



Top Drive Frame Base Inspection

Issue

A crack may form on the top drive frame as a result of rough drilling or fatigue.

Recommendation

- Inspect the top drive frame for any visible sign of cracks. Canrig recommends a regular inspection of the top drive to identify cracks and other signs of damage and wear. See section 4B of the Canrig top drive manual. Paint flaking or cracking can be an indicator of cracks in the weld or base metal beneath.
- Inspect the top drive frame after any impact events and after periods of rough drilling or jarring. Refer to section 4B of the Canrig Top Drive manual for additional inspection recommendations following rough drilling and jarring.
- If any visible signs of cracks are found, repair the cracks at the earliest opportunity following the procedure below.

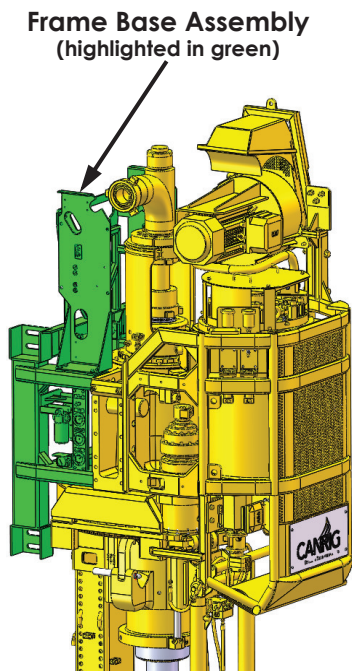


Figure 1: Frame Base Inspection Areas. Inspect both sides.



Model: 750T/500T/350T	Nov. 15, 2017
Serial #: All	
Alert	

Top Drive Frame Weld Repair Procedure

Welding must be performed by a welder certified to weld the applicable material in accordance with AWS D1.1 or equivalent.

While welding, be sure to do the following:

- Adjust amperage on the welding machine to give the best penetration possible
- Remove slag after each pass

Use the following procedure to repair the crack:

1. Grind or gouge out the base metal to remove the crack.
2. If the crack extended into the weld or if there is a crack in the weld, remove the existing weld in the area where the crack is present down to sound metal using grinding or gouging method.
3. To ensure that the crack is completely removed, it is necessary to grind past the visible crack.
4. MPI (Magnetic Particle Inspection) the crack area completely by going past the end of the visible crack to ensure that the crack is completely removed.
5. If it was found that the crack was not completely removed or a new crack was discovered, grind the crack completely and MPI the area again to ensure that the crack is completely removed.
6. If necessary, preheat the joint to a temperature greater than 75°.
7. Using an E7018 low hydrogen welding rod, fill in the areas that were removed. Refer to Canrig Engineering Specification 704.
8. Clean the repair weld with a wire brush and MPI to ensure that there are no cracks.
9. Apply primer and paint to prevent corrosion.