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Wireline Guide Installation Alert

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1.0 Overview:

The installation of wireline guide rollers into the wireline guide assembly requires that the nuts retaining the roller be carefully torqued to prevent rig damage and ensure reliable operation and the safety of personnel.

Competent engineering personnel must be engaged to design or review each installation. Operation and safety procedures and policies for each installation must be clearly established and implemented by the user. This engineering bulletin provides guidelines for design of a safe and reliable assembly. Except as noted, these guidelines apply both to the Oteco, Inc. G-10 and G-102 wireline guide assembly.

The design must take into account the torque applied to shaft nuts, tension load applied to wireline hangar assembly and force applied by the wireline during operation. Should assembly be over torqued and over tensioned shaft or thread shear can occur potentially causing a roller to fall to the rig floor.

2.0 Installation Guideline:

2.1 Nut Torque - Rollers

When assembling the wireline guide roller assembly, the four "external" G-10/G-102 wireline guide rollers should be installed by applying approximately ½ turn to the ½"-20UNF nylon lock nut after the nut comes snugly in contact with the frame. Torque to achieve this ½ turn should not exceed 20 ft-lbs. The two "internal" G-10/G-102 wireline guide rollers should be installed by applying approximately ¼ turn to the ½"-20UNF nylon lock nut after the nut comes snugly in contact with the frame. Torque to achieve this ¼ turn should not exceed 10 ft-lbs. Verify free turning of each roller after tightening nuts. The nylon lock nuts are supplied as the means to prevent nuts from loosening during operation. Use of a non nylon nut, even if tightened to recommended torque will not prevent loosening. Use only Oteco supplied nylon lock nuts. Nylon lock



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nuts should never be reused after their first use. Always use new nylon lock nuts when G-10/G-102 rollers are installed. After torqueing nuts, install cotter pins into shaft hole above nuts. Bend cotter pin to complete installation.

2.2 Nut Torque – Roller Cage

When assembling the wireline guide roller assembly, the four slip plate nuts and eight fender bolts shall be torqued to 15 ft-lbs.

2.3 Wireline Hangar Tension

Wireline hangar tension should not preclude wireline guide assembly from tracking back and forth. If the hangar tension is too tight, pulling main wireline towards derrick using wireline guide assembly, excessive loading can cause bearings to seize.

3.0 Inspection:

Routine inspection should be performed to ensure rollers are rotating properly. The roller shaft should not rotate during normal operation, but instead, the roller should rotate on the stationary shaft. During operation, a visibly rotating cotter pin can be an indication of a seized bearing and a rotating shaft. Should this occur, the roller should be replaced immediately.

4.0 Pulley Maintenance:

Routine inspection should be performed to ensure pulleys are lubricated and rotating freely. Standard zerk fittings for lubrication are located on pulley face. HF-4 pulley manufacturer recommends lubrication after every 24 hours continuous operation or every 14 days intermittent use with a lithium base grease.