1. OMC Nut Lock
2. OMC Triple-Guard® Grease
3. RTV Sealer
4. Ultra 1500™
5. OMC Gasket Sealing Compound
6. OMC Ultra Lock-271

A. 45 in. lbs. (5 N·m)
B. 84 in. lbs. (9 N·m)
C. 162 in. lbs. (18 N·m)
Steering Nozzle, Reverse Gate, and Linkage

Disassembly

1. Remove screws retaining linkage to the steering nozzle and reverse gate. Remove linkage.

2. Remove bushings from linkage and discard. Inspect linkage and replace if necessary.

3. Remove linkage arm from reverse gate. Remove screws retaining gate to steering nozzle.

4. Remove bushings from reverse gate and discard. Inspect reverse gate for damage.

5. Remove the screws retaining the steering nozzle to the impeller nozzle. Remove the nozzle and discard the bushings.

6. Remove the screws and washers retaining the impeller nozzle and remove nozzle.

Assembly

7. Apply OMC Nut Lock to threads of impeller nozzle to impeller housing screws. Secure impeller nozzle to impeller housing with screws and washers. Torque to 80-90 in. lbs. (9-10 N-m).
2. Install new bushings in steering nozzle. Apply OMC Ultra Lock to threads of screws. Install steering nozzle on impeller nozzle. Torque screws to 162 in. lbs. (18 N-m).

3. Install new bushings in reverse gate. Apply OMC Ultra Lock to threads of screws. Install gate on steering nozzle and linkage arm to gate. Torque screws to 162 in. lbs. (18 N-m).

4. Install new linkage bushings in respective linkage. Apply OMC Ultra Lock to threads of all linkage screws. Install linkage on steering nozzle and reverse gate. Refer to Service Chart for torque values.

**Impeller Housing**

**Disassembly**

1. Disconnect clamps to remove impeller housing and nozzle assembly.

2. Remove O-rings from impeller housing and discard.

3. Remove relief plug, O-ring, spring, and ball from impeller housing. Check for damage or deterioration and replace any parts required. Install parts and tighten plug securely.

4. Refer to nozzle servicing described earlier in this section for removal of nozzle assemblies.

5. Remove the three screws and washers retaining the cover to the impeller housing. Remove the cover.
6. Remove O-rings from cover and discard. Inspect cover.

7. Place OMC Spline Shaft, P/N 341273, in impeller and secure other end of shaft in a vise. Remove impeller shaft from impeller.

8. Pry seal from impeller and discard seal. Inspect impeller for nicks, cracks, or distortion.

9. Remove O-rings from impeller shaft and discard. Inspect shaft.

10. Remove screws and washers retaining shift cable clamp from impeller housing. Remove clamp.

11. Remove internal shaft bearing using OMC Puller Bridge, P/N 432127, and OMC Large Puller, P/N 432129. Discard bearing.

12. Remove sleeve from inside seal.
13. Remove pump impeller seals with bearing using OMC Puller Bridge, P/N 432127 and OMC Small Puller, P/N 432131. Discard seals and bearing.

Assembly

1. Apply gear lubricant to a new pump impeller housing bearing and press in housing, lettered side up, using OMC Bearing Installer, P/N 326578. Press until seated.

2. Apply OMC Gasket Sealing Compound to the metal casings of two new impeller housing seals. Install seals, one at a time, lips side up, using OMC Seal Installer, P/N 326546. Press first seal in until seated, and second seal until flush with housing. Apply OMC Triple-Guard Grease to the seal lips after installing.

3. Install sleeve inside seals, pushing it in until seated. Sleeve can be installed by either end.

4. Apply gear lubricant to a new internal shaft bearing. Press in bearing, lettered side up, using OMC Bearing Installer, P/N 912271, until seated.

5. Apply OMC Ultra Lock to threads of shift cable clamp screws and secure to housing. Torque 5 mm screw to 45 in. lbs. (5 N·m), 6 mm screw to 84 in. lbs. (9 N·m).

6. Apply OMC Triple-Guard Grease to new impeller shaft O-rings and install on impeller shaft.


8. Apply OMC Nut Lock to threads of impeller shaft and install in impeller. Torque to 70-75 ft. lbs. (95-102 N·m).

9. Lightly apply RTV Sealer to both O-ring grooves in the cover. Install new O-rings.

10. Apply OMC Nut Lock to threads of cover screws. Install cover on impeller housing. Torque the screws to 80-90 in. lbs. (9-10 N·m).

11. Install new O-rings on the forward end of the impeller housing. Lightly apply Ultra 500 on housing side of the O-rings to hold them in place.