

## **Pilot System Pressure - Test**



### **WARNING**

**Personal injury or death can result from escaping fluid under pressure.**

**Escaping fluid under pressure, even a very small pin-hole size leak, can penetrate body tissue and cause serious injury and possible death. If fluid is injected into your skin, it must be treated immediately by a doctor familiar with this type of injury.**

**Always use a board or cardboard when checking for a leak.**

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### **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, "Caterpillar Dealer Service Tool Catalog" for tools and supplies suitable to collect and contain fluids on Caterpillar products.**

**Dispose of all fluids according to local regulations and mandates.**

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Before any tests are performed, release the pressure in the hydraulic system and prepare the machine for troubleshooting. Refer to Testing and Adjusting, "Hydraulic System Pressure - Release". Before any tests are performed, visually inspect the machine for oil leaks and damaged parts.

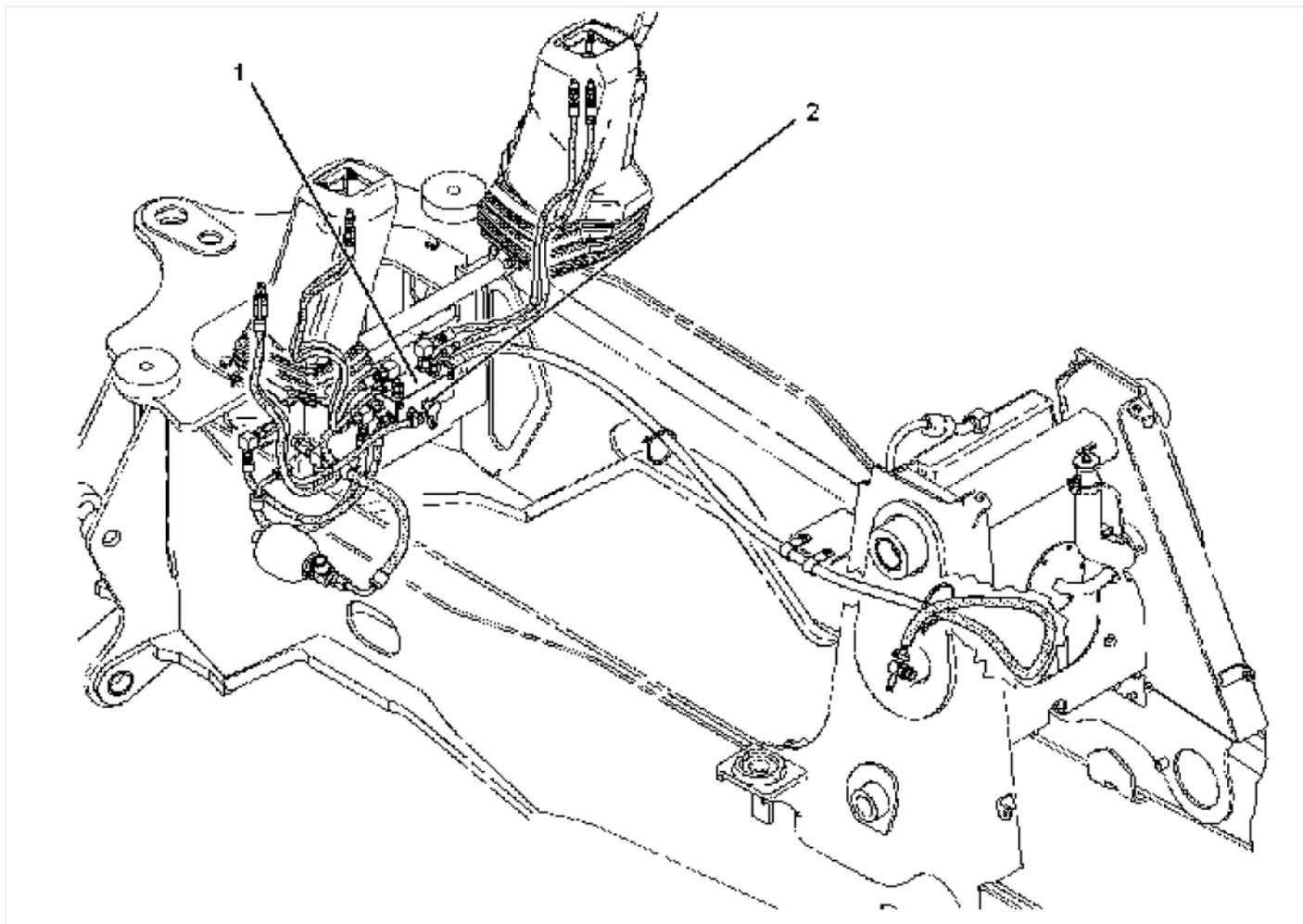


Illustration 1

(1) Manifold for the **pilot** system

(2) Test port for the **pilot** oil pressure

1. Install a **8T-0856** Pressure Gauge on a **177-7860** Hose As . Install the other end of the hose to test port (2) for the **pilot** oil pressure.

**Note:** Prior to testing the **pilot** system pressure, make sure that the piston pump is at the optimum pressure.

2. Start the engine and run the engine at **HIGH** idle. Stall a cylinder in the loader circuit or the backhoe circuit. The pressure reading must be  $3400 \pm 500$  kPa ( $500.0 \pm 73.0$  psi).
3. Stop the engine and engage the parking brake.
4. If the **pilot** system pressure is not within the specifications, the pressure reducing valve on the bank valve for the backhoe must be adjusted to the specification.