



Model: All	Aug. 5, 2020
Serial #: N/A	
Product Bulletin # <b>CDS-002</b>	
<b>Alert</b>	



## CDS Link Tilt Speed Control

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### Issue

Canrig has identified the CDS link tilt cylinders could move at an unintended speed when cylinders are actuated.



**Warning!** Serious injury to personnel may occur by the sudden movement of the link tilt assembly. Personnel should stand clear of the line of fire when the link tilt cylinders are commanded to move.

### Solution

To improve the control of the speed of the cylinders, the current “meter-in” flow control valves configuration should be replaced with a “meter-out” flow control.

## Affected Manifolds and Replacement Parts

There are only two manifold types that require the flow control valves to be replaced.

Use Table 1 on page 2 and Figure 1 on page 2 as a reference to identify the manifold requiring replacement of the flow control valves.

The manifold P/N: H16707 does not require replacement of the flow control valve cartridges.

Contact RIGLINE 24/7™ to order the replacement parts.



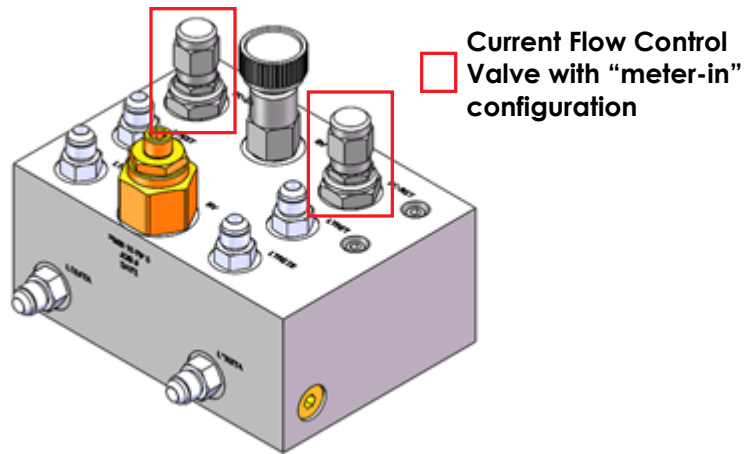


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**Table 1: Affected Manifolds and Replacement Parts**

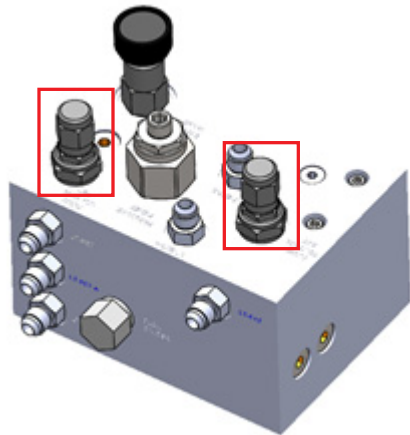
Manifold Assembly	Manifold P/N	Replacement Required?	Current Flow Control Valve Canrig P/N (Mfg. P/N)	Replacement Flow Control Valve Canrig P/N (Mfg. P/N)
AY24283	H16783	Yes	H16786 (FCVXXXX)	H14804 (FARXXXX)
AY24283	H16810 w/Flow Divider	Yes	H16786 (FCVXXXX)	H14804 (FARXXXX)
AY23793	H16707	No	H11908 (FDBXXXX)	No Replacement Required

**Note:** Manufacturer part numbers shown only for reference.

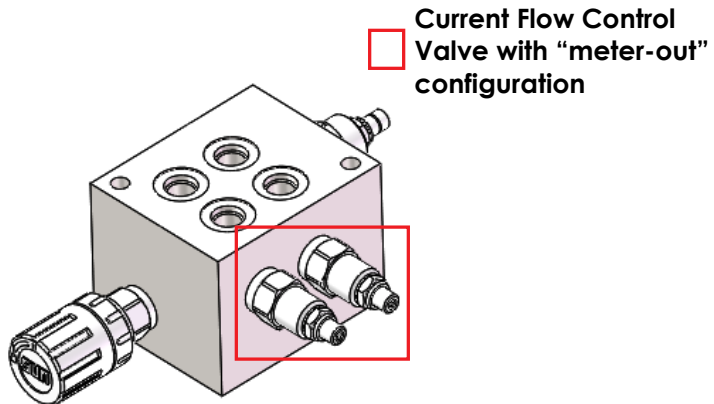


Current Flow Control Valve with "meter-in" configuration

**H16783 – Manifold without Flow Divider**



**H16810 – Manifold w/Flow Divider**



**H16707 – Manifold – No Change Required**

Figure 1: CDS Link Tilt Manifold Configurations

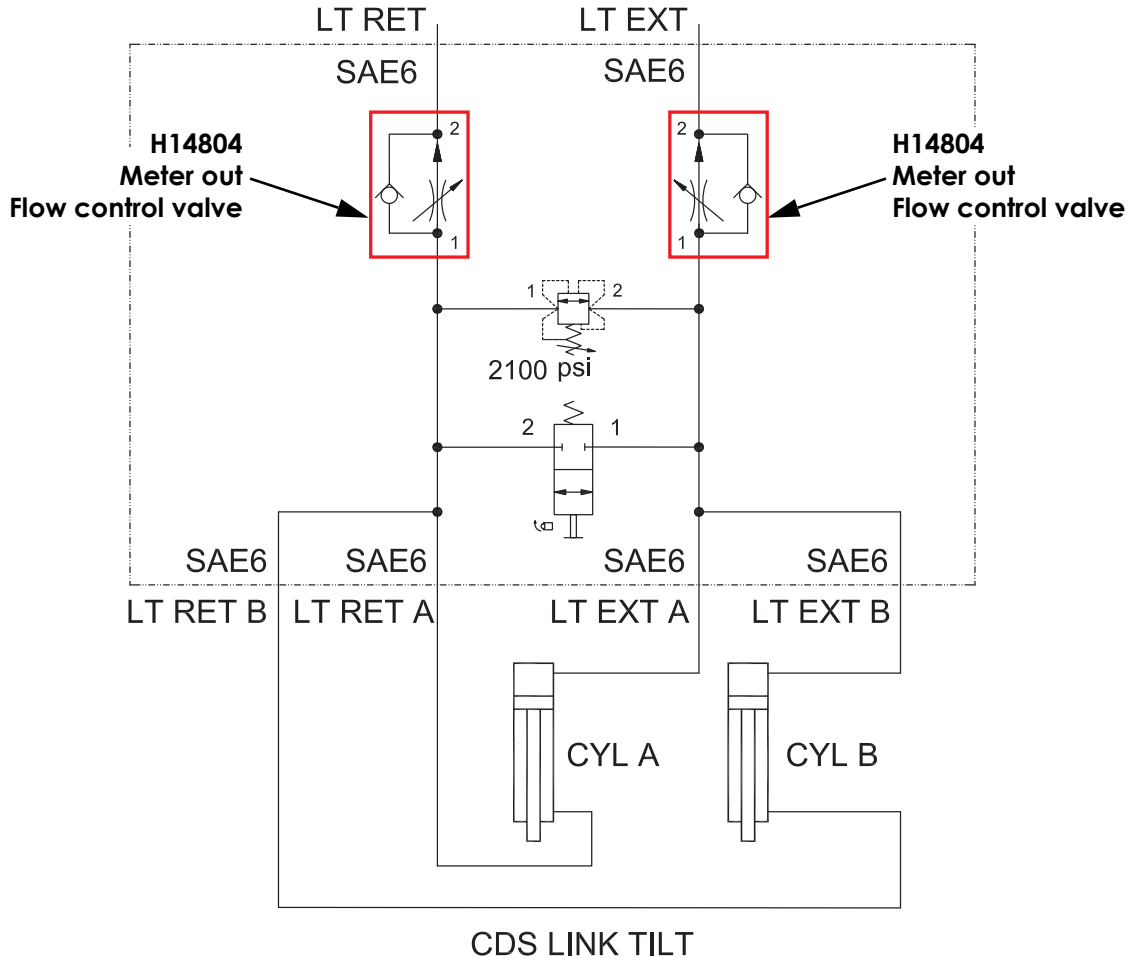


Figure 2: CDS link tilt flow control valves

## Flow Control Valve Cartridge Adjustment

There are two versions of CDS link tilt cylinders used with the links:

- CDS adjustable links: Uses a small bore cylinder with 2" bore diameter and the time required for the links to move from a vertical position to the maximum position is approximately 5 seconds for both extend and retract functions.



**Caution!** Time must never be less than 5 seconds for both extend and retract functions.



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- CDS non-adjustable links: Uses a larger bore cylinder with 3.5" bore diameter and the time required for the links to move from a vertical position to the maximum position is approximately 8 seconds for both extend and retract functions.



**Caution!** Time must never be less than 8 seconds for both extend and retract functions.

To calibrate the flow rate, use the following instructions to adjust the flow control valves (see Figure 3 for reference):

1. Loosen jam nut (turn CCW) while holding the cartridge stem steady with hex key.
2. Turn the cartridge stem 1/4 turn until the appropriate flow rate has been established. Turning the stem clockwise will slow the speed, turning the stem counterclockwise will increase the speed.
3. After appropriate speed of the CDS links has been established, tighten the jam nut firmly while holding the cartridge stem with hex key.
4. Tighten the set screw firmly.

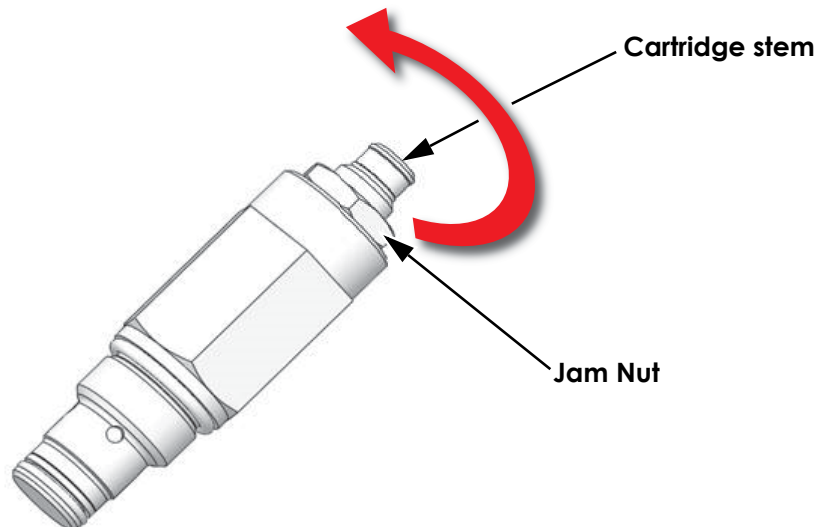


Figure 3: Flow Control Valve Cartridge Adjustment



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## Pressure Relief Valve Cartridge Adjustment

To ensure the CDS Link Tilt cylinders are maintained at any position and do not creep due to lower pressure setting, re-adjust the pressure relief valve on the manifold currently set at 1,800 psi to 2,100 psi. Pressure relief valve is labeled "RV/PRESSURE RELIEF VALVE."

## CDS Link Tilt Cylinder Synchronization

Link tilt manifolds (P/N: H16783 and H16707) do not have a flow divider valve which ensures the cylinders are synchronous when functioning the elevator links. Canrig offers a manifold (P/N: H16810) which includes a flow divider which improves this operation.