

RELAY VALVE



Service Instructions

NOTE

The repair kit is used to service various models in this relay valve series which may not require the use of all repair kit components.

Models: 06-466-522
06-466-571
06-466-968

DISASSEMBLY

(Refer to Figure 1)

1. Remove plug (1), retainer (3), and spring (4) from housing (7). Remove o-ring (2) from plug (1).
2. Separate housings (7 & 11) by removing cap screws (5) and washers (6). Remove o-rings (9 & 10) from housings (7 & 11). **NOTE: Model number 06-466-571 includes an internal shuttle valve assembly. DO NOT attempt to disassemble these items from housing (11).**
3. Carefully remove spool (8) from housing (7). **NOTE: Be careful not to damage spool or housing bore.**

CAUTION

Do not intermix spools and housings. Spool (8) and housing (7) are manufactured as a matched set.

ASSEMBLY

(Refer to Figure 1)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Lubricate spool (8) with clean system fluid and carefully slide into top end of housing (7) bore. Note direction of spool (8). **NOTE: Spool must slide freely into bore. If either part is damaged, a new valve assembly may be required.**
3. Install new o-rings (10 & 9) in proper o-ring pockets on housings (7 & 11).
4. Reassemble housings (7 & 11) using cap screws (5) and washers (6). Use Loctite 242 on cap screws and torque 27.1-32.5 N·m (20-24 lb·ft).
5. Install new o-ring (2) on plug (1).
6. Install spring (4), retainer (3), and plug (1) in housing (7). Torque plug (1) 47.5-54.2 N·m (35-40 lb·ft).

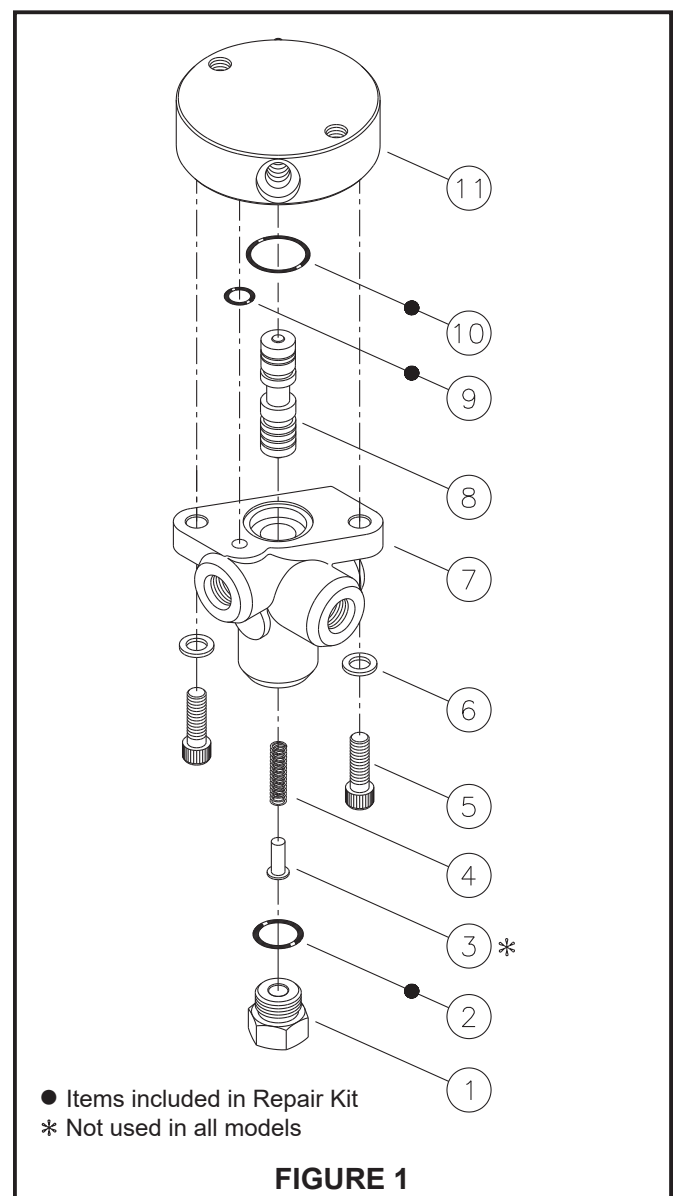


FIGURE 1

Model: 06-466-978

DISASSEMBLY

(Refer to Figure 2)

1. Remove plug (1), retainer (3), and spring (4) from housing (7). Remove o-ring (2) from plug (1).
2. Separate housing (7), spacer (11), and housing (13) by removing cap screws (5) and washers (6). Remove two o-rings (9 & 10).
3. Carefully remove spool (8) from housing (7) and spool (12) from spacer (11). **NOTE: Be careful not to damage spools, housing bore or spacer bore.**

⚠ CAUTION

Do not intermix spools, housings, or spacers. Spool (8) and housing (7) are manufactured as a matched set as are spool (12) and spacer (11).

ASSEMBLY

(Refer to Figure 2)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Lubricate spools (8 & 12) with clean system fluid. Carefully slide spool (8) into top end of housing (7) bore and spool (12) into spacer (11) bore. Note direction of spools (8 & 12). **NOTE: Spools must slide freely in bores. If either part is damaged, a new valve assembly may be required.**
3. Install two new o-rings (9 & 10) in proper o-ring pockets on housings (7 & 13) and spacer (11).
4. Reassemble housings (7 & 13) and spacer (11) using cap screws (5) and washers (6). Use Loctite 242 on cap screws and torque 27.1-32.5 N·m (20-24 lb·ft).
5. Install new o-ring (2) on plug (1).
6. Install spring (4), retainer (3), and plug (1) in housing (7). Torque plug (1) 47.5-54.2 N·m (35-40 lb·ft).

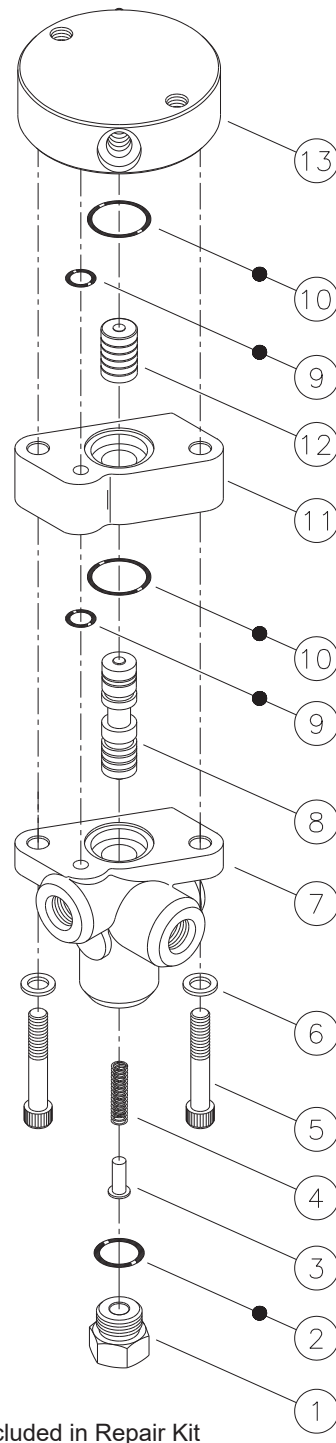


FIGURE 2

Model: 06-466-923

DISASSEMBLY

(Refer to Figure 3)

1. Remove plug (1) and spring (3) from housing (6). Remove o-ring (2) from plug (1).
2. Separate housing (6), spacer (9), and housing (12) by removing cap screws (4) and washers (5). Remove two o-rings (8).
3. Carefully remove spool (7) from housing (6) and spool (10) from spacer (9). **NOTE: Be careful not to damage spools, housing bore or spacer bore.**

⚠ CAUTION

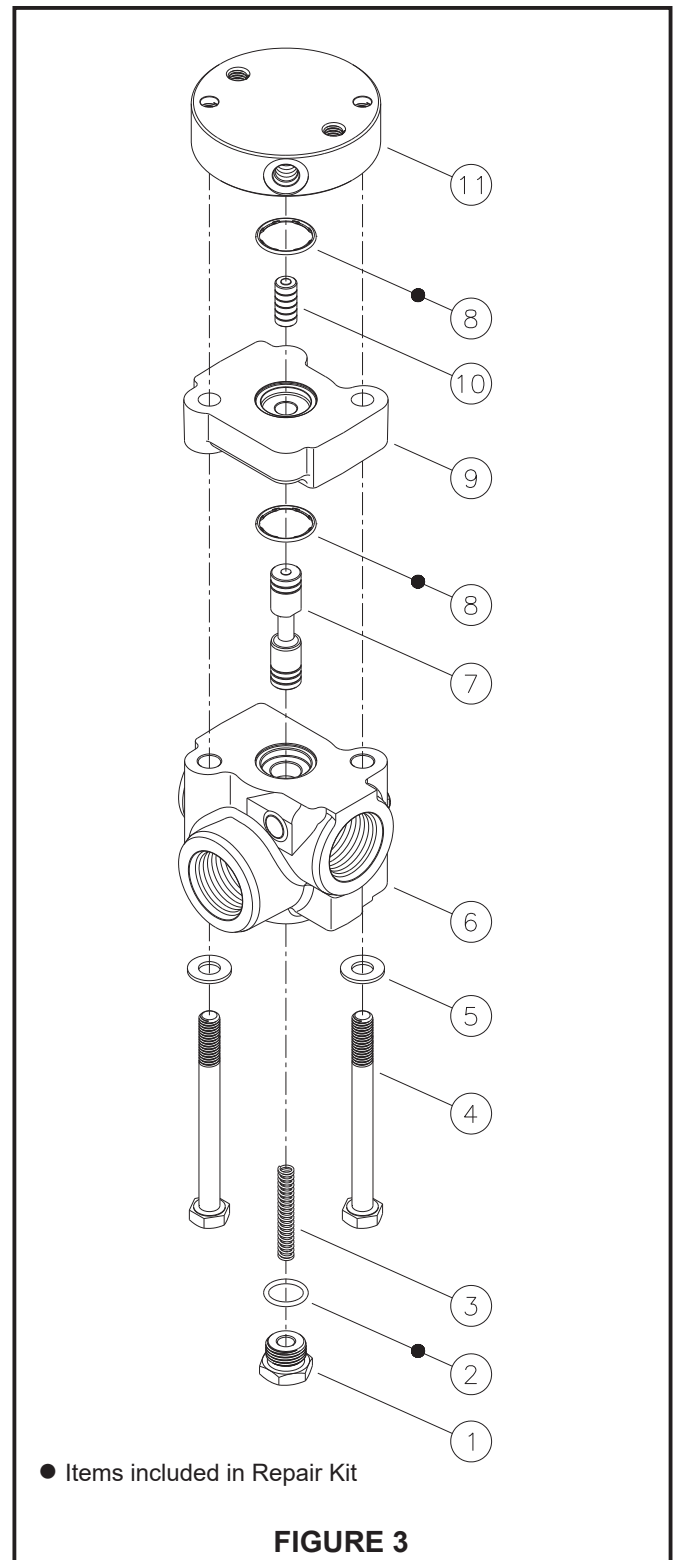
Do not intermix spools, housings, or spacers. Spool (7) and housing (6) are manufactured as a matched set as are spool (10) and spacer (9).

ASSEMBLY

(Refer to Figure 3)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Lubricate spools (7 & 10) with clean system fluid. Carefully slide spool (7) into top end of housing (6) bore and spool (10) into spacer (9) bore. Note direction of spools (7 & 10). **NOTE: Spools must slide freely in bores. If either part is damaged, a new valve assembly may be required.**
3. Install two new o-rings (8) in o-ring pockets on housings (6 & 12) and spacer (9).
4. Reassemble housings (6 & 12) and spacer (9) using cap screws (4) and washers (5). Use Loctite 242 on cap screws and torque 47.5-54.2 N·m (35-40 lb·ft).
5. Install new o-ring (2) on plug (1).
6. Install spring (3) and plug (1) in housing (6). Torque plug (1) 47.5-54.2 N·m (35-40 lb·ft).



Model: 06-466-917

DISASSEMBLY

(Refer to Figure 4)

1. Remove plug (3), spring (5), and retainer (6) from housing (7). Remove o-ring (4) from plug (3).
2. Separate housing (7), spacer (10), and housing (12) by removing cap screws (1) and washers (2). Remove two o-rings (9).
3. Carefully remove spool (8) from housing (7) and spool (11) from spacer (10). **NOTE: Be careful not to damage spools, housing bore or spacer bore.**

⚠ CAUTION

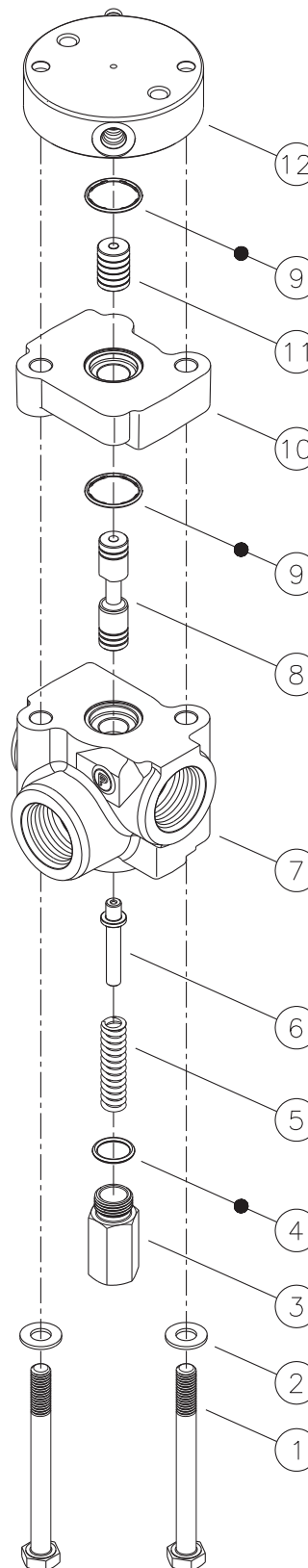
Do not intermix spools, housings, or spacers. Spool (8) and housing (7) are manufactured as a matched set as are spool (11) and spacer (10).

ASSEMBLY

(Refer to Figure 4)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Lubricate spools (8 & 11) with clean system fluid. Carefully slide spool (8) into top end of housing (7) bore and spool (11) into spacer (10) bore. Note direction of spools (8 & 11). **NOTE: Spools must slide freely in bores. If either part is damaged, a new valve assembly may be required.**
3. Install two new o-rings (9) in o-ring pockets on housings (7 & 12) and spacer (10).
4. Reassemble housings (7 & 12) and spacer (10) using cap screws (1) and washers (2). Use Loctite 242 on cap screws and torque 47.5-54.2 N·m (35-40 lb·ft).
5. Install new o-ring (4) on plug (3).
6. Install retainer (6) and spring (5) in spool (8) already installed in housing (7). Install plug (3) in housing (6). Torque plug (3) 47.5-54.2 N·m (35-40 lb·ft).



● Items included in Repair Kit

FIGURE 4

Model: 06-466-511

DISASSEMBLY

(Refer to Figure 5)

1. Remove plug (1), spring (3), retainer (4), and spring (4) from housing (8). Remove o-ring (2) from plug (1).
2. Separate housing (8) and housing (12) by removing cap screws (6) and washers (7). Remove o-rings (10 & 11).
3. Carefully remove spool (9) from housing (8). **NOTE: Be careful not to damage spools, housing bore or spacer bore.**

⚠ CAUTION

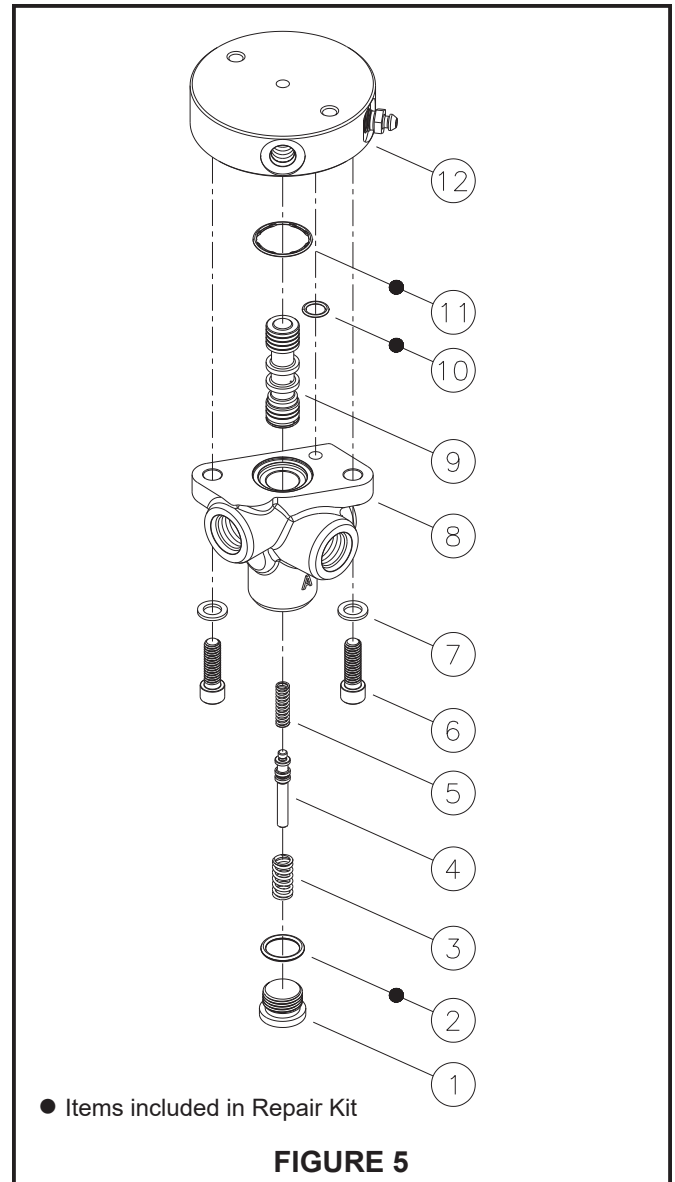
Do not intermix spools and housings. Spool (9) and housing (8) are manufactured as a matched set.

ASSEMBLY

(Refer to Figure 5)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Lubricate spool (9) with clean system fluid. Carefully slide spool (9) into top end of housing (8) bore. Note direction of spool (9). **NOTE: Spool must slide freely in bore. If either part is damaged, a new valve assembly may be required.**
3. Install new o-rings (10 & 11) in proper o-ring pockets on housing (8) and housing (12).
4. Reassemble housings (8 & 12) using cap screws (6) and washers (7). Use Loctite 242 on cap screws and torque 27.1-32.5 N·m (20-24 lb·ft).
5. Install new o-ring (2) on plug (1).
6. Install spring (5), retainer (4), and spring (5) in spool (9) already installed in housing (8). Install plug (1) in housing (8). Torque plug (1) 47.5-54.2 N·m (35-40 lb·ft).



Model: 06-466-371

DISASSEMBLY

(Refer to Figure 6)

1. Remove plug (1) and spring (3) from housing (6).
Remove o-ring (2) from plug (1).
2. Separate housing (6), spacer (10), and housing (12) by removing two cap screws (4) and two washers (5). Remove two o-rings (8) and two o-rings (9).
3. Carefully remove spool (7) from housing (6) and spool (11) from spacer (10). **NOTE: Be careful not to damage spools, housing bore, or spacer bore.**

⚠ CAUTION

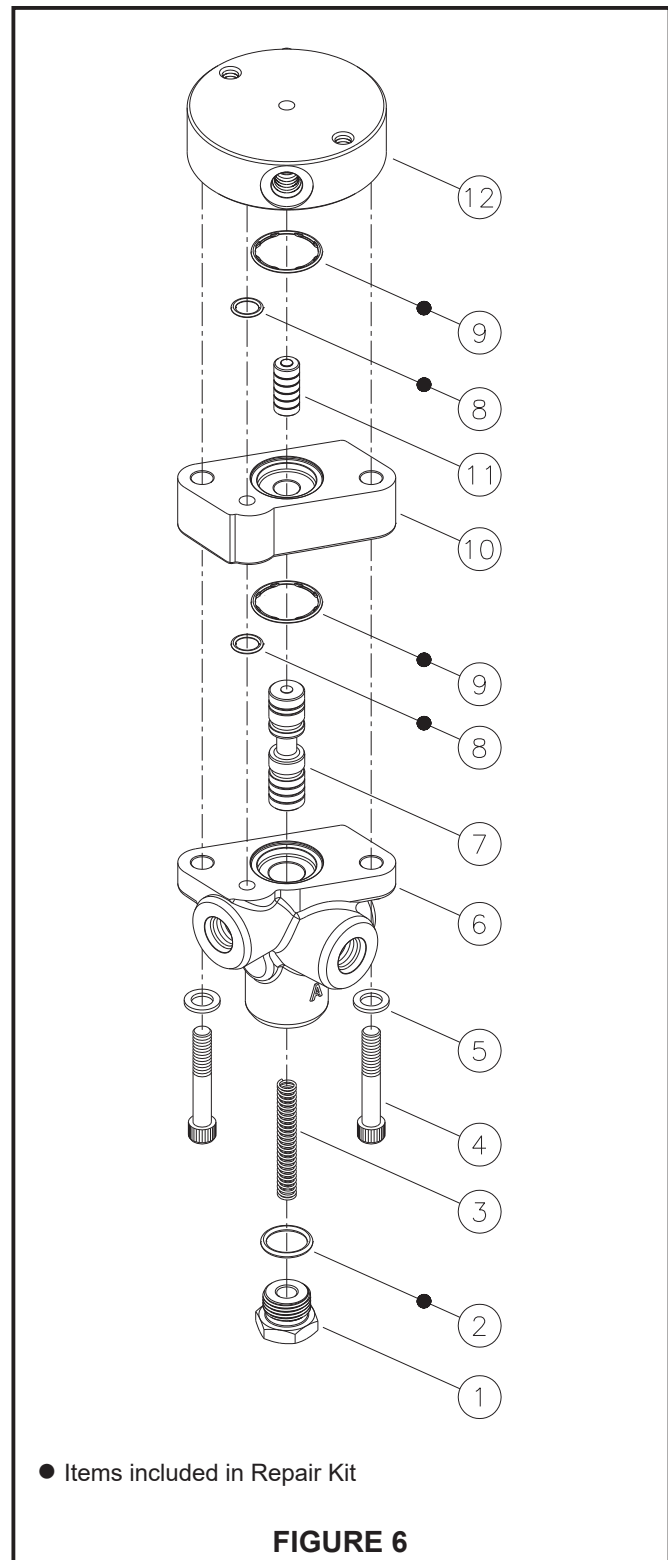
Do not intermix spools, housings, or spacers. Spool (7) and housing (6) are manufactured as a matched set as are spool (11) and spacer (10).

ASSEMBLY

(Refer to Figure 6)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Lubricate spools (7 & 11) with clean system fluid. Carefully slide spool (7) into top end of housing (6) bore and spool (11) into spacer (10) bore. Note direction of spools (7 & 11). **NOTE: Spools must slide freely in bores. If either part is damaged, a new valve assembly may be required.**
3. Install two new o-rings (8) and two new o-rings (9) in o-ring pockets on housings (6 & 12) and spacer (10).
4. Reassemble housings (6 & 12) and spacer (10) using two cap screws (4) and two washers (5). Use Loctite 242 on cap screws and torque 27.1-32.5 N·m (20-24 lb·ft).
5. Install new o-ring (2) on plug (1).
6. Install spring (3) and plug (1) in housing (6). Torque plug (1) 47.5-61.0 N·m (35-45 lb·ft).



● Items included in Repair Kit

FIGURE 6

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