



Robbins & Myers

Material Handling Products

H & C Division

Springfield, Ohio 45501

Phone 513 327-3585

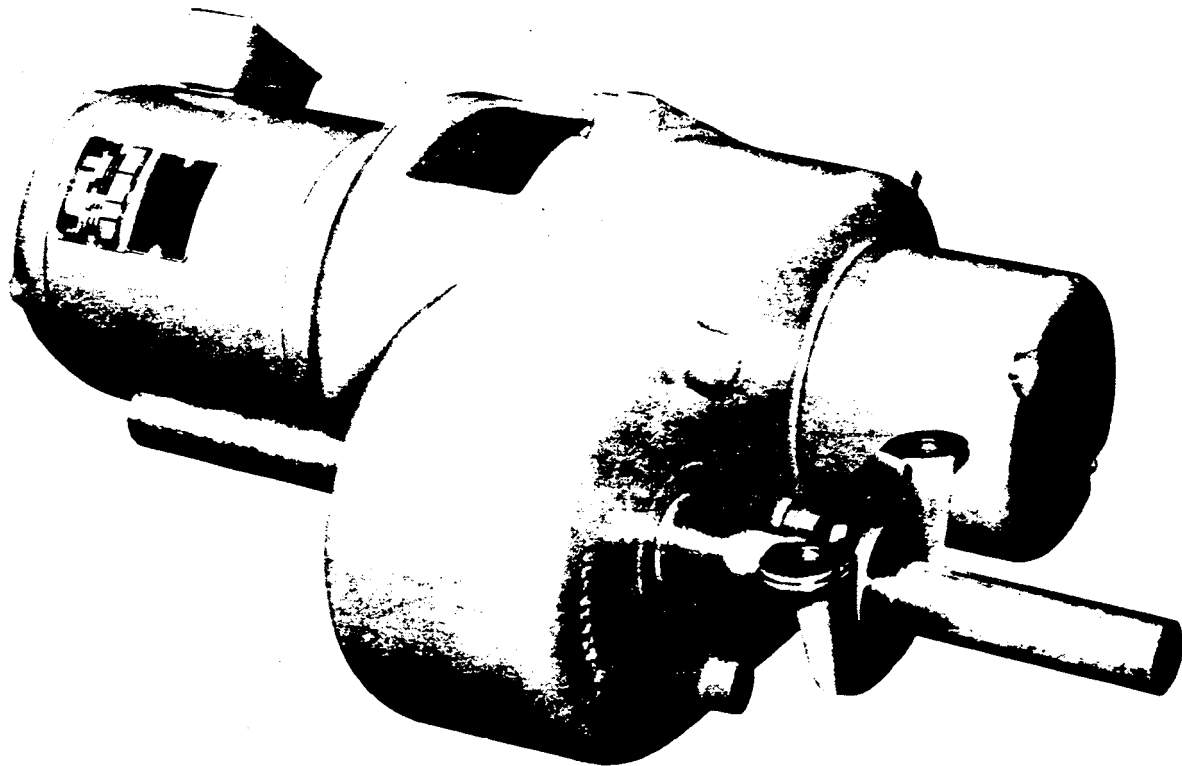
Telex: 205-427

Bulletin 930C

BRIDGE

Type SM Crane Drive Service Manual and Parts Catalog

TROLLEY

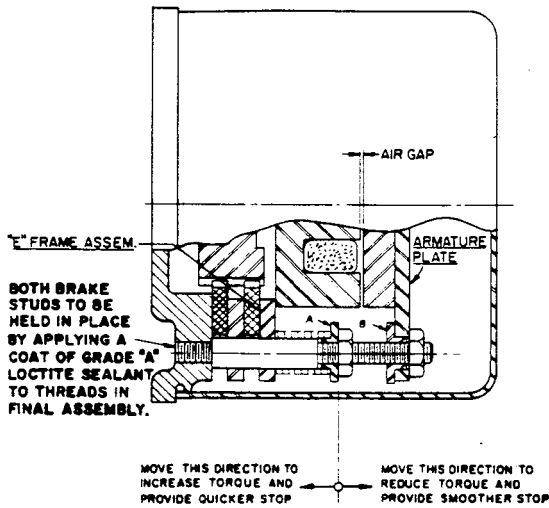


Serial No. _____ Motor HP _____

Reduction _____ Motor RPM _____

Current _____ Volts _____ Ph. _____ Hertz

BRAKE



ALL BRAKES ARE SET AT THE FACTORY FOR AVERAGE CONDITIONS BASED ON THE CAPACITY AND SPEED. YOU MAY ADJUST THE TORQUE TO SUIT YOUR PARTICULAR APPLICATION.

TO ADJUST BRAKE TORQUE - COMPRESS SPRING TO THE REQUIRED LEVEL BY ADJUSTING NUT "A", LOCK IN PLACE WITH JAM NUT.

TO ADJUST BRAKE FOR LINING WEAR, SET AIR GAP AT $\frac{1}{32}$ " (031") BY ADJUSTING NUT "B", LOCK ARMATURE PLATE SECURELY IN PLACE WITH JAM NUT.

IMPORTANT - RECHECK AIR GAP TO MAKE SURE AT LEAST 031" AIR GAP IS PRESENT. FOR MAXIMUM LIFE AND PERFORMANCE FROM BRAKE, ADJUSTMENTS SHOULD BE MADE WHEN AIR GAP EXCEEDS $\frac{1}{16}$ " DUE TO FRICTION DISC WEAR. DISC SHOULD BE REPLACED WHEN THICKNESS OF DISC IS REDUCED TO $\frac{1}{8}$ ".

SPARE PARTS

Order spare parts by listing the crane drive Serial Number and the Part Number as listed below.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
6285	SPACER	6319	BEARING SPACER
6286	BALL BEARING	6320	GEAR CASE
6287	OIL SEAL	6321	GASKET
6288	OUTPUT GEAR	6322	INTERMEDIATE PINION
6289	INTERMEDIATE PINION	6323	BEARING SPACER
6290	KEY	6324	BALL BEARING
6291	BALL BEARING	6325	OUTPUT SHAFT
6302	SPACER	6326	OIL SEAL
6303	KEY	6327	BEARING CAP
6305	OIL SEAL	5952	GASKET
6306	BALL BEARING	5955	SNAP RING
6307	OIL SLINGER	5957	FRICION HUB
6308	SNAP RING	5958	FRICION DISC
6309	BEARING SPACER	5959	ARMATURE PLATE ASSEMBLY
6310	GEAR CASE	5960	BRAKE STUD
6311	DRIVE HOUSING	5961	SPRING
6312	MOTOR	5962	ADJUSTING NUT
6313	MOTOR EXTENSION SHAFT	5963	MAGNET COIL
6314	COUPLING	5964	POLE PLATE
6315	OIL SEAL	5966	BRAKE COVER
6316	BALL BEARING	6918	ARMATURE PLATE
6317	BALL BEARING	6295	RETAINING NUT
6318	INTERMEDIATE SHAFT		

IMPORTANT NOTE
WHEN ORDERING REPAIR PARTS BE SURE TO LIST
1. CRANE SERIAL NUMBER
2. THIS DRAWING NUMBER
3. PART NUMBER(S) ON THIS DRAWING
4. YOUR ORDER NUMBER

-6305 -6306 -6307 -6308 -6309 -6310 -6311 -6312

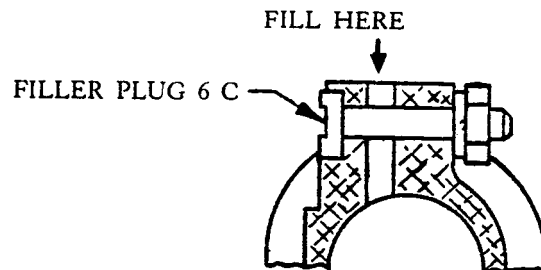
SHAFT MOUNTED CRANE DRIVE

COUPLING

Robbins & Myers crane drives are provided with both direct drive and fluid drive couplings. Your crane drive has been provided with:

- With a direct drive coupling connecting the motor to the gearcase.
 - A dry fluid coupling. This coupling gives the crane and/or trolley a cushioned start to minimize swinging of the load. The cushioning affect of the coupling may be altered by increasing or decreasing the amount of the dry fluid in the coupling.
- * The coupling was shipped from the factory filled with sufficient fluid for average conditions. A bottle with additional dry fluid was also shipped with the coupling so you may adjust the coupling to suit your particular application.
1. — *IF YOUR UNIT STARTS TOO FAST* — Remove some of the dry liquid for a smoother start. *DO NOT* remove so much fluid that the coupling slips more than 5 seconds during starting. Excessive slip would cause over heating and eventual damage to the coupling.
 2. — *IF YOUR UNIT STARTS TOO SLOWLY* — Add dry fluid to the coupling so that it will come up to speed and stop slipping in less than 5 seconds.

To change the amount of shot in the 6 C coupling, loosen the nut then remove the filler plug. Be sure to replace the filler plug and tighten the nut before operating unit.



3. — *CHANGE FLUID ONCE A YEAR* — The dry fluid gradually loses its effectiveness after about a year of crane duty use. Prolonged use after it has broken down may result in damage to the coupling. We suggest that you replace the fluid in the coupling on a yearly basis. Dry fluid is available in convenient plastic vials at a nominal cost.
1 lb. 2 ounce bottle, dry fluid for 6 C coupling.
 4. — *LUBRICATION* — The coupling is lubricated at the factory and requires no further lubrication. Never apply oil or grease to the flow charge.
- * Center drive units not mounted on the Robbins and Myers cranes or hoists are shipped without fluid in the couplings. A full bottle of dry fluid is included with each coupling. Add fluid to the coupling in accordance with instructions 1 & 2 above.

SM CENTER DRIVE
GEARCASE AND
MISCELLANEOUS PARTS

SM DRIVES

1-1

AUGUST 1980

ITEM		PART NUMBER	QUANTITY
6285	Spacer	22-08905-001	1
6286	Ball Bearing	6-30-020-111-0	2
6287	Oil Seal	22-02553-001	2
	Int. Gear (150 FPM)	24-04980-001	1
6288	Int. Gear (75 FPM)	24-04980-002	1
	Int. Gear (100 FPM)	24-04980-006	1
	Int. Pinion (150 FPM)	24-04979-001	1
6289	Int. Pinion (75 FPM)	24-04979-002	1
	Int. Pinion (100 FPM)	24-04979-006	1
6290	Key	6-11-024-034-0	1
6291	Ball Bearing	6-30-041-204-0	1
6302	Now A Part Of Item 6307		
6303	Key	6-11-026-088-0	1
6304	Friction Disc	22-07965-002	1
6305	Oil Seal	22-08130-001	1
6306	Ball Bearing	6-30-041-203-0	1
6307	Oil Slinger	22-08908-001	1
6308	Snap Ring	22-06497-026	2
6309	Bearing Spacer	6-23-020-032-0	6
6310	Gearcase	25-02420-002	1
6311	Drive Housing (Fluid Coupling)	24-04939-001	1
	Drive Housing (1"C" Face 5 7/8BC)	24-04992-002	1
	Drive Housing (C Face 7 1/4 BC)	24-04992-001	1
	3/4 HP @ 1800 RPM Fluid Dr.	23-07703-001	1
	1 1/2 HP @ 1800 RPM Fluid Dr.	23-07703-002	1
6312	3 HP @ 1800 RPM Fluid Dr.	23-07703-003	1
	1 1/2 HP @ 1800 RPM Var. Speed	22-09038-001	1
	3 HP @ 1800 RPM Var. Speed	22-08116-004	1
6313	Motor Extension Shaft	23-06495-003	1
6314	Coupling (Fluid Drive)	22-08773-005	1
	Coupling (Var-Speed)	23-05935-002	1

SM DRIVES

SM CENTER DRIVE
GEARCASE AND
MISCELLANEOUS PARTS

1-2

MAY 1983

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
6315	Oil Seal	22-06499-001	1
6316	Ball Bearing	6-30-041-204-0	1
6317	Ball Bearing	6-30-041-203-0	1
6318	Int. Shaft	22-08907-001	1
6319	Bearing Spacer	6-23-020-036-0	5
6320	Gear Case Cover	24-04938-002	1
6321	Gasket	22-08904-001	1
6322	Motor Gear	23-06494-001	1
6323	Bearing Spacer	6-23-020-009-0	1
6324	Ball Bearing	6-30-020-111-1	1
6325	Output Shaft	23-06496-001	1
6326	Oil Seal	22-02553-001	1
6327	Bearing Cap	22-08779-001	1
BRAKE PARTS			
5952	O'Ring Gasket	22-09461-001	1
5955	Snap Ring	22-06497-026	1
5957	Disc Hub	22-08000-023	1
5958	Friction Disc	22-07965-002	2
▷ 5959	Armature Plate Assy.	23-06374-001	1
▷ 5960	Brake Stud	23-03645-022	2
5961	Springs	22-03615-010	2
5962	Adjusting Nut	22-08470-002	1
▷ 5963	Coil (230V)	22-08269-001	1
▷ 5964	Pole Plate Assy.	23-06314-001	1
5966	Brake Cover	23-06312-001	1
6918	Int. Disc	23-06313-001	1
6295	Hex Nut	6-14-005-023-1	2

▷ Old style parts may not be available. If unavailable, brake may be serviced by converting to a new style type R4 brake.

230 Volt "M to R" kit
460 Volt "M to R" kit

27-12041-007
27-12041-008