

intra-letter

Date: 10 October 1984

From: John Holz

To: Mr. Randy Burlison

Subject: NON-ASBESTOS BRAKE
LININGS

Mining Engineering has completed the program to incorporate non-asbestos lining material on all production non-disc brake applications. The disc brakes applied to mining shovels and draglines have always used sintered metal linings and do not contain asbestos.

All brake drawings that did specify asbestos lining material have been changed to non-asbestos material and released. A tabulation showing the "old" vs. "new" (ie, asbestos vs. non-asbestos) part numbers is attached. Brake part numbers already specifying non-asbestos material did not change.

The non-asbestos lining material specified for drum brakes is P&H 3022, and the purchased non-asbestos lining material for propel "V" brakes is described by the vendor H.K. Porter as specification NA104.

The new non-asbestos brake linings were released to supersede the old asbestos linings, with instructions to use up existing stock of asbestos material. It is imperative to establish a system to identify and exhaust the existing stock of asbestos linings at the stocking level to insure a complete conversion to non-asbestos lining across the board for mining equipment as quickly as stock will permit.

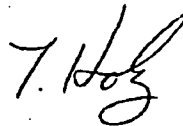
Material Management is requested to inform Engineering which production stock order non-asbestos linings will become effective for the various brake assemblies in order to be able to state this effectivity in sales and marketing efforts.

In keeping with the policy to eliminate asbestos lining material from the complete mining equipment product line, brake linings for older non-production brakes should be changed to non-asbestos material before they are re-purchased for stock replenishment. Upon notification, Engineering will advise Purchasing the new

Harnischfeger
P&H

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NON-ASBESTOS BRAKE LININGS

material and part number to order non-asbestos linings and will release new or revised drawings incorporating the new lining material.



John Holz

/jkh

Attach: Brake Tabulation

cc: H. Kallenberger
T. Weber
R. Kohlhepp, Jr.
R. Profio
D. Krueger
E. Quinn
E. Doolan

cc: G. Petre
K. Scheuren
D. Wood
D. Strum
W. Smith
R. Schramm
D. Talsky

*** MINING EQUIPMENT NON-DISC BRAKE APPLICATION ***

DATE OF ISSUE 10-11-84
SHEET 1 OF 3

'NEW' PART NUMBERS INDICATE CHANGE TO NON-ASBESTOS LINING MATERIAL
'SAME' PART NUMBERS INDICATE PREVIOUSLY SPECIFIED NON-ASBESTOS LINING MATERIAL

	HOIST		SWING		CROWD		PROPEL	
	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
1600/CL BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J2536-1 915E9-3 15F394C3 715Q3D6 3022	SAME	100J1247-5 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D10 3022	100J1247-5 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D10 3022	100J1200-5	
1900AL/ALCL/LR BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-3 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J1247-5 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D9 3022	100J1247-3 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D10 3022	100J4516-1 15N722 915N229-1 15N723 15U35 3021	LCHG 'B' 15N722D2 915N229F2 15N723D2 15U35D2 NA104
2100BL/WORM DRIVE BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-5 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J1247-5 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D10 3022	100J1247-10 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D10 3022	100J4499-2 100N2356-4 915N228-4 15N725D3 15U63D1 D85B	LCHG 'B' LCHG 'C' 915N228F5 15N725D4 15U63D2 NA104
2100BL/P.B. BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-5 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J1247-5 915F31-5 15H183C1 715U1D8 3020	LCHG 'N' 915P276F1 15P1177 715Q3D10 3022	100J3173-1 915F73-2 15F386C2 715Q3D5 3022	SAME	100J4499-2 100N2356-4 915N228-4 15N725D3 15U63D1 D85B	LCHG 'B' LCHG 'C' 915N228F5 15N725D4 15U63D2 NA104
2100BLE/P.D. BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-5 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J3012-2 915F70-1 15H449C3 715Q3D4 3022	SAME	100J3173-1 915F73-2 15F386C2 715Q3D5 3022	SAME	100J4499-2 100N2356-4 915N228-4 15N725D3 15U63D1 D85B	LCHG 'B' LCHG 'C' 915N228F5 15N725D4 15U63D2 NA104

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	HOIST		SWING		CROWD		PROPEL	
	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
2300MKII/XP BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-6 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J3012-1 915F70-1 15H449C3 715Q3D4 3022	SAME	100J3173-1 915F73-2 15F386C2 715Q3D5 3022	SAME	100J5341-1 100J5344-1 915N245-1 15N725D3 15U63D1 D858	SAME LCHG 'A' 915N245F3 15N725D4 15U63D2 NA104
2300LR BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-6 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J3013-1 915E9-1 15F394C3 715Q3D6 3022	SAME	100J3173-1 915F73-2 15F386C2 715Q3D5 3022	SAME	100J5341-1 100J5344-1 915N245-1 15N725D3 15U63D1 D858	SAME LCHG 'A' 915N245F3 15N725D4 15U63D2 NA104
2800MKII/XP BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J5301-1 915E5-4 15F207C1 715U1D17 3020	LCHG 'D' 915E5F9 15P1176 715Q3D9 3022	100J3012-1 915F70-1 15H449C3 715Q3D4 3022	SAME	100J4507-1 915E9-1 15F394C3 715Q3D6 3022	SAME	100J5316-2 100N2831-1 915N244-1 15N766D1 15U64D1 D858	SAME LCHG 'A' 915N244F2 15N766D2 15U64D2 NA104
5700 BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J5301-1 915E5-4 15F207C1 715U1D17 3020	LCHG 'D' 915E5F9 15P1176 715Q3D9 3022	100J3013-1 915E9-1 15F394C3 715Q3D6 3022	SAME	100J5301-1 915E5-4 15F207C1 715U1D17 3020	LCHG 'D' 915E5F9 15P1176 715Q3D9 3022	100J4860-1 100N2767-1 915N243-1 15N761D1 715U8D1 D858	SAME LCHG 'A' 915N243F2 15N761D2 715U8D2 NA104
5700LR BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	100J1242-5 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022	100J3013-1 915E9-1 15F394C3 715Q3D6 3022	SAME	100J4507-1 915E9-1 15F394C3 715Q3D6 3022	SAME	100J4860-1 100N2767-1 915F243-1 15N761D1 715U8D1 D858	SAME LCHG 'A' 915F243F2 15N761D2 715U8D2 NA104

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	HOIST		SWING		CROWD		PROPEL	
	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
2355 BRAKE ASM. BRAKE ARM & SHOE BRAKE SHOE ASM. BRAKE LINING SEMIFIN. P/N MATERIAL	DISC	N/A	100J3013-3 915E9-1 15F394C3 715Q3D6 3022	SAME	N/A		100J1242-6 915E5-4 15F207C1 715U1D17 3020	LCHG 'N' 915E5F9 15P1176 715Q3D9 3022