



Model: See Affected Product Lines

Serial #: N/A

Jun. 8, 2021

Product Bulletin # TDS-233 Rev 1

## Alert



# Broken Guide Dolly Pin Retainer

## Issue

In a recent dropped object incident, the guide dolly pin retainer plate and fasteners broke and dropped to the rig floor. The retainer plate is designed to prevent the pin from coming out, but the design is such, that it also restricts the rotation of the pin. On occasion, the operation of the top drive with the guide dolly applies a rotational force to the pin. The retainer plate and fasteners have inadequate strength to resist this rotational force, and the retainer fails over time.

These dolly pins and retainers have been revised to retain the pin, but also allow it to rotate freely.

## Affected Product Lines

Canrig Top Drives of the following models, which use a custom dual rail guide dolly torque arrest:

- 250-EMI-400 (also known as T-250)
- 350/400-EXI-600/800 (also known as T-350)
- 500/750-ESI-1000/1350 (also known as T-500)



**Note:** Not all EMI (T-250), EXI (T-350), and ESI (T-500) top drives will have a dual rail guide dolly torque arrest. Most top drives will use a single rail torque track, which do not have this defective design. Some custom guide dollies use bolted connections rather than pinned connections, and therefore do not include this defect.



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## Background

The Canrig model top drives listed above use one of the following torque arrest systems to transfer the reactive drilling torque of the top drive to the mast:

### Single Rail Torque Track and Torque Bushing

This is the standard design and can be easily installed in any mast. A single rectangular tube (torque track) hangs from the crown behind well center. Torque is transferred from the top drive to the torque track via a torque bushing, and then to the mast via the T-bar and anchor beam. Top drives using this torque arrest system are NOT affected by this bulletin.

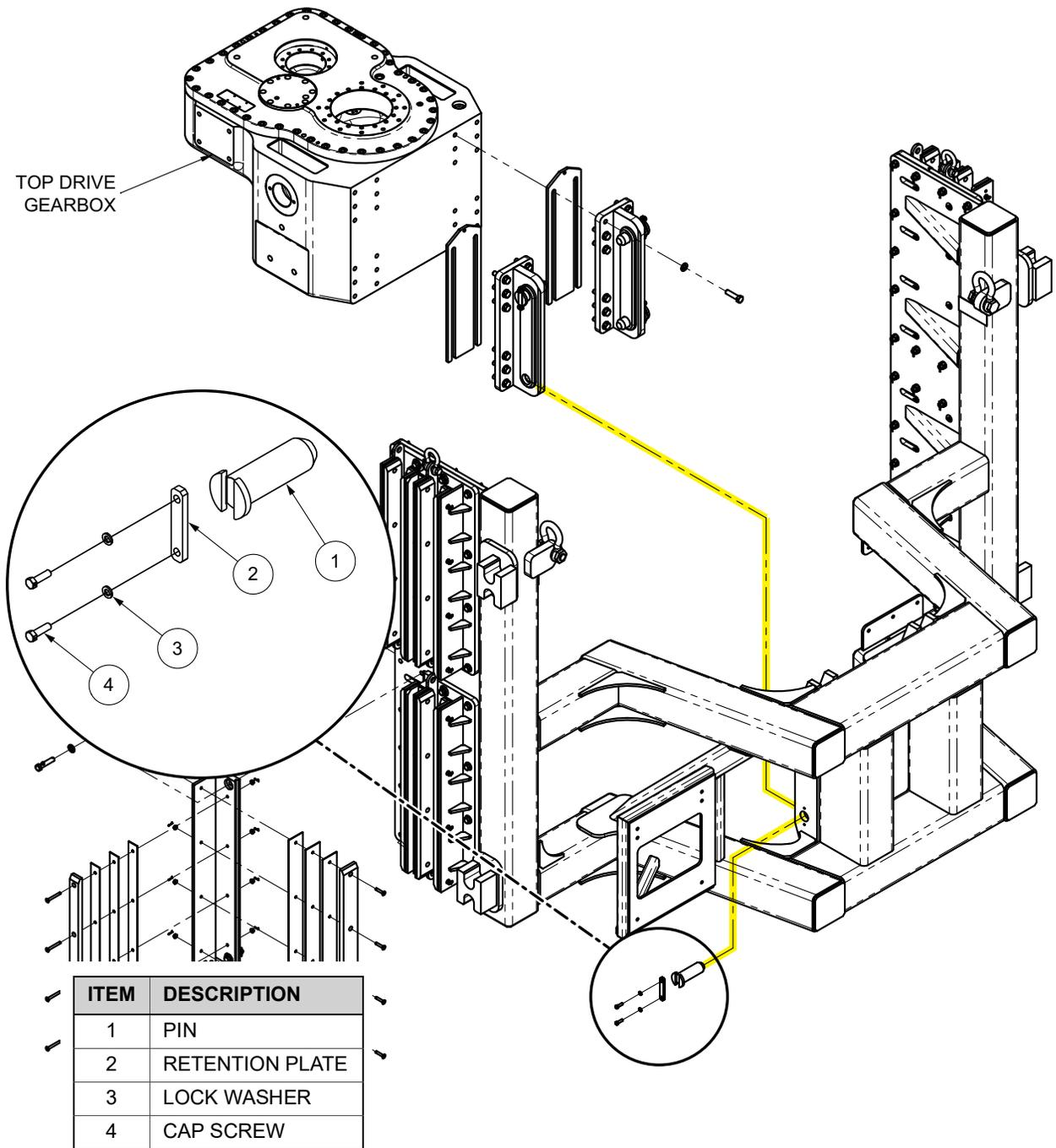
### Dual Rail Guide Dolly

Each guide dolly is custom designed to fit the mast they are used in. They transfer torque to the mast via rails which are welded to the front legs of the mast. In some guide dollies, the top drive gearbox and the rail sliders bolt directly to the main dolly frame. In some guide dollies, pins may be used to connect to either the gearbox or rail sliders to the main dolly frame. Top drives using guide dollies WITH pinned connections are affected by this bulletin.

See Figure 1 on page 3 for the original (defective) design and Figure 2 on page 4 for the revised design.



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ITEM	DESCRIPTION
1	PIN
2	RETENTION PLATE
3	LOCK WASHER
4	CAP SCREW

Figure 1: Defective Design



**Alert**

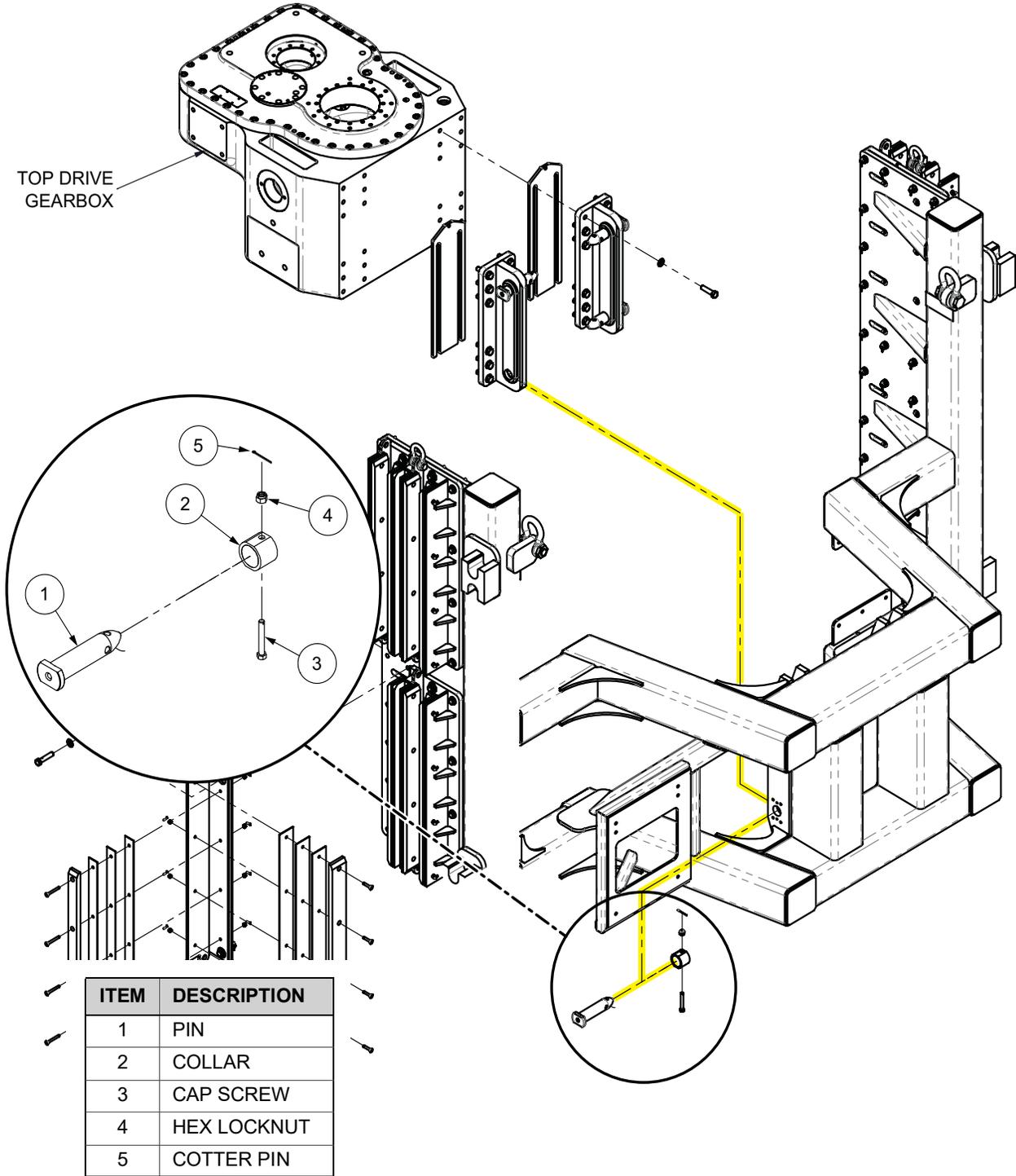


Figure 2: Revised Design



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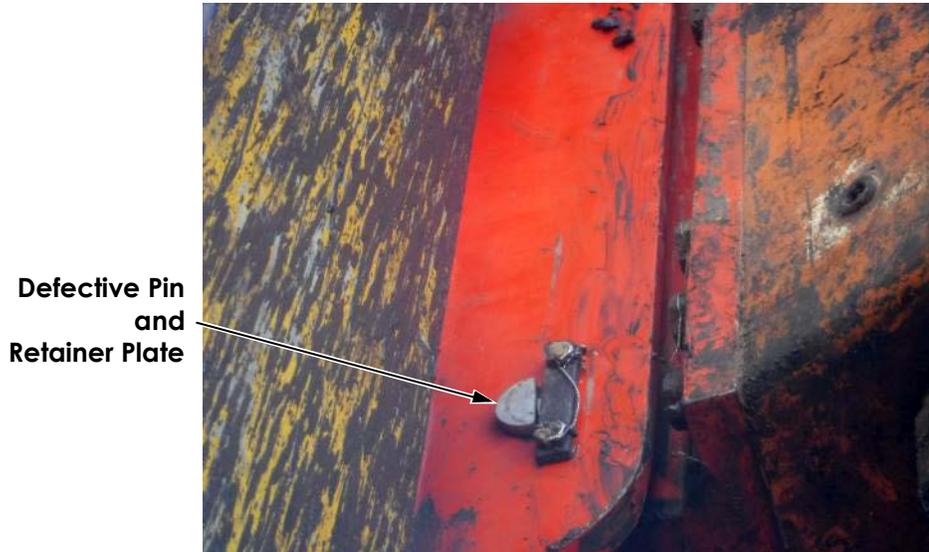


Figure 3: Defective Pin and Retainer Plate

## Recommended Action

- Determine if your custom guide dolly has the affected type of pin and retainer.
- Perform daily inspections of the guide dolly pins, retainer plates, and fasteners to ensure that they are not damaged.
- Contact RIGLINE 24/7™ to order replacement dolly pins with revised retainer and fasteners.