1. Lubrication: For initial use, it is neither necessary nor desirable to remove the thread compound unless contaminated or washed away from outdoor exposure. Thereafter, clean and re-lubricate both the male and female threads with a high quality thread compound after each use. Thread compound with 50% zinc particulate is recommended for maximum protection against galling and for a high friction factor providing maximum load capacity. Avoid low strength and low friction compounds using plastic or graphite particulate. Use enough compound to cover both thread and shoulder surfaces. A 40 to 50 mm (1.5 to 2 inch) brush is recommended for applying lubrication compound.

2. When rods are temporarily stacked in the mast or rod rack, always provide a wooden or rubber base to protect the pin ends. This is especially important when handling multiple length stands of 6 m (20 ft) or more.

3. Align rods before engaging: If the pin end is not aligned, it will stab into the box end shoulder causing permanent damage and joint leakage.

4. Make-up wireline rods and casing by slowly rotating the pin clockwise into the box (right hand threads). On most drills, this must be done at a very low rotation (e.g. 10 RPM or less) to avoid applying extraneous torque due to the inertia of the drill head.

5. XQ threads have a coarser thread pitch than RQ and Q threads. If the drill rig make/break system rotation rate is fixed, increase the feed rate. Conversely, if the make/break system feed rate is fixed, reduce the rotation rate. Always adjust rotation or feed rate towards light compression on the threads rather than tension, during making and breaking. Also, consider the weight of the drill drive head and the rods above the joint.

For LM Drills: see LM DRILLS OPS AND SERVICE MANUAL, Head Float Calibration

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**Head Float Calibration**

During the thread making and thread breaking modes, reduced system pressure is automatically applied to the appropriate side of the feed cylinder. This causes the rotation unit carriage to move either forwards or rearwards in sequence to the thread pitch on the drill rods.

To adjust the speed at which the carriage floats, take the following steps:

1. Located in the power pack hydraulic module are valves V20 and V21. Screw both of these valves fully anticlockwise to close off the flow to the cylinder completely.

2. Select Rod Handling mode and full forward rotation. Adjust V21 (bottom) so that the carriage moves forward approximately synchronized to the rod thread pitch.

3. Select Rod Handling mode and full rearward rotation. Adjust V20 (top) so that the carriage moves rearward approximately synchronized to the rod thread pitch.
8. Always ensure that the foot-clamp is taking the full weight of the rod string before engaging a chuck or top-drive to make or break a joint.

9. Break-out torque may exceed the original make-up applied. This can be overcome by applying a slight percussive blow to the side of the box thread with a rubber mallet or similar non-damaging tool.

10. Inspect used rods for bent mid-bodies regularly. Discard bent rods immediately as these cause vibration and increased drilling torque, hampering drilling performance.

11. All threaded accessory equipment, such as Kelly (drive) rods, drive head adapter subs, hoist plugs, water swivels, and cross-over adapter subs should be inspected prior to use to ensure they are in good condition. Use only genuine Boart Longyear™ accessories to ensure proper fit and maximum wear life.

For more information on XQ Wireline Coring drill rods, visit www.boartlongyear.com/xq.