

SERVICE INSTRUCTIONS FOR THE FD [950] SERIES FLOW DIVIDERS

For Use With Seal Kit: 950777000

dimensions: mm [in]

NOTE: Because of the need for proper internal timing of components and the difficulties involved in assembling the 2, 3, 4, 5, & 6-way flow dividers, White Drive Products strongly recommends returning flow dividers to the factory for service. To obtain return authorization and procedures, contact your nearest White Drive Products distributor.

NOTE: THIS SERVICE PROCEDURE IS INTENDED FOR SERVICING 2-WAY FLOW DIVIDERS ONLY.

- A) To aid in reassembly, make a "V" shaped set of lines from both endcovers (5) to the ported divider (11) using either paint or a marker. With endcover (5) with seven nuts (4) showing facing down, secure flow divider in vise by clamping onto either ported divider (11) or rotor assembly (9).
- B) Loosen and remove seven bolts (15) from endcover (5). Remove endcover (5) and discard endcover seal (1). Remove balance plate (7), taking care not to drop the three steel balls (6) located in the three holes in the balance plate (7).
- C) Remove rotor assembly (9) and discard the two body seals (2). Remove drive link spacer (8) (NOTE: There may be one, two or none at all). Remove manifold (14). Remove and discard housing seal (3).
- D) Turn flow divider over and secure in vise. Repeat steps B and C for this end of flow divider. Also remove drive link (13).

At this point, all parts should be cleaned in an oil-based solvent and dried using compressed air (For safety, observe all OSHA safety guide lines). All new seals should be lightly coated in clean oil prior to installation.

- E) Place ported divider (11) on work surface with side with two ports facing up. Insert three capscrews (12) through holes 1, 2 & 3 (See Figure 1) in ported divider (11) so that capscrew heads are in countersunk hole. Insert the short end of three "L" shaped allen wrenches in the heads of the three capscrews and turn ported divider (11) over so that it rests on the three allen wrenches (threaded ends of capscrews will now face up). Install housing seal (3) in groove in ported divider (11).
- F) Using a marker, mark the valley between any two splines on one end of drive link (See Figure 2). Continue line straight down body of drive link and mark corresponding valley on other end of drive link. (Make sure mark is visible from the ends of the drive link). Place drive link (13) through center of ported divider (11). Place manifold (10) onto ported divider making sure that side with seven holes faces ported divider (11).
- G) Install a body seal (2) into the groove in both sides of the rotor assembly (9). Place rotor assembly (9) over capscrews (12) and onto manifold (10) making sure that chamfer in splines on rotor faces manifold (10). Align mark on drive link (13) with a lobe of the rotor (See Figure 3). Place drive link spacer(s) (8) on top of drive link (13) if required.
- H) Place balance plate (7) on rotor assembly (9) with three holes for steel balls (6) facing up. Install steel balls (6) into holes in balance plate (7). Install endcover seal (1) into endcover (5). Place endcover over capscrews (12) and on to balance plate (7). Install nuts (4) on capscrews (12) and pre-torque to 13,6 Nm [10 ft. lb.]. Install remaining four capscrews (13) and nuts (4) and pre-torque to 13,6 Nm [10 ft. lb.]. Using bolt torque sequence shown in Figure 1, torque nuts to 69,8 ± 7,5 Nm [51.5 ± 5.5 ft. lb.].
- I) Secure flow divider in vise with assembled portion facing down. Place housing seal (3) into groove in ported divider (11). Place manifold (14) onto ported divider (11) making sure that side with seven holes faces ported divider, and align bolt holes.
- J) Install a body seal (2) in the groove in both sides of rotor assembly (9). Place rotor assembly (9) over drive link (13) making sure that chamfer in splines on rotor faces manifold and mark on drive link (13) is aligned with a valley of rotor (See Figure 3). Place drive link spacer(s) (8) on top of drive link (13) if required.
- K) Place balance plate (7) on rotor assembly (9) with three holes for steel balls (6) facing up. Install three steel balls (6) into holes in balance plate (7). (Check to make sure "V" shaped lines are aligned). Place endcover seal (1) in groove in endcover (5). Place endcover (5) onto balance plate (7) and align bolt holes. Install seven bolts (15) and pre-torque to 13,6 Nm [10 ft. lb.]. Using bolt torque sequence in Figure 1, torque all bolts to 69,8 ± 7,5 Nm [51.5 ± 5.5 ft. lb.].

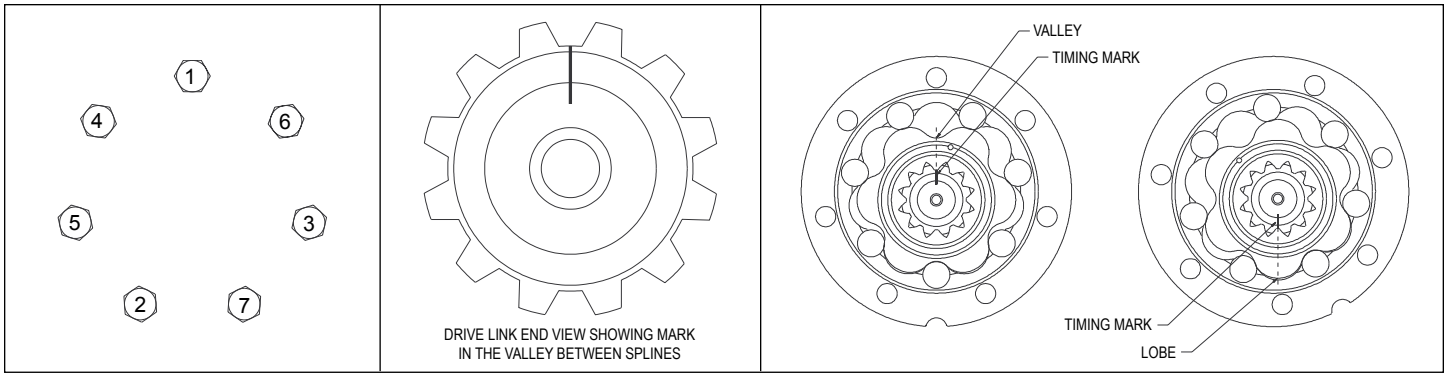
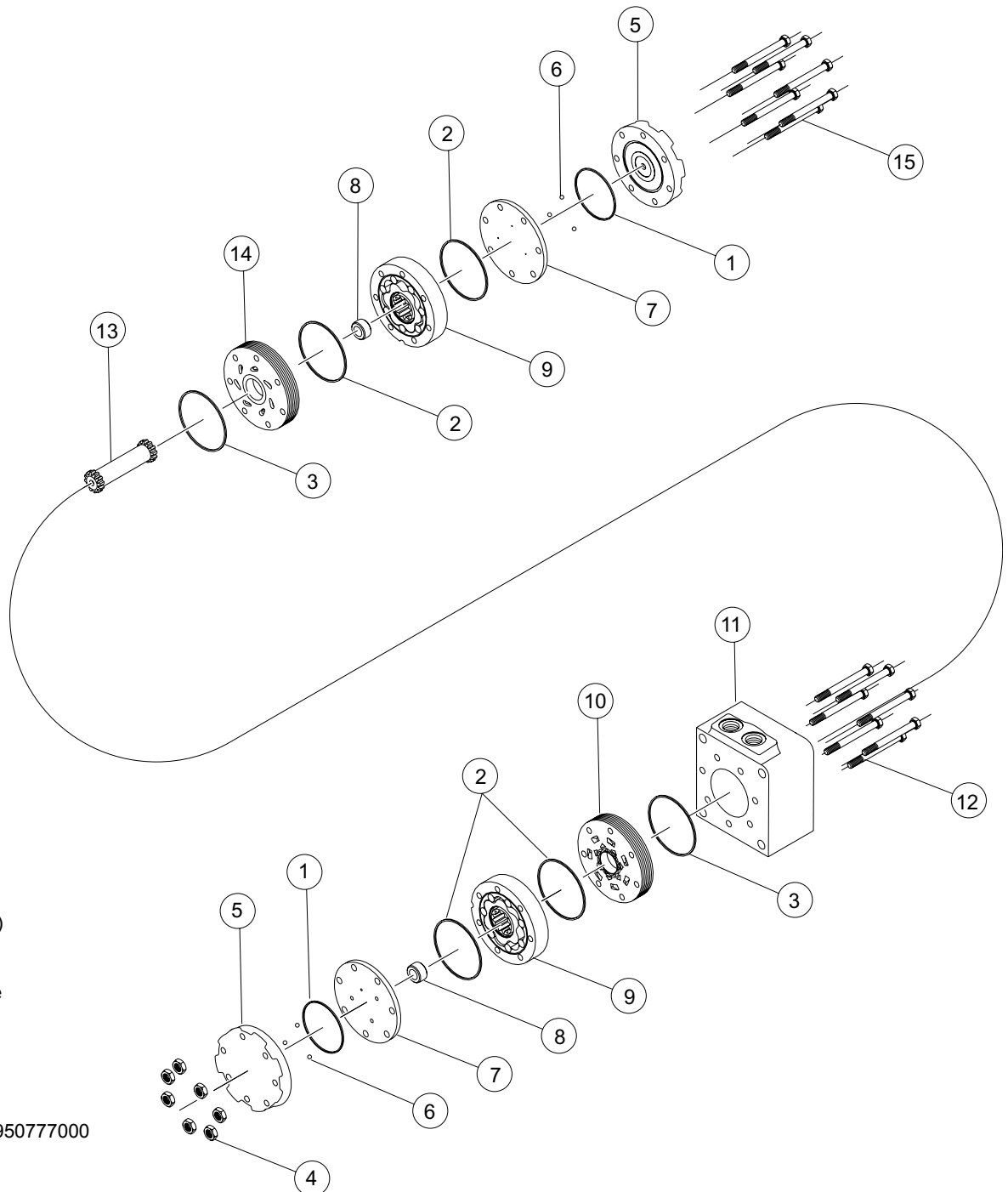


FIGURE 1

FIGURE 2

FIGURE 3



- 1. * Endcover Seals (2)
- 2. * Body Seals (4)
- 3. * Housing Seals (2)
- 4. Nuts (7)
- 5. Endcovers (2)
- 6. Steel Balls (6)
- 7. Balance Plates (2)
- 8. Spacer(s) (0, 2 or 4)
- 9. Rotor Assembly (2)
- 10. Forward Manifold
- 11. Ported Divider Plate
- 12. Capscrews (7)
- 13. Drive Link
- 14. Reverse Manifold
- 15. Bolts (7)

* Contained in Seal Kit 950777000