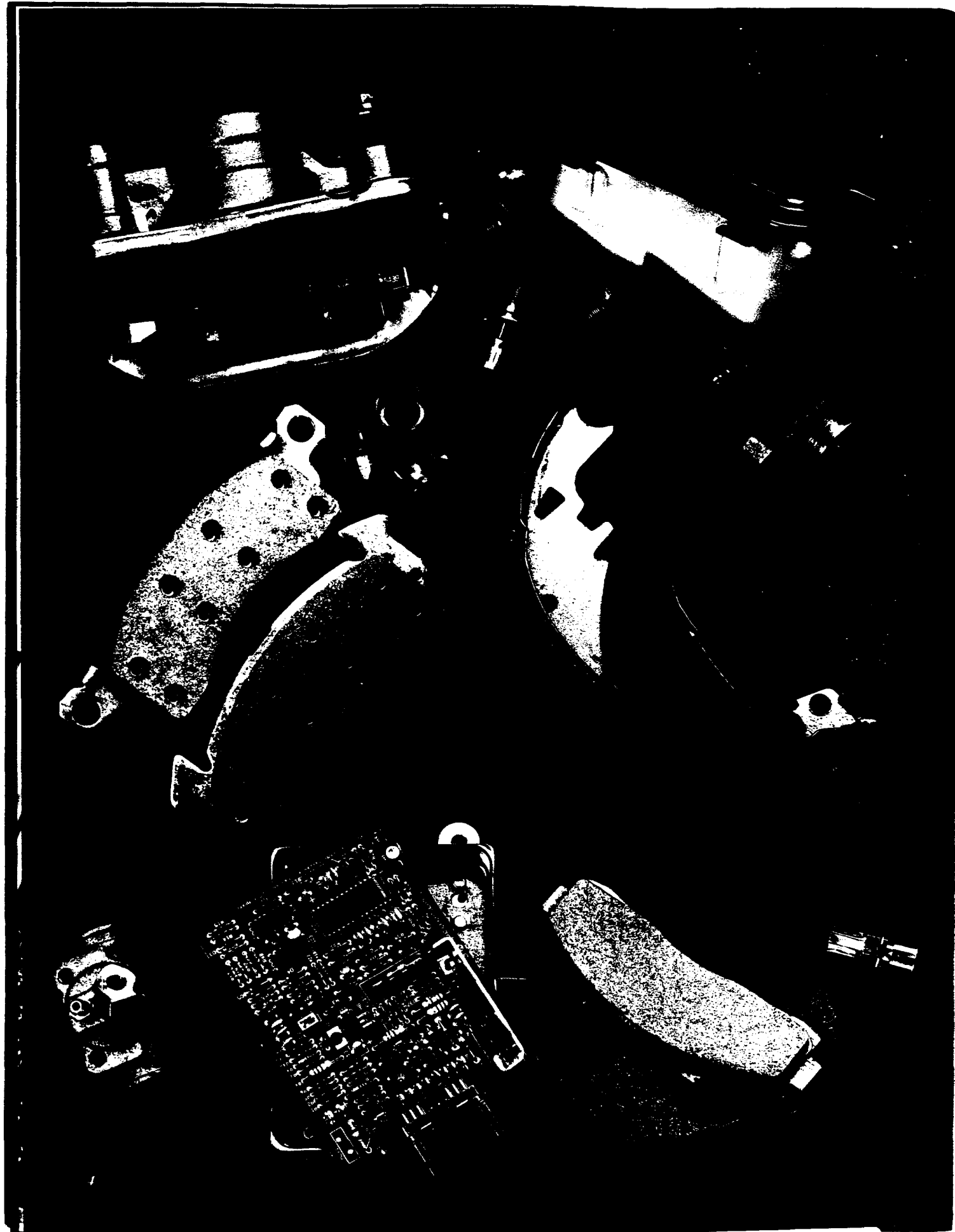
Engine Management Division

Products: (shown on facing page) ignition and electrical parts, emission and engine controls, on-board computers, sensors, ignition wire sets, battery cables, carburetor and fuel system parts, fuel pumps.

Brand names: Standard, Blue Streak, GP/Sorensen, Hygrade, Modern Mechanic, Tru-Tech; Private brands: Big A, Carquest, Pronto, Precision Tune.

History: Original business founded 1919; Hygrade Products acquired 1947; Blue Streak Electronics joint venture initiated 1992.

Factories: Long Island City, NY; Edwardsville, KS; Concord, Ontario, Canada; Fajardo, Puerto Rico; Hong Kong. Distribution Centers: Disputanta, VA; Edwardsville, KS; Reno, NV; Mississauga, Ontario and Calgary, Alberta, Canada.



FMSI 13924

PRESIDENT'S LETTER *(cont'd)*

important improvements suggested by individuals. We are very proud of what our people have accomplished in every Division.

Cost reduction has become a permanent way of life at Standard. We expect the market to remain extremely competitive, and we will continue to reduce costs accordingly.

One area in which we did not achieve our target was inventory reduction. Our inventories increased in 1994 by \$25.6 million. This increase was a larger percentage than the sales increase, reducing inventory turns below 1993 levels. A major hurdle has been the multiplicity of brands we now provide, which up until now has required a multiplicity of inventories. We have begun a pack-to-order system in two locations. Such a system manages multiplicity by maintaining inventory in a bulk state until the last moment before shipment. In 1995 we will introduce this concept into other locations, and we look forward to significant improvements in this area.

On balance, 1994 was a highly successful year. What follows now is a report on each of our primary operating Divisions.

ENGINE MANAGEMENT

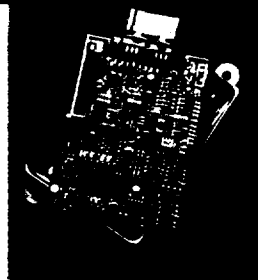
The largest growth areas in the engine management field are electronics and emission control parts. To help exploit these trends, we established a joint venture in Concord, Canada in 1992, creating an entity called Blue Streak Electronics. Blue Streak Electronics rebuilds engine control computers, anti-lock brake system controllers, and a host of sensors. Sales have doubled each year, and the future potential is vast. To further enhance this growth in 1995, we are

opening a research and development facility in Haifa, Israel.

Helping to spur this growth is the 1990 Federal Clean Air Act. IM240, the Inspection and Maintenance section of the Act, imposes strict emissions-control standards on existing as well as new vehicles, via a dynamometer test. Industry predictions are that 20% to 30% of all vehicles will fail this test. While the law initially affected only 97 urban areas with serious air-quality problems, it will ultimately include most large cities and their surrounding counties. There will be minimal sales impact in 1995, and there is now some uncertainty in the wake of current anti-government trends. Nevertheless, analysts estimate as much as \$500 million in additional annual sales for the aftermarket, if and when the program is fully implemented.

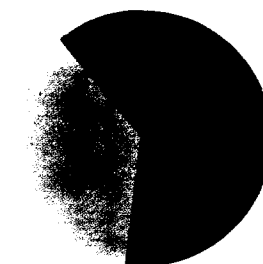
It has become imperative that we train our independent installers to handle the increasingly complex electronic technology, as they will be competing with the car dealers for this replacement business. The Company has an aggressive program of mechanics' training, which includes technical assistance phone lines, troubleshooting seminars for professional mechanics, mechanics' service newsletters, instructional videotapes and local technical clinics.

Two years ago, in a move to tie independent service dealers closer to the Company and its salespeople, the Standard Plus Club was launched. Membership entitles an installation shop to purchase telephone diagnostic and service assistance for its technicians, and also includes discounts on seminars, manuals, videotapes and other training materials. Response to the Club has been very enthusiastic: more than 10,000



Anti-lock computer

Control computers for anti-lock brake systems are a rapidly-growing portion of the brake products line. EIS is basic in friction, hydraulics, anti-lock brake parts, and all other important brake product groups.



■	Friction 52%
■	Hydraulics 37%
■	Other Products 11%

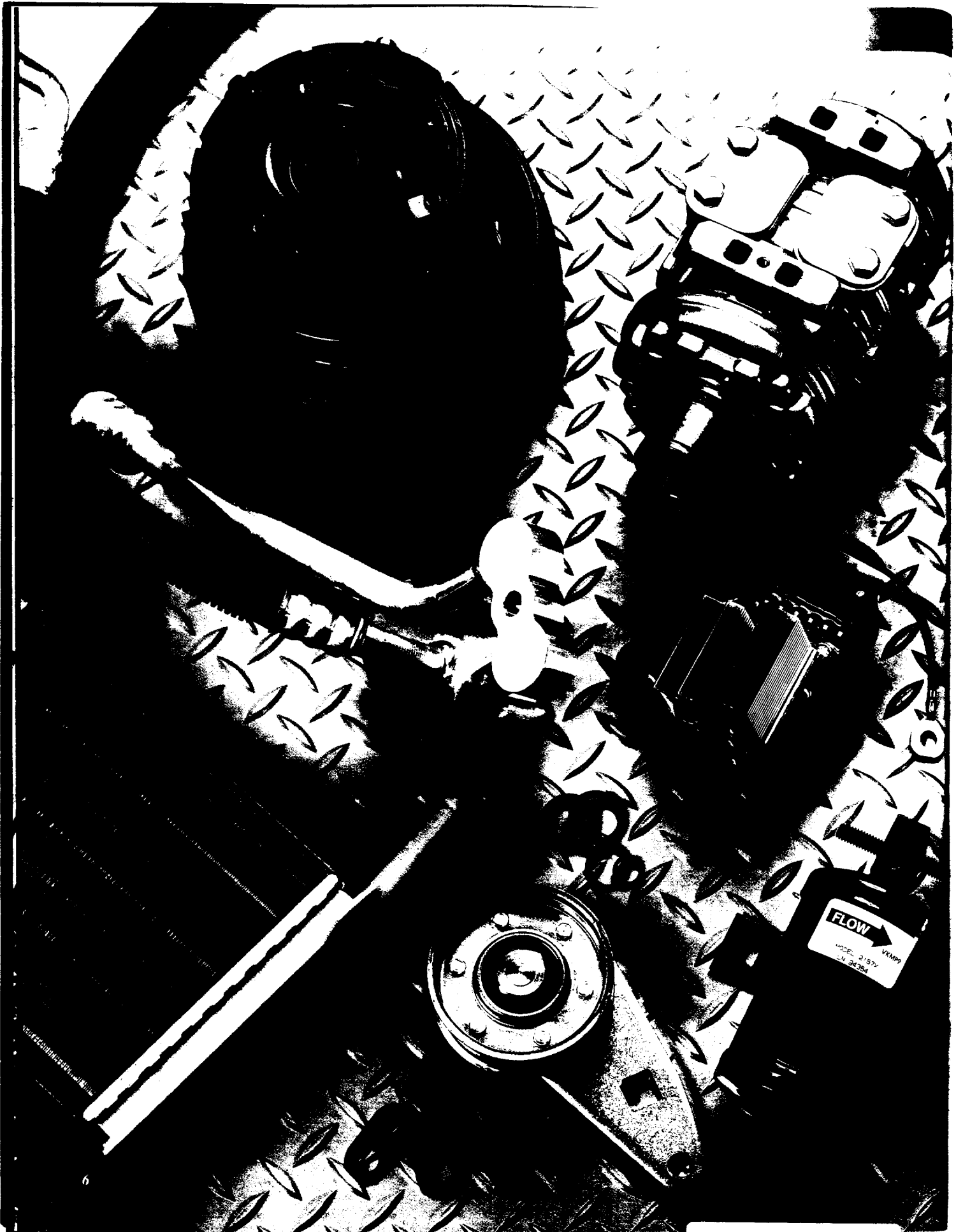
Brake Products Division

Products: (shown on facing page) brake master cylinders, wheel cylinders, disc calipers, brake shoes, disc pads, brake hardware, drums, rotors, cables, hydraulic lines, anti-lock system computers.

Brand names: EIS, Cali-Blok, Modern Mechanic, Traffic King, Tru-Tech; Private brand: Carquest.

History: EIS Brake Parts acquired 1986; Eisline joint venture initiated 1994.

Factories: Berlin, CT; Rural Retreat, VA; Manila, AR; Ontario, CA; Fajardo, Puerto Rico; Distribution Centers: Berlin, CT; Manila, AR; Ontario, CA.



FMSI 13926

PRESIDENT'S LETTER *(cont'd)*

installers joined in 1994, and 1995's goal is 15,000 members. The engine management "hot line", based in Long Island City, alone has 18 people answering telephones, receiving nearly 2,000 calls per week. Similar "hot lines" are maintained at our brake parts and climate control Divisions. We believe Club membership enhances the loyalty of installers to the Company's brand names, and therefore it is an important part of our future.

BRAKE PRODUCTS

Brake products is one of the fastest growing product lines in the aftermarket. Within this group, loaded calipers (brake calipers preassembled with disc pads and hardware) represent one of the fastest growing segments. Installers are discovering that the higher cost of loaded calipers is offset by savings in labor. Accordingly, in 1994 we began a joint venture with Autoline Industries to manufacture these parts in California. Sales are growing nicely.

The popularity of anti-lock braking systems on new cars has prompted increased sales of anti-lock computers and related components, and has also focused the attention of car owners on the importance of brake system maintenance in general. The computers are now being remanufactured by Blue Streak Electronics, so we are well positioned in this new product line.

To enhance our presence in the Canadian market, and give us a toehold in the manufacture of friction materials, a new plant is now under construction in the Toronto area to produce friction materials and to remanufacture brake shoes and disc pads, with operations scheduled to begin in April 1995.

Our goal in EIS is to become a basic

supplier in every major product group. The above steps are moves in that direction. We have several additional plans in this area, and we will be pursuing them actively in 1995.

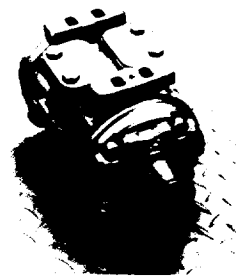
CLIMATE CONTROL

Four Seasons had an extremely strong sales year in 1994. It was aided by a hot summer, by growth in our retail customers' business, and by the arrival in our market of cars sold in the late 1980's, when higher installation rates of factory installed air conditioning began.

Sales were so strong, in fact, that we experienced shipping delays and back orders from our Texas facility. We are rectifying that situation by reorganizing our distribution center for greater efficiency and by adding automated equipment. Thus far in 1995 the results are promising. We have also been rebuilding compressors — our number one sales item — at a higher production rate throughout the year, rather than waiting for the warm weather to begin. This accounted for some of our inventory growth in 1994, but we believe it will be beneficial in the long run.

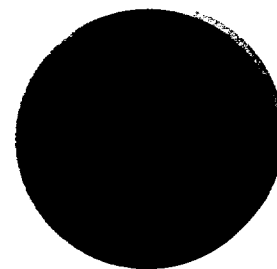
Federal regulations of CFC (fluorocarbon) refrigerants continue to dominate changes in the climate control industry. The phase-out of R-12 refrigerant (DuPont's Freon® and other brands) is forcing installers to acquire and use new refrigerant recycling equipment, and influencing car makers to change to a replacement refrigerant, designated as R-134a. We have re-engineered most of our product line to handle both types of refrigerant, so there should be minimal disruption here.

Finally, we have made a decision to become more basic in the major product



Toyota compressor

This remanufactured Toyota compressor exemplifies Four Seasons' superb coverage in parts for imports. Extensive coverage and high service levels are important Four Seasons advantages.



Compressors	38%
Other Air Conditioning	48%
Heater parts and other	14%

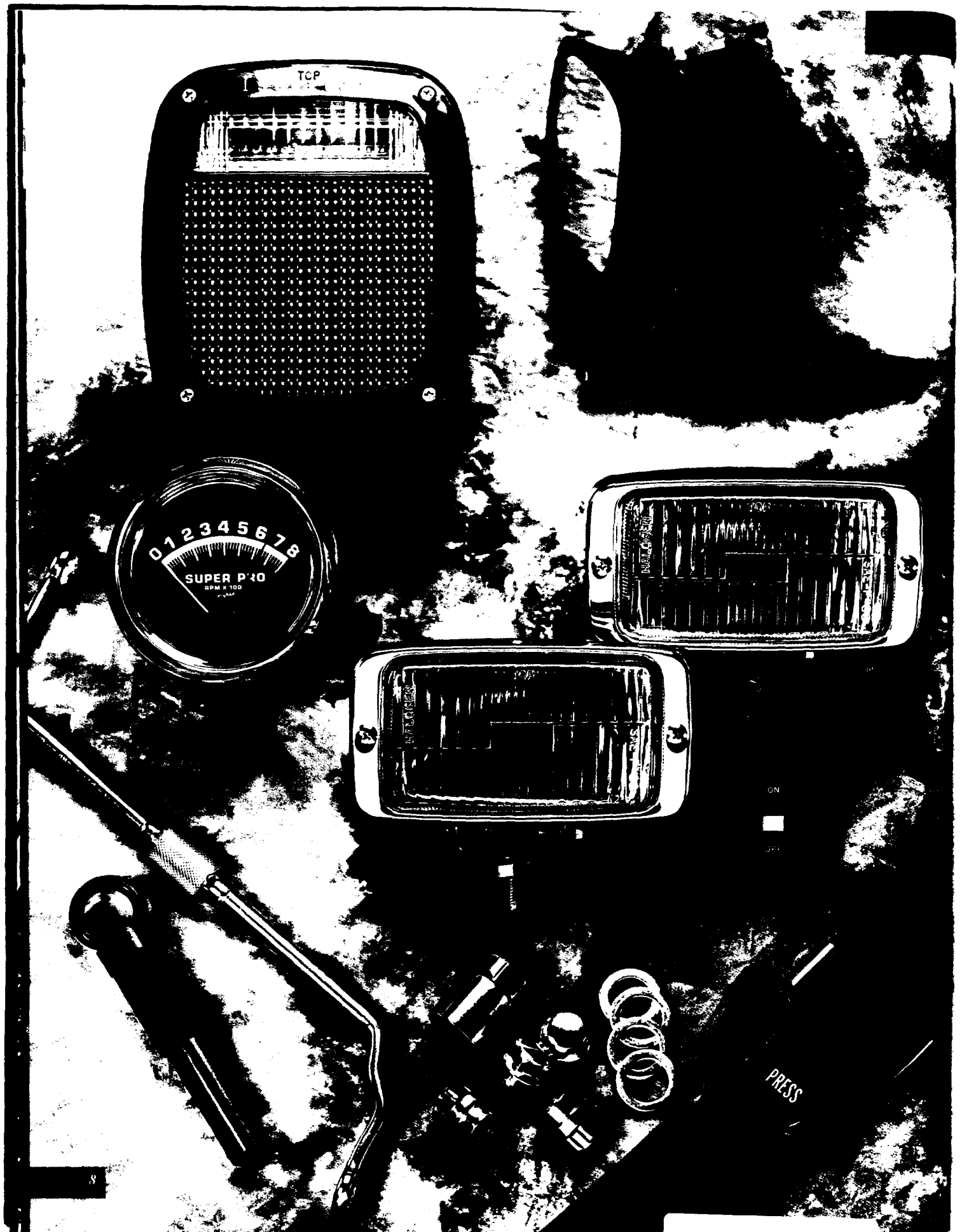
Climate Control Division

Products: (shown on facing page) air conditioning compressors, clutches, accumulators, filter/driers, filters, blower motors, heater valves, heater cores, evaporators, condensers, hoses, fittings, recovery/recycling units, tools.

Brand names: Four Seasons, Cartemp, Coolmark, Factory Air, Trumark; Private brands: AIM, Big A, Parts Master, Professional Choice, Rockhill, TruStar.

History: Four Seasons Comfort Controls acquired 1978; Car Air Components (Carco) acquired 1979.

Factory: Grapevine, TX; Distribution Center: Coppell, TX.



FMSI 13928

PRESIDENT'S LETTER *(cont'd)*

groups that we supply. There will be examples of this in Four Seasons in the near future.

GENERAL SERVICE LINE

The Champ Division markets equipment, supplies, tools, repair parts and automotive accessories for the professional mechanic and the do-it-yourselfer. At the beginning of 1993 this Division was reorganized as a separate business unit, with its own management, a dedicated sales force, and the freedom to explore new markets and new sales techniques. Among the innovations has been a careful reduction of prices, which has made Champ more competitive and has increased its sales volume.

The agreement, signed in April 1993, to supply the Big A Service Line to APS distribution centers and jobbers, has now been fully integrated. This new business increased Champ's sales volume by approximately 60% from 1992.

In February 1995, we acquired the assets of Pik-A-Nut, a leading aftermarket supplier of nuts, bolts, screws and other fasteners. This is a natural fit with Champ, and we have just begun the process of integrating the two companies. Pik-A-Nut has a loyal installer base, and we see good growth opportunities here.

75 YEARS OF SUCCESS AND GROWTH

April 1994 marked the Company's 75th Anniversary in business. Standard has grown from a small local operation to a successful public corporation and a national leader in a highly competitive industry.

Our 75th anniversary and the approaching millennium find us optimistic for the future of the aftermarket and for our Company. Both natural and

government-mandated technological and demographic changes bode well for the future. The electronic component of today's automobile is already at 12% and increasing steadily, and Standard is well-positioned to benefit from this increasing computerization. The Clean Air Act, and particularly LM240, should generate increased auto repair activity and increased sales of parts. The mandated phaseout of fluorocarbon-based refrigerants is increasing the number of temperature control parts, and placing great emphasis on recycling and training. The brake business is growing rapidly, and anti-lock brake systems offer new sales opportunities without reducing existing markets. Together, these developments emphasize professionalism on the part of the supplier as well as the installer.

Today, the aftermarket is more competitive than ever before. As a company we have learned to compete successfully in this environment, through increased efficiency, reduced inventories, reduced debt, and diversifying our customer base. We are continuing our efforts to acquire companies that are truly synergistic, and to implement joint ventures that will provide competitive advantages in the aftermarket. And we are beginning to pursue expansion outside of North America.

We are equally aware of the important qualities which have led to our past success: design ingenuity, manufacturing excellence, market coverage, superior customer service, and outstanding sales support. By properly balancing these attributes against the demanding requirements of the business world, we will ensure our future profitability.



Lawrence I. Sills, President

General Service Line Division

Products: (shown on facing page) antennas, gauges, mirrors, cigarette lighters, driving lights, floor mats, fuses, lift supports, tire repairs, tire hardware, mops, brooms, pails, paint brushes, tow straps, transmission coolers, fasteners.

Brand name: Champ, Pik-A-Nut; Private brand: Big A Service Line

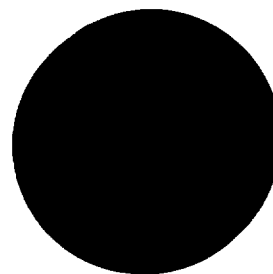
History: Champ-Items acquired 1972; Big A Service Line assets acquired 1993, Pik-A-Nut acquired 1995.

Distribution centers: Edwardsville, KS; Disputanta, VA; Huntington, IN



Amber driving light

This driving light is one of more than 9,000 SKUs in the general service line. Simplified sourcing and full service make this an attractive line for the traditional automotive distributor.

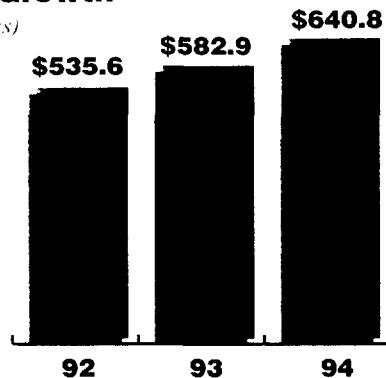


Supplies	47%
Accessories	27%
Repair parts	26%

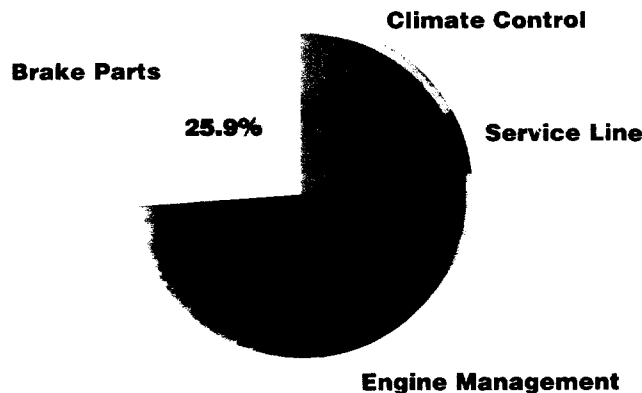
REVIEW OF OPERATIONS AND FINANCIAL CONDITION

Sales Growth

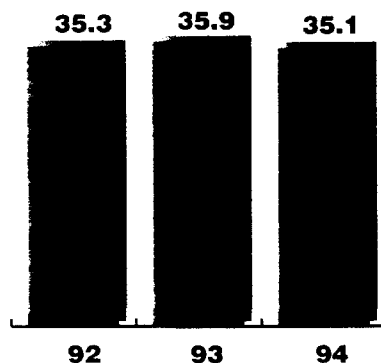
(In millions)



Sales by Product Group



Gross Margin as % of Sales



Sales in 1994 increased 9.9% to \$640.8 million from \$582.9 million in 1993. The strong sales performance in 1994 reflected growth by all Divisions, led by a nearly 25% increase in sales by the Four Seasons Division (temperature control products). The Standard Division (engine management) also had a strong year, with sales increasing 9.2% over 1993. Champ Service Line sales were up 14.3% in 1994, primarily reflecting the full year impact of the APS Service Line business, which the Company supplied for nine months in 1993. Sales of the EIS Division (brake parts) grew by 2.2% in 1994 in spite of a price reduction on certain parts required early in the year.

The strong sales growth in 1994 continued the trend begun in 1993. The addition of new customers and new products, and strong industry sales of ignition and temperature control products resulting partially from harsh weather conditions, fueled the sales growth. Pricing opportunities in 1994 were extremely limited, with most product lines reflecting lower net selling prices.

Standard Motor Products' sales continued to be focused primarily in the U.S., with 92% of total sales to domestic customers. The Company's business in Canada continued strong, up nearly 18% in 1994. Sales to other export markets were down slightly in 1994. **The company continued to diversify its customer base in 1994.** Sales to non-traditional distribution channels (retail, special markets, co-manufacturer and export) grew in 1994 to comprise 21% of total company sales, up from 17% of total sales in 1993.

Gross margins in 1994 declined by 8/10ths of a percentage point to 35.1%, from 35.9% in 1993. The margin decline occurred early in the year, resulting from lower prices primarily in brake and service line products. Margins in the first quarter were 1.7 percentage points below a year earlier. As the year progressed, however, margins improved due to cost reductions, higher pricing, manufacturing efficiencies and lower rates of product returns. In the fourth quarter of 1994, gross margins were slightly ahead of the comparable period in 1993.

Gross margins in 1993 improved by 6/10ths of a percentage point from the 35.3% earned in 1992. The improvement in 1993 gross margins resulted from improved manufacturing efficiency, overhead cost reductions and minimal cost increases on purchased materials. Margins in 1993 were unfavorably impacted by higher customer returns.

Results in 1994 also reflect favorable leveraging of operating expenses, as the 5.7% increase in selling, general and administrative expenses, to \$178.7 million, was below the growth rate in revenues. Selling, general and administrative expenses were 27.9% of sales in 1994, 1.1 percentage points below 1993. In 1993, operating expenses of \$169.0 million or 29% of sales were below the 31.1% of sales experienced in 1992.

The Company's 1994 results were favorably impacted by the non-recurrence of a \$2.8 million restructuring provision that was included in the 1993 financial results. The restructuring actions were completed in 1994 and have already resulted in reduced expenses.

Other income was lower in 1994, as higher interest income and a more than doubling of income received from the Blue Streak Electronics joint venture were more than offset by higher costs of our accounts receivable financing program and reduced returns on securities investments.

Interest expense in 1994 of \$12.3 million was slightly below a year earlier. The negative impact of higher interest rates on the Company's short-term borrowings was offset by the retirement of certain higher cost long-term debt. Interest expense has not varied significantly since 1992, when \$12.3 million of interest expense was incurred.

Taxes of \$11.7 million in 1994 were \$3.5 million higher than a year earlier. The effective tax rate in 1994 of 33.1% increased from the 30.6% rate in 1993. Higher pre-tax earnings and a lower relative benefit from earnings of the Company's Hong Kong and Puerto Rico subsidiaries increased taxes and the effective tax rate.

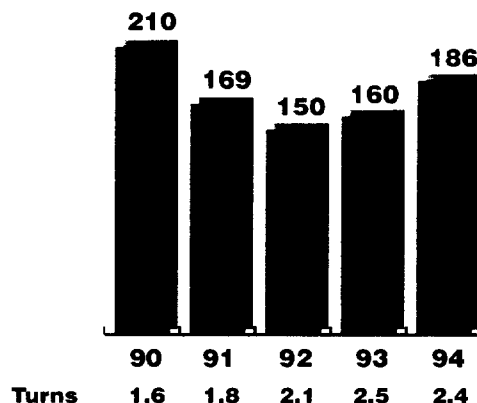
The balance sheet was strengthened in 1994 by a \$4 million reduction in debt and an improvement in debt to total capitalization to 41.2%, from 44.1% in 1993. Current assets increased, however, by \$31.1 million to \$328.9 million. The increase was primarily due to higher receivables and inventories. Receivables days outstanding and inventory turns, both measures of asset utilization, worsened in 1994. Average receivables days outstanding increased by one day in 1994, reflecting the expansion of the Company's business to retailers, whose normal payment term is 90 days. Inventory turns declined to 2.4 from 2.5 turns in 1993. The Company is redoubling its efforts to identify and implement means to reduce inventories required to service the increasing proliferation of product brands being offered. Efforts are focusing on a pack-to-order system, which retains parts in a bulk state until an order is received for a specific brand of product. Working capital management remains a key focus for management.

Cash flow was strong during 1994, as cash generated from operations funded increases in working capital and \$12.6 million of capital expenditures. Cash was available to reduce borrowings at year end by \$4 million, compared to 1993, and to repurchase \$4.3 million of the Company's common stock. Total cash flow from operations in 1994 was higher than 1993, but below the rate of 1992 or 1991, when significant reductions in inventories were achieved.

The net effect of the above factors was to increase net earnings to a record level of \$23.7 million or \$1.80 per share. Net income was up 35.2% from 1993, after the impact of changes in accounting principles, and 27.2% before the impact of changes in accounting principles.

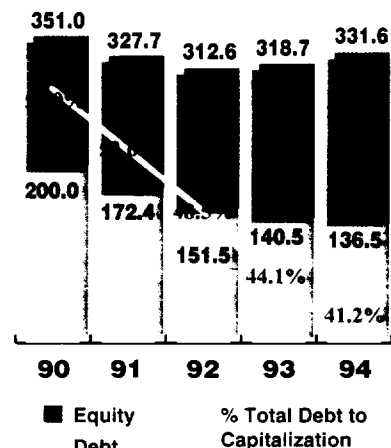
Inventory at Year End

(In millions)



Capitalization

(In millions)



STANDARD MOTOR PRODUCTS, INC. AND SUBSIDIARIES

Consolidated Statements of Earnings

(Dollars in thousands, except per share amounts)

	Years Ended December 31,		
	1994	1993	1992
Net sales	\$640,810	\$582,851	\$535,553
Cost of sales	415,687	373,588	346,570
Gross profit	225,123	209,263	188,983
Selling, general and administrative expenses	178,674	168,981	166,521
Provision for restructuring charges (Note 17)	--	2,781	--
Operating income	46,449	37,501	22,462
Other income (expense), net (Note 13).....	1,236	1,648	697
Interest expense	47,685	39,149	23,159
	12,288	12,344	12,339
Earnings before taxes and cumulative effect of changes in accounting principles	35,397	26,805	10,820
Taxes based on earnings (Note 14)			
Current:			
Federal (principally U.S.)	10,294	11,475	1,996
State and local	2,851	2,275	522
Deferred.....	13,145	13,750	2,518
	(1,413)	(5,543)	(576)
	11,732	8,207	1,942
Earnings before cumulative effect of changes in accounting principles	23,665	18,598	8,878
Cumulative effect of changes in accounting for postretirement benefits and income taxes, net (Notes 12 and 14).....	--	(1,090)	--
Net earnings	\$ 23,665	\$ 17,508	\$ 8,878
Per share data:			
Earnings before cumulative effect of changes in accounting principles	\$ 1.80	\$ 1.41	\$.68
Cumulative effect of changes in accounting principles	--	(.09)	--
Net earnings per common and common equivalent share	\$ 1.80	\$ 1.32	\$.68
Cash dividends paid:			
Common stock - \$.32 per share	\$ 4,217	\$ 4,211	\$ 4,199
Average number of common and common equivalent shares	13,165,567	13,226,678	13,130,733

See accompanying notes to consolidated financial statements.

Consolidated Balance Sheets

(Dollars in thousands)

		December 31,	
		1994	1993
Assets	Current assets:		
	Cash and cash equivalents (Note 15)	\$ 2,796	\$ 12,346
	Marketable securities (Note 15)	6,018	11
	Accounts receivable, less allowances for discounts and doubtful accounts of \$5,708 (1993 - \$5,536) (Note 3)	109,966	103,019
	Inventories (Note 4)	185,855	160,268
	Prepaid taxes based on earnings	--	974
	Deferred income taxes (Note 14)	20,111	17,460
	Prepaid expenses and other current assets	4,131	3,722
	Total current assets	328,877	297,800
	Property, plant and equipment, net (Notes 5 and 8)	104,126	103,004
Liabilities and Stockholders' Equity	Other assets:		
	Receivables - due after one year	501	2,645
	Sundry (Note 6)	28,847	29,905
	Total other assets	29,348	32,550
	Total assets	\$462,351	\$433,354
	Current liabilities:		
	Notes payable - banks (Note 7)	\$ 6,600	\$ 5,100
	Current portion of long-term debt (Notes 8 and 15)	19,987	4,935
	Accounts payable	40,517	41,373
	Sundry payables and accrued expenses	58,832	42,050
	Taxes based on earnings	2,412	4,617
	Taxes (other than those based on earnings)	822	1,332
	Payroll and commissions	10,500	10,173
	Total current liabilities	139,670	109,580
	Long-term debt (current portion shown above) (Notes 8 and 15)	109,927	130,514
	Deferred income taxes (Note 14)	4,863	3,625
	Postretirement benefits other than pensions (Note 12)	12,802	11,452
	Commitments and contingencies (Notes 8, 9, 15 and 16)		
	Stockholders' equity (Notes 8, 9, 10 and 11):		
	Common Stock - par value \$2.00 per share:		
	Authorized 30,000,000 shares, issued 13,324,476 shares in 1994 and 13,309,976 shares in 1993 (including 203,650 and 5,000 shares held as treasury shares in 1994 and 1993, respectively)	26,649	26,620
	Capital in excess of par value	2,555	2,120
	Loan to Employee Stock Ownership Plan (ESOP)	(6,705)	(8,385)
	Minimum pension liability adjustment	(1,204)	(581)
	Retained earnings	177,904	158,456
	Foreign currency translation adjustment	(139)	69
		199,060	178,299
	Less: Treasury stock - at cost	3,971	116
	Total stockholders' equity	195,089	178,183
	Total liabilities and stockholders' equity	\$462,351	\$433,354

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

(In thousands)

		Years Ended December 31,		
		1994	1993	1992
Cash Flows From Operating Activities	Net Earnings	\$23,665	\$17,508	\$ 8,878
	Adjustments to reconcile net earnings to net cash provided by operating activities:			
	Cumulative effect of changes in accounting for postretirement benefits and income taxes, net	--	1,090	--
	Depreciation and amortization	11,008	10,523	9,688
	Loss on disposal of property, plant & equipment	364	204	191
	Proceeds from sales of trading securities	7,500	--	--
	Purchases of trading securities	(7,676)	--	--
	(Increase) in deferred income taxes	(1,411)	(5,543)	(576)
	Tax benefits applicable to E.S.O.P.	123	124	123
	Tax benefits applicable to the exercise of employee stock options ...	249	1,240	--
	Change in assets and liabilities:			
	(Increase) in accounts receivable, net	(7,203)	(13,890)	(5,686)
	(Increase) decrease in inventories	(26,032)	(10,893)	18,971
	(Increase) decrease in prepaid taxes based on earnings	974	259	(97)
	(Increase) decrease in other assets.....	4,859	(13,802)	3,422
	Increase (decrease) in accounts payable	(842)	14,237	(6,792)
	Increase (decrease) in taxes based on earnings	(2,211)	2,856	1,269
	Increase (decrease) in other current assets and liabilities	(528)	3,672	32
	Increase in sundry payables and accrued expenses	18,265	12,520	2,127
	Net cash provided by operating activities	21,104	20,105	31,550
Cash Flows From Investing Activities	Proceeds from held-to-maturity securities	5,828	--	--
	Purchases of held-to-maturity securities	(13,618)	--	--
	Proceeds from sales of marketable securities	--	18,283	23,533
	Purchases of marketable securities	--	(17,970)	(23,376)
	Sale of fixed assets	48	117	52
	Capital expenditures	(12,557)	(12,329)	(15,257)
	Net cash (used in) investing activities	(20,299)	(11,899)	(15,048)
Cash Flows From Financing Activities	Net borrowings (repayments) under line-of-credit agreements	1,500	5,100	(82,200)
	Proceeds from issuance of long-term debt	--	--	80,000
	Principal payments of long-term debt	(5,535)	(16,010)	(18,782)
	Reduction of loan to E.S.O.P.	1,680	1,680	1,680
	Proceeds from exercise of employee stock options	538	5,086	20
	Purchase of treasury stock	(4,301)	(4,524)	(38)
	Dividends paid	(4,217)	(4,211)	(4,199)
	Net cash (used in) financing activities	(10,335)	(12,879)	(23,519)
	Effect of exchange rate changes on cash	(20)	(6)	--
	Net (decrease) in cash	(9,550)	(4,679)	(7,017)
	Cash and cash equivalents at beginning of year	12,346	17,025	24,042
	Cash and cash equivalents at end of year.....	\$ 2,796	\$12,346	\$17,025
Supplemental disclosure of cash flow information:				
Cash paid during the year for:				
	Interest	\$12,377	\$12,160	\$13,284
	Income taxes	14,376	10,635	1,346

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Stockholders' Equity

(In thousands)

Years Ended December 31, 1994, 1993 and 1992

	Common Stock	Capital in Excess of Par Value	Loan to E.S.O.P.	Minimum Pension Liability Adjustment	Retained Earnings	Foreign Currency Translation Adjustment	Treasury Stock	Total
Balance at December 31, 1991	\$26,458	\$1,536	\$(11,745)		\$140,480		\$(1,401)	\$155,328
Net earnings - 1992					8,878			8,878
Cash dividends paid					(4,199)			(4,199)
Exercise of employee stock options		(5)					25	20
Minimum pension liability adjustment				\$(664)				(664)
Tax benefits applicable to Employee Stock Ownership Plan		123						123
Employee Stock Ownership Plan			1,680					1,680
Purchase of treasury stock							(38)	(38)
Balance at December 31, 1992	26,458	1,654	(10,065)	(664)	145,159		(1,414)	161,128
Net earnings - 1993					17,508			17,508
Cash dividends paid					(4,211)			(4,211)
Exercise of employee stock options	162	(898)					5,822	5,086
Minimum pension liability adjustment				83				83
Tax benefits applicable to Employee Stock Ownership Plan		124						124
Tax benefits applicable to the exercise of employee stock options		1,240						1,240
Employee Stock Ownership Plan			1,680					1,680
Purchase of treasury stock							(4,524)	(4,524)
Foreign currency translation adjustment						\$69		69
Balance at December 31, 1993	26,620	2,120	(8,385)	(581)	158,456	69	(116)	178,183
Net earnings - 1994					23,665			23,665
Cash dividends paid					(4,217)			(4,217)
Exercise of employee stock options	29	63					446	538
Minimum pension liability adjustment				(623)				(623)
Tax benefits applicable to Employee Stock Ownership Plan		123						123
Tax benefits applicable to the exercise of employee stock options		249						249
Employee Stock Ownership Plan			1,680					1,680
Purchase of treasury stock							(4,301)	(4,301)
Foreign currency translation adjustment						(208)		(208)
Balance at December 31, 1994	\$26,649	\$2,555	\$(6,705)	\$(1,204)	\$177,904	\$(139)	\$(3,971)	\$195,089

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies

Principles of Consolidation

The Company is engaged in the manufacture and sale of automotive replacement parts.

The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly owned. As more fully described in Note 2, the Company's investments in unconsolidated affiliates are accounted for on the equity method. All significant intercompany items have been eliminated.

Reclassifications

Where appropriate, certain amounts in 1992 and 1993 have been reclassified to conform with the 1994 presentation.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with a maturity of three months or less to be cash equivalents.

Marketable Securities

Effective January 1, 1994 the Company adopted Statement of Financial Accounting Standards (SFAS) No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Prior years' financial statements have not been restated to apply the provisions of SFAS No. 115. The adoption of the standard had an immaterial impact on the Company's financial position and results of operations for the year ended December 31, 1994.

At December 31, 1994, held-to-maturity securities amounted to approximately \$10,790,000 and trading securities amounted to approximately \$28,000. Held-to-maturity securities consist primarily of U.S. Treasury Bills and corporate debt securities which are reported at unamortized cost which approximates fair value. As of December 31, 1994, \$5,990,000 of the held-to-maturity securities mature within one year and \$4,800,000 mature within five to ten years.

The first-in, first-out method is used in computing realized gains or losses.

Inventories

Inventories are stated at the lower of cost (determined by means of the first-in, first-out method) or market.

Property, Plant and Equipment

These assets are recorded at cost and are depreciated over their respective useful lives using the straight-line method of depreciation.

Revenue Recognition

The Company recognizes revenues from product sales upon shipment to the customers.

Net Earnings Per Common and Common Equivalent Share

Net earnings per common and common equivalent share are calculated using the daily weighted average number of common shares outstanding during each year and if material, the net additional number of shares which would be issuable upon the exercise of stock options, assuming that the Company used the proceeds received to purchase additional shares at market value. Shares held by the ESOP are considered outstanding

and are included in the calculation to determine earnings per share.

Income Taxes

Deferred income taxes result from temporary differences in methods of recording certain revenues and expenses for financial reporting and income tax purposes (see Note 14).

Customer Acquisition Costs

Costs associated with the acquisition of new customer accounts are deferred and amortized over a twelve-month period.

Foreign Currency Translation

Assets and liabilities are translated into U.S. dollars at year end exchange rates and revenues and expenses are translated at average exchange rates during the year. The resulting translation adjustments are recorded in a separate component of stockholders' equity.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash investments and accounts receivable. The Company places its cash investments with high quality financial institutions and limits the amount of credit exposure to any one institution. With respect to accounts receivable, such receivables are primarily from warehouse distributors in the automotive aftermarket industry located in the United States. The Company performs ongoing credit evaluations of its customers' financial conditions and does require collateral or other security to support customer receivables where appropriate. Members of one marketing group represent the Company's largest group of customers and accounted for 15% of consolidated net sales for the year ended December 31, 1994. No individual member of this marketing group accounted for more than 10% of net sales for the year ended December 31, 1994. For the year ended December 31, 1994 the Company's five largest individual customers, including the members of this marketing group, accounted for 27% of net sales.

2. Acquisitions

The Company acquired, as of September 1, 1992, 50% ownership in Blue Streak Electronics, Inc. for approximately \$360,000. Blue Streak Electronics, Inc., located in Concord, Canada, is a remanufacturer of automotive on-board computers, sensors and related parts. The investment is accounted for under the equity method. The accompanying consolidated balance sheets include the investment in subsidiary at December 31, 1994 and 1993 of approximately \$1,384,000 and \$597,000, respectively in "Other Assets: Sundry."

In April 1993, the Company acquired, for approximately \$9,000,000, substantially all of the general service line inventory and certain other related assets of APS, Inc., a national distributor of automotive parts, along with a ten-year agreement to supply this product line to APS, Inc. on an exclusive basis. This acquisition has been accounted for as a purchase. The acquisition increased consolidated net sales by approximately \$16,300,000 in 1994 and \$10,900,000 in 1993.

Notes to Consolidated Financial Statements (continued)

During 1994 the Company made two additional investments. The investments had no significant effect on the Company's financial position or results of operations.

3. Sale of Accounts Receivables

On December 20, 1993, the Company entered into a new three-year agreement whereby it can sell up to a \$25,000,000 undivided interest in a designated pool of certain eligible accounts receivable. At December 31, 1994 and 1993, net receivables amounting to \$25,000,000 had been sold under these agreements. As collections reduce previously sold undivided fractional interest, new receivables are customarily sold up to the \$25,000,000 level. At the expiration of the agreement, the Company and the purchaser share a proportionate risk of loss as the eligible pool of accounts receivable is liquidated (see Note 13).

4. Inventories*(In thousands)*

	December 31,	
	1994	1993
Inventories consist of:		
Finished goods	\$114,021	\$100,004
Work in process	19,336	18,249
Raw materials	52,498	42,015
Total inventory	\$185,855	\$160,268

5. Property, Plant and Equipment*(In thousands)*

	December 31,	
	1994	1993
Property, plant and equipment consist of the following:		
Land and buildings	\$ 67,819	\$67,470
Machinery and equipment	65,146	55,341
Tools, dies and auxiliary equipment	7,244	6,526
Furniture and fixtures	15,025	13,756
Leasehold improvements	4,641	4,622
Construction in progress	7,481	8,147
	167,356	155,862
Less, accumulated depreciation and amortization	63,230	52,858
Total property, plant and equipment, net	\$104,126	\$103,004

6. Other Assets — Sundry*(In thousands)*

	December 31,	
	1994	1993
Other assets — sundry consist of the following:		
Deferred new customer acquisition costs	\$12,233	\$14,742
Unamortized customer supply agreements	6,908	8,178
Marketable securities	4,800	3,000
Equity in joint ventures	2,196	792
Pension assets	632	713
Other	2,078	2,480
Total other assets — sundry	\$28,847	\$29,905

Included in Other is a preferred stock investment in a customer of the Company. Net sales to such customer amounted to \$51,935,000 and \$42,823,000 in 1994 and 1993, respectively.

7. Notes Payable — Banks

The maximum amount of short-term bank borrowings outstanding at any month-end was \$38,500,000 in 1994 and \$27,700,000 in 1993, and averaged \$27,268,000 and \$16,958,000, respectively. The weighted average short-term interest rate was 4.77% for 1994 and 3.99% for 1993. At December 31, 1994, the Company had unused lines of credit aggregating approximately \$98,000,000.

8. Long-Term Debt*(In thousands)*

	December 31,	
	1994	1993
Long-term debt consists of:		
7.85% senior note payable	\$ 65,000	\$65,000
10.50%-11.50% senior note payable	4,000	6,000
9.47% senior note payable	30,000	30,000
6.01% senior note payable	15,000	15,000
Credit Agreement	6,714	8,394
7.35%-12.875% purchase obligations	8,200	9,862
Floating rate purchase obligation	950	1,100
9.50% mortgage payable	50	93
	129,914	135,449
Less current portion	19,987	4,935
Total noncurrent portion of long-term debt	\$109,927	\$130,514

Under the terms of the \$65,000,000 senior note agreement, the Company is required to repay the loan in seven equal annual installments beginning in 1996.

Under the terms of the \$4,000,000 senior note agreement, the Company is required to repay the remaining loan in two equal annual installments ending in 1996.

Under the terms of the \$30,000,000 senior note agreement, the Company is required to repay the loan in seven varying annual installments beginning in 1998. Subject to certain restrictions, the Company may make prepayments without premium beginning in 1998.

Under the terms of the \$15,000,000 senior note agreement, the Company is required to repay the loan in full in 1995. The Company also entered into an interest rate swap agreement. The swap agreement modifies the interest rate on the \$15,000,000 senior note agreement, adjusted favorably or unfavorably for the spread between 5.66% and the 6-month reserve unadjusted London Interbank Offering Rate ("LIBOR").

The Credit Agreement matures in varying annual installments through 1998 and bears interest at the lower of 91% of prime rate, or 91% of the "LIBOR" plus 1.092%. The Company also entered into an interest rate swap agreement to reduce the impact of changes in interest rates on its Credit Agreement. The swap agreement modifies the interest rate on

(continued on following page)

Notes to Consolidated Financial Statements (continued)**Long-Term Debt (continued)**

\$6,412,500 of the Credit Agreement, adjusted favorably or unfavorably for the spread between 77.52% of the 3-month reserve unadjusted "LIBOR" and 7.69%. The proceeds of such note were loaned to the Company's Employee Stock Ownership Plan (ESOP) to purchase 1,000,000 shares of the Company's common stock to be distributed in accordance with the terms of the ESOP established in 1989 (see Note 11).

The Company is exposed to credit loss in the event of non-performance by the other parties to the interest rate swap agreements. However, the Company does not anticipate non-performance by the counterparties.

The purchase obligations, due under agreements with municipalities, mature in annual installments through 2003, and are secured by properties having a net book value of approximately \$20,794,000 at December 31, 1994. An optional prepayment of \$600,000 was made on July 1, 1994.

The floating rate purchase obligation matures in annual installments through 1999, bears interest at sixty-five percent of prime, and is secured by property having a net book value of approximately \$1,334,000 at December 31, 1994.

The mortgage payable is due in installments through 1995.

Maturities of long-term debt during the five years ending December 31, 1999 are \$19,987,000, \$14,262,000, \$12,312,000, \$16,601,000 and \$14,982,000 respectively.

Certain loan agreements require the maintenance of a specified amount of working capital and limit, among other items, investments, leases, indebtedness and distributions for the payment of dividends and the acquisition of capital stock. At December 31, 1994, the Company had unrestricted retained earnings of \$12,194,000.

9. Stockholders' Equity

The Company has authority to issue 500,000 shares of preferred stock, \$20 par value, and the Board of Directors is vested with the authority to establish and designate series of preferred, to fix the number of shares therein and the variations in relative rights as between series. No such shares are outstanding at December 31, 1994.

The Company announced on October 18, 1993 that the Board of Directors has authorized the repurchase by the Company of up to 325,000 shares of its common stock to be used to meet present and future requirements of its stock option program. The repurchase program was completed in early March 1994 and 325,000 shares were repurchased at a cost of \$7,345,000.

On April 20, 1994, the Company announced that the Board of Directors has authorized the repurchase by the Company of up to 200,000 shares of its common stock to be used to meet present and future requirements of its stock option program. As of December 31, 1994, 90,300 shares were repurchased at a cost of \$1,480,000.

10. Stock Options

Under the Company's stock option plans, while the holder is an employee of the Company, the options are exercisable in

whole or in part anytime during the five years following the date of grant for options granted prior to 1994. For options granted in 1994, while the holder is an employee of the Company, the options are exercisable in whole or in part anytime during the five years following the date of vesting.

On May 26, 1994, the shareholders approved an increase of 400,000 shares for issuance under the Company's 1994 Omnibus Stock Option Plan. At December 31, 1994, 438,000 shares of authorized but unissued common stock were reserved for issuance under the Company's stock option plans, of which 288,000 shares were subject to outstanding options.

The change in outstanding options are as follows:

	1994	1993	1992
Outstanding at beginning..	82,300	437,700	441,600
Granted	250,000	32,000	72,000
Exercised (1994 and 1993 – \$10.13 to \$16.88, 1992 – \$10.13)	(35,950)	(378,650)	(2,000)
Terminated and expired ...	(8,350)	(8,750)	(73,900)
Outstanding at end	288,000	82,300	437,700
Vested at end.....	38,000	82,300	437,700
Aggregate option price ...	\$4,756,375	\$1,337,688	\$5,968,938

At a price range per share of:

	1994	1993	1992
Beginning	\$10.13 to \$18.56	\$10.13 to \$16.88	\$10.13 to \$17.56
End	\$12.75 to \$18.56	\$10.13 to \$18.56	\$10.13 to \$16.88

11. Employee Benefit Plans

The Company has a defined benefit pension plan covering substantially all of the unionized employees of the EIS Brake Parts Division. The benefits are based on years of service. The Company's funding policy is to contribute annually the maximum amount that can be deducted for federal income tax purposes. Contributions are intended to provide not only for benefits attributed to service to date but also for those expected to be earned in the future.

(In thousands)

	December 31,		
	1994	1993	1992
Net periodic pension cost for 1994, 1993 and 1992 includes the following components:			
Service cost – benefits earned during the period	\$250	\$248	\$220
Interest cost on projected benefit obligation	631	613	590
Actual return on plan assets.....	(88)	(960)	(724)
Net amortization and deferral	(521)	391	59
Net periodic pension cost	\$272	\$292	\$145

Notes to Consolidated Financial Statements (continued)

The following table sets forth the plan's funded status at December 31, 1994 and 1993:

(In thousands)

	December 31,		
	1994	1993	
Actuarial present value of benefit obligations:			
Accumulated benefit obligation, including vested benefits of \$(9,706) and \$(9,474) in 1994 and 1993, respectively	\$(10,322)	\$(10,032)	
Projected benefit obligation for service rendered to date	\$(10,322)	\$(10,032)	
Plan assets at fair value (primarily debt securities, commercial mortgages and listed stocks)	8,486	8,738	
Plan assets (less than) projected benefit obligation	(1,836)	(1,294)	
Unrecognized prior service cost	460	503	
Unrecognized net loss	1,343	747	
Unrecognized net obligation being recognized over 15 years	172	198	
Adjustment required to recognize minimum liability	(1,975)	(1,448)	
Accrued pension cost included in accrued expenses	\$(1,836)	\$(1,294)	
Assumptions used in accounting for the pension plan are as follows:			
	1994	1993	1992
Discount rates	6.5%	6.5%	6.6%
Expected long-term rate of return on assets	8.0%	8.0%	8.5%

In addition, the Company participates in several multiemployer plans which provide defined benefits to substantially all unionized workers. The Multiemployer Pension Plan Amendments Act of 1980 imposes certain liabilities upon employers associated with multiemployer plans. The Company has not received information from the plans' administrators to determine its share, if any, of unfunded vested benefits.

The Company and certain of its subsidiaries also maintain various defined contribution plans, which includes profit sharing, providing retirement benefits for other eligible employees.

The provisions for retirement expense in connection with the plans are as follows:

	Multi- employer Plans	Defined Contribution and Other Plans
Year-end December 31,		
1994	\$379,000	\$5,033,000
1993	358,000	4,760,000
1992	498,000	1,895,000

In January 1989, the Company established an Employee Stock Ownership Plan and Trust for employees who are not covered by a collective bargaining agreement. The ESOP authorized the Trust to purchase up to 1,000,000 shares of the Company's common stock in the open market. In 1989, the Company entered into an agreement with a bank authorizing the Company to borrow up to \$18,000,000 in connection with the ESOP. Under this agreement, the Company borrowed \$16,729,000, payable in annual installments through 1998 (see Note 8), which was loaned on the same terms to the ESOP for the purchase of common stock. During 1989, the ESOP made open market purchases of 1,000,000 shares at an average cost of \$16.78 per share. Future company contributions plus dividends earned will be used to service the debt.

During 1994, 1993 and 1992, 96,800, 100,700 and 101,600 shares were allocated to the employees, leaving 398,800 unallocated shares in the ESOP trust at December 31, 1994.

Contributions to the ESOP are based on a predetermined formula which is primarily tied into dividends earned by the ESOP and loan repayments. The provision for expense in connection with the ESOP was approximately \$1,321,000 in 1994, \$1,380,000 in 1993 and \$1,387,000 in 1992. The expense was calculated by subtracting dividend and interest income earned by the ESOP, which amounted to approximately \$296,000, \$305,000 and \$313,000 for the years ended December 31, 1994, 1993 and 1992, respectively, from the principal repayment on the outstanding bank loan. Interest costs amounted to approximately \$645,000, \$772,000 and \$756,000 for the years ended December 31, 1994, 1993 and 1992, respectively.

At December 31, 1994 and 1993, indebtedness of the ESOP to the Company in the amounts of \$6,705,000 and \$8,385,000, respectively, are shown as deductions from stockholders' equity in the consolidated balance sheets. Dividends paid on ESOP shares are recorded as reductions in retained earnings in the consolidated balance sheet.

In August 1994 the Company established an unfunded Supplemental Executive Retirement Plan for key employees of the Company. Under the plan, employees may elect to defer a portion of their compensation and, in addition, the Company may at its discretion make contributions to the plan on behalf of the employees. Such contributions were not significant in 1994.

12. Postretirement Benefits

The Company provides certain medical and dental care benefits to eligible retired employees. Approximately 1,900 employees and 200 retirees are eligible under this plan. Salaried employees become eligible for retiree health care benefits after reaching age 65 if they retire at age 65 or older with at least 15 years of continuous service. EIS Brake Parts unionized employees become eligible after reaching age 65 if they retire at age 65 or older with at least 10 years of continuous service. Other unionized employees are covered under union health care plans.

(continued on following page)

Notes to Consolidated Financial Statements (continued)**Postretirement Benefits (continued)**

Generally, the health care plans pay a stated percentage of most health care expenses reduced for any deductible and payments made by government programs and other group coverage. The costs of providing most of these benefits has been shared with retirees since 1991. Retiree annual contributions will increase proportionally if the Company's health care payments increase.

Effective January 1, 1993 the Company adopted Statement of Financial Accounting Standards (SFAS) No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." Prior years' financial statements have not been restated to apply the provisions of SFAS No. 106. SFAS No. 106 requires that the expected cost of these postretirement benefits be charged to expense during the years that the employees render services. SFAS No. 106 was adopted using the immediate recognition transition option; the accumulated postretirement benefit obligation of \$10,225,000, and related deferred tax benefit of \$4,090,000 (net of \$6,135,000), has been included in "cumulative effect of changes in accounting for postretirement benefits and income taxes, net" in the 1993 consolidated statement of earnings. This new accounting method has no effect on the Company's cash outlays for retiree benefits. The Company's current policy is to fund the cost of the health care plans on a pay-as-you-go basis.

The components of the net periodic benefit cost, excluding the cumulative effect of this accounting change, for the years ended December 31, 1994 and 1993 are as follows:

	1994	1993
Service cost	\$ 701	\$ 672
Interest cost	960	800
	\$1,661	\$1,472

The following table sets forth the amounts included in the accompanying consolidated balance sheets at December 31, 1994 and 1993:

	1994	1993
Accumulated Postretirement Benefit Obligation (APBO):		
Retirees	\$ 4,012	\$ 4,015
Fully eligible active participants	1,011	936
Other active participants	7,779	6,501
Total	\$12,802	\$11,452

For measuring the expected postretirement benefit obligation, a health care cost trend rate of 13 and 14 percent was assumed for 1994 and 1993, respectively, declining 1 percent per year to 7 percent in 2000, then 0.5 percent per year to 6 percent in 2002 and remain at that level thereafter. The weighted-average discount rate used in determining the APBO was 8 percent at January 1, 1994 and 1993.

The health care cost trend rate has a significant effect on the APBO and net periodic benefit cost. A 1 percent increase in the trend rate for health care costs would increase the APBO by \$2,479,000 and service and interest costs by \$359,000.

13. Other Income (Expense), Net

(In thousands)

	December 31,		
	1994	1993	1992
Other income (expense), net consists of:			
Interest and dividend income	\$1,724	\$1,648	\$1,630
(Loss) on sale of accounts receivables (Note 3)	(1,107)	(660)	(997)
Income (loss) from Blue Streak Electronics, Inc.	828	352	(97)
Other - net	(209)	308	161
Total other income (expense), net	\$1,236	\$1,648	\$ 697

14. Taxes Based on Earnings

Effective January 1, 1993 the Company adopted Statement of Financial Accounting Standards (SFAS) No. 109, "Accounting for Income Taxes." Prior years' financial statements have not been restated to apply the provisions of SFAS No. 109.

Under SFAS No. 109, deferred tax balances are stated at tax rates expected to be in effect when taxes are actually paid or recovered. The cumulative catch-up adjustment resulted in a deferred tax benefit of \$5,045,000, which has been included in the consolidated statements of earnings as "cumulative effect of changes in accounting for postretirement benefits and income taxes, net."

Reconciliations between the U.S. federal income tax rate and the Company's effective income tax rate as a percentage of earnings before income taxes and cumulative effect of changes in accounting principles follow:

	1994	1993	1992
U.S. federal income tax rate	35.0%	35.0%	34.0%
Increase (decrease) in tax rate resulting from:			
State and local income taxes, net of federal income tax benefit ...	5.2	5.5	1.5
(Tax-exempt income)/non-deductible items - net	0.1	0.2	0.2
Benefits of income subject to taxes at lower than the U.S. federal rate	(8.6)	(9.7)	(16.8)
Other	1.4	(0.4)	(1.0)
Effective tax rate	33.1%	30.6%	17.9%

The following is a summary of the components of the net deferred tax assets and liabilities recognized in the accompanying consolidated balance sheets:

Notes to Consolidated Financial Statements (continued)

(In thousands)

	December 31,	
	1994	1993
Deferred tax assets:		
Inventory	\$12,161	\$ 9,291
Allowance for customer returns ...	6,075	5,412
Postretirement benefits	4,827	4,581
Allowance for doubtful accounts	1,287	1,348
Accrued salaries	1,315	1,424
Restructuring charges	--	1,023
Other	1,704	408
Total	\$27,369	\$23,487
Deferred tax liabilities:		
Depreciation	\$ 8,847	\$ 8,093
Promotional costs	1,820	728
Other	1,454	831
Total	12,121	9,652
Net deferred tax assets	\$15,248	\$13,835

Based upon the level of historical taxable income and projections for future taxable income over the periods which the deferred tax assets are deductible, the Company believes that it is more likely than not that the results of future operations will generate sufficient taxable income to realize the net deferred tax assets.

The Company has not provided for federal income taxes on the undistributed income of its foreign subsidiaries because of the availability of foreign tax credits and/or the Company's intention to permanently reinvest such undistributed income. Cumulative undistributed earnings of foreign subsidiaries on which no United States income tax has been provided were \$12,502,000 at the end of 1994, \$10,011,000 at the end of 1993 and \$7,181,000 at the end of 1992.

Earnings of a subsidiary operating in Puerto Rico, amounting to approximately \$9,482,000 (1993 - \$7,285,000; 1992 - \$6,941,000), which are not subject to United States income taxes, are partially exempt from Puerto Rican income taxes under a tax exemption grant expiring on December 31, 2002. The tax benefits of the exemption, reduced by a minimum toll-gate tax instituted in 1993, amounted to \$.24 per share in 1994 (1993 - \$.19; 1992 - \$.23).

Foreign income taxes amounted to approximately \$1,097,000, \$838,000 and \$697,000 for 1994, 1993 and 1992, respectively.

15. Fair Value of Financial Instruments

The following methods and assumptions were used to estimate the fair value of each class of financial instruments for which it is practicable to estimate that value:

Cash and cash equivalents

The carrying amount approximates fair value because of the short maturity of those instruments.

Marketable securities

The fair values of investments are estimated based on quoted market prices for these or similar instruments.

Long-term debt

The fair value of the Company's long-term debt is estimated based on the current rates offered to the Company for debt of the same remaining maturities.

Interest rate swap agreements

The fair value of interest rate swaps (used for hedging purposes) is the estimated amount that the Company would receive or pay to terminate the swap agreements at the reporting dates, taking into account current interest rates.

The estimated fair values of the Company's financial instruments are as follows:

(In thousands)

December 31, 1994	Carrying Amount	Fair Value
Cash and cash equivalents	\$ 2,796	\$ 2,796
Marketable securities	10,818	10,811
Long-term debt	(129,914)	(127,077)
Off-Balance Sheet financial instruments:		
Interest rate swaps:		
In a net payable position...	--	(482)

(In thousands)

December 31, 1993	Carrying Amount	Fair Value
Cash and cash equivalents	\$ 12,346	\$ 12,346
Marketable securities	3,011	3,011
Long-term debt	(135,449)	(151,587)
Off-Balance Sheet financial instruments:		
Interest rate swaps:		
In a net receivable position	--	415
In a net payable position...	--	(1,146)

16. Commitments and Contingencies

Total rent expense for the three years ended December 31, 1994 was as follows:

(In thousands)

	Total	Real Estate	Other
1994	\$5,345	\$2,223	\$3,122
1993	5,544	2,320	3,224
1992	5,931	2,618	3,313
At December 31, 1994, the Company is obligated to make minimum rental payments (exclusive of real estate taxes and certain other charges) through 2004, under operating leases for real estate, as follows:			
(In thousands)			
1995		\$ 2,389	
1996		2,093	
1997		1,577	
1998		1,217	
1999		1,175	
Thereafter		4,643	
		\$13,094	

(continued on following page)

Notes to Consolidated Financial Statements (continued)**Commitments and Contingencies (continued)**

At December 31, 1994, the Company had letters of credit outstanding aggregating approximately \$1,652,000. The contract amount of the letters of credit is a reasonable estimate of their value as the value for each is fixed over the life of the commitment.

The Company is involved in various litigation matters arising in the ordinary course of business. Although the final outcome of these matters cannot be determined, it is management's opinion that the final resolution of these matters will not have a material effect on the Company's financial position and results of operations.

17. Restructuring Charges

During 1993, the Company recorded a \$2,781,000 provision for restructuring charges. Included in the restructuring plan are charges for the expected costs of facility consolidations, asset retirements, employee separations, relocations and related costs. Restructuring plans started in 1993 were completed by the end of 1994.

18. Quarterly Financial Data (Unaudited)

	Net Sales	Gross Profit	Net Earnings	Per Share
<i>(In thousands, except per share amounts)</i>				
1994 Quarter:				
First	\$147,126	\$ 50,226	\$ 2,745	\$.21
Second	187,645	63,989	8,216	.62
Third	168,291	58,825	7,730	.59
Fourth	137,748	52,083	4,974	.38
Total	\$640,810	\$225,123	\$23,665	\$1.80
1993 Quarter:				
First	\$127,755	\$ 45,684	\$ 1,763	\$.13
Second	161,201	56,760	6,779	.51
Third	161,340	56,786	5,703	.43
Fourth	132,555	50,033	3,263	.25
Total	\$582,851	\$209,263	\$17,508	\$1.32

The fourth quarter of 1994 results reflect physical inventory adjustments which had the effect of increasing fourth quarter operating income by approximately \$3,245,000 (\$1,947,000 net of income taxes).

The fourth quarter 1993 reflects an improved gross profit percentage, compared to the prior 1993 quarters, primarily due to favorable year-end inventory adjustments.

Independent Auditors' Report

To the Board of Directors and Stockholders
Standard Motor Products, Inc.

We have audited the consolidated balance sheet of Standard Motor Products, Inc. and subsidiaries as of December 31, 1994, and the related consolidated statements of earnings, changes in stockholders' equity, and cash flows for the year then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. The accompanying financial statements of Standard Motor Products, Inc. as of December 31, 1993 and for each of the years in the two year period ending December 31, 1993 were audited by other auditors whose report dated February 25, 1994 expressed an unqualified opinion on those statements.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Standard Motor Products, Inc. and subsidiaries as of December 31, 1994, and the results of their operations and their cash flows for the year then ended, in conformity with generally accepted accounting principles.

Short Hills, New Jersey
February 23, 1995

KPMG Peat Marwick LLP

Selected Financial Data

The following summary financial information has been extracted from the audited financial statements of the Company.

(In thousands, except per share amounts)

	Years Ended December 31,				
	1994	1993	1992	1991	1990
Net sales	\$640,810	\$582,851	\$535,553	\$534,808	\$507,820
Earnings before cumulative effect of changes in accounting principles	\$ 23,665	\$ 18,598	\$ 8,878	\$ 6,667	\$ 7,734
Net earnings	\$ 23,665	\$ 17,508	\$ 8,878	\$ 6,667	\$ 7,734
Earnings per share before cumulative effect of changes in accounting principles	\$ 1.80	\$ 1.41	\$.68	\$.51	\$.59
Net earnings per share	\$ 1.80	\$ 1.32	\$.68	\$.51	\$.59
Working capital	\$189,207	\$188,220	\$180,143	\$113,937	\$134,473
Total assets	\$462,351	\$433,354	\$384,616	\$401,764	\$430,658
Long-term debt (excluding current portion)	\$109,927	\$130,514	\$136,111	\$ 73,338	\$ 90,230
Stockholders' equity	\$195,089	\$178,183	\$161,128	\$155,328	\$151,035
Stockholders' equity per share	\$ 14.82	\$ 13.47	\$ 12.28	\$ 11.84	\$ 11.51
Cash dividends per common share	\$.32	\$.32	\$.32	\$.32	\$.32

Price Range of Common Stock and Dividends

The Company's Common Stock is traded on the New York Stock Exchange under the symbol SMP. The following table shows the high and low sale prices on the composite tape of, and the dividend paid per share on, the Common Stock during the periods indicated.

1994	Quarter	High	Low	Dividend	1993	Quarter	High	Low	Dividend
	1st	\$26.88	\$16.00	\$0.08		1st	\$17.38	\$13.13	\$0.08
	2nd	\$18.38	\$14.75	\$0.08		2nd	\$20.25	\$16.13	\$0.08
	3rd	\$19.75	\$17.38	\$0.08		3rd	\$24.13	\$18.88	\$0.08
	4th	\$19.75	\$16.88	\$0.08		4th	\$26.88	\$21.00	\$0.08

The Board of Directors will consider the payment of future dividends on the basis of earnings, capital requirements and the financial condition of the Company. The Company's loan agreements limit dividends and distributions by the Company. As of December 31, 1994, approximately \$12,194,000 of retained earnings was available under those agreements for payment of cash dividends and purchase of capital stock.

Corporate Information

Registrar and Transfer Agent

Registrar & Transfer Co.

10 Commerce Drive, Cranford, NJ 07016

Common Stock

Standard Motor Products, Inc. Common Stock is listed on the New York Stock Exchange under the symbol SMP.

Auditors

KPMG Peat Marwick LLP
Short Hills, NJ 07078

Standard Motor Products Executive Offices

37-18 Northern Blvd., Long Island City, NY 11101

Standard Division

Offices – Long Island City, New York
Manufacturing – Long Island City, New York
Edwardsville, Kansas
Distribution Centers – Disputanta, Virginia
Edwardsville, Kansas
Reno, Nevada

Champ Service Line Division

Offices – Edwardsville, Kansas
Distribution Centers – Edwardsville, Kansas
Disputanta, Virginia
Huntington, Indiana

Four Seasons Division

Offices – Coppell, Texas
Manufacturing – Grapevine, Texas
Distribution Center – Coppell, Texas

EIS Brake Parts Division

Offices – Berlin, Connecticut
 Manufacturing – Berlin, Connecticut
 Manila, Arkansas
 Ontario, California
 Rural Retreat, Virginia
 Distribution Centers – Ontario, California
 Berlin, Connecticut
 Manila, Arkansas

Canadian Subsidiaries

Blue Streak-Hygrade Motor Products, Ltd.
Mississauga, Ontario
Calgary, Alberta

EIS Brake Manufacturing, Ltd.
Mississauga, Ontario

Puerto Rico Subsidiary

Stanric, Inc.
Fajardo, Puerto Rico

Hong Kong Subsidiary
Standard Motor Products (Hong Kong) Limited
Hong Kong



STANDARD MOTOR PRODUCTS, INC.
37-18 Northern Boulevard
Long Island City, New York 11101

FMSI 13945

October 16, 1995

TO: Membership Committee

SUBJECT: Application for Active Membership Filed by
EIS Brake Parts, Division of Standard Motor Products, Inc.

Enclosed is a copy of the Application for Active Membership filed by EIS Brake Parts.
The complete address of the applicant is:

EIS Brake Parts
Division of Standard Motor Products, Inc.
P.O. Box 1315
129 Worthington Ridge
Berlin, CT 06037

Would you kindly review the application, complete the ballot and return it to the Institute.

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosures

Friction Materials Standards Institute
588 Monroe Turnpike
Monroe, CT 06468

Gentlemen:

My vote on the application for Active Membership filed by EIS Brake Parts is:

Accept

☐

Do Not
Accept

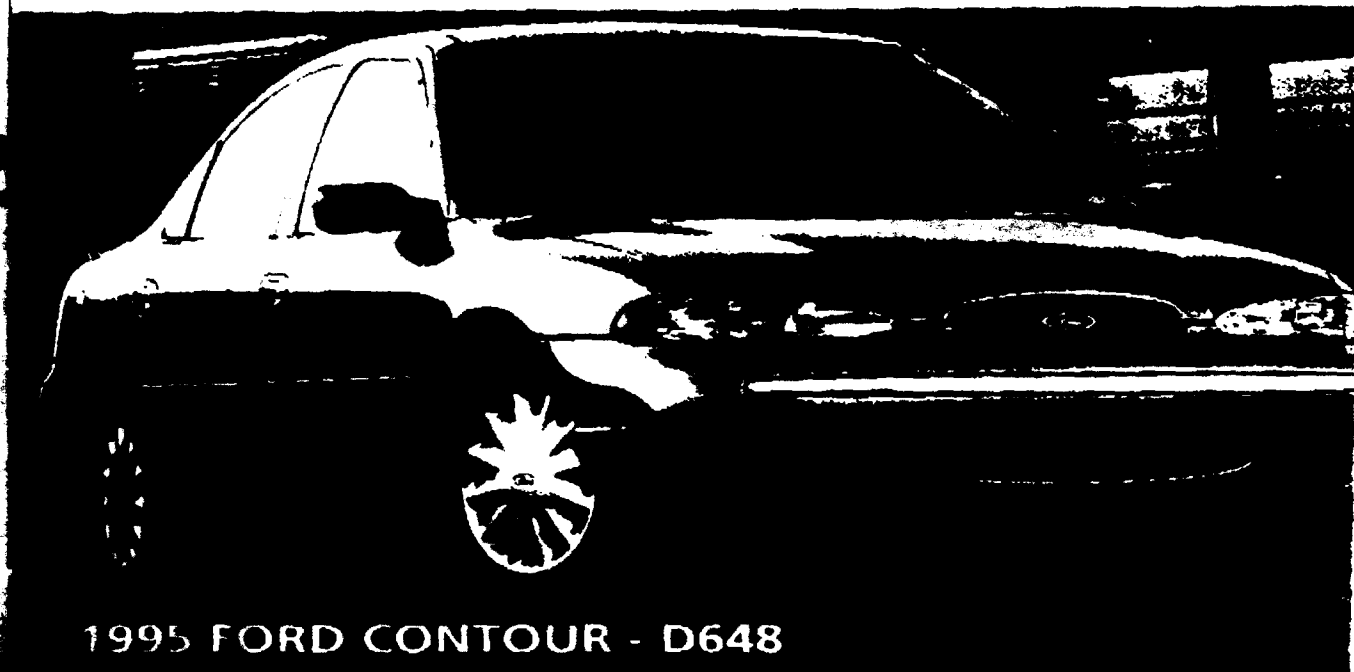
☐

By:

Company:

Date:

First...Again



1995 FORD CONTOUR - D648

IF YOU NEED IT, WE HAVE IT **FIRST**

Are you saying "no" to brake work because your aftermarket supplier doesn't have new parts when you need them? They aren't asking for EIS brake parts. Add the Ford Contour to an impressive list of new vehicles where EIS has supplied replacement disc pads long before the competition. This new Ford world car, with European-type performance, is expected to be a huge seller, and EIS is there first to help you service it.

Just like you, our reputation is built on quality and availability.

So if you want to be first,

call you need brakes now for the new Ford world car,

call the World Class brake supplier - EIS.



BRAKE PART

Stop at the T

Circle No. 76 on Reader Card

FMSI 13948

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

May 2, 1995

Mr. D. Carboni
EIS Brake Parts
129 Worthington Ridge Road
Berlin, CT 06037

Dear Sir:

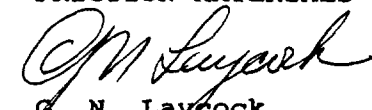
Enclosed is a copy of our invoice number 7353 for Membership Dues dated July 1, 1994. It is now over 10 months old. I am sure it has been overlooked even though I have sent several reminders.

We will be presenting a list of those Members who are delinquent in their dues payments to the Institute Board of Directors at our Annual Membership Meeting - June 10 -12. At that time the Board reviews the list and considers all Members who are seriously delinquent in dues payments for termination of Membership.

Your attention to the open invoice is appreciated.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

TELEPHONE (203) 452-1877
FAX (203) 452-7951

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

January 3, 1995

Mr. Mark Gustavson
EIS Brake Parts
129 Worthington Ridge Road
Berlin, CT 06037

Dear Mark:

Enclosed is a copy of our invoice number 7353 dated July 1, 1994. This invoice is now over six months old and we have not received payment. Perhaps this invoice has been overlooked.

Your attention to this invoice is appreciated.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld
Enclosure

FMSI 13950

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

September 8, 1994

Mr. Ray Piepenbring
EIS Brake Parts
129 Worthington Ridge Road
Berlin, CT 06037

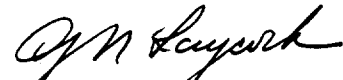
Dear Ray:

Enclosed is a copy of Macomb Printing invoice number 39586 dated 6/15/94, for FMSI Catalogs. The invoice was not directed to a specific person or department, therefore, it may be wandering around at EIS.

Your efforts to track it down and get a payment to Macomb Printing are appreciated. When all payments to Macomb Printing are made the Institute can close its books on the 1994 Catalog.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



G. N. Laycock
Executive Director

GNL:ld
Enclosure

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

September 6, 1990

Mr. Mark Gustavson
EIS Brake Parts
129 Worthington Ridge Road
Berlin, CT 06037

Dear Mark:

The attached has just been mailed to our Data Book and Technical Committee soliciting assistance to fill in the voids in our 1989-90 Import information. Since you have expressed an interest in new model information and we have received information from John Viklinetz, you may wish to compare the enclosed to your NIP's which have been investigated.

Any assistance which you can provide is appreciated.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Attachments

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

May 1, 1990

Mr. Thomas D. Wall
EIS Brake Parts
Div. of Standard Motor Products Inc.
129 Worthington Ridge
Box 1315
Berlin, CT 06031

Dear Mr. Wall:

It was a pleasure meeting you at the APRA Brake Systems Meeting in Atlanta. As I noted in our conversations, Licensee Members can and have submitted parts to the Institute for part number assignments. However, the rules under which the Institute operate say that I cannot distribute "Friction Material" drawings to Licensee's. But I believe a part number for an application is what you are looking for. You can obtain the friction material drawing from your supplier.

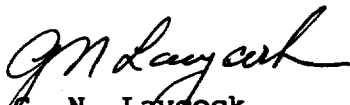
Your situation as a Licensee who is also a major distributor of friction materials is not unique. Up until a few years ago, Wagner was in the same situation and they were and still are major contributors of new part information to the Institute.

Also, as we discussed at breakfast on Monday, you, as a major purchaser of materials from Institute Members, could use your influence to encourage them to provide support to the Institute. This could be a win win win situation. The Institute would have better import coverage, the supplier would sell more parts and EIS would have the full line coverage which I believe you are seeking.

Again, it was a pleasure meeting you in Atlanta. I would like a \$60,000 CAD machine at some point in time, but, in the short run I will take the support of the Membership as a first step. Thank you for your assistance.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

April 18, 1990

Mr. Gene Taylor
5348 Adney Gap Circle
Memphis, TN 38134

Dear Mr. Taylor:

We received your note concerning the 1990 FMSI Automotive Data Books. Your home office in Berlin, CT has ordered 2,000 of the Catalogs.

It would be simpler to obtain the Catalogs from them. We anticipate that the Catalogs will be available in early June.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

RapidForms
LETTER-LIMINATOR

FORM 11003

REORDER FROM RAPIDFORMS INC. 501 BENIGNO BLVD. BELLMAWR, NJ 08031
CALL TOLL FREE 800-257-8354. FAX NO. 1-800-451-8113

TO FMSI INC
588 MONROE TURNPIKE
MONROE, CT 06468

FROM

EIS BRAKE PARTS
Division of Standard Motor Products, Inc.
Box 1315
Berlin, CT 06037
Phone (203) 828-8290

SUBJECT: FMSI DATA BOOK ON SHOES & PADS

FOLD HERE

DATE

5-9-90

MESSAGE

DEAR Sir:

I would like to purchase two
of your data books on shoes and
pads, as a territory manager for EIS
Brake, I find that your data book is the
most valuable information there is in the field.

SIGNED

DATE

REPLY

if you could send me the cost of
the above book I will reply by return
mail.

GENE TAYLOR
5348 ADNEY GAP CV
MEMPHIS, TN 38134

SIGNED

FORM 11003 RAPIDFORMS, INC., BELLMAWR, N.J. 08031

LETTER-LIMINATOR

RECIPIENT: RETAIN WHITE COPY, RETURN PINK COPY

FMSI 13955



EIS BRAKE PARTS
DIVISION of STANDARD MOTOR PRODUCTS, INC.

129 WORTHINGTON RIDGE - P.O. BOX 1315 - BERLIN, CT 06037

PHONE (203) 828-8290

Telex 643296

FAX No. 203-828-0613

December 20, 1989

Mr. Gil Laycock
Friction Materials Standard Institute, Inc.
588 Monroe Turnpike
Monroe, CT 06468

Dear Gil,

Welcome to Connecticut! It is great to have the FMSI office here in our state. I would like to get together with you for lunch one day during the week of January 15, 1990. I'll give you a call in early January.

Per our phone conversation earlier this year, we now have two new O.E. Research Coordinators at EIS. Please update your bulletin mailing list to include Mr. Larry Harrison and Mr. John Viklinetz. They will be working out of our Berlin office.

Enjoy the holidays. Looking forward to getting together.

RJP/kf

A handwritten signature in cursive script, appearing to read 'Ray Piepenbring'.

Ray Piepenbring
Senior Product Manager

cc: L. Harrison
J. Nodson
J. Viklinetz

FMSI 13956

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

October 16, 1991

Mr. L. Steve Suber
EIS Brake Parts
Highway 18 Bypass
Box 955
Manila, AR 72442

Dear Steve:

During one of our several meetings at the APRA show you mentioned that EIS was considering the Heavy Duty Lined Brake Shoe Market. Three of the Institute's Licensee Members are involved in the heavy duty shoe area. Two of these had booths at the show; Rome Tool and Die Company and Semac Industries Ltd. The third which came to mind is Uni-Bond Brake, Inc. Their address is:

Uni-Bond Brake, Inc.
1350 Jarvis
Ferndale, MI 48220

Phone: (313)-547-3870
Fax: (313)-547-5349

You may wish to give them a call. The Sales Manager is Mr. Philip Church.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

September 14, 1995

Mr. Sean McVey
EIS Brake Parts
129 Worthington Ridge Road
Berlin, CT 06037

Dear Sean:

This is in reply to your request to change the Membership Category for EIS Brake Parts from Licensee to Active Member. In order to accomplish this we must process a Membership Application through our normal procedure. We normally require prepayment of the first years Annual Membership Dues. You noted that EIS would be a two category member (disc brake & drum brake). The Annual Dues would be \$2,300, however, since your Licensee Dues of \$1,000 has been paid we will credit the \$1,000 toward the prepayment of dues. Therefore, return the filled out Membership Application along with a check for \$1,300 and we will start processing the application.

Applications for Active Membership are reviewed by the Membership Committee, Board of Directors and the full Membership on separate mail ballots and will take 6 to 8 weeks. It is unlikely that the application would be rejected. Therefore, if you want to get lining prints, do so at any time. Please note that in quantities up to 5 assignment prints there is no charge, over 5 identities we charge \$1.00 per identity.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld
Enclosure

FRICION MATERIALS STANDARDS INSTITUTE, INC.

588 MONROE TURNPIKE
MONROE, CT 06468

January 15, 1990

Mr. Sean McVey
EIS Brake Parts
P.O. Box 1315
Berlin, CT 06037

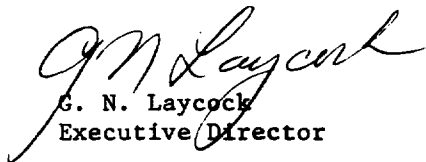
Dear Sean:

Please excuse the delay in replying to your request to reprint the disc and drum illustrations in your "Illustrated Buyers Guide 901". Your request got temporarily misplaced during the office move.

The Institute grants permission to EIS Brake Parts to reproduce disc brake plate and drum brake shoe illustrations for use in EIS Brake Parts - Illustrated Buyers Guide 901. If possible (if it is not too late) please add the notation "Drawings reproduced with permission of Friction Materials Standards Institute, Inc.".

Sincerely,

FRICION MATERIALS STANDARDS INSTITUTE


G. N. Laycock
Executive Director

GNL:ld



EIS BRAKE PARTS
DIVISION of STANDARD MOTOR PRODUCTS, INC.

129 WORTHINGTON RIDGE - P.O. BOX 1315 - BERLIN, CT 06037

PHONE (203) 828-8290

Telex 643296

FAX No. 203-828-0613

November 20, 1989

Mr. Gil Laycock
Friction Materials Standards Institute, Inc.
E. 210 Route #4
Paramus, NJ 07652

Dear Gil,

EIS is currently in the process of updating our Illustrated Buyer's Guide. In this guide we include illustrations of all the pads and shoes that we sell.

I request permission from FMSI to reprint your disc pad and drum shoe illustrations in our new Illustrated Buyer's Guide 901.

Please feel free to call me if you should have any questions.

Best regards,

Sean McVey
Technical Services Manager

SM/cm



EIS BRAKE PARTS
DIVISION of STANDARD MOTOR PRODUCTS, INC.

129 WORTHINGTON RIDGE - P.O. BOX 1315 - BERLIN, CT 06037

PHONE (203) 828-8290

Telex 643296

FAX No. 203-828-0613

November 17, 1989

Mr. Gil Laycock
Friction Materials Standards Institute, Inc.
East 210 Route 4
Paramus, NJ 07652

Dear Gil,

Per our phone conversation on 11/17/89, Larry Harrison will be in charge of FMSI bulletins for EIS. Please make the necessary arrangements to update your files by deleting Cy Tavel and adding Larry Harrison.

Keep me informed as to the relocation of your office to Connecticut. Once you are settled in, Neil Gethin, our Friction Product Manager and I would like to take the opportunity to have lunch with you, and welcome you to Connecticut.

If we can be of any assistance in any way, feel free to give us a call.

Best Regards,

A handwritten signature in cursive script, appearing to read "Ray".

Ray Piepenbring
Senior Product Manger

cc: N. Gethin
L. Harrison
J. Nodson

FMSI 13961



EIS BRAKE PARTS
DIVISION of STANDARD MOTOR PRODUCTS, INC.

129 WORTHINGTON RIDGE - P.O. BOX 1315 - BERLIN, CT 06037

PHONE (203) 828-8290

Telex 643296

FAX No. 203-828-0613

March 23, 1989

Mr. E.W. Drisland
FMSI, Inc.
East 210, Route 4
Paramus, NJ 07652

Dear Mr. Drisland:

Enclosed is our purchase order for the 1989 Automotive Data Book supplement.

500 1989 Data Book supplements with 5 hole punch.

Please ship to:

EIS Brake Parts
129 Worthington Ridge
Berlin, CT 06037
Attention: Neil Gethin

Regards,

Neil Gethin
Product Manager

NG:dn

Enclosure



EIS BRAKE PARTS
DIVISION of STANDARD MOTOR PRODUCTS, INC.

129 WORTHINGTON RIDGE - P.O. BOX 1315 - BERLIN, CT 06037

PHONE (203) 828-8290

Telex 643296

FAX No. 203-828-0613

March 7, 1988

Mr. E.W. Drisland
FMSI, Inc.
East 210, Route 4
Paramus, NJ 07652

Dear Mr. Drisland:

Enclosed is our purchase order for the 1988 Automotive Data Book.

300 1988 Data Books with 5 hole punch.

Please ship to:

EIS Brake Parts
129 Worthington Ridge
Berlin, CT 06037
Attention: Neil Gethin

Regards,

A handwritten signature in cursive script that reads "Neil Gethin".

Neil Gethin
Product Manager

NG:db

Enclosure

FMSI 13963

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

*address
Correction*

*address
Correction*



Mr. Cy Tavel

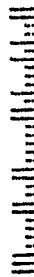
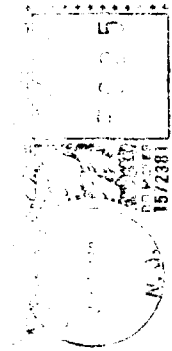
EIS Division *BRAKE PARTS*

Parker Hannifin Corp

P. O. Box 1315

Berlin, CT 06037

STANDARD MOTOR PRODUCTS INC.



FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

January 25, 1988

Mr. Neil Gethin
EIS Brake Products
Box 1315
Berlin, CT 06037

Dear Neil:

We have just received a request from Mr. William R. Favio, EIS Brake Parts. P.O. Box 216, Rural Retreat, VA 24368 to be placed on our mailing list for technical bulletins.

EIS Brake Products is a Licensee Member of the Institute. As such, EIS is entitled to copies of our SHOE BULLETINS, but not our Data Book Bulletins. Further, as a Licensee, we limit our mailings to five different mailing addresses. Currently, EIS has the five maximum on the list: Tavel, Gethin, Broadway, Hackett (same address as Favio) and Suber.

As a Licensee we will not provide EIS with Data Book Bulletins - they are available only to the higher dues paying Active Members - brake lining manufacturers. We could put two copies in the other mailing to Rural Retreat, or perhaps one of the names on the attached list could be eliminated.

Would you please review this mailing list. I would like someone from EIS in Berlin, CT to request the mailing list change.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

phone 1/27
Javio request Hackett
Broadway is out

Mr. Cy Tavel
EIS Brake Products
P.O. Box 1315
Berlin, CT 06037

1P

Mr. William R. Farrow

~~Mr. Dan Hackett~~
EIS Brake Products
State Route 616
Rural Retreat, VA 24368

1

Mr. Neil Gethin
EIS Brake Products
Box 1315
Berlin, CT 06037

1

Mr. Steve Suber
EIS Brake Products
Box 955
Manila, AR 72442

1

Mr. Ralph Broadway
EIS Brake Products
P.O. Box 455
West Bend, WI 53095

out

1



**EIS BRAKE PARTS
DIVISION of STANDARD MOTOR PRODUCTS, INC.**

STATE ROUTE 616 - P.O. BOX 216 - RURAL RETREAT, VA 24368

PHONE (703) 686-4145
FAX No. 703-686-4603

January 20, 1988

Friction Materials Standards Institute
Bergen Mall Office Center
E 210 Route 4
Paramus, NY 07652

I would like to be added to your mailing list to receive the FMSI Shoe
Bulletins and also the Automotive Data Bulletins.

Thank you,

William R. Favio
William R. Favio

MO

*LICENSE E
SHOE BULLETINS ONLY*

William R. Favio
EIS Brake Parts
Div. of Standard Motor Products
P.O. Box 216
Rural Retreat, VA 24368

cc: File

FMSI 13967

EIS

TELEPHONE (201) 845-0440

FRICITION MATERIALS STANDARDS INSTITUTE, INC.
BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PARAMUS, N. J. 07652

April 23, 1987

Mr. R. J. Bracali
Tweddle Litho Company
24000 Harper Avenue
St. Clair Shores, MI 48080

Dear Ron:

This concerns the balance of our stock of the 1986 Automotive Data Book held at Tweddle Litho. Would you please ship the entire balance (assuming it is somewhere between 100 and 200 copies) by UPS to:

EIS Brake Parts
129 Worthington Ridge
Berlin, CT 06037
Attn.: Ray Piepenbring

Please Mark: P.O. 20519

Please advise the following:

- (1) The quantity shipped
- (2) Date Shipped
- (3) UPS Charges

Thank you.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

(R)

pd 6/22/87

Ray Piepenbring, EIS phone call 4/22:

Would like to order 250 copies of the 1986 Data Book. Told him I only had about 100 left. Don't have a count from the Printer yet.

Asked me to call: Debby Debko, give her the quantity and price when known.

Price \$.96 each

Where to ship? EIS Brake Parts ?
 129 Worthington Ridge
 Berlin, CT 06037

What's Purchase Order No.?

PO 20519

(R)

Ray Piepenbring, EIS phone call 4/22:

Would like to order 250 copies of the 1986 Data Book. Told him I only had about 100 left. Don't have a count from the Printer yet.

Asked me to call: Debby Debko, give her the quantity and price when known.

Price \$.96 each

Where to ship? EIS Brake Parts ?
129 Worthington Ridge
Berlin, CT 06037

What's Purchase Order No.?

PO 20519

Qty 108

5

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

April 23, 1987

Mr. R. J. Bracali
Tweddle Litho Company
24000 Harper Avenue
St. Clair Shores, MI 48080

Dear Ron:

This concerns the balance of our stock of the 1986 Automotive Data Book held at Tweddle Litho. Would you please ship the entire balance (assuming it is somewhere between 100 and 200 copies) by UPS to:

EIS Brake Parts
129 Worthington Ridge
Berlin, CT 06037
Attn.: Ray Piepenbring

Please Mark: P.O. 20519

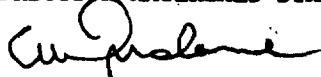
Please advise the following:

- (1) The quantity shipped * 2 CARTONS 108 Books total
- (2) Date Shipped * 4-27-87 MMN
- (3) UPS Charges $\rightarrow 2 \text{ Boxes @ } 8.69 = \17.38

Thank you.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE



E. W. Drislane
Executive Director

(2)

INVOICE

FRICITION MATERIALS STANDARDS INSTITUTE

2-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 848-0440

SOLD TO

KIS Brake Parts
129 Worthington Ridge
Berlin, CT 06037

Accounts Payable

SHIPPED TO

Same

Attention: Ray Flapenbring

DATE	DATE SHIPPED	SHIPPED VIA	YOUR ORDER NO.	SHIP TO	TERMS	INVOICE NO.	
05-11-87	04-27-87	United Parcel	P.O. 20319	St. Clair, MI	Net	005175	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
100	copies - 1986 Automotive Data Book with 3 hole punch					\$1.06	\$103.68
	WPS Charges						17.38
	Total						\$121.06
	Shipment made in two cartons, 54 catalogs each, from St. Clair Shores, MI on 4/27/87. P.O. 20319 confirmed verbal instruction from Ray Flapenbring.						

2

Item # 1117-075 © Wheeler Group Inc.

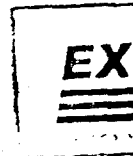
THANK YOU

STANDARDS INSTITUTE, INC.
ALL OFFICE CENTER
210 ROUTE 4
US. N. J. 07652

*Returned to sender
No info with
this co.*

RETURNED
TO
SENDER

Mr. Phil Malmsten
EIS Division
Parker Hannifin Corp.
P. O. Box 455
West Bend, WI 53095



2

MATERIALS STANDARDS INSTITUTE, INC.
BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PARAMUS, N. J. 07652

*Returned to sender
No info with
this co.*

RETURNED
TO
SENDER

Mr. Leroy Gessert
EIS Division
Parker Hannifin Corp.
P. O. Box 455
West Bend, WI 53095



1

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

October 29, 1986

Mr. Ray Piepenbring
EIS Division
Parker Hannifin Corporation
Berlin, CT 06037

Dear Ray:

Back on July 1, 1986, at the beginning of the Institute's fiscal year, we sent EIS Division our invoice for the annual membership fee. This had been sent to Ralph Broadway. Based on your telephone request of July 10 and your letter of July 11, we were asked to prepare a new invoice to your attention.

We did that, sending you our Invoice No. 5017, copy attached. I also enclose copies of the EIS balance on our books. We have not been paid.

Would you kindly look into this and request our payment. Thanks.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

*Follow-up phone 12/5/86
with client Mary Beach.*

FMSI 13974

July 11, 1986

Mr. Ed Drislane
Friction Materials Standards Institute
E-210, Route 4
Paramus, NJ 07052

Dear Ed:

Per our phone conversation on 7/10/86, please make the necessary arrangements to delete Mr. Ralph Broadway from the annual membership listing ref. invoice No.005000, Dated 07/01/86.

At your earliest convenience, please issue a new invoice listing the annual membership fee in my name. Listed below is the updated address. I have also enclosed my business card.

EIS DIVISION
PARKER HANNIFIN CORPORATION
BOX 1315
BERLIN CT 06037

Thank you for your cooperation in this matter.

Regards,

Ray Piepenbring
Ray Piepenbring

RP/mk

cc: J. Hamilton
R. Moran

FMSI 13975

Industry Briefs

edited by Maria C. Dimengo

EIS D.

Allied Aftermarket Division is planning to combine the sales forces of its Fram, Autolite and Bendix product lines.

The move is part of the company's efforts to more efficiently serve its customers and the automotive aftermarket industry. Earlier this year, the Allied Aftermarket Division was formed by merging the Bendix Aftermarket Brake Division and the Fram Division.

The company will provide a mix of Fram/Autolite and Bendix sales people within each zone. Cross-product sales training programs have been underway since the reorganization was announced.

According to Walter L. McCarthy, vice president of sales: "Now our customers will be able to work with one supplier for filters, spark plugs, wire and cable, and brake products. Most importantly, they will benefit from improved product availability as our distribution resources are merged."

The division also anticipates new distribution of Bendix brake products to current Fram and Autolite accounts and vice versa.



Kurt D. Gawne (left) receives the APAA's Volume Retail Service Technician of the Year Award from Service Committee Chairman Walter Nichols. Among volume retail service technicians, Gawne scored the highest in all eight categories of the National Institute of Automotive Service Excellence (ASE) testing in 1985.

Standard Motor Products has signed an agreement with the Parker Hannifin Corporation, to acquire the EIS Division of the Parker Automotive Aftermarket Group.

The purchase price is estimated to exceed \$40 million — subject to closing adjustments — which Parker stated would result in a modest nonrecurring gain on the transaction.

According to a Parker spokesman, the EIS division had sales of more than \$75 million in fiscal 1986. EIS manufactures a broad range of brake products for both import and domestic cars and light trucks.

Standard is a major supplier of ignition parts, heater and air conditioning parts, carburetor kits and general shop service items.

According to Paul G. Schloemer, Parker president and chief executive officer: "The Standard acquisition of EIS will afford us a better opportunity to concentrate on marketing the 17 other products in the Parker Automotive Aftermarket

Group, and to work on expansion of these diverse lines. The Group has built an integrated marketing approach for product lines ranging from cooling system products, to power steering components, service tools, windshield wipers and a broad range of other automotive products."

Parker produces the world's broadest line of fluid power systems and components for industrial, automotive, aviation, space and marine markets.

Dearborn, Mich., is the site of CARS Expo '86, a three-day event which will be held September 18-20.

CARS '86 will feature the latest technical seminars available and will provide education for professional business management.

A mechanical repair exposition will include 140 booths representing 100 different companies. Automotive factory tours are scheduled, including a tour of Chrysler's Sterling Heights Assembly Plant, Ford's Experimental Garage and Test Track, and the General Motor's Service

Research Center. A tour of Henry Ford's Museum is also planned.

The Hyatt Regency Dearborn is the main hotel but reservations received after August 15, 1986, will be handled on a space available basis. Contact CARS (Congress of Automotive Repair and Service) for suite rates or other information at (817) 283-8953.

The Automotive Service Association (ASA) is continuing to support a vehicle inspection program outlined in Section 10 of House Resolution 2248.

According to Don Randall, ASA's Washington representative, Section 10 would require the National Academy of Sciences (NAC) to conduct a thorough study of the costs and benefits of a vehicle inspection program, which combines Periodic Motor Vehicle Inspection (PMVI) and Inspection and Maintenance (I&M).

ASA believes that PMVI and I&M are a cost effective means of improving vehicle safety, improving air quality and extending the useful life of an au-



February 5, 1986

EIS Division
Parker Hannifin Corporation
129 Worthington Ridge
Box 1315
Berlin, CT 06037
Phone (203) 828-8290

Mr. Ed Drislane
Friction Material Standards Institute, Inc.
East 210, Route 4
Paramus, NJ 07652

Dear Ed:

Listed below are the EIS plant managers names and mailing addresses.

✓ Mr. Dan Hackett
EIS Brake Products
Rural Retreat Plant
State Route 616
Rural Retreat, VA 24368

✓ Mr. Dick Rolland
Cali-Blok Friction Products
California Plant
P.O. Box 510
Gardena, CA 90248

✓ Mr. Steve Suber
EIS Brake Products
Manila Plant
Box 955
Manila, AR 72442

Bulletin only

Please make the necessary arrangements to add them to your information mailing list. It is necessary for them to receive FMSI bulletins and drawings. If there is an additional fee for this service, please forward the bill to my attention.

Thank you for your concern in this matter. If you have any questions, please feel free to contact me.

Regards,

Ray Piepenbring
Ray Piepenbring
Friction Product Manager

RP:dm

cc: D. Hackett D. Rolland
 J. Hamilton S. Suber
 R. Moran



FMSI 13977

EIS

TELEPHONE (201) 845-0440

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

4 February 1986

Ms. Mary Peach
Purchasing Department
EIS Division
129 Worhtington Ridge
P.O. Box 1315
Berlin, CT 06037

Subject: Your Purchase Order 10856; Our Invoice 4819

I am enclosing a duplicate copy of our Invoice 4819. When this was originally sent it had referenced as the Order: W163-776. I was given this number by Mr. Ray Piepenbring (See his letter of November 1, 1985, copy attached).

We have not as yet been paid for Invoice 4819 which was dated 11-14-85. (We received your Purchase Order 10856 after our shipment was made). We'd most appreciate payment on this order.

You may check this with Mr. Piepenbring. Thank you.

Sincerely,

FRICITION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

Copy: R. Piepenbring

FMSI 13978



INVOICE
TO:

☒ EIS DIVISION
PARKER HANNIFIN CORPORATION
129 WORTHINGTON RIDGE
P.O. BOX 1315
BERLIN, CONN. 06037
TEL. (203) 828-8290

Purchase Order No. 10856

ORDER NO. MUST APPEAR ON PACKAGES
PACKING SLIPS AND CORRESPONDENCE

Acct. No. W160-277 Date 11/1/85

Ship Via ☐ Prepaid ☐ Collect

F.O.B.

CHEAPEST WAY UNLESS SPECIFIED.

Acknowledge receipt by return mail giving shipping date.

SEPARATE INVOICE MUST BE SENT FOR EACH ORDER. AND EACH SHIPMENT
ON EACH ORDER.
MAIL INVOICE IN TRIPLICATE TOGETHER WITH BILL OF LADING.

TO
• FRICTION MATERIALS STANDARDS INST.
E 210 ROUTE #4
PARAMUS, N.J. 07652
ATT: ED DRISLANE

☒ ORIGINAL ☐ CONFIRMING ☐ DO NOT DUPLICATE ☒ TAXABLE ☐ NON-TAXABLE

DELIVERY REQUIRED BY: ADVISE BEST TERMS

NOTE

SHIP TO: ☐ EIS DIVISION 695 High St. Middletown, CT 06457
☒ EIS DIVISION 129 Worthington Ridge Berlin, CT 06037
☐ EIS DIVISION Manila Plant Highway 18 - Bypass Manila, AR 72442
☐ EIS DIVISION Gardena Plant 15930 S. Figueroa St. Gardena, CA 90248
☐ EIS DIVISION West Bend Plant 133 Oak St. West Bend, WI 53095

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1 EA	OF 750 BRAKE SHOE & DISC PAD BLUE PRINT DRAWINGS 8 1/2 X 11 FOR ALL AVAILABLE, CURRENT PRODUCTION SETS APPROX. PLEASE RETURN DWGS. ATT: RAY PIEPENBRING	1.00/EA	

AB

ALL SHIPMENTS MUST SHOW PURCHASE ORDER NUMBER

Any transportation charges appearing on Invoice must be supported by paid transportation bills.
The Terms and Conditions on the reverse hereof are made a part of this Purchase Order and by your acceptance hereof, you agree to supply the goods or services herein described at the price shown and subject to the Terms and Conditions stipulated.
UNLESS YOUR INVOICE SHOWS TERMS OF PAYMENT WE SHALL DEDUCT 2%
FOR PAYMENT ON THE 10th AND 25th.
CORRESPONDENCE PERTAINING TO THIS ORDER SHOULD BE ADDRESSED
TO THE COMPANY MARKED FOR PURCHASING DEPT. ATTENTION OF

For: EIS DIVISION

PARKER HANNIFIN CORPORATION

VAL A. LOPER

BY:

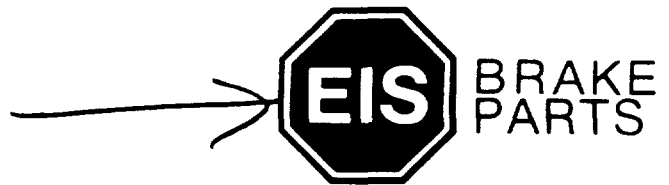
PACKING SLIP MUST ACCOMPANY ALL SHIPMENTS — RENDER INVOICE IN TRIPLICATE



ORIGINAL

1106/5M/118:

FMSI 13979



November 1, 1985

EIS Division
Parker Hannifin Corporation
129 Worthington Ridge
Box 1315
Berlin, CT 06037
Phone (203) 828-8290

Mr. Ed Drislane
Friction Materials Standards Institute, Inc.
E. 210, Route #4
Paramus, NJ 07652

Dear Ed:

Per our phone conversation, I am in the process of building a complete file for our friction line. At your earliest convenience, please forward all of the FMSI disc and shoe drawings that you have on file.

Listed below is the P.O. Order to be referenced for this information.

P.O. # W163-776

Thank you for your cooperation in this matter.

Regards,

A handwritten signature in cursive script, appearing to read "Ray Piepenbring".

Ray Piepenbring
Friction Product Manager

RP:dm

cc: J. Hamilton
D. Radican



FMSI 13981

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

November 4, 1985

Mr. Ray Piepenbring
EIS Brake Parts
129 Worthington Ridge
Box 1315
Berlin, CT 06037

Dear Ray:

Per our conversation, I will be selecting all disc and drum brake shoe numbers that were listed in our 1984 Data Book, less those from D248 up (disc) and 529 up (drum). I've attached a list of the numbers involved.

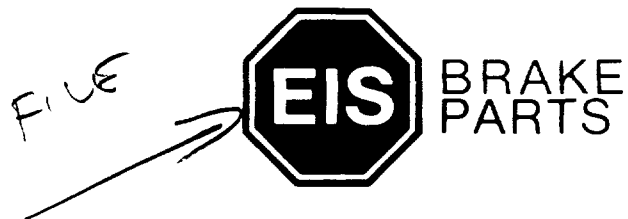
There are about 440 numbers involved which with Inner and Outer, Forward and Reverse etc. will come to about 600 prints. At \$1.00 per print, this will run about \$600. Where our original is 8-1/2 x 11 we have no problem. It's where the original is larger and must be copied in more than one pass and then taped together where our costs go up. Also, for this job we will have to bring in a temporary, so please allow us several weeks for this job.

Unless I hear otherwise, we will proceed as indicated above. I hope to get this started next week.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director



October 10, 1985

EIS Division
Parker Hannifin Corporation
129 Worthington Ridge
Box 1315
Berlin, CT 06037
Phone (203) 828-8290

Mr. Ed Drislane
Friction Materials Standards Institute, Inc.
E. 210, Route #4
Paramus, NJ 07652

Dear Ed:

I am in the process of updating the FMSI file. Listed below are designations that are not on file. At your earliest convenience, can you please forward the pad and steel drawings for my reference.

<u>Disc</u>			<u>Shoe</u>		
D20	D150	151	321	400	473
D50	D151	152	329	401	474
D52	D152	169	333	402	481
D84	D154	242	334	442	482
D85	D162	246	348	445	500
D90	D170	263	357	446	501
D91	D179	264	358	446	504
D92	D183	265	361	447	514
D119	D199	267	363	450	519
D120	D221	280	366	451	520
D123	D257	299	381	452	521
D142		320	383	462	522

Thank you for your cooperation in this matter.

Sincerely,

Ray Piepenbring
Friction Products Manager

RP:dm
cc: J. Hamilton



FMSI 13983

INVOICE

FRICITION MATERIALS STANDARDS INSTITUTE

E-210 ROUTE 4 • PARAMUS, NEW JERSEY 07652 • PHONE (201) 846-0440

SOLD TO

EIS Division
Parker Hannifin Corporation
129 Northington Ridge
Box 1315
Berlin, CT 06037

Attn.: Ray Piepenbring

SHIPPED TO

Same

DATE	DATE SHIPPED	SHIPPED VIA	YOUR ORDER NO.	F.O.B.	TERMS	INVOICE NO.	
11-14-85	11-14-85	Parcel Post	PO W163-776	Destination	Net	004819	
QUANTITY	DESCRIPTION					PRICE	AMOUNT
442	Prints of Various FMSI Shoe Numbers					\$1.00	\$442.00
	202 Disc brake shoe prints; 240 drum brake shoe prints						
	Per attached packing lists.						
	Purchase Order W163-776. Number sent to FMSI by Ray Piepenbring.						
	Reference letter of November 1, 1985						

Item # NV-R75 ©Wheeler Group Inc.

004819

FMSI 13984

10/17

Ray Piepenbring
Ed S

ret'd your ^{again} call.
Will Call Fri Aftern.

October 3, 1985

Mr. Ray Piepenbring (pronounced PEEpenbring)
EIS Division
Parker-Hannifin Corp.
P.O. Box 775
Berlin, CT 06038

203-828-8290

JUL 08 1983

EIS Division, Parker Hannifin

Fee Billing to: EIS Division
Parker Hannifin Corporation
P.O. Box 455
West Bend, WI 53095

Attention: Ralph Broadway

Technical Bulleting to:

EIS Division
Parker Hannifin Corporation
P.O. Box 1315
Berlin, CT 06037

Attention: Cy Tavel

OCT 24 1983

To All Our Vendors:

In order to expedite the processing of Accounts Payable, the EIS Division of Parker Hannifin is requesting that all invoices and statements from our branch vendors be mailed directly to our business offices at:

Accounts Payable Department
EIS Division, Parker Hannifin Corporation
P.O. Box 1315
Berlin, CT 06037

Please put this change into effect as soon as possible. Thank you very much for your cooperation.

Accounts Payable Department
EIS Division, Parker Hannifin Corporation

1415/5C/1083

FMSI 13988

EIS Corp

OCT 05 1983

Stanley L. Stokes
Chief Product Engineer



EIS Division
Parker Hannifin Corporation
695 High St. - Middletown, CT
Phone (203) 347-9999
Mailing Address:
Box 1315
Berlin, CT 06037





☒ EIS DIVISION
PARKER - HANNIFIN CORPORATION
P.O. BOX 701
MIDDLETOWN, CT. 06457
PHONE: (203) 346 - 8624

☐ EIS DIVISION
PARKER - HANNIFIN CORPORATION
WEST BEND PLANT
P.O. BOX 455
WEST BEND, WI. 53095
PHONE (414) 334 - 2355

Purchase Order No. 01394

ORDER NO.
MUST APPEAR ON CORRESPONDENCE
PACKAGES AND PACKING SLIPS

Acct. No. 80140 Date 3/20/79

Ship Via Best Way ☐ Prepaid ☐ Collect

F.O.B. Your Plant

CHEAPEST WAY UNLESS SPECIFIED.

Acknowledge receipt by return mail giving shipping date.

SEPARATE INVOICE MUST BE SENT FOR EACH ORDER, AND EACH SHIPMENT ON EACH ORDER.
MAIL INVOICE IN TRIPLICATE TOGETHER WITH BILL OF LADING.

TO • Friction Materials Standards
Institute, Inc.
E-210 Route #4
Paramus, N.J. 07652

☒ ORIGINAL ☐ CONFIRMING ☐ DO NOT DUPLICATE ☒ TAXABLE ☐ NON-TAXABLE REQUESTED AT DESTINATION BY: **A.S.A.P.** TERMS:

Item No.	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
	100 Copies	1979 Supplement to the 1978 Brake Shoe Identification Catalog.	132.80/4	
		5 Hole Punch	\$144.00/M	
		Please mark to attention of Harold Lenox.		

MARK FOR DEPT. NO. AND SHIP TO:

☒ EIS DIVISION
695 HIGH ST.
MIDDLETOWN, CT. 06457

☐ EIS DIVISION
JOHNSON ST.
MIDDLETOWN, CT. 06457

☐ EIS DIVISION
129 WORTHINGTON RIDGE ROAD
BERLIN, CT. 06077

☐ EIS DIVISION
WEST BEND PLANT
133 OAK ST.
WEST BEND, WI. 53095

ee

ALL SHIPMENTS MUST SHOW PURCHASE ORDER NUMBER

Any transportation charges appearing on invoice must be supported by paid transportation bills. The Terms and Conditions on the reverse hereof are made a part of this Purchase Order and by your acceptance hereof, you agree to supply the goods or services herein described at the price shown and subject to the Terms and Conditions stipulated.

UNLESS YOUR INVOICE SHOWS TERMS OF PAYMENT WE SHALL DEDUCT 2% FOR PAYMENT ON THE 10th AND 25th.

CORRESPONDENCE PERTAINING TO THIS ORDER SHOULD BE ADDRESSED TO THE COMPANY MARKED FOR PURCHASING DEPT. ATTENTION OF _____

For: EIS DIVISION
PARKER HANNIFIN CORPORATION

BY: Steven I. Weiss

PACKING SLIPS MUST ACCOMPANY ALL SHIPMENTS - RENDER INVOICE IN TRIPLICATE



1106 M 75C 10-78

FMSI 13990

TERMS AND CONDITIONS

1. ACCEPTANCE AND AMENDMENTS: This contract is between Parker Hannifin Corporation, hereinafter referred to as "Buyer," and the Seller, subject to the terms and conditions of the purchase order and the Seller's standard terms and conditions of sale. The Seller's standard terms and conditions of sale, which are incorporated herein by reference, shall be deemed to be a part of this contract. The Seller's standard terms and conditions of sale shall be deemed to be a part of this contract. The Seller's standard terms and conditions of sale shall be deemed to be a part of this contract.

2. DELIVERY: Time is of the essence in this contract, and delivery of goods is not complete until the goods are delivered to the Buyer in accordance with the terms of this contract. The Seller shall be responsible for the delivery of the goods to the Buyer in accordance with the terms of this contract. The Seller shall be responsible for the delivery of the goods to the Buyer in accordance with the terms of this contract.

3. INSPECTION: Payment for any goods under this contract shall not constitute acceptance thereof. All goods purchased hereunder are subject to inspection at Buyer's discretion, either before or after acceptance. Buyer reserves the right to reject and refuse acceptance of goods which are not in accordance with the specifications, drawings, and data of Seller's warranties expressed or implied. Goods not accepted will be returned to Seller for credit and replacement at Buyer's option and at Seller's risk and expense, including transportation charges both ways. The replacement of rejected goods shall be made unless specified by Buyer in writing.

4. CHANGES: The Buyer reserves the right at any time to make written changes within the general scope of this contract in any one or more of the following:

- Specifications, drawings, and data incorporated in this contract where the items to be furnished are to be specially manufactured for the Buyer.
- Methods of shipment or packing.
- Place of delivery.
- Time of delivery.
- Manner of delivery.
- Quantities.

If any such changes cause an increase or decrease in the cost of or in the time required for the performance of this contract, an equitable adjustment shall be made in the contract price or delivery schedule, or both. Any claim by Seller for adjustment in the cause must be approved by the Buyer in writing before the Seller proceeds with such change. Price increases shall not be binding on Buyer unless evidenced by a purchase order change notice or revision signed by Buyer.

5. SELLER'S WARRANTIES: Seller hereby warrants that all goods at services covered by this contract will conform with Buyer's instructions, specifications, drawings, and data, will be merchantable, will be free from defects in material or workmanship, and will be fit for the purposes intended. Seller further warrants that the goods and services furnished under this contract shall conform to all representations and affirmations, promises, descriptions, and other statements made by Seller in writing or otherwise. Seller agrees that these warranties shall survive acceptance of the goods and services. Seller further warrants that all services performed for or on behalf of Buyer will be performed in a competent workmanlike manner and shall be free from faults and any warranties or additional scope given by Seller to Buyer. Notwithstanding to whom the goods are delivered, Seller's warranties shall be deemed disclaimed or avoided unless a service order or change notice or revision signed by Buyer and agreed to by Buyer. The warranties, however, shall inure to the benefit of Buyer's successors and assigns, customers, and users of its products.

6. BUYER'S PROPERTY: Seller hereby agrees to provide a written contract of agreement in writing to the Buyer's property. The Seller shall be responsible for the delivery of the goods to the Buyer in accordance with the terms of this contract. The Seller shall be responsible for the delivery of the goods to the Buyer in accordance with the terms of this contract.

7. INDEMNIFICATION: Seller further agrees to indemnify and save Buyer harmless from any and all losses, liabilities, damages, claims, demands, suits, actions, proceedings, judgments, and expenses, including court costs and attorneys' fees, resulting in any way to this contract or the services performed or goods delivered hereunder, except for goods manufactured entirely to Buyer's specifications and Seller further agrees to indemnify Buyer against any and all expenses, losses, royalties, profits, and damages, including court costs and attorneys' fees, resulting from the bringing of such suit or proceedings, including any settlement or decree of judgment entered therein. Buyer may be represented by and actively participate through its counsel in any such suit or proceeding if so desired. Seller's obligations hereunder shall survive the acceptance of the goods and services and payment therefor by the Buyer.

8. INSURANCE: If this contract covers the performance of labor for Buyer, Seller agrees to indemnify and save harmless Buyer against all liability claims or demands for injuries or damages to any person or property growing out of the performance of this contract. Seller further agrees to furnish insurance carrier's Certificate showing the Seller has adequate insurance coverage in the following minimum amounts:

9. CANCELLATION: Buyer shall have the right to cancel for default on any part of the contract, in whole or in part, if Seller breaches any of the terms hereof, including warranties of Seller or if Seller becomes insolvent or commits an act of bankruptcy. If it is determined that Seller is in breach of this contract, the Seller shall be deemed to have accepted the Buyer's cancellation and the Seller shall be deemed to have accepted the Buyer's cancellation and the Seller shall be deemed to have accepted the Buyer's cancellation.

10. ASSIGNMENT AND SUBCONTRACTING: The work to be performed under this contract may not be assigned or subcontracted in whole or in part nor may any assignment of any money due or to become due hereunder be made by Seller without the prior written consent of Buyer.

11. WAIVER: The failure of Buyer to insist in any one or more instances upon the performance of any of the terms and conditions of this contract at the time of its breach hereunder shall not be construed as a waiver or relinquishment of the future performance of any such terms and conditions or the future exercise of such right and the obligation of Seller with respect to such future performance shall continue in full force and effect.

12. PACKAGING: No charge for packing, drayage or containers will be allowed unless specified on the face of the contract or specifically listed as an additional and separate charge on Seller's quotation and acceptance of this contract. Seller shall be liable for damage to materials or articles described herein caused by improper boxing, crating or packing.

13. TOOLING: Unless otherwise specified in this contract, all tooling and/or other articles required for the performance hereof shall be furnished by Seller and shall be maintained in good condition and replaced when necessary at Seller's expense.

14. SPECIAL TOOLING: The term "special tooling" as used in this clause shall be deemed to include all jigs, dies, fixtures, molds, patterns, special cutting tools, special gauges, special test equipment and the like acquired or manufactured or used in the performance of this contract, which are of such a specialized nature that without substantial alteration their use is limited to the production of the goods or parts thereof or performance of the services of the type required by this contract.

Seller agrees that special tooling shall be retained and not used or reworked except for performance of work hereunder as authorized in writing by Buyer. Where Seller is in possession of or control, Seller warrants that it will keep the special tooling in good condition fully covered by insurance, and will replace it when lost, destroyed or necessary for work hereunder. Upon cessation or termination of the work under this contract for which the special tooling is required, Seller shall return to Buyer a list of the products, parts or services for the manufacture or performance of which such special tooling was used or designed and the list indicating where each item of the special tooling is located, and shall transfer title to and possession of the special tooling to Buyer for an amount equal to the unamortized cost thereof or dispose thereof as Buyer may direct in writing. In addition, Buyer shall have the right to take possession of, including the right of entry for such purpose, any special tooling, title to which Buyer acquires hereunder without any additional liability whatsoever to Seller.

15. PROPRIETARY RIGHTS: All technical information in the nature of designs, blueprints, specifications, engineering data for production or product know-how, which is supplied to the Seller by the Buyer to facilitate or assist in the performance of this contract shall, unless otherwise agreed, be considered and kept confidential by the Seller. Seller will use and cause its employees and agents to use extreme caution not to disclose such information, either directly or by incorporation of such information in or its use in manufacturing products for others.

16. PATENT INDEMNITY: Seller agrees, upon receipt of notification to promptly assume full responsibility for the defense of any suit or proceeding which may be brought against Parker Hannifin Corporation or any of its subsidiaries or affiliates, agents or vendees, hereinafter for the purposes of this clause collectively referred to as the "Buyer," for alleged patent infringement, as well as for the alleged unfair competition resulting from similarity in design, trademark or appearance of goods by reason of the use or sale of any goods furnished under this contract, except for goods manufactured entirely to Buyer's specifications and Seller further agrees to indemnify Buyer against any and all expenses, losses, royalties, profits, and damages, including court costs and attorneys' fees, resulting from the bringing of such suit or proceedings, including any settlement or decree of judgment entered therein. Buyer may be represented by and actively participate through its counsel in any such suit or proceeding if so desired. Seller's obligations hereunder shall survive the acceptance of the goods and services and payment therefor by the Buyer.

17. INDEMNIFICATION: Seller further agrees to indemnify and save Buyer harmless from any and all losses, liabilities, damages, claims, demands, suits, actions, proceedings, judgments, and expenses, including court costs and attorneys' fees, resulting in any way to this contract or the services performed or goods delivered hereunder, except for goods manufactured entirely to Buyer's specifications and Seller further agrees to indemnify Buyer against any and all expenses, losses, royalties, profits, and damages, including court costs and attorneys' fees, resulting from the bringing of such suit or proceedings, including any settlement or decree of judgment entered therein. Buyer may be represented by and actively participate through its counsel in any such suit or proceeding if so desired. Seller's obligations hereunder shall survive the acceptance of the goods and services and payment therefor by the Buyer.

18. INSURANCE: If this contract covers the performance of labor for Buyer, Seller agrees to indemnify and save harmless Buyer against all liability claims or demands for injuries or damages to any person or property growing out of the performance of this contract. Seller further agrees to furnish insurance carrier's Certificate showing the Seller has adequate insurance coverage in the following minimum amounts:

19. WORKER'S COMPENSATION: Statutory limits for the state or states for which the work is to be performed.

General: Public Liability - \$500,000/\$1,000,000 and property damage \$250,000.

Automobile Public Liability - \$100,000/\$300,000 and property damage \$100,000.

Said Certificate must set forth the amount of coverage, number of policy and date of expiration. If Seller is a self-insurer, the Certificate of the Department of Labor and Industry of the state in which labor is to be performed shall be furnished by such Department directly to Buyer. Compliance by Seller with insurance requirements does not in any way affect Seller's indemnification of Buyer under Clause 12 above.

20. CANCELLATION: Buyer shall have the right to cancel for default on any part of the contract, in whole or in part, if Seller breaches any of the terms hereof, including warranties of Seller or if Seller becomes insolvent or commits an act of bankruptcy. If it is determined that Seller is in breach of this contract, the Seller shall be deemed to have accepted the Buyer's cancellation and the Seller shall be deemed to have accepted the Buyer's cancellation and the Seller shall be deemed to have accepted the Buyer's cancellation.

21. ASSIGNMENT AND SUBCONTRACTING: The work to be performed under this contract may not be assigned or subcontracted in whole or in part nor may any assignment of any money due or to become due hereunder be made by Seller without the prior written consent of Buyer.

22. WAIVER: The failure of Buyer to insist in any one or more instances upon the performance of any of the terms and conditions of this contract at the time of its breach hereunder shall not be construed as a waiver or relinquishment of the future performance of any such terms and conditions or the future exercise of such right and the obligation of Seller with respect to such future performance shall continue in full force and effect.

- The reasonable value of cost (whichever is higher) of any items used or sold by the Seller without the Buyer's consent.
- The agreed value of any items used or sold by the Seller with the Buyer's consent.
- The cost of any defective or destroyed material.

Buyer will make no payments for the finished work or material or fabricated parts covered by the Seller in excess of any order or release. Notwithstanding the above, payments made under this clause shall not exceed the aggregate price specified in this contract, less payments otherwise made or to be made, and adjustments shall be made reducing the payments hereunder for costs of work in process and for material to be returned to the Buyer as scrap or for the return of the contract. If the Seller has made payments under this clause which constitute the Buyer's liability in the event this contract is terminated hereunder, except as otherwise provided in this contract, the provisions of this clause will not apply to the extent of the Buyer's liability for the Seller's or for any other cause and effect under this contract.

16. FURTHER AGREEMENTS: Seller agrees:

- To be bound by and comply with Executive Order 11248 of September 24, 1965, and all rules, regulations and orders of the Secretary of Labor issued pursuant to Section 204 thereof.
- That the Equal Opportunity Clause contained in 41 CFR Part 60-1.4 is incorporated herein by reference.
- That it will prepare and maintain a written affirmative action compliance program pursuant to 41 CFR Part 60-140, unless exempted from one or more of such requirements by a rule, regulation or order of the Secretary of Labor.

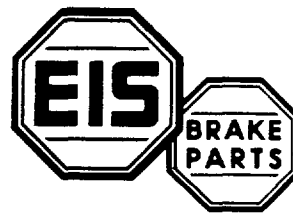
Seller agrees that it will provide a Certificate of Nonsegregated Facilities in the form required by 41 CFR Part 60-1.6 as a precondition to the award of this contract.

17. COMPLIANCE WITH LAW: In the performance of work under this contract, Seller agrees to comply with all applicable federal, state and local laws, rules, regulations and ordinances.

18. FAIR LABOR STANDARDS ACT: Seller certifies that all goods provided under this contract were produced in compliance with all applicable requirements of Section 4, 7 and 12 of the Fair Labor Standards Act, as amended, and all regulations and orders issued by the United States Department of Labor under said Act.

19. ASSIGNMENT AND SUBCONTRACTING: The work to be performed under this contract may not be assigned or subcontracted in whole or in part nor may any assignment of any money due or to become due hereunder be made by Seller without the prior written consent of Buyer.

20. WAIVER: The failure of Buyer to insist in any one or more instances upon the performance of any of the terms and conditions of this contract at the time of its breach hereunder shall not be construed as a waiver or relinquishment of the future performance of any such terms and conditions or the future exercise of such right and the obligation of Seller with respect to such future performance shall continue in full force and effect.



July 26, 1978

Mr. E. W. Drislane
Friction Materials Standards
Institute, Inc.
Bergen Mall Office Center, D210
Route 4
Paramus, N.J. 07652

EIS Division
Parker Hannifin Corporation
695 High Street - P.O. Box 701
Middletown, CT 06457
Phone (203) 346-8624
Telex 99-4453

Dear Mr. Drislane:

Concerning your letter of July 24, the listing should read "The EIS Division, Parker Hannifin Corp., West Bend, Wisconsin".

The Pick Automotive Corp. is being dissolved and will become an integral part of the EIS Division.

Thank you very much for your notice of this item, and we appreciate that the change be made whenever convenient for you.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'Maurice Schwarz', is written over the typed name.

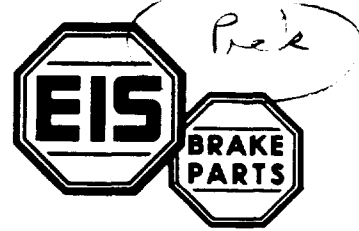
Maurice Schwarz
President

MS:ag



FMSI 13992

78C-21



TO ALL SUPPLIERS

EIS Division
Parker Hannifin Corporation
695 High Street - P.O. Box 701
Middletown, CT 06457
Phone (203) 346-8624
Telex 99-4453

June 1978

Gentlemen:

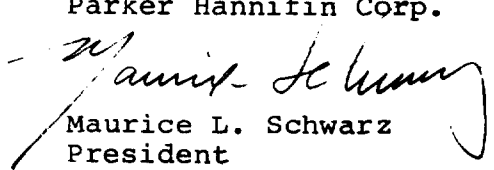
The merger between EIS Automotive and the Parker Hannifin Corporation was completed March 10, 1978. We are now a division of the Parker Automotive Group. This group consists of 3 other divisions: Ideal, Brooklyn, N.Y.; Plews, Minneapolis, Mn.; and Roberk, Shelton, Ct. Each of the divisions operates as an independent unit.

The management of the EIS Division's business is continuing with the same personnel and policies as before the merger. We hope that you will continue to supply us with the same products and services that we have become accustomed to.

We are happy with the relationship we have with our parent company, and look forward to a continued long relationship with you.

Sincerely,

EIS DIVISION
Parker Hannifin Corp.


Maurice L. Schwarz
President

MLS:ag

Enc.

P.S. The above letter is with reference to your dealings with Pick Automotive Corp., West Bend, Wisconsin, which is a subsidiary of the EIS Division, Parker Hannifin Corp.



FMSI 13993

July 24, 1978

Mr. M. L. Schwarz
EIS Division
Parker Hannifin Corporation
695 High Street
Middletown, Ct. 06457

Dear Mr. Schwarz:

This concerns the June 1978 letter to suppliers noting the change resulting from the EIS and Parker Hannifin merger.

In that memorandum you list your company as the EIS Division, Parker Hannifin Corporation. On our Membership listing, we have listed Pick Automotive Corporation, Division of EIS Automotive Corporation, West Bend, Wisconsin as the Licensee Member of the Institute. Should this listing be changed to EIS Division, Parker Hannifin Corporation? Or should we list Pick Automotive Corporation, EIS Division Parker Hannifin Corporation? Please see the enclosed listing for Pick Automotive Corporation the way it is now shown on the Institute roster.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

EWD/lmc
Enc.

E. W. Drislane
Executive Director



Pick

AUTOMOTIVE CORPORATION

Subsidiary of THE EIS AUTOMOTIVE CORPORATION

133 OAK STREET
WEST BEND, WISCONSIN 53095

Phone: 334-2355
Area Code: 414

March 16, 1978

CE

Friction Materials Standards Institute, Inc.
210 Route #4
Paramus, New Jersey 07652

Dear Sir:

In the 1973 Brake Shoe Identification Catalog, F.M.S.I. number 268 and 392 have a drum diameter of 9-27/32 and a F.M.S.I. lining number of 8078. In the 1976 Brake Shoe Identification Catalog, F.M.S.I. number 268 and 392 had a drum diameter of 9-49/64 and a F.M.S.I. lining number of 8078. What I would like to find out is which diameter is correct and if they are both correct, when the changes of diameters occurred. I would appreciate any information you could give me. Thank you for your time.

Sincerely yours,

Tom W. Malnory
Tom W. Malnory



"Factory Lined" Brake Shoes • Unlined Brake Shoes
Brake Bands • Industrial Products



FMSI 13995

March 27, 1978

Pick Automotive Corporation
Subsidiary of the EIS Automotive Corporation
133 Oak Street
West Bend, Wisconsin 53095

Attention: Mr. Tom W. Mainory

Gentlemen:

This is to reply to your letter of March 16, 1978 concerning drum diameter dimensions for FMSI shoe numbers 268 and 392. The 1978 Brake Shoe Identification Catalog listing with the 9-27/32" drum diameter was in error. The correct drum diameter was that shown in the "1976 Brake Shoe Identification Catalog: 9-49/64".

These errors were brought to the attention of the Membership in Shoe Bulletin #68 of December 28, 1973 and subsequently in Shoe Bulletin #76 of December 10, 1975. I have enclosed copies of those corrections as they appeared in the two bulletins. Changes were not made in the diameter. These were corrections where my original 9-27/32 was wrong. The 9-49/64" diameter was correct.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

EWD/lmc
Encs.

E. W. Drislane
Executive Director

FMSI 13996



Pick

AUTOMOTIVE CORPORATION

Subsidiary of THE EIS AUTOMOTIVE CORPORATION

133 OAK STREET
WEST BEND, WISCONSIN 53095

Phone: 334-2355
Area Code: 414

May 2, 1977

Friction Materials Standards Institute, Inc.
Bergen Mall Office Center
E. 210 Route 4
Paramus, N. J. 07652

Gentlemen:

Please mark your records that our correct mailing address is
as follows:

Pick Automotive Corporation
P. O. Box 455
West Bend, WI 53095.

OK. EPC

All mail sent to us should be addressed as shown above. Thank
you.

Yours very truly,

PICK AUTOMOTIVE CORPORATION

E. A. Gessert
Assistant Sales Manager

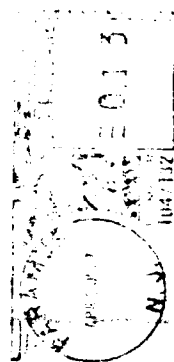
EAGessert:ed



"Factory Lined" Brake Shoes • Unlined Brake Shoes
Brake Bands • Industrial Products

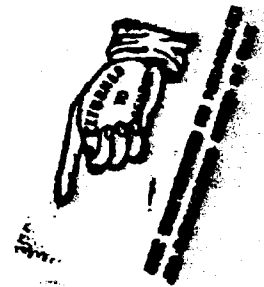


FMSI 13997



FRICTION MATERIALS STANDARDS INSTITUTE
BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PASAUNUS, N. J. 07653

Pick Automotive Corporation
Box 71
West Bend, Wis. 53095
Attn: Mr. Leroy Gessert





The EIS AUTOMOTIVE CORPORATION

P.O. BOX 701 • MIDDLETOWN, CONN. 06457

PHONE (203) 346-8624

TELEX 99-4453

CABLE ADDRESS "EIS MANUF"

April 29, 1977

Friction Materials Standards Inst., Inc.
Bergen Mall Office Center
E. 210 Route 4
Paramus, N.J. 07652

Attn: Miss Emily Collins

Dear Miss Collins:

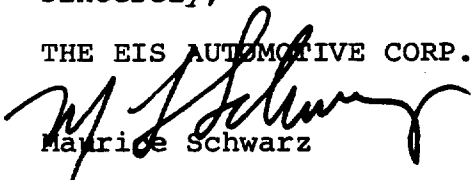
With reference to your letter of April 25, the correct address for Mr. Broadway and Mr. Gessert at Pick Automotive Corp. in West Bend, Wisconsin is P.O. Box 455 or 133 Oak Street (Zip 53095).

The Post Office Dept. rearranged their boxes and changed our numbers without advising everyone concerned and apparently, your address was not updated. Please make the necessary corrections.

Thank you for your courtesy.

Sincerely,

THE EIS AUTOMOTIVE CORP.


Maurice Schwarz

MS:ag



THE COMPLETE BRAKE PARTS LINE



FMSI 13999

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

April 25, 1977

Mr. M. L. Schwarz
The EIS Automotive Corporation
P. O. Box 701
Middletown, Connecticut 06457

Dear Mr. Schwarz:

Once again I have to ask your help with the address of Mr. Broadway and Mr. Gessert. The enclosed envelopes were returned to us today and there is no forwarding address. Have we still got the right address for them both?

I wrote to you about this matter on November 25, 1975. In your reply of December 2, 1975, you said that we did have the right address. Would you be so kind as to advise if there has been a change of address or not. Also please forward these letters to the two gentlemen.

Your help is most appreciated.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

ERC/erc
Enclosures:

Emily R. Collins (Miss)

Pick (EIS)

March 14, 1977

Mr. E. I. Schwartz
EIS Automotive Corporation
Box 701
Middletown, Connecticut 06457

Dear Mr. Schwartz:

This is to reply to your note of March 3, 1977, copy attached.

Based on information provided by General Motors the note as shown in Shoe Bulletin #81 is correct. In particular, it says that the new #462 shoe can be used on earlier models where the #363 shoe was used. This is not an interchange, because #363 cannot be used for #462 applications.

The retrofit is not dependent upon exact silhouette of the shoe web, but in this particular case it is because #363 and #462 shoes both have 3/16" webs. (The #363 shoe has a 1/4" web.)

After your note, I called GM to re-verify the comment and they agree that it is correct as written.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

EWD/lmc
Enc.

E. W. Drislane
Executive Director

FMSI 14001



EIS AUTOMOTIVE CORP.
Middletown, Connecticut

INTER OFFICE COMMUNICATION

TO: Mr. E.W. Drislane DATE: 3/3/77
SUBJECT: Ref # 81 Bulletin

REQUEST:

You show 365 to
interchange with
462 it seems
363 with oblong

SIGNED:

Hale are back

REPLY:

is the one that
~~is the~~ file

SIGNED

FORM 606

		WEB	<u>Rim</u>	
363		.248 t	.078	2.125
365	Tamot, Deland	.187 t	.078	2.062
462		.179 t	.071	2.125

Pick
(EIS)

September 2, 1976

The Pick Automotive Corporation
133 Oak Street
West Bend, Wisconsin 53095

Attention: Accounts Payable

Gentlemen:

This refers to your photocopy of a statement that we had sent to West Bend, Wisconsin. Per your note you asked for a copy of Invoice #2209 for the amount of \$32.23.

This statement was sent to you by error. This invoice was actually directed to the Middletown, Connecticut address for EIS Automotive Corporation. I've attached a copy of that invoice but it has since been paid by EIS in Middletown.

We apologise for any inconvenience caused by our mailing of the statement to the West Bend, Wisconsin address. Please destroy that copy. Your account has a zero balance on our records.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

EWD/lmc
Enc.

E. W. Drislane
Executive Director

FMSI 14004



SINCE 1930

THE EIS AUTOMOTIVE CORPORATION • MIDDLETOWN, CONN.

P. O. BOX 701 • 06457

PHONE • (203) 346-8624

CABLE ADDRESS "EISMANUF"

December 2, 1975

Friction Materials Standards Inst., Inc.
E. 210 Route 4
Paramus, New Jersey 07652

Attn: Ms. Emily R. Collins

Dear Ms. Collins:

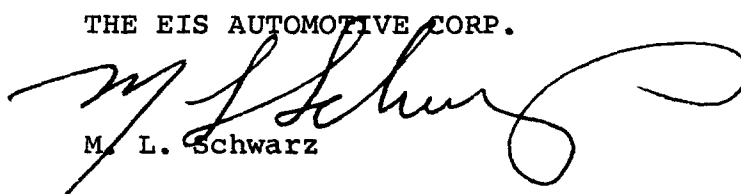
With reference to your letter of November 25 regarding the address of Pick Automotive Corp., please be advised that your addressing of the envelope was correct.

We are forwarding this envelope to Mr. Ralph Broadway to have him take it up with the Postal Department at West Bend.

If there are any more problems, please drop us a line and we will continue to follow it up.

Very truly yours,

THE EIS AUTOMOTIVE CORP.


M. L. Schwarz

MLS:ag



AUTOMOTIVE BRAKE PARTS, FLUID, DRUMS, SHOES & TOOLS



FMSI 14005



SINCE 1930

THE EIS AUTOMOTIVE CORPORATION • MIDDLETOWN, CONN.

P. O. BOX 701 - 06457

PHONE • (203) 346-8624

CABLE ADDRESS "EISMANUF"

August 18, 1975

Friction Materials Standards
Institute, Inc.
E. 210 Route 4
Paramus, N.J. 07652

Att: E. W. Drislane

Gentlemen:

Thanks very much for your letter of the 12th with the Volkswagen numbers; there's another one we need, namely:

1975 Datsun 610, 710

Thanks for whatever you can do for us.

Very truly yours,

THE EIS AUTOMOTIVE CORP.

E. I. Schwarz
E. I. Schwarz

EIS:ag

F 7046-D-113
E 8101-359



AUTOMOTIVE BRAKE PARTS, FLUID, DRUMS, SHOES & TOOLS



FMSI 14006

August 22, 1975

Mr. E. I. Schwarz
EIS Automotive Corporation
P. O. Box 701
Middletown, Connecticut 06457

Dear Mr. Schwarz:

This is to reply to your letter of August 18, 1975 relative to
1975 Datsun 610, 710.

We have: Front Disc Brakes
 7046** (Integrally molded lining)
 D-113 Steel
 7046-D-113 Assembly

 Rear Drum Brakes
 8101* (Banded Lining)
 399 Shoe
 8101-399 Assembly

The disc fronts are now releases. I hope to have a bulletin out
on them shortly.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

END/erc

E. W. Drieland
Executive Director



SINCE 1930

THE EIS AUTOMOTIVE CORPORATION • MIDDLETOWN, CONN.

P. O. BOX 701 - 06457

PHONE • (203) 346-8624

CABLE ADDRESS "EISMANUF"

Pick (EIS)

July 22, 1975

Friction Materials Standards
Institute, Inc.
E210, Route 4
Paramus, N.J. 07652

Att: E. W. Drislane, Exec. Director

Gentlemen:

Could we please again request the assignment of a Disc Pad for
1975 Volkswagen, Sciroco, Dasher, VW# 171-698-151B.

Pads are made and we would like to sell them with proper number,
rather than use another number and create interchange problem
forever after.

Thanks.

Very truly yours,

THE EIS AUTOMOTIVE CORP.

E. I. Schwarz

EIS:ag



AUTOMOTIVE BRAKE PARTS, FLUID, DRUMS, SHOES & TOOLS



FMSI 14008

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

August 12, 1975

Mr. E. I. Schwarz
EIS Corporation
P. O. Box 701
Middletown, Connecticut 06457

Dear Mr. Schwarz:

In further reply to your July 22, 1975 letter, we will shortly
be making the following release:

1975 Volkswagen Dasher
Scirocco
Rabbitt

1975 Audi Fox

Lining: FMSI 7044 (Integrally molded)
Shoe: FMSI D-110
Assembly: FMSI 7044-D-110

A print is attached.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

EWD/erc
Enclosure:

E. W. Drislane
Executive Director

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER
E. 210 ROUTE 4
PARAMUS, N. J. 07652

Pick (EIS)

July 24, 1975

Mr. E. I. Schwarz
EIS Automotive Corporation
P. O. Box 701
Middletown, Connecticut 06457

Dear Mr. Schwarz:

This is to reply to your letter of July 22, 1975 concerning an assignment for disc pad for the Volkswagen, Scirocco and Dasher (VW #171-698-151B).

I have been trying to get information on this application as well as the VW Rabbit, but without success. If you have prints available, I would greatly appreciate a copy. I would then make a release and advise you.

I have no automatic source of data on Volkswagen. I have to scrounge this information from whatever source is willing to provide it.

Sincerely,

FRICTION MATERIALS STANDARDS INSTITUTE

EWD/ero

E. W. Drislane
Executive Director

APPLICATION FOR MEMBERSHIP

Accepted Nov. 11/59

TO THE BOARD OF DIRECTORS OF
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

GENTLEMEN:

THE UNDERSIGNED HEREBY APPLIES FOR MEMBERSHIP IN THE FRICTION MATERIALS STANDARDS INSTITUTE, INC., AS A BRAKE SHOE MANUFACTURING MEMBER, AND CERTIFIES TO THE FOLLOWING:

1. NAME OF APPLICANT: Pick Manufacturing Company, West Bend, Wisconsin
2. STATE OF INCORPORATION: Delaware (Prior registration Wisconsin 1923)
3. PRINCIPAL OFFICE: West Bend
4. DATE OF INCORPORATION: 1943
5. LENGTH OF TIME DEALING WITH BRAKE SHOES: 32 years
6. DO YOU MANUFACTURE BRAKE SHOES FROM THE BASIC MATERIALS: Yes
7. APPROXIMATE ANNUAL CAPACITY OF PLANT: 2,500,000 pieces
8. STATE APPROXIMATE AMOUNT OF BRAKE SHOES MANUFACTURED IN COMMERCIAL QUANTITIES: 2,500,000 pieces
9. IS THE DISTRIBUTION OF YOUR PRODUCT NATIONAL, INTERNATIONAL, OR LOCAL OR IN HOW MANY STATES: International
10. DO YOU LIST THE BRAKE SHOES YOU MANUFACTURE IN CATALOGS OR IN SOME OTHER FORM; IF SO, WILL YOU FURNISH US WITH A COPY OF SAME: Yes
11. REFERENCE AS TO FINANCIAL STRENGTH IN RELATION TO OPERATIONS: Satisfactory
12. IS PLANT OWNED BY APPLICANT OR LEASED: Owned

THE UNDERSIGNED HEREBY ACKNOWLEDGES RECEIPT OF A COPY OF THE CONSTITUTION AND BY-LAWS OF THE INSTITUTE AND AGREES THAT, IF ELECTED TO MEMBERSHIP, IT WILL ACCEPT AND BE BOUND BY THE SAID CONSTITUTION AND BY-LAWS, TOGETHER WITH ANY AMENDMENTS THAT MAY FROM TIME TO TIME BE MADE THERTO.

THE UNDERSIGNED HEREBY DESIGNATES William J. Dooley AS ITS DELEGATE AND Alan E. Pick AS ITS ALTERNATE DELEGATE, TO ATTEND ANY MEETING OF THE MEMBERSHIP WITHOUT THE RIGHT TO VOTE ON ANY MATTER PRESENTED.

Pick Manufacturing Company

BY

W. J. Dooley
Automotive Sales Manager