PRODUCT BULLETIN NUMBER: 97

Canrig
Drilling Technology Limited

DATE: August 9, 2004

SUBJECT: **Canrig Lower Well Control Valve (LWCV) Backpressure Control**

SERIAL NUMBERS: S/N 092, 111, 148, 150, 156, 205, 238, 239, 257, 260

DISCUSSION: It has been reported that the cylinders on the Canrig LWCV Actuator were creeping due to backpressure in the hydraulic system. Over a period of time, the creeping could have resulted in the washout of some valves.

RECOMMENDATION: To eliminate the possibility of the hydraulic cylinders creeping when in use, a check valve should be installed in the hydraulic circuit of the LWCV actuator (Canrig P/N H07-1010-010). Please refer to the appropriate instructions below to install the valve.

For all systems, perform the following actions:

Relieve hydraulic pressure from the system- this can be performed by disconnecting the hydraulic quick-connects from the Top Drive at the service loop. Next, operate the torque boost in both directions to relieve pressure in the system.

Locate the LWCV valve stack on hydraulic manifold- normally mounted at position '5' on manifold. Identify top drive configuration (as noted below) and follow the instructions as shown on the following pages.

Before proceeding to update the valve stack, it is imperative that identification is made of the specific hydraulic arrangement that is used on your top drive. To identify the valve voltage, refer to the label on the valve solenoid mounted on the hydraulic manifold- it should read "120 VAC" or "24 VDC". The manifold can be identified by looking at the manifold- non-integrated manifolds are smaller (approximately 3" square) than the integrated manifolds and have all valves mounted on top of the manifold. Integrated manifolds are larger (approximately 6" square) and have several valves mounted directly into the manifold body.

For LWCV installations on 120 VAC non-integrated manifold valve systems, see page 2. For LWCV installations on 24 VDC non-integrated manifold valve systems, see page 3. For LWCV installations on 24 VDC integrated manifold valve systems, see page 4.

AY11920-1, Kit, Interface, LWCV, Non-Integrated Manifold, 120 VAC

Refer to Figure 1 (shown below). Disassemble valve stack noting position and orientation of each valve. Remove existing threaded rods from hydraulic manifold. Install new longer threaded rods (Canrig P/N H13-1036-833) in manifold. Reinstall test port assembly (previously removed) and install check valve (Canrig P/N H07-1010-010) in position on manifold noting proper position of ports. Reinstall previously removed valves in same orientation as noted when removed. Reinstall threadnuts (Canrig P/N H13-1035-01A). Set pressures of all valves as shown in Figure 1.

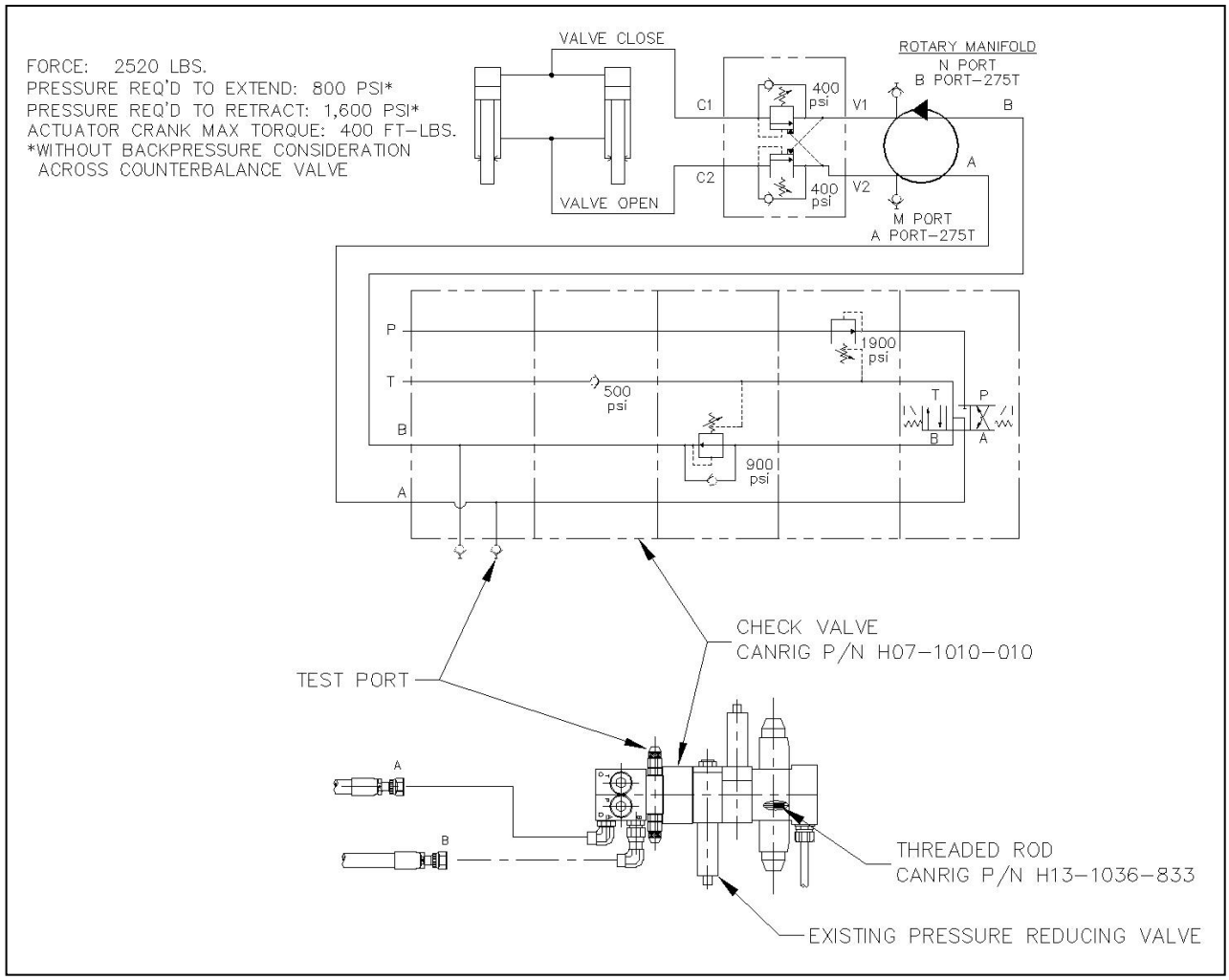

Figure 1

AY11920-2, Kit, Interface, LWCV, Non-Integrated Manifold, 24 VDC

Refer to Figure 2 (shown below). Disassemble valve stack noting position and orientation of each valve. Remove existing threaded rods from hydraulic manifold. Install new longer threaded rods (Canrig P/N H13-1036-754) in manifold. Reinstall test port assembly and install check valve (Canrig P/N H07-1010-010) in position on manifold noting proper position of ports. Reinstall previously removed valves in same orientation as noted when removed. Reinstall threadnuts (Canrig P/N H13-1035-01A). Set pressures of all valves as shown in Figure 2.

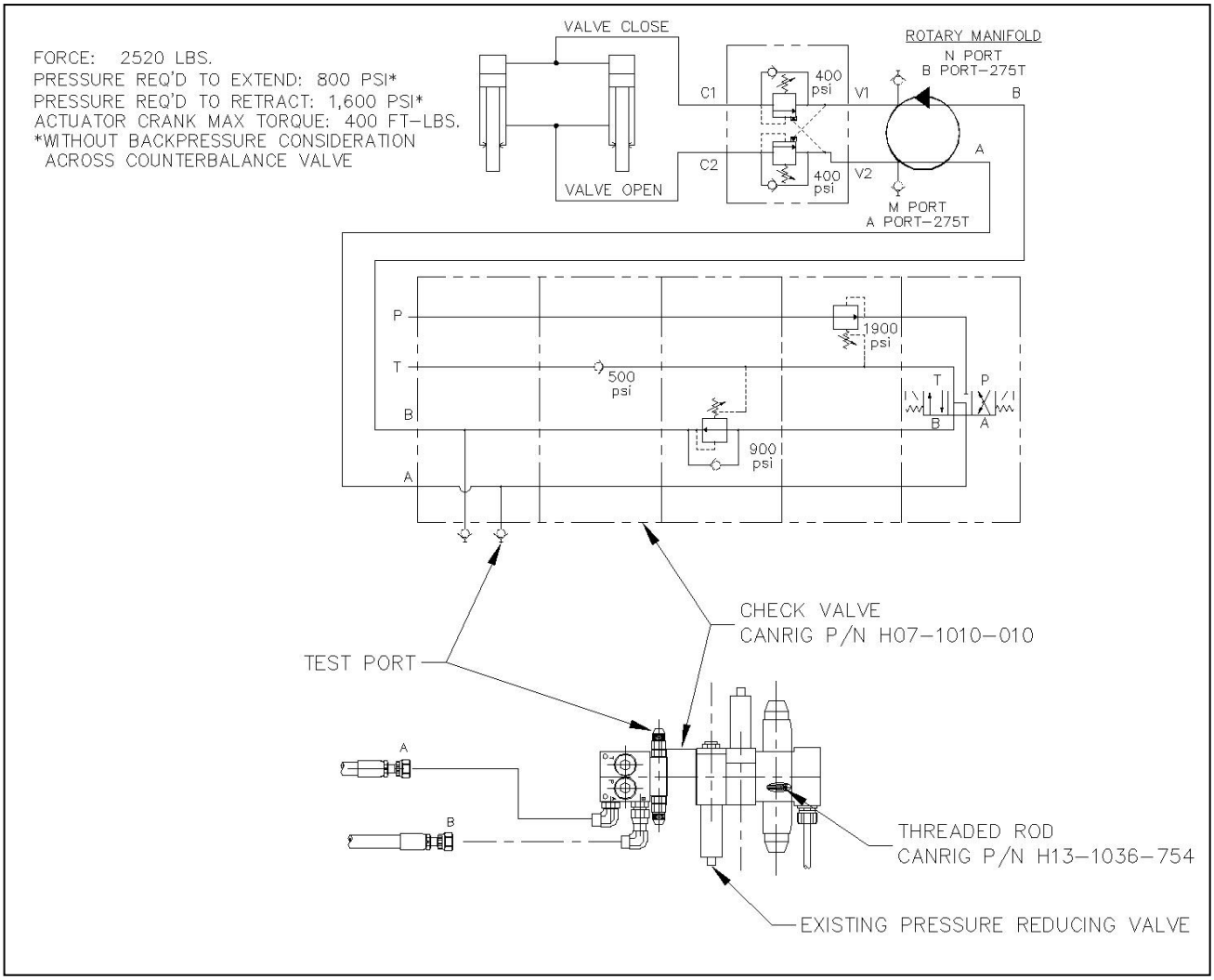

Figure 2

AY11920-3, Kit, Interface, LWCV, Integrated Manifold, 24 VDC

Refer to Figure 3 (shown below). Disassemble valve stack noting position and orientation of each valve. Discard pressure reducing valve (Canrig P/N H05-1001-010) as shown in Figure 3. Install check valve (Canrig P/N H07-1010-010) in position on manifold noting proper position of ports. Reinstall previously removed valves in same orientation as noted when removed. Reinstall threadnuts (Canrig P/N H13-1035-01A). Set pressures of all valves as shown in Figure 3.

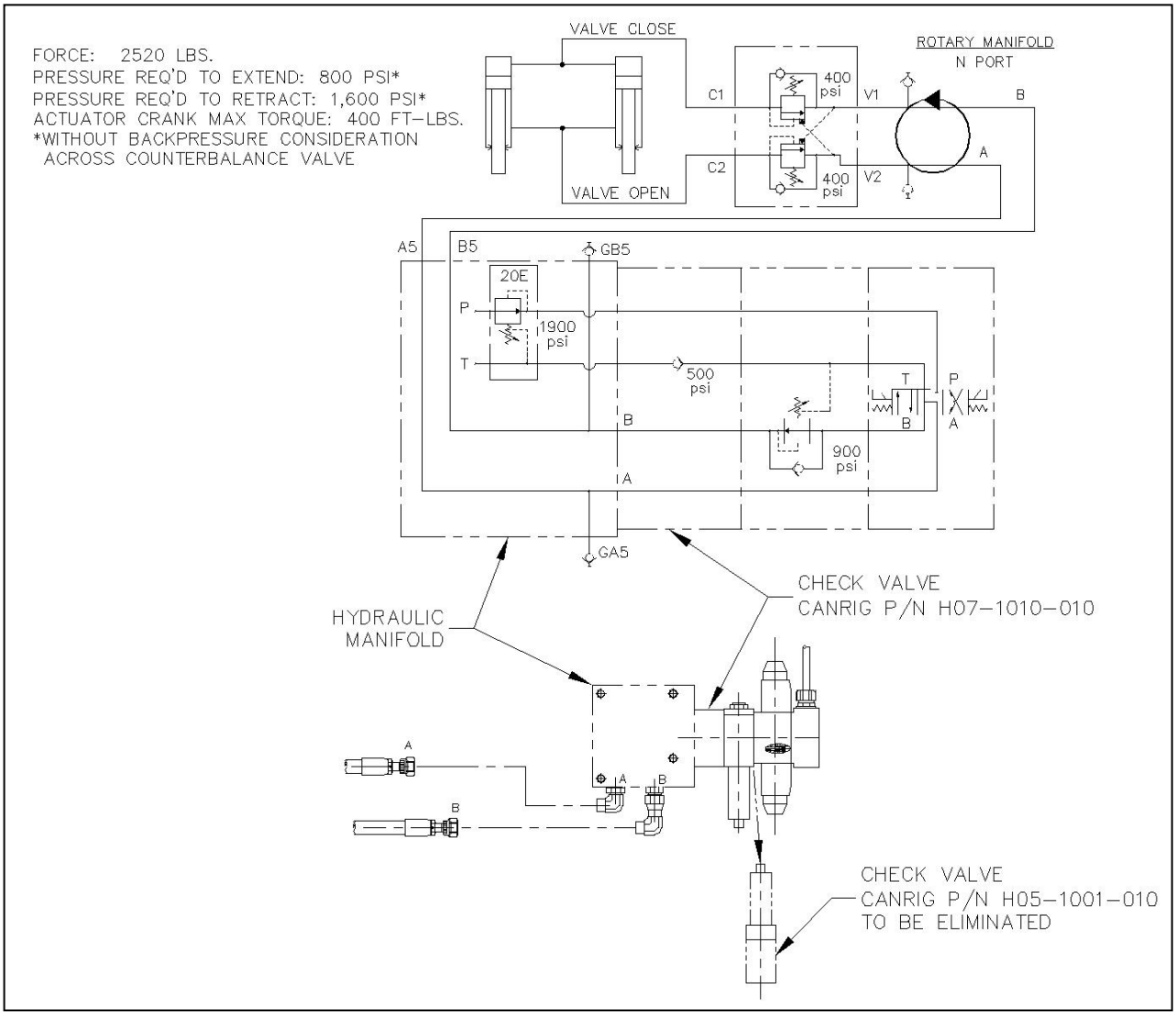

Figure 3

INFORMATION: Should you have any questions or concerns, please do not hesitate to contact your CANRIG representative or the Field Operations Manager listed below.

*For a complete list of all bulletins go to **www.canrig.com***

For further information contact:

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