

SWIVELS SELECTION & MAINTENANCE



DEFINITION OF A SWIVEL

The transition point of the stationary part of the rig and the rotating part of the rig while maintaining a pressure seal.

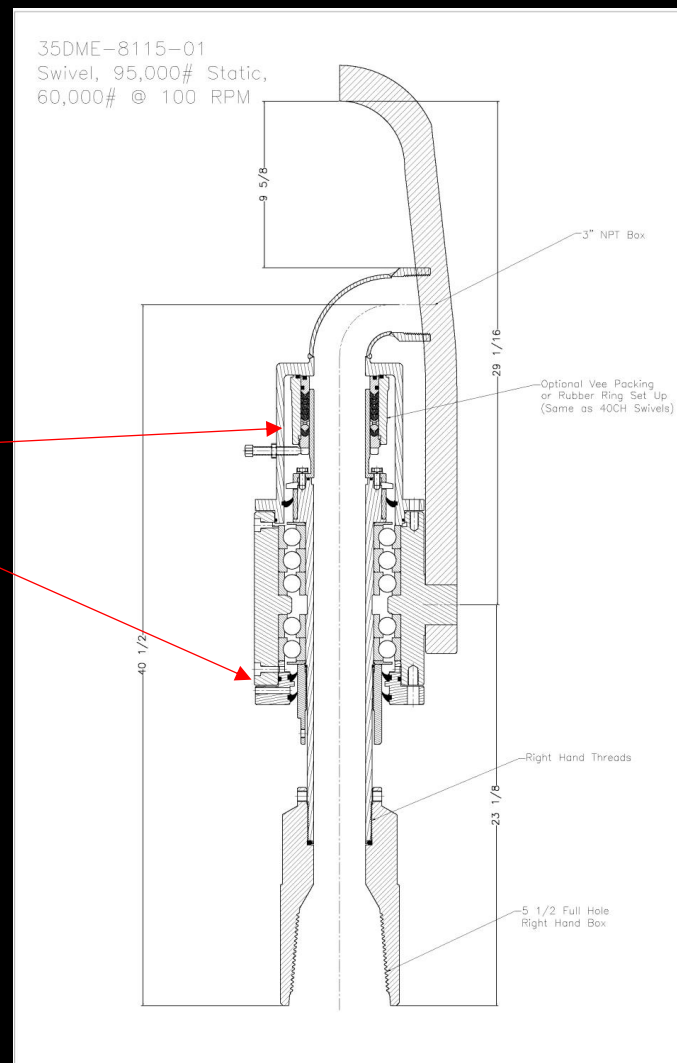


SELECTION WHEN PURCHASING

Know what type of swivel you require.

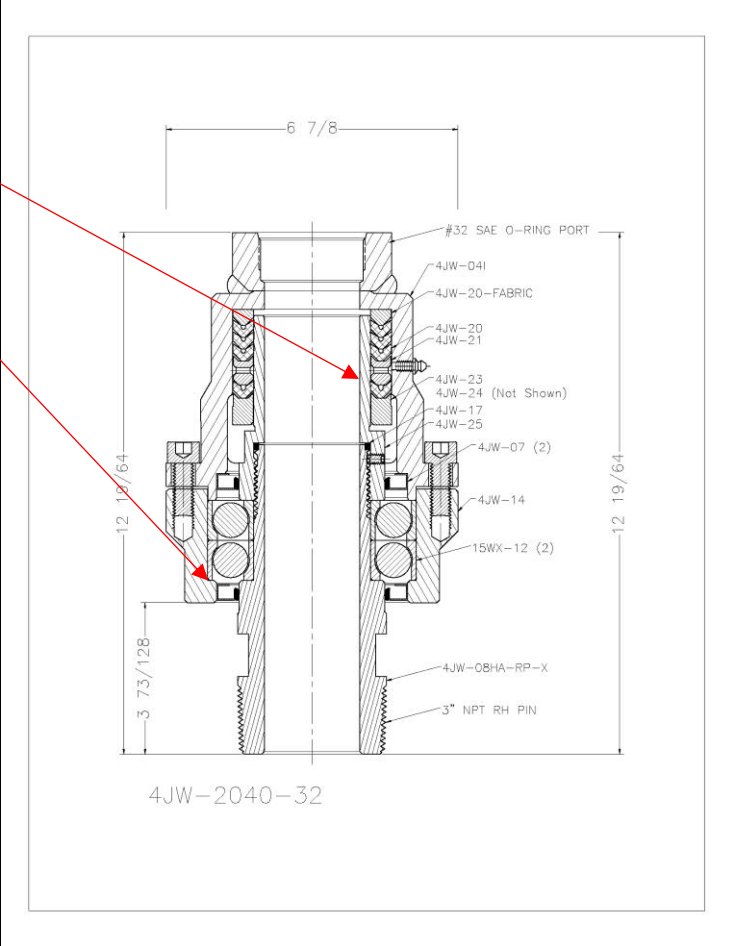
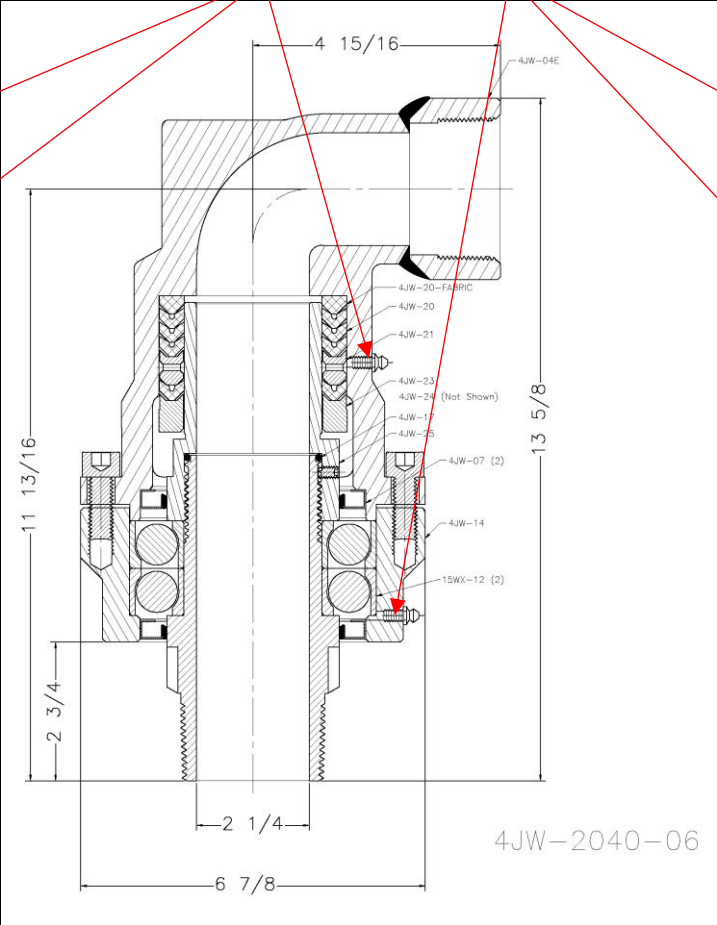
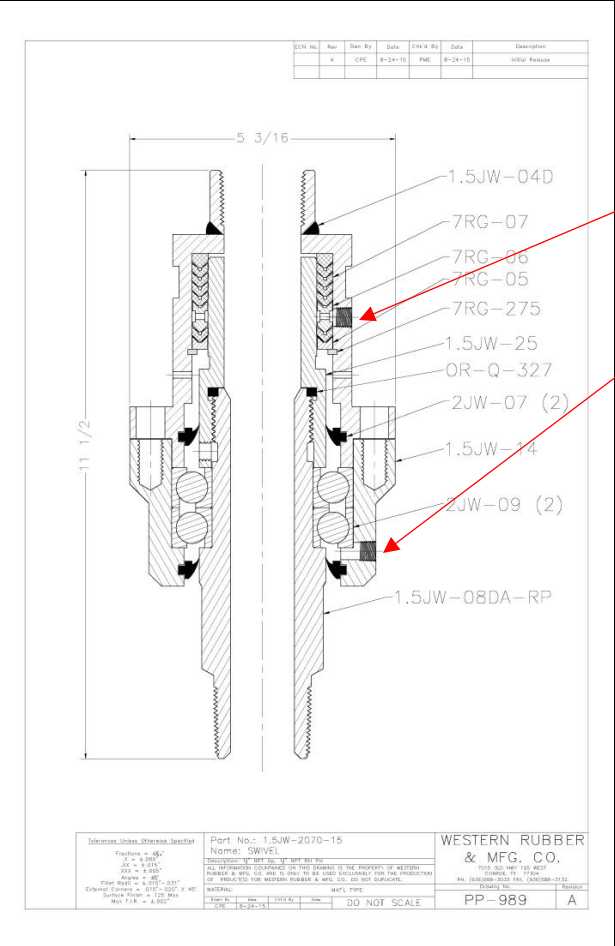
- Rotating Head
- Side Inlet
- Tailing Swivel
 - Load Bearing
 - Non-Load Bearing
- HOSE CONNECTION AND LOWER CONNECTION, SIZE AND TYPE.





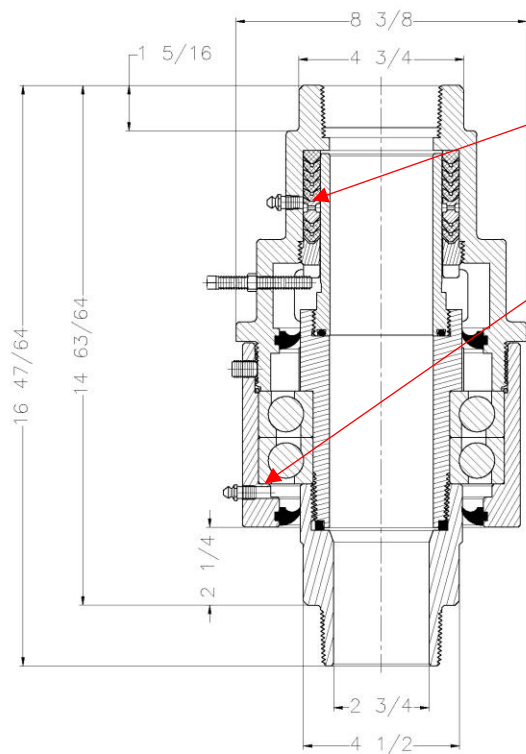
OTHER EXAMPLES OF COMMON ROTATING HEADS FOUND ON TODAY'S DRILLS

Zerk
Fittings

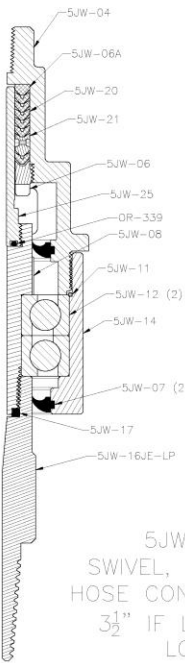
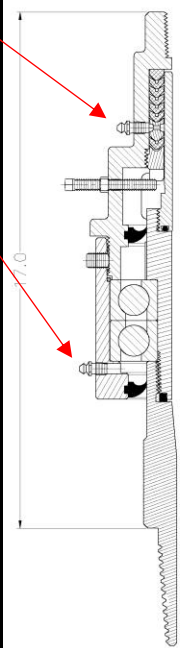
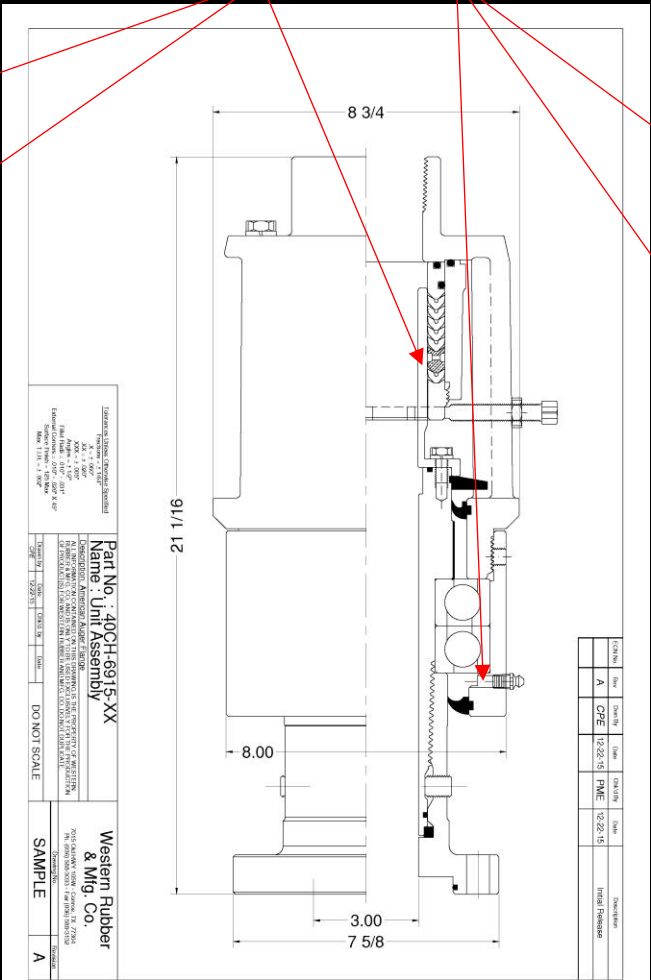


MORE EXAMPLES

Zerk Fittings



5JW-2050-01X
SWIVEL, 3" NPT FEMALE HOSE CON.
STRT UP, WITH 3" NPT LH PIN
LOWER CON., 2 3/4" IDTHRU LOWER CON.

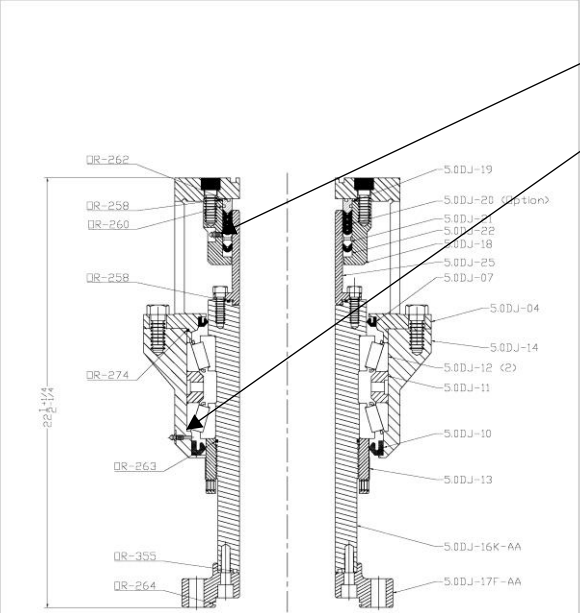


5JW-2050-22
SWIVEL, 3" NPT FEMALE
HOSE CON. STRT UP, WITH
3 1/2" IF LEFT HAND PIN
LOWER CON.

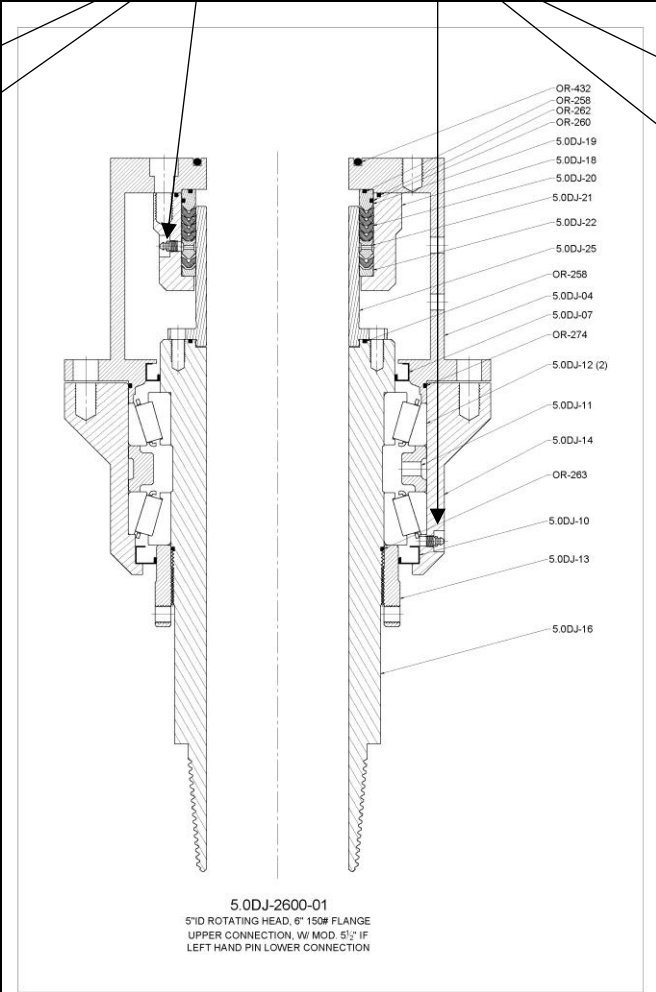


MORE EXAMPLES

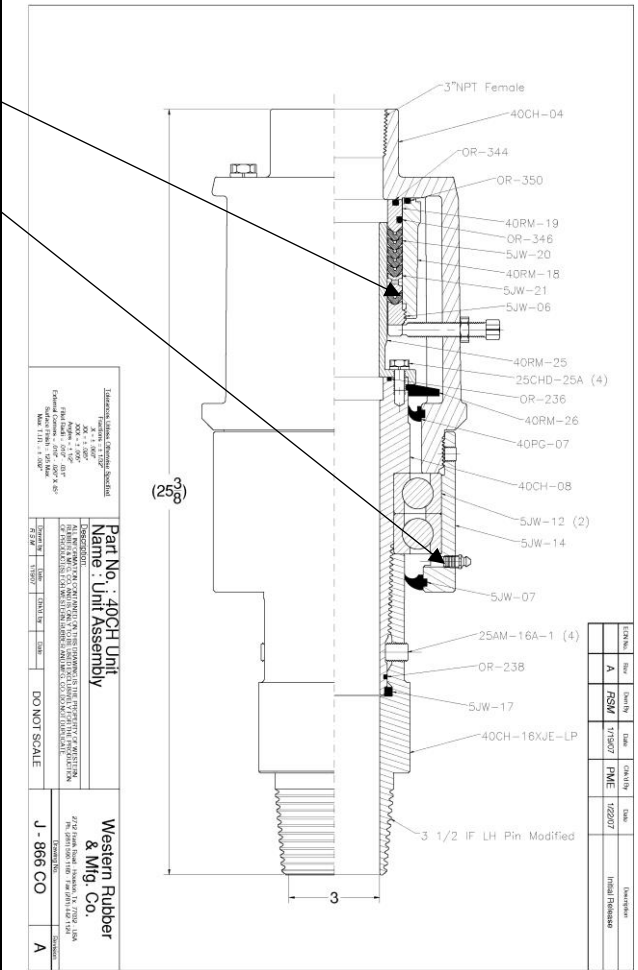
Zerk Fittings



5.0DJ-2600-06
SWIVEL, 5" ID, 6" 150# FLANGE W/
DRING GROOVE UPPER CONNECTION,
CUSTOM AMERICAN AUGER LOWER FLANGE
CONNECTION



5.0DJ-2600-01
5" ID ROTATING HEAD, 6" 150# FLANGE
UPPER CONNECTION, W/ MOD. 5 1/2" IF
LEFT HAND PIN LOWER CONNECTION



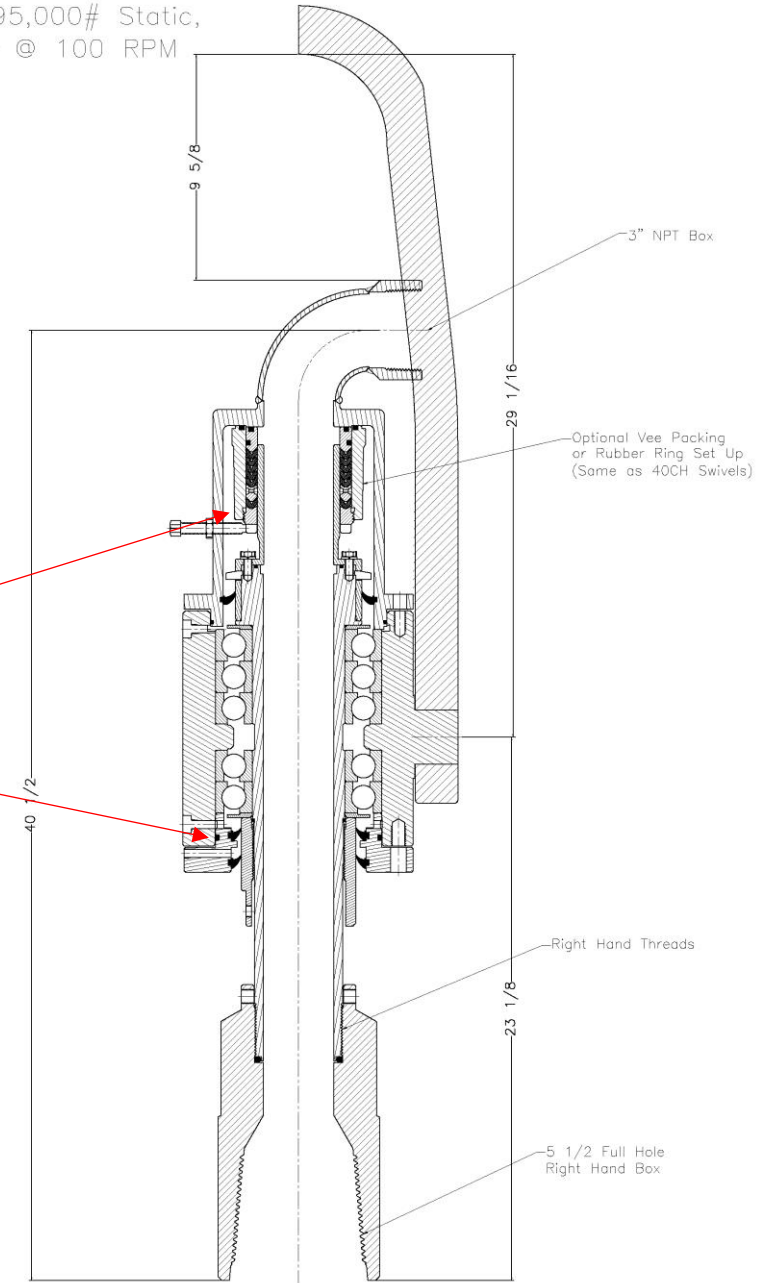
EXAMPLE OF LOAD BEARING TAILING SWIVEL

Zerk
Fittings

35DME-8115-01

Swivel, 95,000# Static,

60,000# @ 100 RPM

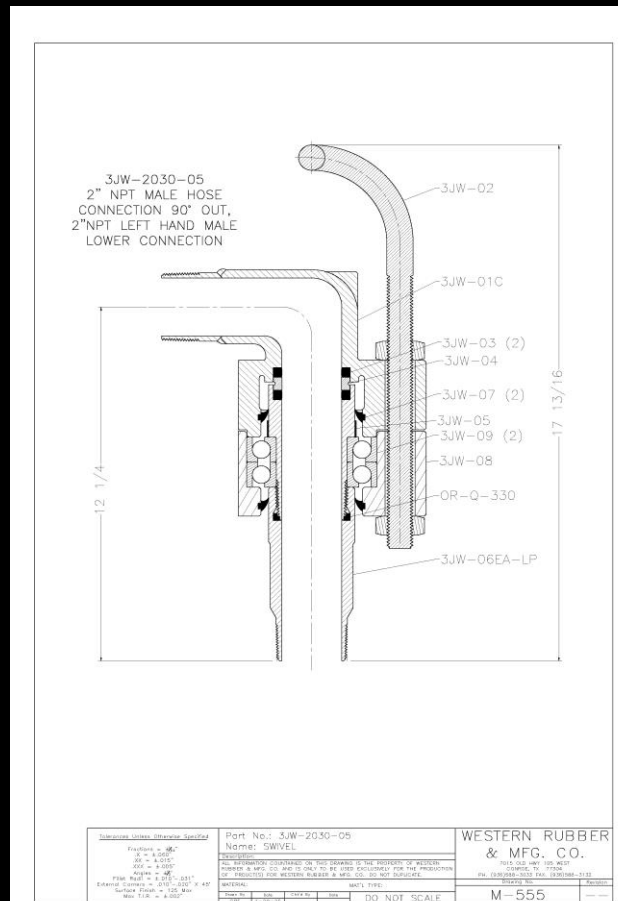


DIFFERENT PACKING TYPES

Rubber Ring

For pressures up to 300 PSI.

Not normally used in the HDD market, sometimes as a low pressure tailing swivel.



Chevron Packing

For pressures up to 3000 PSI with optional packing.

- 416 packing 350 to 750 PSI
- 20 Packing (standard) 750 to 1750 PSI
- 857 Packing 1500 and up PSI

All Chevron packing requires grease lubrication.



MAINTENANCE

- Grease Bearings Daily while the swivel is slowly rotating, after it has been warmed up. Lubricate until Grease exits the upper housing seal.
- Grease Packing while under no fluid pressure every 2 or 3 hours, or when packing begins to leak.
- If Swivel gets hard to rotate after greasing, stand to the side of the Zerk fitting and Depress the ball to relieve pressure.
- Change upper housing seal after every 2-3 packing changes (this is your defense from drilling mud getting into your bearing case)



“I GREASED IT EVERYDAY”



MORE EXAMPLES OF “I GREASED IT EVERYDAY”



IF YOU TAKE CARE OF IT, IT WILL TAKE CARE OF YOU

- Inspect Daily For Leakage
- Check All Bolts To Insure Tight
- Grease Bearings
- Lubricate Packing As Required
- DO NOT USE IF DAMAGED IS DISCOVERED!



THANK YOU

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