

## **LWCV Actuator Pinion Retainer**

## lssue

The Canrig Lower Well Control Valve (LWCV) actuator uses a retainer plate to ensure the pinion does not back out of the valve. Canrig has been made aware that some valve manufacturers specifications are not within the required dimensions needed to interface with our LWCV actuator. This can cause the pinion to come in contact with the retainer plate, transfer a load to the retainer plate and cause the bolts to fail. These components can potentially become dropped objects in the event they become loose or broken.



Figure 1: Pinion Retainer and pinion location

## **Affected Units**

All top drives with a Canrig manufactured LWCV actuator.



## Recommendation

- 1. Perform a visual inspection of the LWCV immediately.
  - a. Inspect the LWCV actuator guard for damage. Ensure the openings and gaps between the guard panels and the LWCV actuator have not been enlarged, which would allow loose and/or broken parts to fall through.
  - b. Open the guard and inspect the pinion retainer, ensure the fasteners are not damaged and are properly installed. Replace fasteners with any signs of damage.
  - c. Ensure all fasteners are installed with safety securement. Replace safety securement that is frayed, loose, or damaged.
- 2. Lightly tap the pinion until the pinion is bottomed out in the valve hex socket.
- 3. Examine the pinion retainer and ensure the pinion retainer is flush with the gear racks and the fasteners are properly installed.
- 4. Check if there is a gap between the pinion retainer and pinion. Use a feeler gauge to ensure there is a gap between the pinion retainer and pinion.



**Note:** If there is a gap between the pinion retainer and pinion, please disregard the remainder of this product alert.

- 5. If there is no gap between the pinion retainer and the pinion, remove the four pinion retainers and the two pinions.
- 6. Measure the length of the pinions (DT14521). See Figure 2.



Figure 2: Pinion (DT14521) length

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7. Measure the pinion retainers undercut (DT12930). See Figure 3.



Figure 3: Pinion retainer undercut (DT12930)

8. After taking the measurement, contact RIGLINE 24/7<sup>™</sup> for more guidance. Have the above measurements ready to present.