



MAGNETEK
MATERIAL HANDLING

Mondel Brakes

Bearing Replacement Bushing Kit

Technical Bulletin #: 560004-R1

Mondel

- **Bushings directly replace bearings supplied with the original brake. Bearing replacement may be done with the brake while installed. Understand and follow established safety procedures as well as the warnings given here and in the brake instruction manual.**
- **Anyone involved in the installation or service of this brake must have:**
 - Received specific training.
 - Had experience on similar equipment.
 - Knowledge of the equipment on which the brake is installed.
 - The ability to understand the terminology.
 - The ability to understand the diagrams.
- **Do not proceed unless technically qualified for the work involved.**
- **Competent personnel must disconnect all electrical power to this equipment. Consult specific wiring diagrams to identify and isolate all live power inputs to the equipment.**
- **Unexpected movement or hazardous voltage can cause injury or death. Disconnect, lock out, and tag out the power source that feeds this device to prevent power from being applied while service is being performed. Before beginning any service work, try the operational controls to verify that the intended power source is disconnected.**
- **On a hoist, chock the drum to prevent any rotation due to the effect of gravity on the hook block etc.**
- **Remove or contain any spring force having effect on the bearing units.**
- **Protect against the possibility of movement due to the effects of gravity, wind or other source of energy, which has the potential to create a hazard when the brake is being worked on or is removed entirely.**
- **On the travel motion subject to the effect of wind or camber gradient, apply the wind anchors or otherwise secure the equipment against inadvertent movement when the brake is being worked on or is removed entirely.**
- **Ensure a safe working environment and allow adequate work space. Support any brake component, which will be set free during the bearing replacement procedure.**
- **Following on-site service to a brake, and before returning it to service, verify all adjustments and perform an operational test. Procedures are given in the brake instruction manual.**

1.0: General Description

1.1: The outer race component is made from a composite material with a self-lubricating surface coating on the bore. The steel inner race component is precision machined and then nitrided. This combination needs no supplementary lubrication and provides superior, long-term service. Each unit replacement kit consists of:

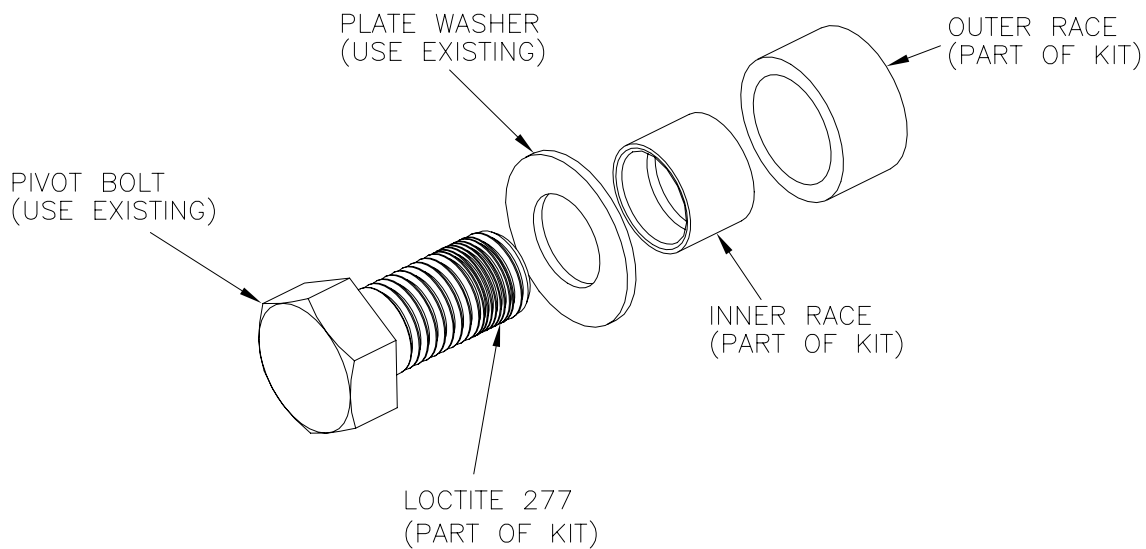
1.1.(a): Outer race – 1 only

1.1.(b): Inner race – 1 only

1.1.(c): Loctite – 1 only

Figure 1

General Arrangement Bearing Replacement Bushing Kit



2.0: Installation

2.1: Observe all warning and cautions when servicing an installed brake.

2.2: Verify the replacement kit part number is correct as shown in Table 1, 2 or 3.

2.3: Prepare and thoroughly clean the area surrounding the bearings; wire brush if necessary to remove any rust, scale or caked-on-dirt.

2.4: Remove and exchange each bearing unit in turn as follows:

2.4.(a): Loosen and remove the pivot bolt.

2.4.(b): Remove and discard both components of the old needle bearing unit. Retain the pivot bolt and plate washer for re-use. Additional cleaning will be required before attempting to fit the new bearing.

2.4.(c): Install the outer race component of the new bearing. Note that this is intended to be a light sliding fit, not an interference fit.

2.4.(d): Install the inner race component of the new bearing and check for its freedom to rotate within the outer race.

2.4.(e): Install the pivot bolt and plate washer exactly as shown in Fig. 1.

2.4.(f): Tighten the pivot bolt and torque to the value specified for the appropriate brake size and type as listed in table 1, 2 or 3.

2.4.(g): Repeat the installation procedure for each bearing.

2.4.(h): Adjust and test the brake as required. For detailed instruction refer to the original brake manual.

3.0: Bushing Part Numbers

Table 1: Kit Part Number for MBT and MBT/E Brakes

Brake Size Inches	Outer Race	Inner Race	Qty	Loctite	Bushing Kit*	Pivot Bolt Torque Ft-lb
5	310250	310198	8	282013	912098	25
8	310251	310199	8	282013	912099	80
10	310252	310200	8	282013	912100	90
13	310253	310201	8	282013	912101	130
16	310255	310203	8	282013	912102	230
19	310256	310204	8	282013	912103	400
23	310256	310205	8	282013	912104	500
30	310257	310206	8	282013	912105	600

Table 2: Kit Part Number for MBE and MBEM Brakes

Brake Size Inches	Outer Race	Inner Race	Qty	Loctite	Bushing Kit*	Pivot Bolt Torque ft-lb
5	310250	310198	12	282013	912080	25
8	310251	310199	12	282013	912081	80
10	310252	310200	12	282013	912082	90
13	310253	310201	10	282013	912083	130
	310254	310202	2			
16	310255	310203	12	282013	912084	230
19	310256	310204	12	282013	912085	400
23	310256	310205	12	282013	912086	500
30	300017	310206	12	282013	912087	600

Table 3: Kit Part Number for MBM Brakes

Brake Size Inches	Outer Race	Inner Race	Qty	Loctite	Bushing Kit*	Pivot Bolt Torque ft-lb
5	310250	310198	8	282013	912098	25
8	310251	310199	8	282013	912099	80
10	310252	310200	8	282013	912100	90
13	310253	310201	8	282013	912101	130
16	310255	310203	8	282013	912102	230
19	310256	310204	8	282013	912103	400

***Each kit has sufficient replacement assemblies for one brake.**