

Change Bulletin

No: CB032

Rev: Draft1

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Description: Replacement of failed Rineer Motor for HXI Top Drive



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BACKGROUND INFORMATION:

Tesco has experienced several hydraulic motor failures on HXI Top Drive units, some operating in the field and one during in house tests. Rineer series 125 hydraulic motors installed on HXI top drives have been replaced, but premature failures re-occurred (loss of net motor pressure). Tesco conducted an investigation involving Rineer specialists in a quest to determine the root cause for the failures. Failed motors were disassembled and carefully inspected revealing insufficient clearance between rotors and end timing plates. This led to overheating, thermo expansion and reduced lubrication between internal components. As a result, cracks occurred in the timing plates causing net pressure loss.

Rineer manufactures different rotor clearance packages for this motor. Therefore, increased clearance rotor cartridges have been supplied by Rineer and tested under continuous full load (430-460 RPM @ 4000 PSI). Tests were unable to create the same or any failure. Based on investigation results Tesco requested increased clearance rotor packages on all series 125 motors to be installed on HXI products.

This bulletin addresses all installed hydraulic motors (Tesco #1120189) on HXI top drives currently operating in the field. Tesco documentation has been revised and all current HXI products receive the new Rineer motor.

AFFECTED PRODUCT:

Possible HXI Units affected: 530, 572, 573, 574, 575, 576, 577, 578, 579, 593, 602, 604, 646, 654
Reference Tesco #1100001 – Top Drive, 2.28:1 Ratio, c/w Swivel Yoke, 250-HXI-700

DESCRIPTION OF CHANGE:

New Rineer hyd. motor for HXI is specified as an increased clearance rotor package, Hi Speed motor. Tesco data base was updated for new motor nomenclature and specifications (Tesco #1120189)

ACTION REQUIRED:

Record hydraulic motor serial number from your HXI top drive unit and forward to Tesco Service department for identification. Each serial number will be verified against Rineer data base and motor type clearance confirmed. If it is a "2S" type and replacement is required, service can make necessary arrangements to have the motor replaced with a 2H type.

J. Blanes
June 9, 2008

Contact your local TESCO Parts and Service Center for further information regarding this bulletin and or supply of affected components noted above.