



## Top Drive Guard Catch Alert

### Issue

Some top drive guards contain perforated plate on the front of the guard that is recessed 1.25" from the face of frame creating a possible catch point. Should drill pipe or other tubulars make contact with the front of the top drive guard while the top drive is descending, the pipe can become entrapped on the structure of the guard.

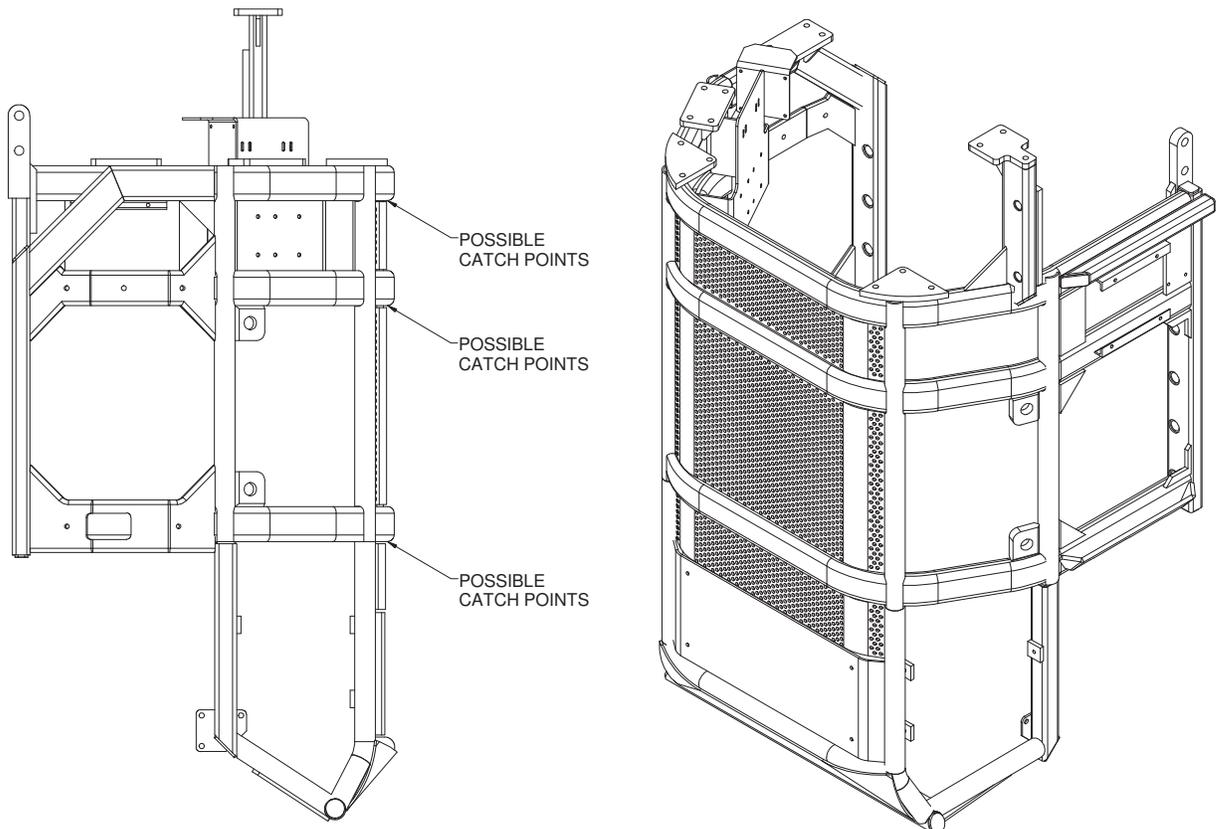


Figure 1: Possible catch points on the top drive guard

### Model Numbers Affected

To determine affected top drive models, perform a visual inspection using Figure 1. Depending upon the age and size of the top drive, this upgrade may not be required.

Alert

## Preventative Methods

Before lowering top drive, ensure the top drive path is clear of drill pipe or any other objects. When necessary use spotters to verify top drive path is clear. Visual and verbal communication between Driller and Derrickman is essential.

## Recommendation

Should preventative methods fail, a guard modification kit is available. This kit eliminates the possible catch points by providing one continuous surface free from any recesses. To install the kit, the existing perforated plate will need to be cut out and removed in the locations described on Figure 3 on page 3, and a new replacement plate will have to be weld in. Contact RIGLINE 24/7™ Support to purchase the components under kit AY23335.

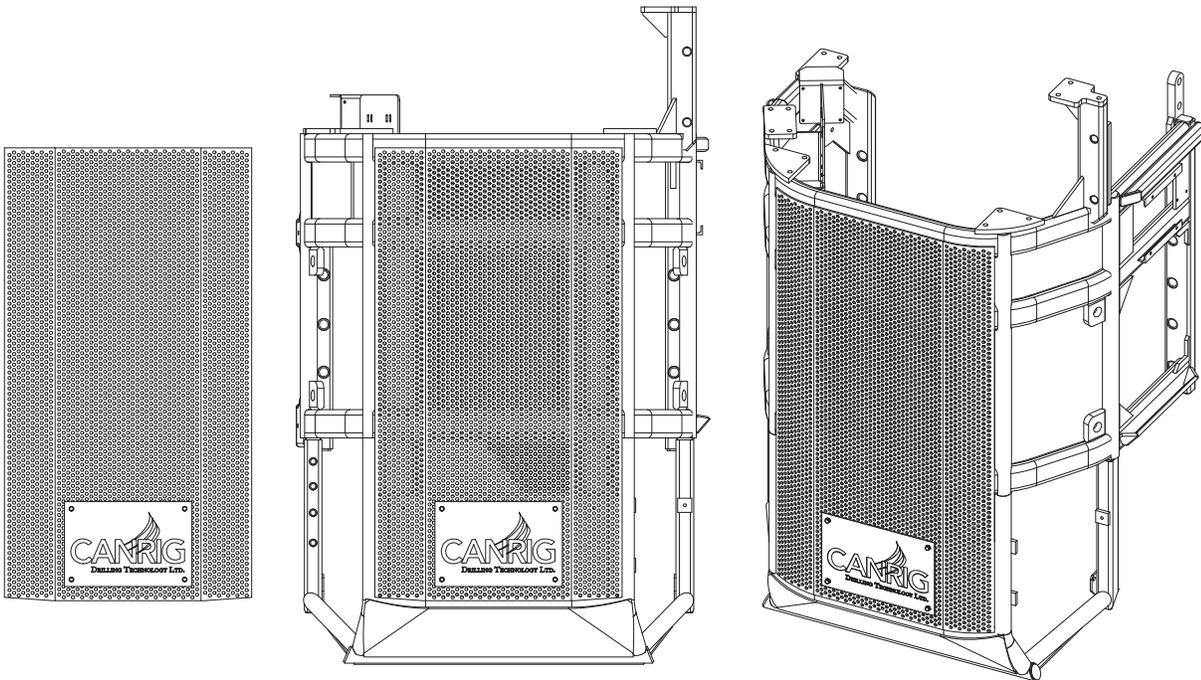


Figure 2: Modified guard included with the kit

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## Procedure

**Note:** Canrig recommends performing this procedure during rig moves with the cage removed from the top drive to prevent equipment damage.



**Warning!**

Always remove the guard from the top drive prior to welding. If welding equipment is not properly grounded during welding, parts of the top drive could be damaged.

1. Cut out existing perforated plate and nameplate mount as shown on Figure 3.

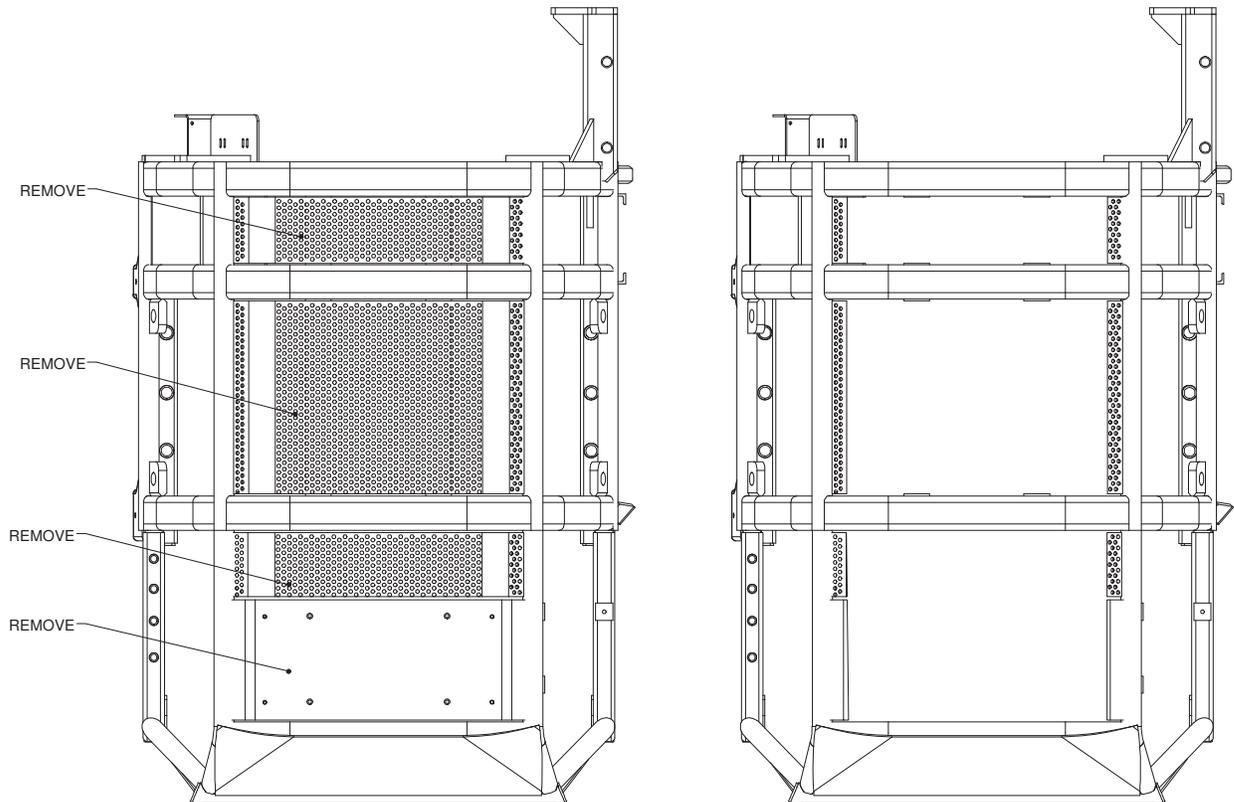


Figure 3: Remove existing plates

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- Place perforated guard cover (item 1 on Table 1) onto surface of existing cage. Make sure bottom of perforated plate (determined by the nameplate mounting hole location) is flush with the pipe at the bottom of the cage to ensure proper fit. See Figure 4.

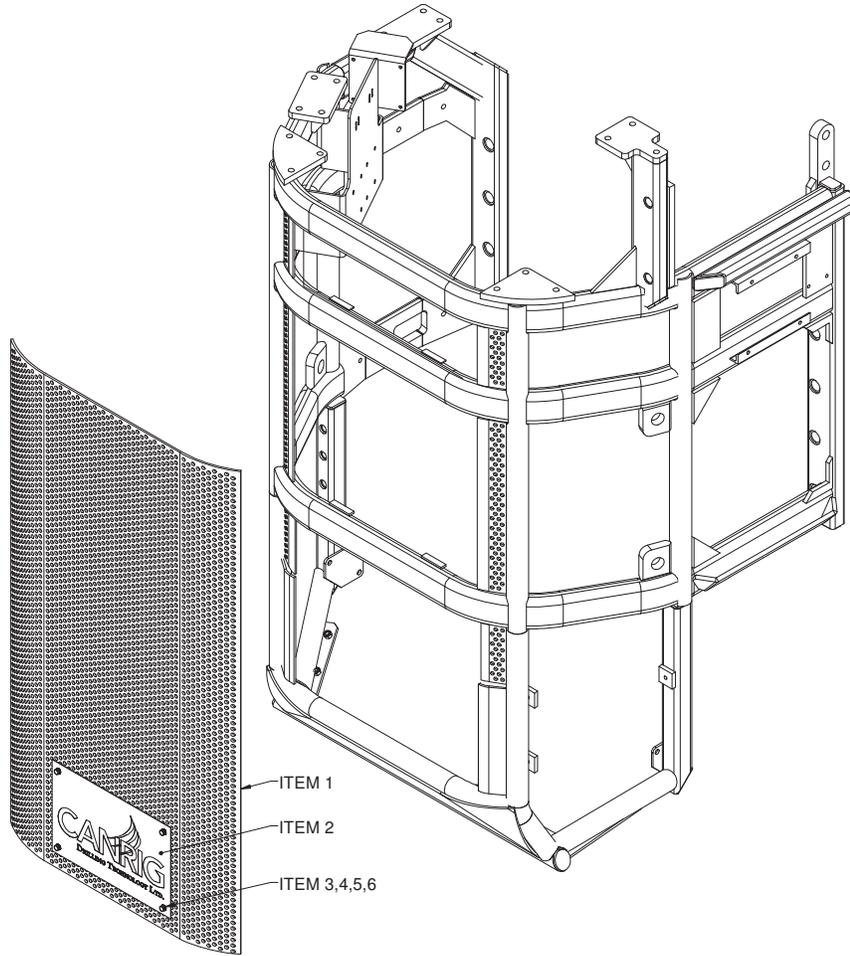


Figure 4: Top Drive Guard Cover Kit

**Table 1: Top Drive Guard Cover Kit Canrig P/N AY23335**

ITEM	QTY	DESCRIPTION	MATERIAL	CANRIG PART NO.
1	1	PLATE, PERFORATED, TD GUARD COVER	1/4" PLATE, PERFORATED, ASTM A36/Q235	DT23707
2	1	LOGO PLATE, CANRIG, 14GA SS, 18 X 12	AISI 304	DT23706
3	4	LOCKWASHER, 3/8, NORD-LOCK, SS		LW-0375-NL-SS
4	4	CAPSCR, HEX HD, 3/8-16UNC X 1.00, GR8, W		HH-0375NC-0100-GR8-W
5	4	WIRE ROPE, 1/16 IN, 7 X 7, STAINLESS	AISI 304	M21-2000-010
6	4	FERRULE, 1/16, OVAL, ALUMINUM		M19-3006-010

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- Weld Item 1 to existing tubing of cage frame as shown on Figure 5 using E7018 welding rod or equivalent per the welding method used.

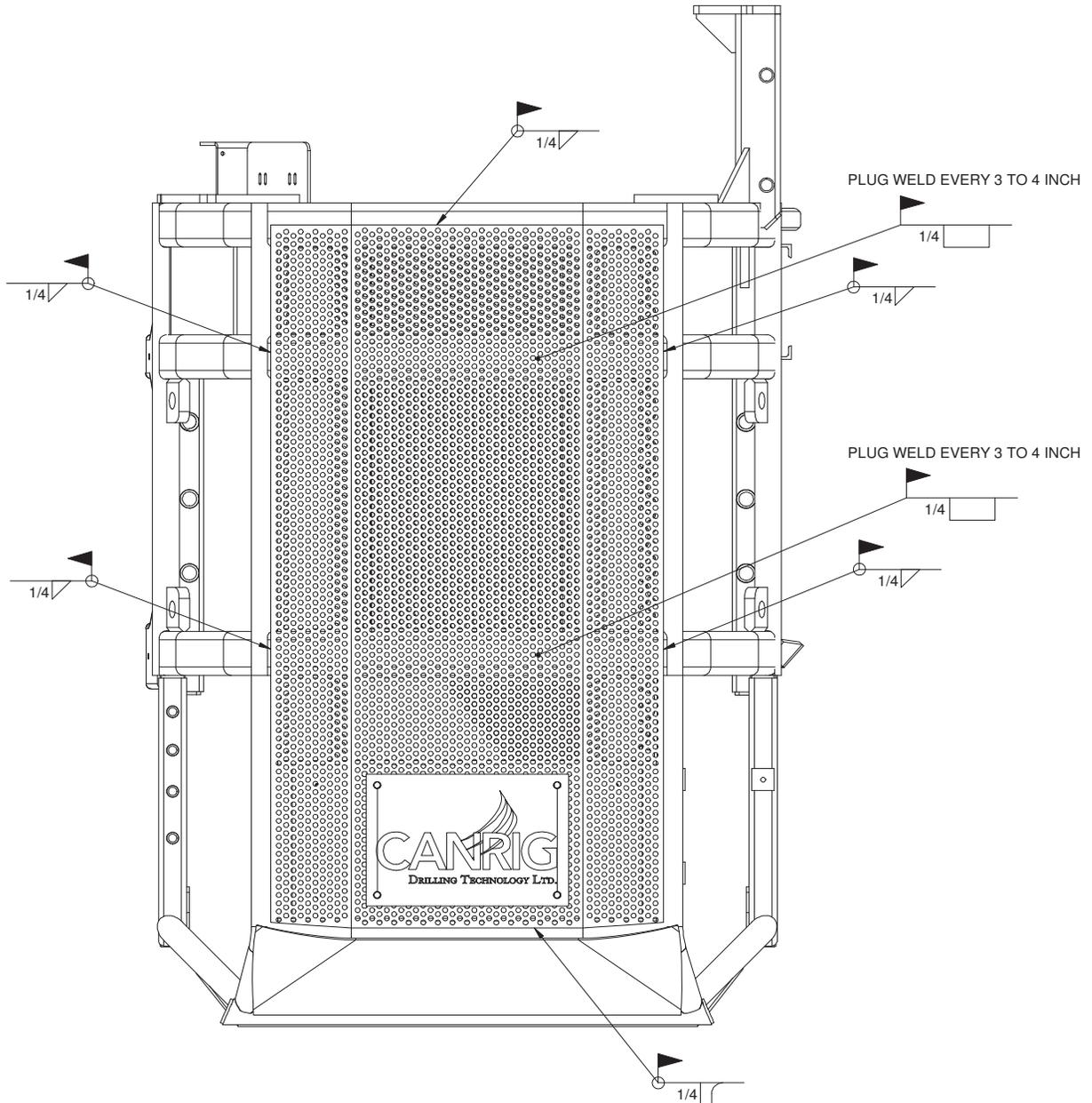


Figure 5: Welding instructions

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4. All bare steel will need to be painted to minimize the possibility of rusting.
5. Locate nameplate (item 2) with the tapped holes provided. Apply Loctite 242 or equivalent to 3/8" bolts (item 3) and use to secure nameplate in conjunction with lock washers (item 4). Torque 3/8" bolts to 40 ft-lbs per Canrig Engineering Specification ENG 725.
6. Safety wire 3/8" bolts using 1/16" diameter wire rope (item 5) and 1/16" oval sleeve (item 6) to prevent loosening of bolt and retaining bolt head in case of failure per Canrig Engineering Specification ENG 701.

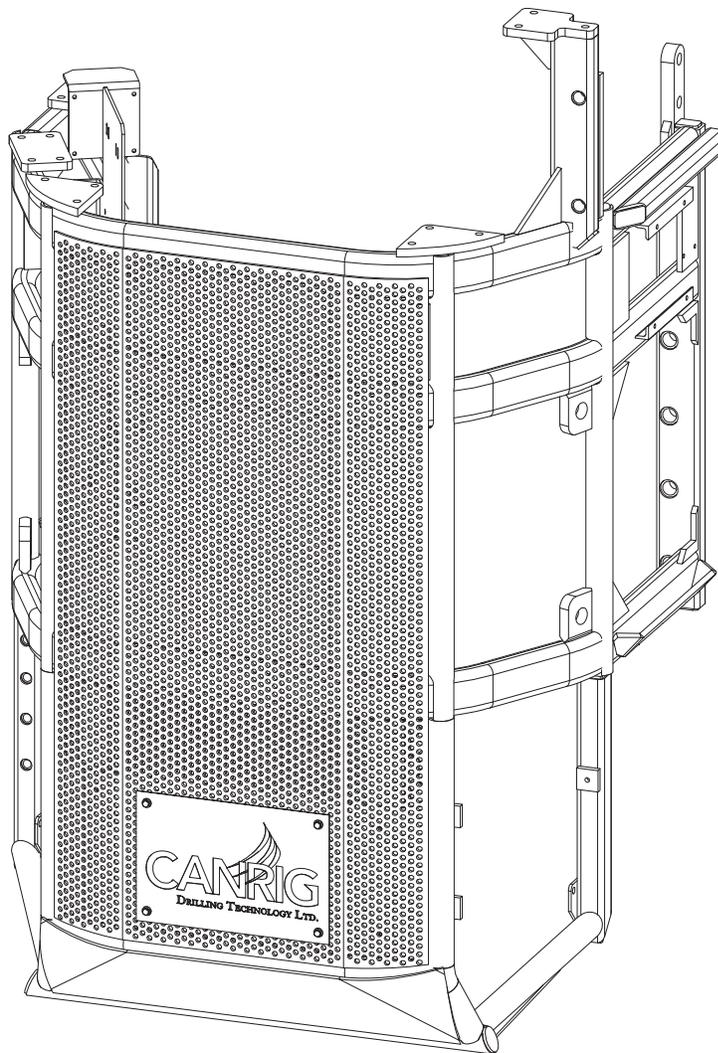


Figure 6: New perforated plate after installation

**Note: Drawings and BOMs are for reference only. Refer to electronic copy for latest updates.**