



REPLACING THE 42032Fxx BEARING HOUSING

MSSM0285AE/2000483V

DANGER: ENTANGLE AND CRUSH HAZARD



Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

-  Do not service unless qualified and authorized.
-  Lock OFF and tag out power at the wall disconnect before servicing the bearing housing.

Required Kit and Materials—Refer to BMP950010 for bearing assembly parts. This procedure only covers bearing housing replacement. Due to the exacting internal tolerances bearing housings require, we do not recommend that you re-build the bearing housing, but rather that it be returned to Milnor for re-building or exchange. Have available the following items on hand before replacing a bearing housing: bearing and fixture kit KMBRGPULLR and cylinder puller kit PK10 0010 or equivalent, (available from Milnor on a rental or purchase basis), loctite 242 and primer (or equivalents), a hoist, and a lifting sling.

Preparation—Referring to FIGURE 1, lower the motor platform to loosen the final drive belt. Do not move the top nuts as they are a reference when retightening bolts

1. Drive wedges between the cylinder and the shell front at eight places then clamp the cylinder to the shell front as shown in FIGURE 2.
2. Remove the cylinder retainer bolt (FIGURE 3), cover, spacer and the two allen screws covering the puller mounting holes. Mount hydraulic ram to the cylinder using the 7" positioning bolt and kit plate as shown in Figure 4. Connect hydraulic pump to ram.
3. Remove 4 equally spaced bearing housing bolts. Replace these bearing housing bolts with guide pins (FIGURE 11). The guide pins support the loosened bearing housing until it can be removed. Thread four bolts into the bearing push-off holes.
4. Remove rear pulley bolts. Thread a bolt into rear of bearing shaft to protect the threads from the pulling fixture bolt (FIGURE 5). Install pulling fixture and remove pulley (FIGURE 6).

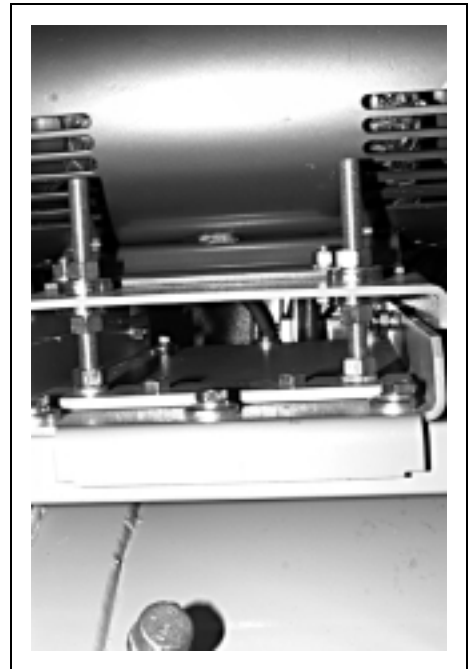


FIGURE 1 (MSSM0285AE)
Motor Mount



FIGURE 2 MSSM0285AE
Cylinder Clamp

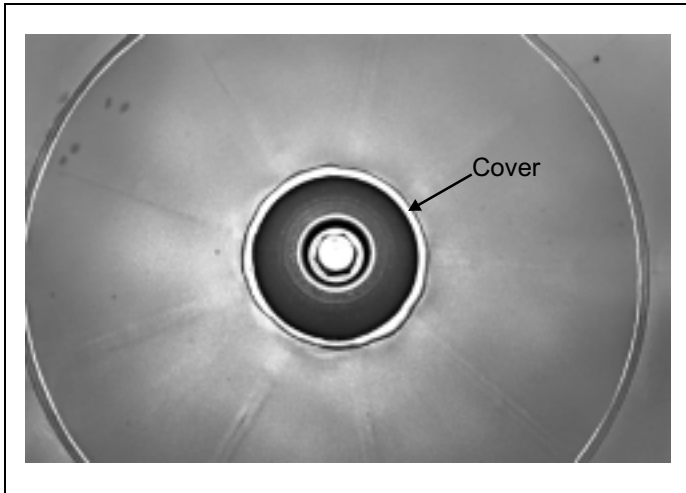


FIGURE 3
Cylinder Retainer Bolt

5. Remove all remaining bearing bolts and turn each push-off bolt about a quarter of a turn in order to assist in bearing removal.
6. Pump hydraulic ram to push the bearing housing out of the mounting ring. Once housing is free of the mounting ring, use the push-off bolts to continue pushing the bearing housing along the guide pins until the tapered hub is free from mounting ring.

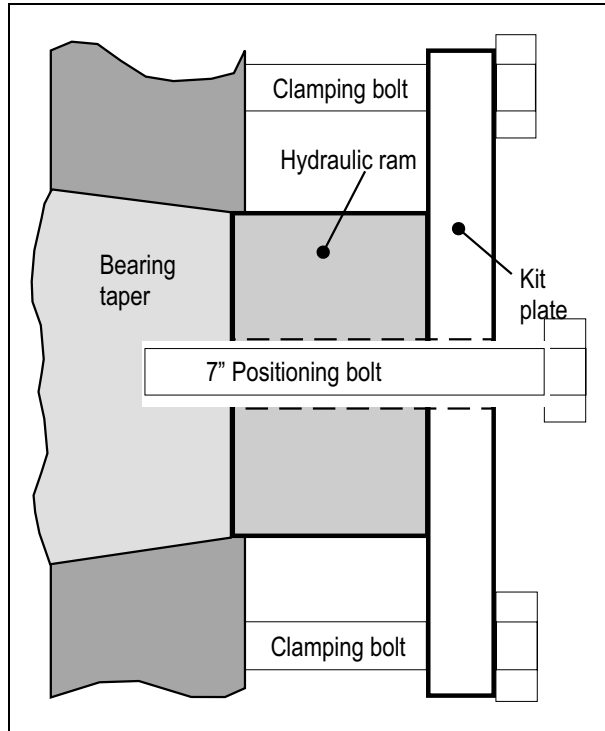


FIGURE 4
Mounting Hydraulic Ram to Remove Cylinder

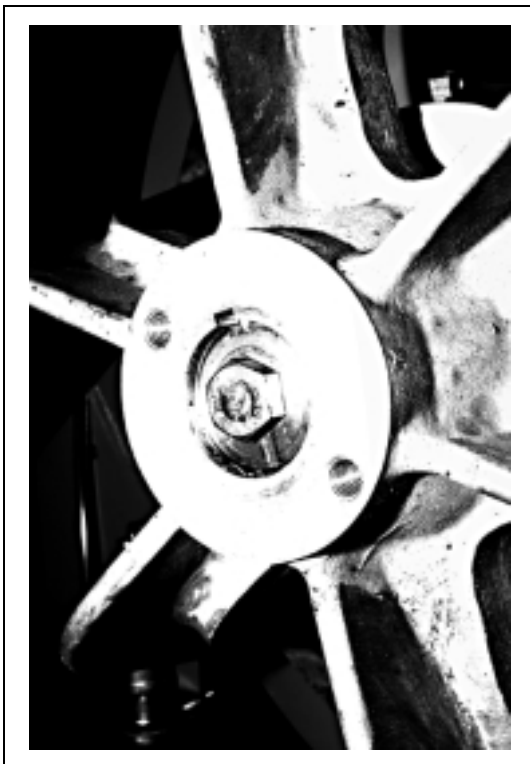


FIGURE 5 (MSSM0285AE)
Protecting Bearing Shaft Threads

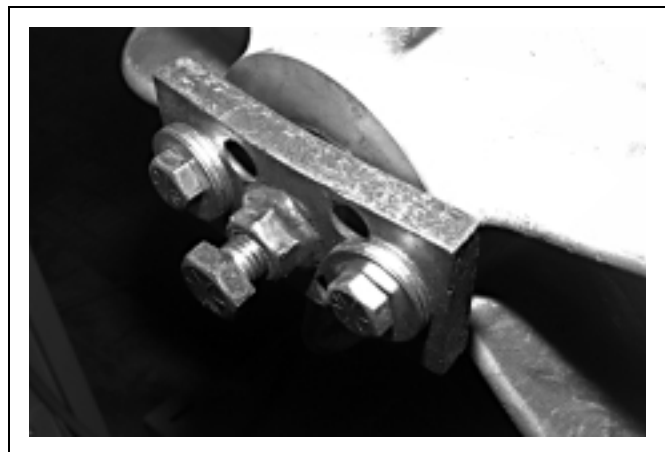


FIGURE 6 (MSSM0285AE)
Pulley Pulling Fixture



FIGURE 7 (MSSM0285AE)
Removing Fan For Hoist Clearance



FIGURE 8 (MSSM0285AE)
Bearing Support Fixture in Place

Rigging the Bearing Support Fixture and Removing the Bearing

1. Remove the electric fan (FIGURE 7).
2. Mount eye-bolt on the bearing support fixture and place on top of the machine (FIGURE 7). Disconnect grease lines from housing.
3. Install hoist and sling (FIGURES 9, 10, and 11).

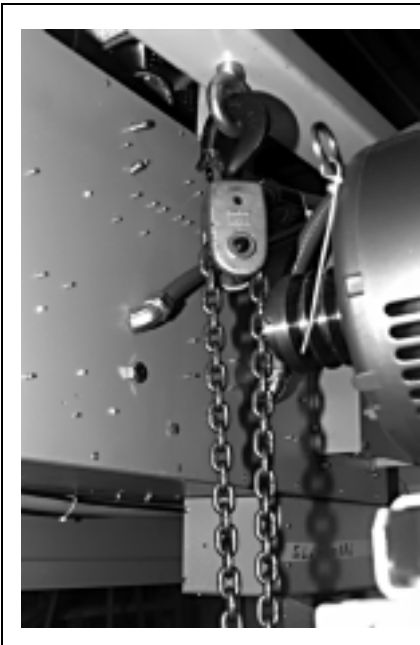


FIGURE 9 (MSSM0285AE)
Attaching Hoist to Eye-bolt on
Bearing Support Fixture



FIGURE 10 (MSSM0285AE)
Bearing Housing Sling Details

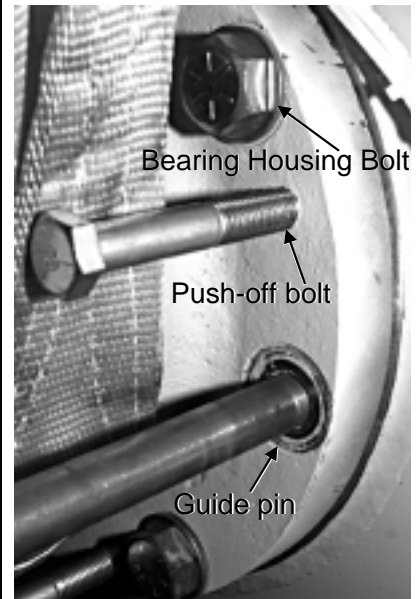


FIGURE 11 (MSSM0285AE)
Identifying Bearing Housing Bolts,
Push-off bolts, and Guide Pins

Re-installing the Bearing Housing

1. Use trichloroethene and light sanding to remove old Loctite from mounting ring surfaces. Retap mounting holes and blow out with compressed air.
2. Install new O-ring on bearing housing (Figure 12). Clean and de-burr mounting surfaces of bearing housing and shaft hub.
3. Position housing and shaft in machine. Make sure the bottom of the housing (identified by the drain slot) is on the bottom.
4. Install guide pins through the bearing housing and into the mounting ring. Leave hoist and strap attached until bearing is firmly mounted in mounting ring. Push the housing along the guide pins into the mounting ring. Apply Loctite primer to each bearing bolt. Do not wipe clean. Apply loctite 242 to primered bolts. Torque bolts to 1,018 foot-pounds (1,381 newton-meters).
5. Install the key in the hub.



FIGURE 12 (MSSM0285AE)
Bearing O-Ring

Re-installing the Cylinder

Assemble the hydraulic ram as shown in Figure 13. Use the cylinder retainer bolt cover (Figure 3), and the 7" long positioning bolt from the cylinder puller kit.

1. Mount hydraulic ram on the bearing hub and pressurize pump.
2. Periodically stop during the pressing process and check how far the cylinder has moved up the bearing hub. Stop pressing when cylinder is 1/16-1/32" of an inch from end of the hub (Figure 14). If the cylinder does not stop where indicated, and pushes flush with the bearing taper, then check the bearing taper.

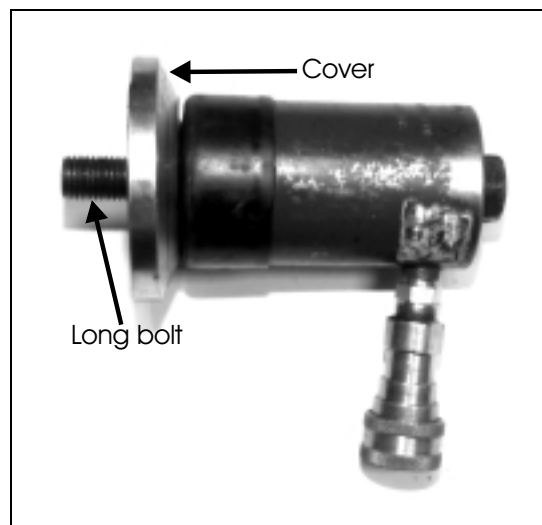


FIGURE 13 (MSSM0285AE)
Assembling the Ram for Cylinder Installation

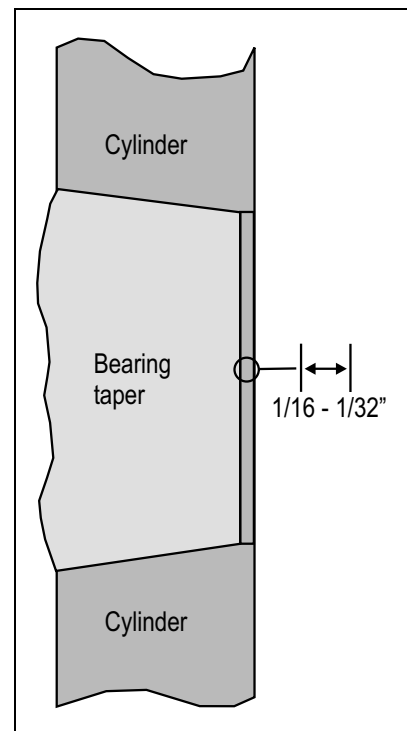


FIGURE 14 (MSSM0285AE)
Required Clearance between
Bearing Taper and Installed
Cylinder