

SERVICE INSTRUCTIONS FOR THE RE [505 & 506] SERIES MOTORS

For Use With Seal Kit: 500444505 & 500444506

dimensions: mm [in]

- A) Remove all shaft related components from shaft (22) (i.e. keys, wire rings, nuts).

SEAL CARRIER DISASSEMBLY AND ASSEMBLY

- B) Secure housing (11) in a vise with the output shaft (22) facing up. Loosen and remove the nine seal carrier bolts (26) and nine seal carrier bolt washers (25) and lay aside. Place 2 of the seal carrier bolts (26) into the jack screw holes in the seal carrier (24) and tighten evenly to lift seal carrier (24) off housing (11) and shaft (22). Remove the seal carrier seal (5) out of the groove in the housing (11) and discard seal. Be careful to leave the shaft (22) in the motor to not disturb the internal housing bearings (12 & 14).
- C) If thrust washer (9) or thrust bearing (10) came out when removing the seal carrier (24), replace them back in housing (11) on top of the shaft (22) with the thrust bearing resting on the shaft and the thrust washer on top of the thrust bearing.
- D) Carefully remove dust seal (1) from the outer bore of the seal carrier (24) and discard seal. Carefully remove the shaft seal (4), backup seal (3) and backup shim (2) from the inner bore of the seal carrier (24) and discard all seals.
- E) At this point, all parts should be cleaned in an oil-base solvent and dried using compressed air (For safety, observe all OSHA safety guidelines). All new seals should be lightly coated in clean oil prior to installation.
- F) Install a new seal carrier seal (5) in groove in housing (11). Place the seal carrier (24) on a clean flat surface with the countersunk bolt holes facing up. Install a new dust seal (1) in the groove in the seal carrier with the lip facing up. Press seal evenly into groove until seated.
- G) Turn the seal carrier over install the new backup shim (2), followed by the backup seal (3) and finally the shaft seal (4). Press the shaft seal evenly until seated in the seal carrier (24). Refer to Figure 1 for proper direction and orientation of the seal carrier components.
- H) Place the seal carrier (24) over the shaft (23) and onto housing (11) lining up the bolt holes and making sure the dust seal is facing up. Extra caution should be used to minimize contact of the shaft seal with the slotted keyway in the shaft. Place the nine washers (25) into the seal carrier followed by the nine bolts (26).
- I) Using a criss-cross pattern evenly tighten the seal carrier bolts (26). Final torque bolts to 17-21 Nm [150-185 lb-in]. If servicing the entire unit, continue to Step I.

REPLACING THE SEALS IN THE REAR PORTION OF THE UNIT

- J) To aid in reassembly of the motor, make a "V" shaped set of lines from the endcover (20) to the housing (11) using either paint or a marker. With the shaft facing down, secure the motor in a vise by clamping onto the housing (11). Loosen and remove the seven bolts (21) holding the motor assembly together. Remove the endcover (20) and the endcover seal (8) and discard seal.
- K) Remove the balance plate (18), being careful not to allow the three check balls (19) to fall out of the balance plate. Remove the rotor set (17) and the manifold (16) from the motor.
- L) Remove both body seals (7) from the rotor set (17) and the housing seal (6) from the housing (11) and discard all seals. It is not necessary to remove the thrust bearing (10), drive link (15) or shaft (22) from the unit.
- M) At this point, all parts should be cleaned in an oil-based solvent and dried using compressed air, (for safety, observe all OSHA safety guidelines). All new seals should be lightly coated in clean oil prior to installation. Use the "V" shaped set of lines as reference when reassembling the unit.
- N) Install a new housing seal (6) into the groove in the rear of the housing (11). Place the manifold (16) over the drive link (15) and onto the housing (11) making sure the teardrop shapes in the manifold face the housing. Place new body seals (7) into both sides of the rotor set (17) and lower onto the manifold (16) making sure that the side of the rotor with the chamfer in the splines faces the manifold.
- O) Place balance plate (18) onto the rotor set (17) making sure that the three steel balls (19) are still seated in the holes in the balance plate (18).
- P) Install a new endcover seal (8) into the groove in the endcover (20) and lower the endcover onto the balance plate (18).
- Q) Install the seven assembly bolts (21) and pre-torque to 13.6 Nm [10 lb-ft]. Using a criss-cross pattern, final torque all bolts to 67.8 Nm [50 lb-ft].

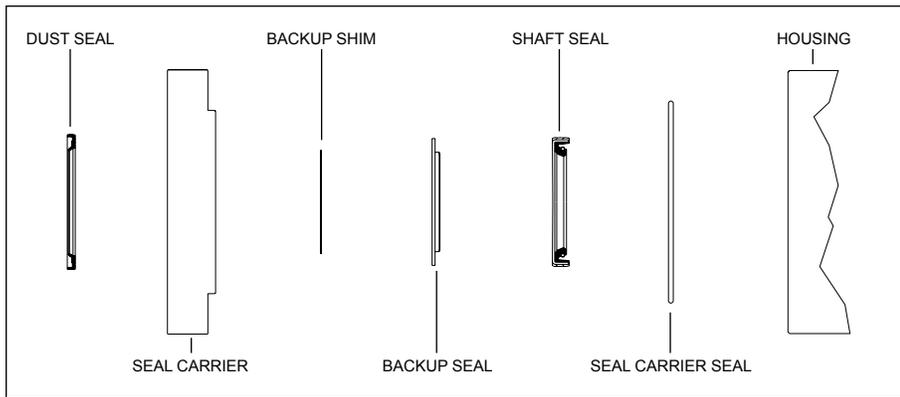
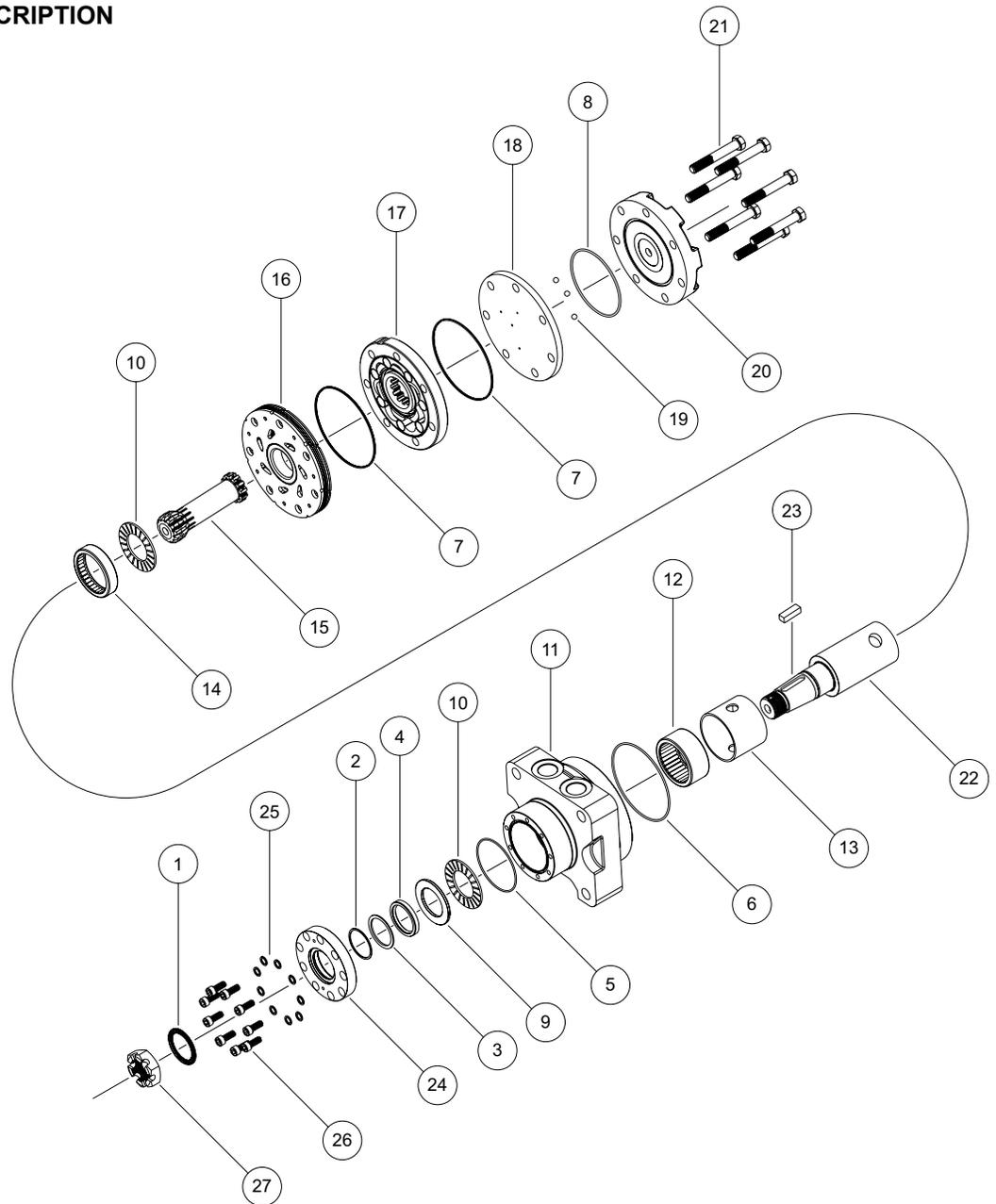


FIGURE 1

EXPLODED VIEW PARTS DESCRIPTION

- 1. †* Dust Seal
- 2. †* Backup Shim
- 3. †* Backup Seal
- 4. †* Shaft Seal
- 5. †* Seal Carrier Seal
- 6. † Housing Seal
- 7. † Body Seal (2)
- 8. † Endcover Seal
- 9. Thrust Washer
- 10. Thrust Bearing
- 11. Housing
- 12. Front Housing Bearing
- 13. Bearing Spacer
- 14. Rear Housing Bearing
- 15. Drive Link
- 16. Manifold
- 17. Rotor Set
- 18. Balance Plate
- 19. Steel Ball (3)
- 20. Endcover
- 21. Assembly Bolt (7)
- 22. Shaft
- 23. Shaft Key
- 24. Seal Carrier
- 25. Seal Carrier Bolt Washer (9)
- 26. Seal Carrier Bolt (9)
- 27. Shaft Nut



* Included in Seal Kit 500444505

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