Limited Warranty

Condux International, Incorporated extends the following warranty to the original purchaser of these goods for use, subject to the qualifications indicated:

Condux International, Incorporated warrants to the original purchaser for use that the goods or any component thereof manufactured by Condux International will be free from defects in workmanship for a period of 90 days from the date of purchase, provided such goods are installed, maintained, and used in accordance with Condux's written instructions.

Components not manufactured by Condux International but used within the assembly provided by Condux International are subject to the warranty period as specified by the individual manufacturer of said component, provided such goods are installed, maintained, and used in accordance with Condux's and the original manufacturer's written instructions.

Condux's sole liability and the purchaser's sole remedy for a failure of goods under this limited warranty, and for any and all claims arising out of the purchase and use of the goods, shall be limited to the repair or replacement of the goods that do not conform to this warranty.

To obtain repair or replacement service under the limited warranty, the purchaser must contact the factory for a Return Material Authorization (RMA). Once obtained, send the RMA along with the defective part or goods, transportation prepaid, to: Condux International, Inc. 145 Kingswood Drive Mankato, MN 56002-0247

THERE ARE NO EXPRESS WARRANTIES COVERING THESE GOODS OTHER THAN AS SET FORTH ABOVE. THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE.

CONDUX ASSUMES NO LIABILITY IN CONNECTION WITH THE INSTALLATION OR USE OF THIS PRODUCT, EXCEPT AS STATED IN THIS LIMITED WARRANTY. CONDUX WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.



Condux International, Inc. • P.O. Box 247 • 145 Kingswood Drive • Mankato, MN 56002-0247 507-387-6576 • 800-533-2077 • FAX 507-387-1442 Internet: http://www.condux.com

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USER GUIDE

USER GUIDE

400 D.Drill[™] Swivels





Inspection Procedure

Inspecting the swivel before and after each use ensures proper operation throughout the job.

- 1. Rotate the swivel to test for proper operation.
- 2. Wiggle the swivel's end to ensure there is no lateral play.
- 3. Make sure clevis pins are not damaged and are the correct size and grade for the swivel.
- 4. If necessary, lubricate the swivel (see Lubrication Procedure).

Lubrication Procedure

NOTE: Always use special **Condux** D.Drill grease (Condux part # 08190007). It is specially formulated with a calcium-complex soap for exclusive use in bentonite environments. Use of any lithium-based grease voids the warranty.

- 1. Locate and clean the grease-zerk fitting (Figure 1).
- 2. Inject grease through the zerk fitting until the old grease flushes past the seals on the swivel's other end.
- 3. Lubricate after every job. This extends the life of the swivel and prevents swivel lockup.

Installation Procedure

NOTE: The D.Drill Swivel has (4) angular contact bearings: (3) for tension loads and (1) for compression loads. The direction of installation is not critical, but we recommend pointing the grease zerk end towards the reamer. This helps prevent dirt from getting past the seals.

- 1. Ensure the swivel is the correct size for the job (see Table 1), and test the swivel operation.
- 2. Connect the swivel between the **pulling eye** and the **earth packer** or **reamer**.
- 3. Tighten the **clevis pin(s)** securely.

Removal is the opposite of the installation procedure.

Replacement Parts and Supplies

Condux offers replacement clevis pins and directional drilling grease. Consult your Condux catalog, or see your Condux representative for more information.



!WARNING: Read and understand all procedure and safety instructions before using any Condux D.Drill Swivels. Failure to do so may result in personal injury or property damage. Save this user's guide for future reference.



!ADVERTENCIA: Lea y entienda todo el procedimiento e instrucciones de seguridad antes de usar cualesquiera eslabones giratorios de Condux D.Drill. La falta de hacer tan puede dar lugar a daños corporales o a daños materiales. Excepto esta guía de usuario para la referencia futura.



!CAUTION: Wear personal protective equipment: Hard Hat, Safety Glasses, Safety Shoes and Leather Gloves. Failure to do this could result in personal injury.



!WARNING: Do not exceed the load capacity of the D.Drill Swivel or any element in the pull string. Do not stand directly behind the pull string. If any component breaks, severe personal injury or property damage could result.



!CAUTION: The D.Drill Swivel will fail if not properly lubricated. Personal injury or property damage could result.

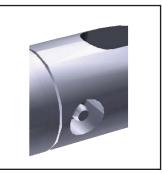


Figure 1 - 400 D.Drill Grease Zerk

	Working Load (LBS)	
Part Number	Tension	Compression
08190408	1,800	595
08190412	4,000	1,300
08190416	8,500	2,800
08190420	10,000	3,300
08190425	20,000	6,600
08190430	30,000	10,000

Table 1 - 400 D.Drill Swivel Load Ratings