i04701289

# Control Manifold (Pilot Oil) - Assemble - Hydraulic Lockout, Swing Brake, Travel

**SMCS** - 5059-016-M9

# **Assembly Procedure**

#### **NOTICE**

Keep all parts clean from contaminants.

Contamination of the hydraulic system with foreign material will reduce the service life of the hydraulic system components.

To prevent contaminants from entering the hydraulic system, always plug or cap the lines, fittings, or hoses as they are disconnected. Cover any disassembled components and clean them properly before assembly.

Clean the hydraulic system properly after any major component exchange or especially after a component failure, to remove any contamination.

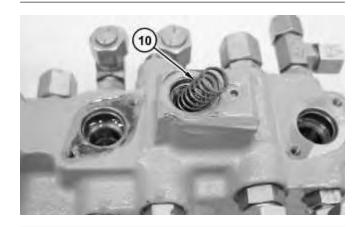


Illustration 1

## 1. Install spring (10).

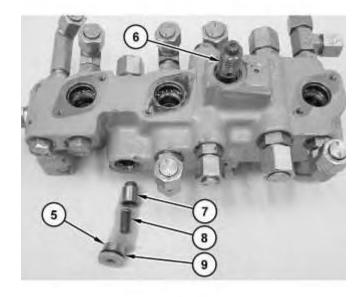


Illustration 2 g01211575

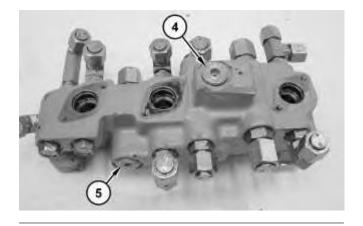


Illustration 3 g01211572

# **WARNING**

Improper assembly of parts that are spring loaded can cause bodily injury.

To prevent possible injury, follow the established assembly procedure and wear protective equipment.

- 2. Install O-ring seals (9) onto plugs (4) and (5).
- 3. Install spool (7) and spring (8).
- 4. Install spool (6).

# 5. Install plugs (4) and (5).

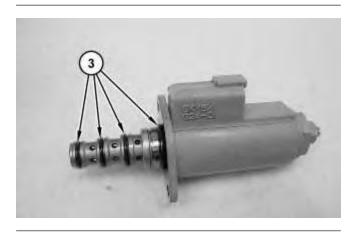


Illustration 4 g01211571

6. Install O-ring seals (3).

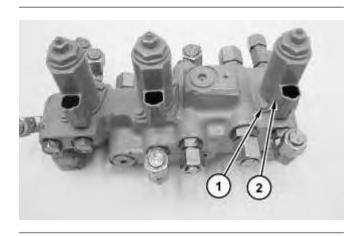


Illustration 5 g01211570

- 7. Position valve assembly (2) and install bolts (1). Tighten bolts (1) to a torque of  $4.0 \pm 0.4 \text{ N} \cdot \text{m}$  (35 ± 4 lb in).
- 8. Repeat Steps 6 and 7 for the remaining valve assemblies.

## End By:

a. Install the control manifold (pilot oil). Refer to Disassembly and Assembly, "Control Manifold (Pilot Oil) - Install".

#### **Disassembly and Assembly**

314F and 315F Excavators Machine Systems
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## **Pilot Valve (Travel) - Remove**

SMCS - 3220-011

#### **Removal Procedure**

#### **Start By:**

a. Release the hydraulic system pressure. Refer to Disassembly and Assembly, "Hydraulic System Pressure - Release".

#### NOTICE

Care must be taken to ensure that fluids are contained during performance of inspection, maintenance, testing, adjusting, and repair of the product. Be prepared to collect the fluid with suitable containers before opening any compartment or disassembling any component containing fluids.

Refer to Special Publication, NENG2500, "Dealer Service Tool Catalog" for tools and supplies suitable to collect and contain fluids on Cat products.

Dispose of all fluids according to local regulations and mandates.

# **WARNING**

At operating temperature, the hydraulic oil is hot and under pressure. Hot oils can cause burns.

To prevent possible personal injury, release the pressure in the work tool hydraulic circuit (boom, stick, bucket, and swing), travel circuits, and the hydraulic oil tank at the filler cap before any hydraulic lines or components are disconnected or removed.

Remove the filler cap only when the engine is stopped and the filler cap is cool enough to touch.