FILE NAME: Ford (FD)

DATE: 1941-1983

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DOCUMENT DESCRIPTION: List of Brake Assembly and Lining Suppliers

Ford Motor Company

Brake Assembly and Lining Suppliers

(Original Draft 12/20/82)

(Revised 2/24/83)

PRODUCED BY FORD

PASSENGER CARS

DISC BRAKE ASSEMBLY

(Front and Rear)

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| 961 - 1982 | Bendix Corporation [1,2,5,6] | Bendix Friction Materials Division [1,2,3,5,6] | Robert Kuhlman (1961-1968) |
| | Kelsey-Hayes [1,2,5,6] | Thiokol Chemical [1,2,3,5,6] (1967-1982) | H.A. Smith (1967-1974) |
| | Wagner Electric (1961-1968) | Raybestos Manhattan (1961-1974) | Murray Smith (1974-1978) |
| | Budd Company (1967-1974/small quantity) | Johns-Manville (1961-1974) | Ken Whitman (1978-1980) |
| | Teves & Culpeper [2,5,6] (1978-1982) | Thermoid Division, H.K. Porter [1,5] (1961-1968; 1974-1977) | W.G. (Bill) Lange (1980-1982) |
| | | Delco-Moraine Division of G.M. [1,3] (1967-1974) | |
| | | Borg-Warner [1 only] (1975) | |
| | | Universal Manufacturing Company (1961-1968/minor supplier) | |

OTE: Document sources are indicated by numbers enclosed in brackets.



PRODUCED BY FORD

PASSENGER CARS and LIGHT TRUCKS

DRUM BRAKE ASSEMBLY

(Front and Rear)

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| 1960 - 1982 | Bendix Corporation [1,4,6] | Bendix Friction Materials Division [1] | Transmission & Chassis Division |
| | Kelsey-Hayes [1] | Raybestos Manhattan (1960-1971) | Carl J. Anderson (1971-1981) re: 1960-1981 |
| | Wagner Electric [1] (1960-1981/cars only) | Thermoid Division, H.K. Porter (1960-1971) | *Ed J. LeFevre (1971-1981) re: 1960-1981 |
| | Budd Company [1] (1960-1974/5) | Johns-Manville* (1960-1971/some involvement) | Body & Assembly Division: |
| | Raybestos Manhattan (1978-1982/cars only) | Abex Corporation (1982/semi-metallic linings) | Fred Read (1970-1973) |
| | Varga (Brazil) (1980-1982) | | Murray Smith (1974-1978) |
| | Eaton Corporation [2 only] (1980/cars only) | | Ken Whitman (1978-1980) |
| | | | W.G. (Bill) Lange (1980-1982) |



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LIGHT TRUCKS

DISC BRAKE ASSEMBLY

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| 1970 - 1982 | Bendix Corporation [1] | Bendix Friction Materials Division [1] | Fred Read (1970-1973) |
| | Dayton Walther [1,6] | Raybestos Manhattan (1970-1978) | Bob Was (1973-1976) |
| | Kelsey-Hayes (1970-1978) | Royal (1980-1982/some; Canadian company) | John England (1976-1978) |
| | Thiokol Chemical (1970-1973/possible supplier) | | Mike Pollich (1976-1979) |
| | | | W.G. (Bill) Lange (1980-1982) |



PRODUCED BY FORD

MEDIUM/HEAVY TRUCK

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| | Air Brakes - Front and Rear | Air Brakes - Front and Rear | Air Brakes - Front and Rear |
| 1970 - 1982 | Rockwell International [1] | Raybestos (1971-1982) | Fred Read (1970-1973) |
| | Eaton Corporation [1] | Bendix Friction Materials Division (1976-1982) | Bob Was (1973-1976) |
| | Wagner Electric [1] (1976-1982/front) | Abex Corporation (1976-1982) | Dave Lienau (1976-1982) |
| | Bendix Corporation [1 only] (1972-1976) | Carlisle (1976-1982) | |
| 1970 - 1982 | Hydraulic Brakes - Front and Rear | Hydraulic Brakes - Front and Rear | Hydraulic Brakes - Front and Re |
| | Wagner Electric | Bendix Friction Materials Division (1971-1982) | Fred Read (1970-1973) |
| | Bendix (1970-1976) | Thiokol Chemical (1971-1976) | Bob Was (1973-1976) |
| | Kelsey-Hayes (1970-1971; 1976-1982) | Abex Corporation (1976-1982) | Dave Lienau (1976-1982) |
| | | Carlisle (1976-1982) | |
| | | Raybestos Manhattan (1976-1982) | |



PRODUCED BY FORD

MEDIUM/HEAVY TRUCKS (a)

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| | Disc - Front | Disc - Front | Disc - Front |
| 1973 - 1976 | Kelsey-Hayes | Johns-Manville* (Some involvement) | *Bob Was (1973-1976) |
| | Drum | Drum | Drum |
| 1972 - 1980 | Wagner Electric [1,2] | Bendix Friction Materials Division [1] (1972-1979) | John England (1976-1978) |
| | Kelsey-Hayes [1] (1972-1979) | Thrukol Chemical (1976-1979) | Mike Pollich (1976-1979) |
| | Bendix [1] (1972-1979) | | |
| | Rockwell International [1,2 only] (1972-1976; 1980) | | |
| | "Wedge" Brake - Front and Rear | "Wedge" Brake - Front and Rear | "Wedge" Brake - Front and Rear |
| 1970 - 1973/ 1976 - 1982 | Bendix | Bendix Friction Materials Division (1976-1982) | Fred Read (1970-1973) |
| | | Abex Corporation (1976-1982) | Dave Lienau (1976-1982) |
| | | Carlisle (1976-1982) | |
| | | Raybestos Manhattan (1976-1982) | |



PRODUCED BY FORD

MEDIUM/HEAVY TRUCKS (c )

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| | Air-Over Hydraulic Brake - Heavy Truck/Front | Air-Over Hydraulic Brake - Heavy Truck/Front | Air-Over Hydraulic Brake - |
| 1976 - 1982 | Kelsey-Hayes | Bendix Friction Materials Division | Dave Lienau (1976-1982) |
| | | Abex Corporation | |
| | | Carlisle | |
| | | Raybestos Manhattan | |



PRODUCED BY FORD

SPECIAL ORDER VEHICLES

CARS

*Majority of brake assemblies used are regular production brakes for new cars (suppliers already identified).

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| | Police Fleets | Police Fleets | Police Fleets |
| 1962 - 1982 | Dana Corporation (specialty axles with Bendix brakes) | Bendix Friction Materials Division (1969-1972; 1979-1982) (1,5 only) | William Nisonger (1962-1982) (William Richard) |
| | Bendix Corporation (5 only) (1979-1982) | Raybestos-Manhattan (1 only) (1969-1972) | *Murray Smith (1974-1978) |
| | | Borg-Warner* (1) (1969-1972) | |



PRODUCED BY FORD

SPECIAL ORDER VEHI

TRUCKS

| Years | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| | Military Trucks | | Military Trucks |
| 1962 - 1971 | Wagner Electric | | William Nisonger (1962-1971) |
| | Kentucky Truck Plant | Kentucky Truck Plant | Kentucky Truck Plant |
| 1962 - 1982 | Rockwell International | Abex Corporation | Arnold Silvers (1962-1982) |
| | Eaton Corporation | | |
| | Wagner Electric (front end only) | | |



PRODUCED BY FORD

MOTT VEHICLES

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| 1959 - 1972 | Unknown | Unknown | MOTT Documents |
| 1972 - Unknown | Wagner Electric Co. | World Bestos Company<br>Brake Lining Co. of America<br>P. T. Brake Lining Co., Inc.<br>Friction Materials Division, Bendix Corp. | |



PRODUCED BY FORD

JEEPS

Ford Model GP

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| 1941 to Unknown | Bendix | Unknown | Jeep Documents |
| | Kelsey Hayes | | |



PRODUCED BY FORD

AFTER MARKET PAT.

NEW (DEALERS)

(Drum and Disc Brakes)

| Year | Brake Assembly Supplier | Brake Lining Supplier | Interview Source |
|---|---|---|---|
| 1968 to Present | Bendix Corporation | Bendix Friction Materials Division | Gil Burford (1968 - present) |
| | Kelsey Hayes | Raybestos Manhattan | |
| | Wagner Electric (not currently) | Abex Corporation | |



PRODUCED BY FORD

AFTER MARK TS

Ford Authorized Remanufacturers (FAR)

(Drum Brake Linings Only)

| Year | Brake Lining Supplier | Source |
|---|---|---|
| Unknown to 1982 | Abex Corp., Friction Products Group | FAR Documents |
| | Bendix Corp., Automotive After Market Operation | |
| | Bendix Corp., Friction Materials Division | |
| | Carlisle Corporation | |
| | Dayton-Walther Corporation | |
| | Eaton Corp., Brake Division | |
| | Johns-Manville Sales Corp. | |
| | Kelsey-Hayes Co. | |
| | Joseph Lucas North America, Inc. | |
| | Pak-Rite Industries | |
| | H. K. Porter Co., Inc. | |
| | Raybestos-Manhattan, Inc. | |
| | Rockwell International | |
| | Alfred Teves, Inc. | |
| | Toyo Kogyo Co., Inc. | |
| | Wagner Electric Corp. | |



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