

STEERING VALVE

Service Instructions

DISASSEMBLY

(Refer to Figures 1 and 2)

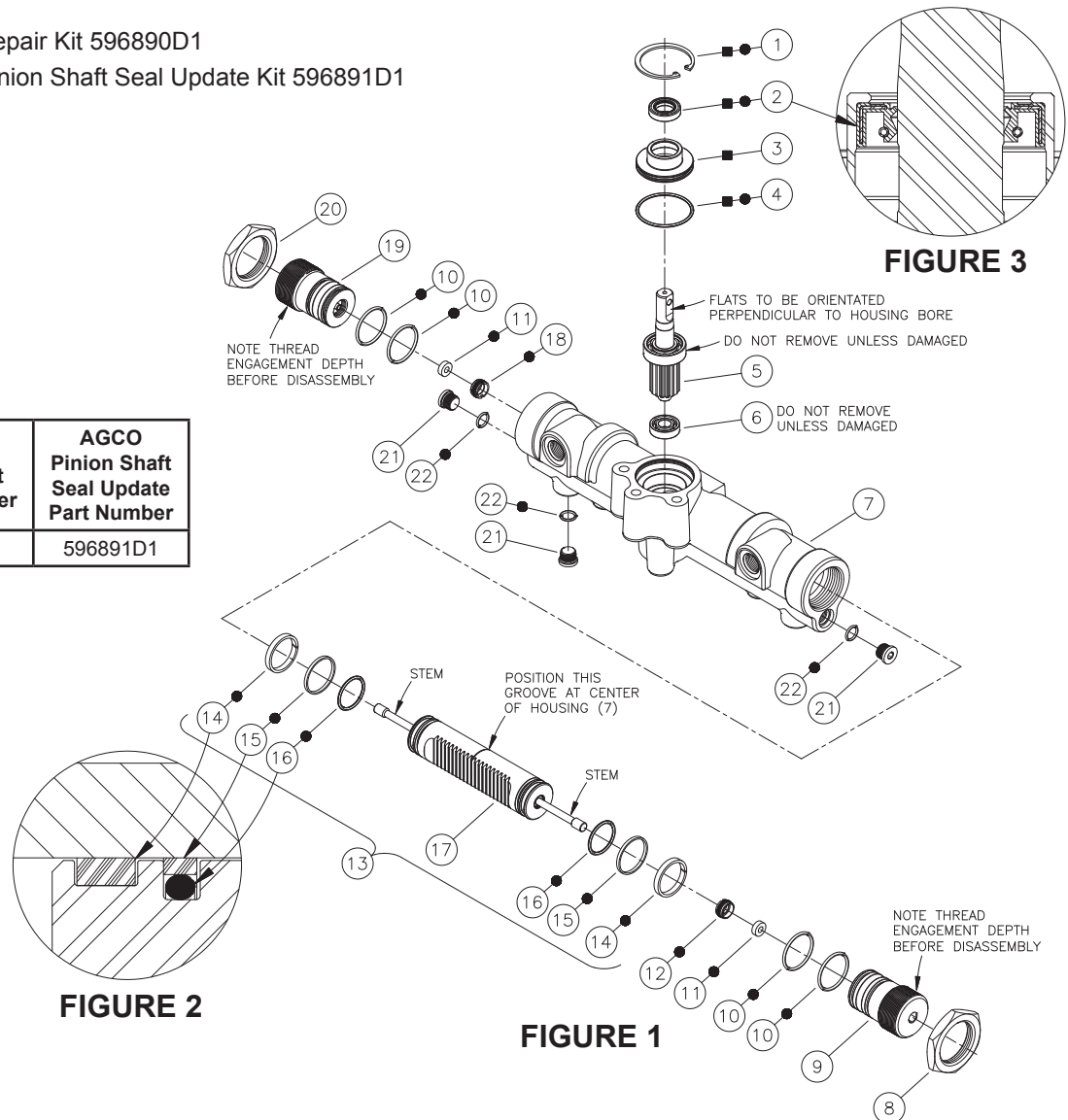
1. Remove retaining ring (1) from housing (7).
2. Note orientation of flats on pinion shaft (5). Remove pinion shaft (5) and retainer (3) from housing (7). Bearing (6) need not be removed from housing (7) unless damaged.
3. Remove shaft seal (2) and o-ring (4) from retainer (3). Bearing on pinion shaft (5) need not be removed unless damaged. Note direction of shaft seal (2), see Figure 3.
4. Use a hex key wrench to hold plug (9) from turning while removing nut (8). Note and record thread engagement depth of plug (9) into housing (7) before removing plug (9). Remove plug (9) from housing (7).
5. Remove two o-rings (10) from plug (9).
6. Remove retainer (12) and seat (11) from plug (9).
7. Use a hex key wrench to hold plug (19) from turning while removing nut (20). Note and record thread engagement depth of plug (19) into housing (7) before removing plug (19). Remove plug (19) from housing (7).
8. Remove two o-rings (10) from plug (19).
9. Remove retainer (18) and seat (11) from plug (19).
10. Remove piston assembly (13) from housing (7).
NOTE: Be careful not to damage piston (13) or housing (7) bore.
11. Carefully remove rings (14), rings (15), and o-rings (16) from piston (17). **NOTE: Be careful not to damage piston (17). Stems and springs inside piston (17) need not be removed unless damaged.**
12. Remove three plugs (21) from housing (7). Remove o-rings (22) from plugs (21).

continued...

● Items included in Repair Kit 596890D1

■ Items included in Pinion Shaft Seal Update Kit 596891D1

AGCO Part Number	AGCO Repair Kit Part Number	AGCO Pinion Shaft Seal Update Part Number
596889D1	596890D1	596891D1



ASSEMBLY

(Refer to Figures 1 and 2)

CLEAN ALL PARTS THOROUGHLY WITH CLEAN SOLVENT AND LET DRY. LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM. BE SURE ENTIRE ASSEMBLY PROCEDURE IS DONE USING CONTAMINATION FREE METHODS.

1. Install new o-rings (16), new rings (15) and new rings (14) on piston (17). See Figure 2. **NOTE: Be careful not to damage piston (17).**
2. Install piston assembly (13) in housing (7) bore. Position as shown with groove in piston (17) at the center of housing (7).
3. Install pinion shaft (5) in housing (7) by pressing against inner race of the bearing on pinion shaft (5) as necessary until properly seated. Be sure flats on pinion shaft (5) are positioned as shown in Figure 1 and piston assembly(13) remains in position.
4. Install new o-ring (4) and new shaft seal (2) on retainer (3). Install retainer (3) and new retaining ring (1) in housing (7). Note direction of retainer (3) and shaft seal (2), see Figure 3.
5. Install new seat (11) in new retainer (12). Install new retainer (12) in plug (9) and torque 11.3-13.6 N·m (100-120 lb·in).
6. Install two new o-rings (10) on plug (9).
7. Thread plug (9) into housing (7) to the depth recorded during disassembly.
8. Apply two drops of Loctite 242 on threads of nut (8). Install nut (8) on plug (9). Use a hex key wrench to hold plug (9) from turning while torquing nut (8) 149.2-162.7 N·m (110-120 lb·ft).
9. Install new seat (11) in new retainer (18). Install new retainer (18) in plug (19) and torque 11.3-13.6 N·m (100-120 lb·in).
10. Install two new o-rings (10) on plug (19).
11. Thread plug (19) into housing (7) to the depth recorded during disassembly.
12. Apply two drops of Loctite 242 on threads of nut (20). Install nut (20) on plug (19). Use a hex key wrench to hold plug (19) from turning while torquing nut (20) 149.2-162.7 N·m (110-120 lb·ft).
13. Install new o-rings (22) on plugs (21). Install three plugs (21) in housing (7) and torque 24.4-32.5 N·m (18-22 lb·ft).
14. Install steering valve on machine and ensure plugs (9 and 19) are adjusted per AGCO specification.