

Hydraulic/Air RELAY VALVE

Service Instructions

John Deere Part Number	John Deere Repair Kit Number
RE315098	RE315101

NOTE

The repair kit is used to service several different model numbers of this style valve. Not all items in the repair kit will be used when servicing your valve.

DISASSEMBLY

(Refer to Figure 1)

1. Remove plug (20) from housing (7). Remove retaining ring (22), baffle (21) and o-ring (2) from plug (20).
2. Remove plug (1), spring (4) and piston (6) from housing (7).
3. Remove o-rings (2 & 3) from plug (1).
4. Separate housing (7) from housing (14) by removing four cap screws (16) and four washers (15).
5. Remove o-ring (8), spring (9) and piston (11) from housings.
6. Remove cup (10) and o-rings (12 & 13) from piston (11). Note direction of cup (10).
7. Remove screw (17), retainer (18) and baffle (19) from housing (7).

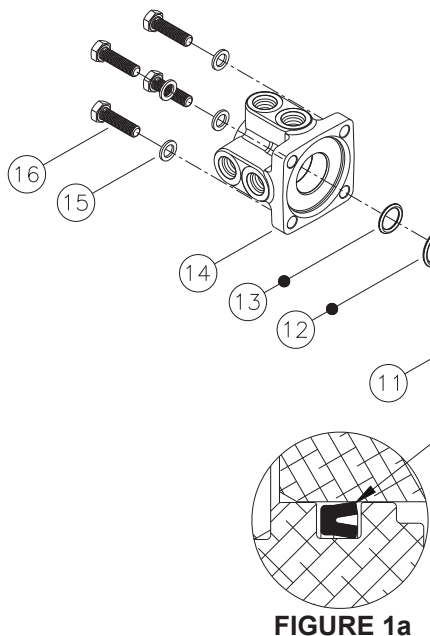


FIGURE 1a

FIGURE 1

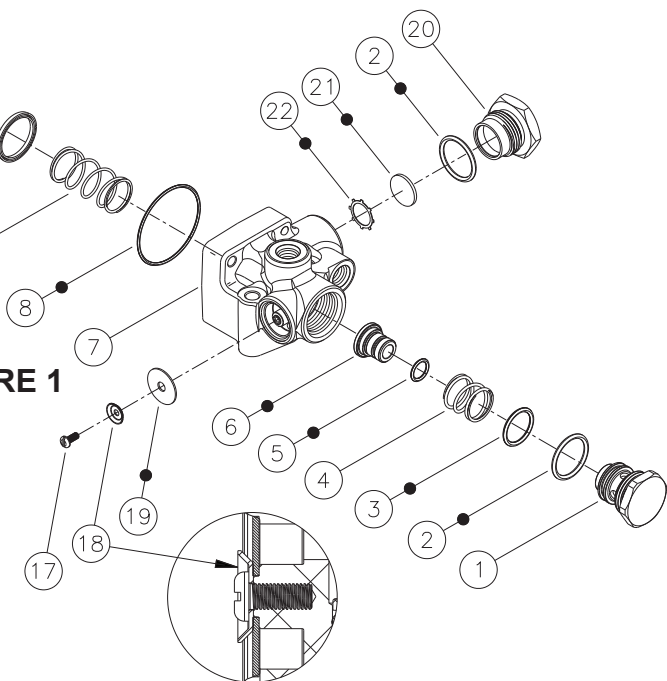


FIGURE 1b

● Items included in Repair Kit

ASSEMBLY

(Refer to Figure 1)

WASH ALL PARTS WITH CLEAN SOLVENT AND DRY. BE SURE ENTIRE ASSEMBLY PROCEDURE IS DONE USING CONTAMINATION FREE METHODS.

1. Lubricate new o-rings (12 & 13) with clean hydraulic system fluid.
2. Install new baffle (21) and new retaining ring (22) in plug (20).
3. Install new o-ring (2) on plug (20). Install plug (20) in housing (7) and torque 61.0-74.6 N·m (45-55 lb·ft).
4. Lubricate new o-ring (5) and new cup (10) with a thin coat of light grease.
5. Install new cup (10) and new o-rings (12 & 13) on piston (11). See Figure 1a for direction of cup (10).
6. Install spring (9) on piston (11) and install in housing (7).
7. Install new o-ring (8) on housing (7).
8. Assemble housings (7 & 14) using four cap screws (16) and four washers (15). Evenly torque cap screws (16) 21.7-28.5 N·m (16-21 lb·ft).
9. Install new o-ring (5) on new piston (6).
10. Install new o-rings (2 & 3) on plug (1).
11. Install new piston (6), spring (4) and plug (1) in housing (7). Torque plug (1) 61.0-74.6 N·m (45-55 lb·ft).
12. Install new baffle (19), retainer (18) and screw (17) on housing (7). Torque screw (17) 2.5-3.2 N·m (22-28 lb·in). See Figure 1b for direction of retainer (18).

John Deere Part Number	John Deere Repair Kit Number
RE562005	RE315101
RE562006	RE315101

NOTE

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DISASSEMBLY

(Refer to Figure 2)

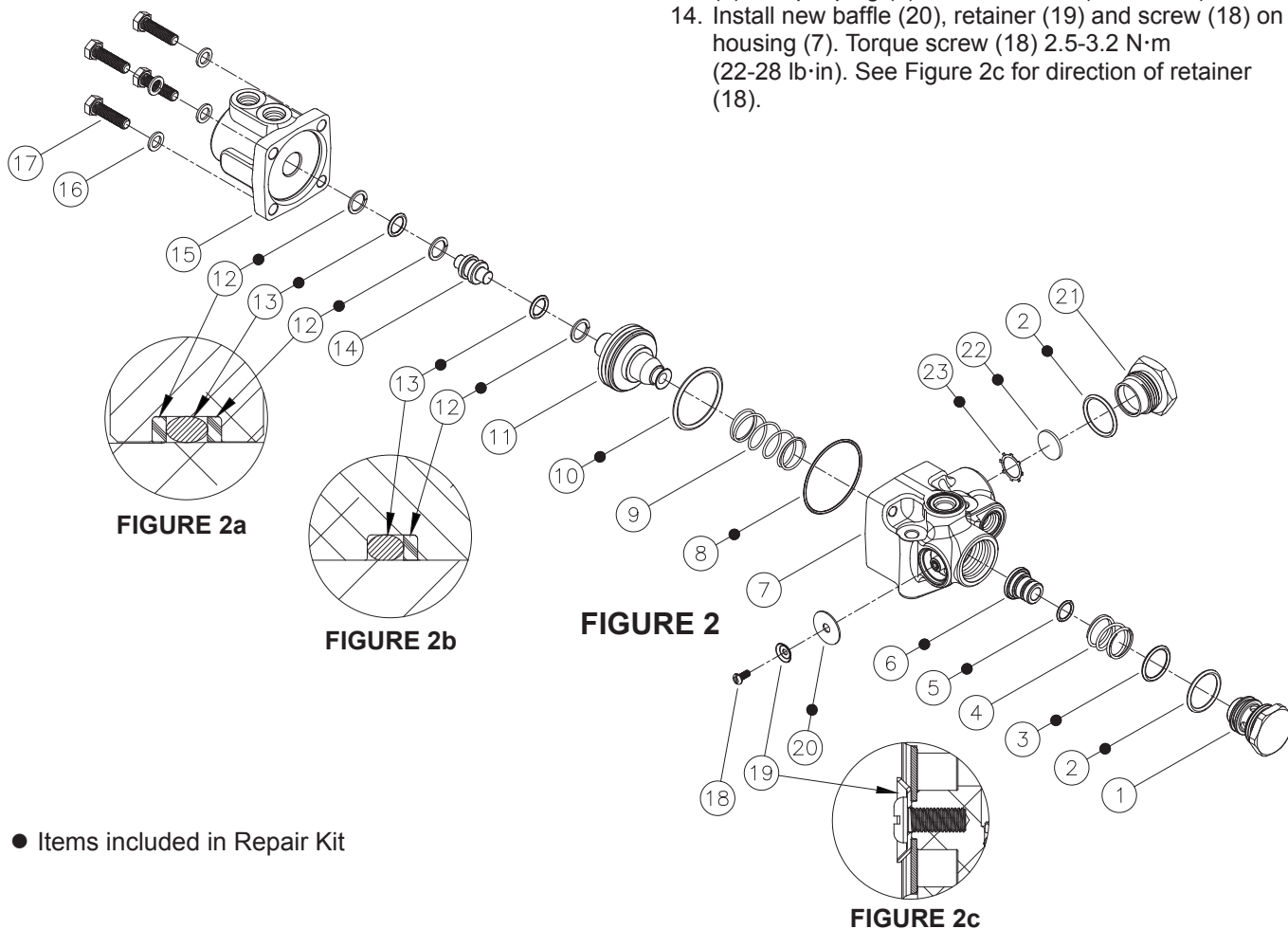
1. Remove plug (21) from housing (7). Remove retaining ring (23), baffle (22) and o-ring (2) from plug (21).
2. Remove plug (1), spring (4) and piston (6) from housing (7).
3. Remove o-rings (2 & 3) from plug (1).
4. Separate housing (7) from housing (15) by removing four cap screws (17) and four washers (16).
5. Remove o-ring (8), spring (9), piston (11) and piston (14) from housings.
6. Remove o-rings (10 & 13) and back-up ring (12) from piston (11).
7. Remove two back-up rings (12) and o-ring (13) from piston (14).
8. Remove screw (18), retainer (19) and baffle (20) from housing (7).

ASSEMBLY

(Refer to Figure 2)

WASH ALL PARTS WITH CLEAN SOLVENT AND DRY. BE SURE ENTIRE ASSEMBLY PROCEDURE IS DONE USING CONTAMINATION FREE METHODS.

1. Lubricate new back-up rings (12) and new o-rings (13) with clean hydraulic system fluid.
2. Install new baffle (22) and new retaining ring (23) in plug (21).
3. Install new o-ring (2) on plug (21). Install plug (21) in housing (7) and torque 61.0-74.6 N·m (45-55 lb·ft).
4. Install new back-up rings (12) and new o-ring (13) on piston (14). See Figure 2a for order of back-up rings (12) and o-ring (13).
5. Install piston (14) in housing (15).
6. Lubricate new o-ring (5) and new o-ring (10) with a thin coat of light grease.
7. Install new back-up ring (12) and new o-rings (10 & 13) on piston (11). See Figure 2b for order of back-up ring (12) and o-ring (13).
8. Install spring (9) on piston (11) and install in housing (7).
9. Install new o-ring (8) on housing (7).
10. Assemble housings (7 & 15) using four cap screws (17) and four washers (16). Evenly torque cap screws (17) 21.7-28.5 N·m (16-21 lb·ft).
11. Install new o-ring (5) on new piston (6).
12. Install new o-rings (2 & 3) on plug (1).
13. Install new piston (6), spring (4) and plug (1) in housing (7). Torque plug (1) 61.0-74.6 N·m (45-55 lb·ft).
14. Install new baffle (20), retainer (19) and screw (18) on housing (7). Torque screw (18) 2.5-3.2 N·m (22-28 lb·in). See Figure 2c for direction of retainer (18).



● Items included in Repair Kit

John Deere Part Number	John Deere Repair Kit Number
RE564677	RE315101
RE579899	RE315101

NOTE

The repair kit is used to service several different model numbers of this style valve. Not all items in the repair kit will be used when servicing your valve.

DISASSEMBLY

(Refer to Figure 3)

1. Remove plug (21) from housing (7). Remove retaining ring (23), baffle (22) and o-ring (2) from plug (21).
2. Remove plug (1), spring (4) and piston (6) from housing (7).
3. Remove o-rings (2 & 3) from plug (1).
4. Separate housing (7) from housing (15) by removing four cap screws (17) and four washers (16).
5. Remove o-ring (8), spring (9), piston (11) and piston (14) from housings.
6. Remove o-rings (10 & 13) and back-up ring (12) from piston (11).
7. Remove two back-up rings (12) and o-ring (13) from piston (14).
8. Remove screw (18), retainer (19) and baffle (20) from housing (7).

ASSEMBLY

(Refer to Figure 3)

WASH ALL PARTS WITH CLEAN SOLVENT AND DRY. BE SURE ENTIRE ASSEMBLY PROCEDURE IS DONE USING CONTAMINATION FREE METHODS.

1. Lubricate new back-up rings (12) and new o-rings (13) with clean hydraulic system fluid.
2. Install new baffle (22) and new retaining ring (23) in plug (21).
3. Install new o-ring (2) on plug (21). Install plug (21) in housing (7) and torque 61.0-74.6 N·m (45-55 lb·ft).
4. Install new back-up rings (12) and new o-ring (13) on piston (14). See Figure 3a for order of back-up rings (12) and o-ring (13).
5. Install piston (14) in housing (15).
6. Lubricate new o-ring (5) and new o-ring (10) with a thin coat of light grease.
7. Install new back-up ring (12) and new o-rings (10 & 13) on piston (11). See Figure 3b for order of back-up ring (12) and o-ring (13).
8. Install spring (9) on piston (11) and install in housing (7).
9. Install new o-ring (8) on housing (7).
10. Assemble housings (7 & 15) using four cap screws (17) and four washers (16). Evenly torque cap screws (17) 21.7-28.5 N·m (16-21 lb·ft).
11. Install new o-ring (5) on new piston (6).
12. Install new o-rings (2 & 3) on plug (1).
13. Install new piston (6), spring (4) and plug (1) in housing (7). Torque plug (1) 61.0-74.6 N·m (45-55 lb·ft).
14. Install new baffle (20), retainer (19) and screw (18) on housing (7). Torque screw (18) 2.5-3.2 N·m (22-28 lb·in). See Figure 3c for direction of retainer (18).

