## **Engineering Change Order**

Effective Date: 12-Oct-2004

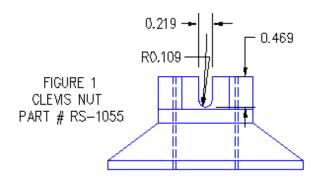
Clevis nuts, Part # RS-1055 are being modified to a heat treat of H-1025. In addition, the slot is being widened to allow a larger cotter pin and radiused at the bottom of the slot. See figure 1. The modified nuts will be marked with an H directly after the lot #. Parts marked with lot # WTI-G3 or higher will be the new design but will not be marked with the added H. The clevis shafts, Part # RS-1154 are being drilled to a larger hole with a #10 drill bit. See figure 2. The Cotter Pins are being changed from Part # RS-1278 5/32" X 2" to Part # RS-1378 3/16" X 2". See figure 3. The material remains 316 S/S. Part # RS-1278 will no longer be available and should be considered obsolete.

This change is applicable to all 14", 17", and 26" sheaves manufactured by Wireline Technologies Inc. Schlumberger describes these sheaves as, 14" SHVC-AA, 17" SHVC-CA, 17" SHVC-DA, 17" SHVC-EA, 24" SHVC-GA, and 24" SHVC-HA.

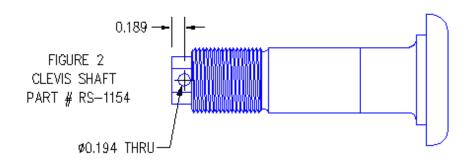
The reason for the change is, some clevis nuts have experienced stress corrosion cracking. The cracks have originated at the thread where the nut contacts the rubber shock cushion and propagated out to the slot. The higher heat treat will make this part less prone to stress corrosion cracking. The larger cotter pin will make the assembly sturdier and capable of handling more abuse.

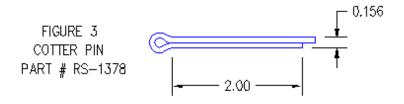
These changes will be made automatically during the annual recertification. If requested, parts can be exchanged for modified parts free of charge from WTI. Upon receipt of the clevis nuts, we will ship back to you modified clevis nuts, and new cotter pins. The clevis shafts will need to be drilled with a #10 drill bit. For more information regarding this exchange contact Russ Vance CEO, Wireline Technologies; (801) 323-5533 X-11 or russ@wtisheave.com.

Technical questions regarding this change can be directed to Derek Carlson, V. P. Engineering; (801) 323-5533 X-13 or derek@wtisheave.com.



17-4PH, HEAT TREATED TO H-1025 ACCEPTABLE LOT NUMBERS ARE: A1H - G3H, G4, G5, G6, ETC.





ALL DIMENSIONS ARE IN INCHES



2140 NORTH REDWOOD ROAD #60 SALT LAKE CITY, UTAH 841/6 TEL. (801) 323-5533 FAX. (801) 323-7033