

TM Wrench Pilot-Operated Check Valve Test Ports

Issue

Exposed hydraulic pressure test port fittings on pilot-operated (PO) check valves mounted on the upper and lower tongs of the TM80 (see Figure 1) can be knocked loose by other equipment on the rig. High pressure fluid escaping from one of the ports with a loose fitting could cause serious injury to personnel.

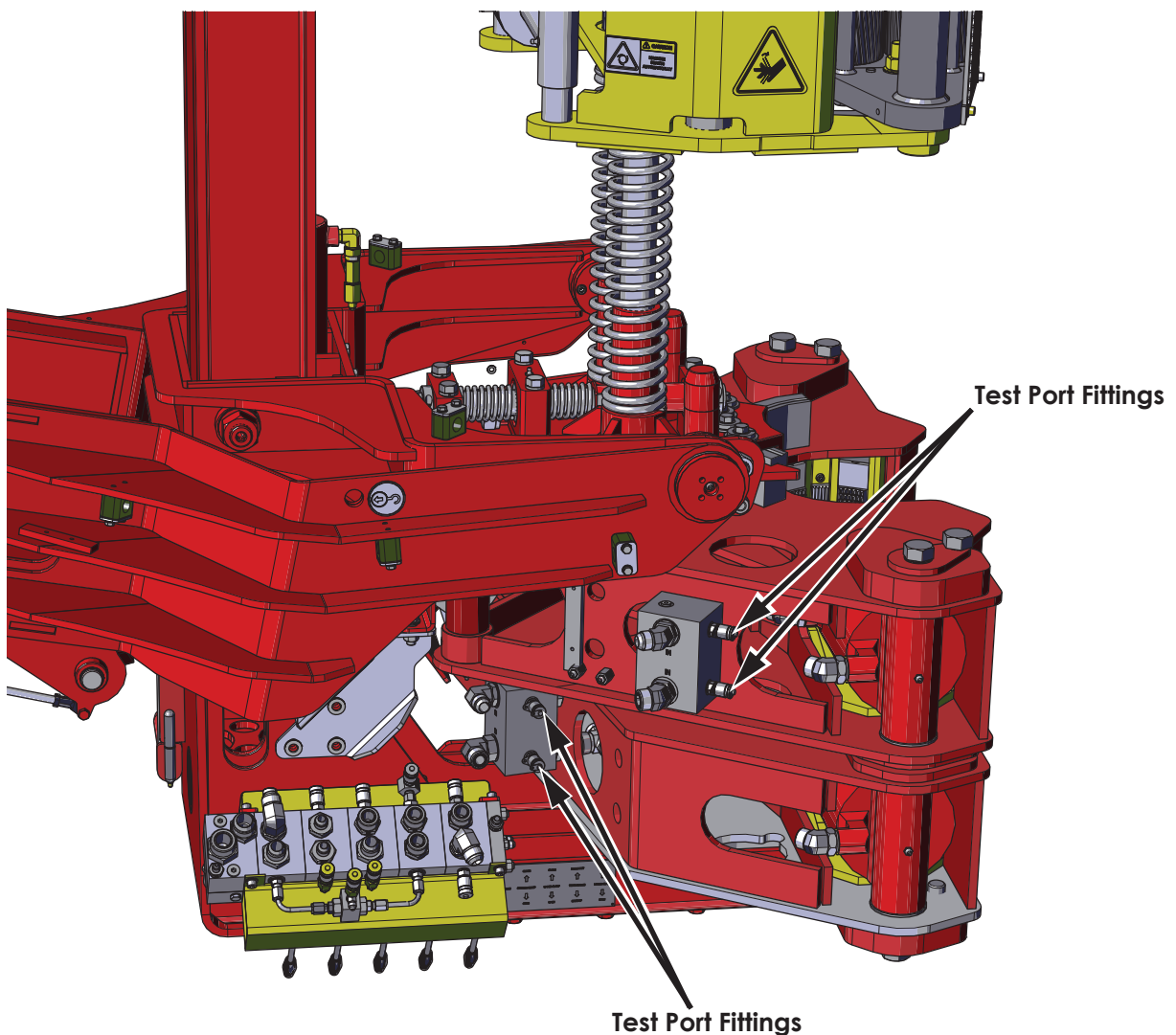


Figure 1: PO Test Port Fitting Locations on TM80

Recommendation

Due to the rare number of instances where pressure readings must be taken from these ports, Canrig recommends replacing the test port fittings with plugs. The plugs have a much lower profile and are much less likely to be knocked loose. If pressure readings are needed, a plug can be replaced with a test port fitting on a temporary basis.

Parts List

The Canrig part numbers and quantities for the plugs needed to replace the test port fittings are listed below. Contact RIGLINE 24/7™ Support for price and availability.

ITEM	PART NUMBER	DESCRIPTION	QTY
1	H15-090109A-04	PLUG, HEX HD, ¼ ORB	4

Installation Instructions



Warning!

Perform lock-out and tag-out of electrical equipment in accordance with local procedure prior to beginning installation.



Warning!

Lines pressures can exceed 5,000 psi. Ensure all pressure is bled from the system prior to installing plugs.

1. Perform a Job Safety Analysis (JSA).
2. Lock-out and tag-out the wrench and HPU. Disconnect cables 37C and 10C at the wrench.



Model: TM80-110, TM80-125	Aug. 22, 2016
Serial #: All	

3. Dissipate any residual hydraulic pressure in the wrench hydraulic circuit by manually actuating the upper tong and lower tong control valves on the tong valve bank.
4. Place a bucket under the PO check valves to capture any leaking hydraulic fluid.
5. Standing out of the pathway of a potential fitting ejection, slowly loosen the test port fittings and remove.
6. Replace the test port fittings with the 1/4" ORB plugs. Torque to 22 ft-lbs.
7. Store the test port fittings in a secure location for future use.
8. Once the wrench has been restored to operational mode, with the HPU running in idle mode, slightly loosen the hose fittings on the cylinder side of the lower tong PO check valve. Manually actuate the lower tong valve until oil starts to leak from the ports. This will bleed any residual air in the circuit. Retighten the hose fittings.
9. Repeat step 8 for the upper tong PO check valve and upper tong valve.