

Hydraulic/Air RELAY VALVE Service Instructions

John Deere Part Number	John Deere Repair Kit Number
SJ31574	BXX12154

DISASSEMBLY

(Refer to Figure 1)

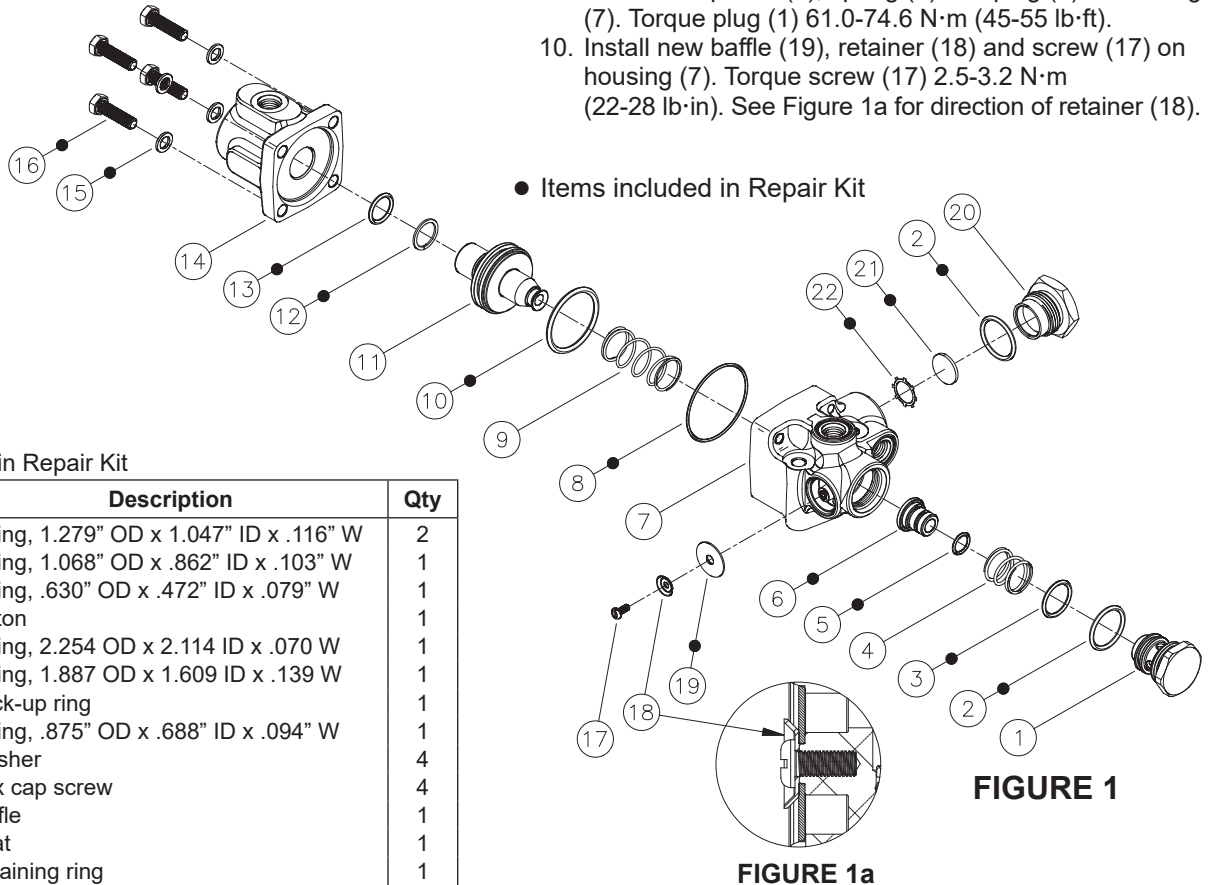
1. Remove plug (20) from housing (7). Remove retaining ring (22), baffle (21) and o-ring (2) from plug (20).
2. Remove plug (1), spring (4) and piston (6) from housing (7).
3. Remove o-rings (2 & 3) from plug (1).
4. Separate housing (7) from housing (14) by removing four cap screws (16) and four washers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

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 new back-up ring ring in the kit 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. Install new new o-rings (10 & 13) and new back-up ring (12) on piston (11). Note the order of back-up ring (12) and o-ring 13).
5. Install spring (9) on piston (11) and install piston (11) in housing (7).
6. Install new o-ring (8) on housing (7). Assemble housings (7 & 14) using four cap screws (16) and four washers (15). Apply loctite 242 or equivalent to threads of cap screws and evenly torque cap screws (16) 21.7-28.5 N·m (16-21 lb·ft).
7. Apply a thin coat of light grease on o-ring (5) and install new o-ring (5) on new piston (6).
8. Install new o-rings (2 & 3) on plug (1).
9. 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).
10. 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 1a for direction of retainer (18).



Items included in Repair Kit

Item No.	Description	Qty
2	O-ring, 1.279" OD x 1.047" ID x .116" W	2
3	O-ring, 1.068" OD x .862" ID x .103" W	1
5	O-ring, .630" OD x .472" ID x .079" W	1
6	Piston	1
8	O-ring, 2.254 OD x 2.114 ID x .070 W	1
10	O-ring, 1.887 OD x 1.609 ID x .139 W	1
12	Back-up ring	1
13	O-ring, .875" OD x .688" ID x .094" W	1
15	Washer	4
16	Hex cap screw	4
19	Baffle	1
21	Seat	1
22	Retaining ring	1