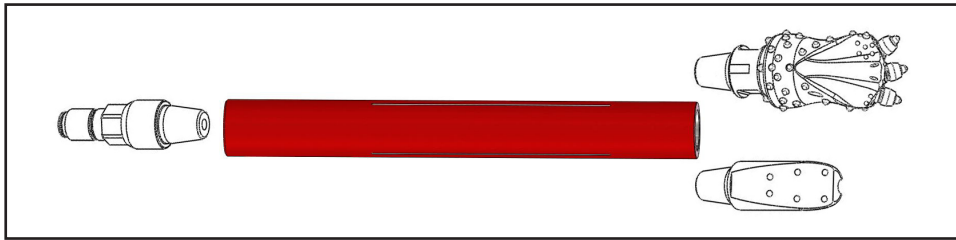


Drill Head Assembly

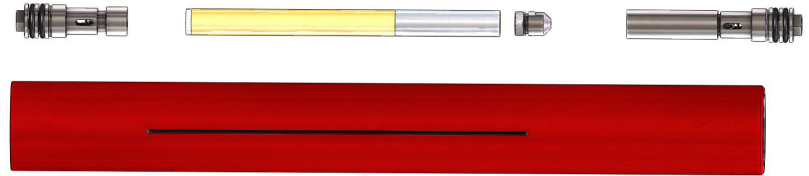


1. Apply anti-seize to Bit-Body or Eagle Claw.
2. Install Bit-Body or Eagle Claw on front of housing, indicated by engraved arrow.
3. Torque Bit-Body or Eagle Claw to 1,800 ft/lbs.
4. Repeat process for tail piece on rear of housing.

Timing Calibration

Follow the instructions included with your locate system to properly time your transmitter to the 12 o'clock position.

NOTE: It is necessary to have the “Roll Offset” feature on your receiver in order to use this housing.



Clean transmitter housing after each use:

One easy way to prolong the life of your housing and transmitter is to keep the housing clean. Wash off dirt and mud before it hardens. Remove transmitter after each use. Flush clean water through fluid ports. Clean connection threads.

Inspect fluid ports:

Clean gundrilled fluid passage(s). A stiff wire can often be used. Clean before any dirt hardens. If possible, flush clean water through the housing at the end of each day's operation. Check for erosive wear in gundrilled holes.

Monitor external wear on housing:

Wear exceeding 5% of the housing diameter is considered excessive and replacing the housing should be considered. Hardfacing or building up the housing with weld is not recommended. The heat can cause distortion and stress concentrations that may lead to cracking. Welding near housing slots or threads is especially discouraged.

Inspect threaded connections:

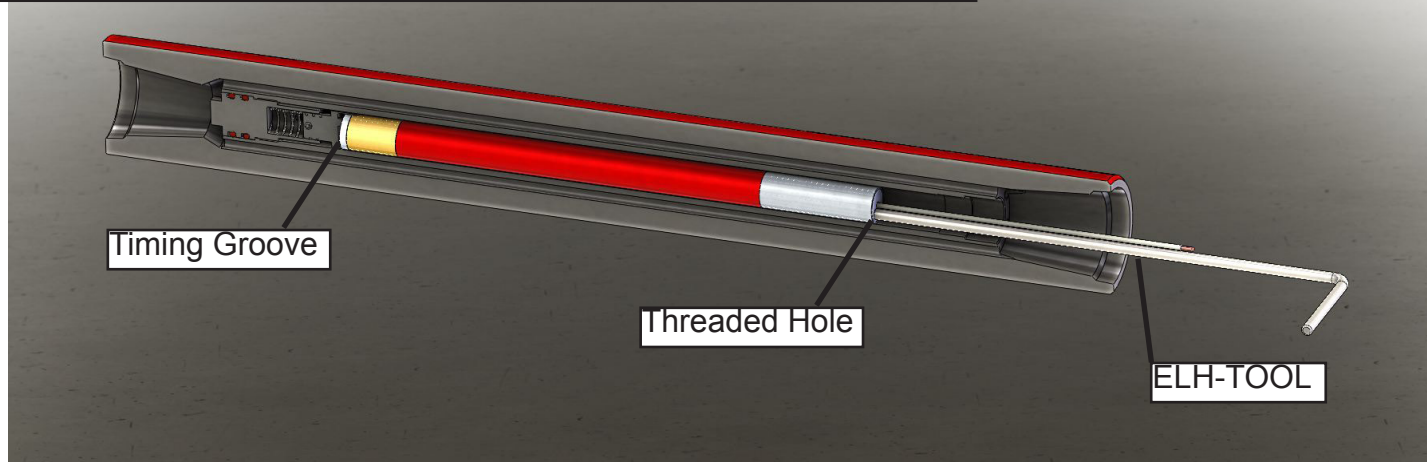
All Melfred Borzall sonde housings feature replaceable tailpieces to maximize the longevity of your sonde housing. Inspect tailpiece threads for wear and replace as needed. Before installation, threads should be cleaned with a wire brush, and anti-seize should be applied.

Inspect O-rings and mechanical parts :

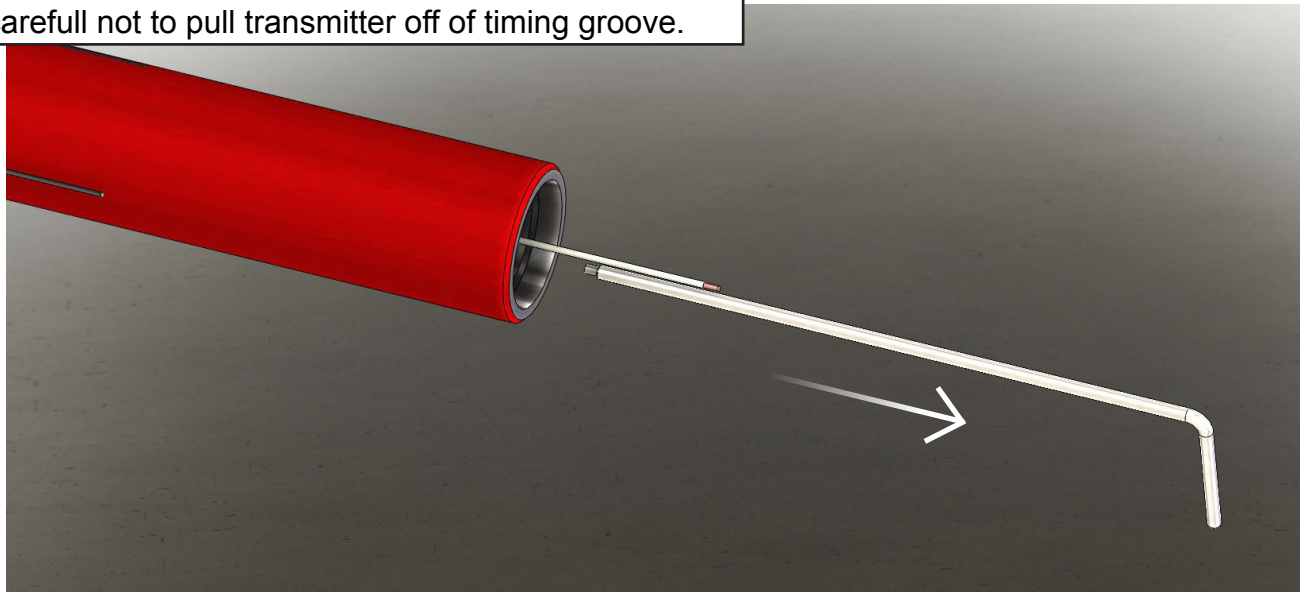
Inspect O-rings, springs, and spring pins for wear and damage. Replace suspect components immediately to prevent unnecessary damage. Components should thread in freely. If threads are tight, do not force. Stop, inspect and clean or repair.

ELH-WIRE Assembly Instructions

Thread "ELH-TOOL" into hole in transmitter. Use "ELH-TOOL" to place transmitter in housing and align the timing groove.

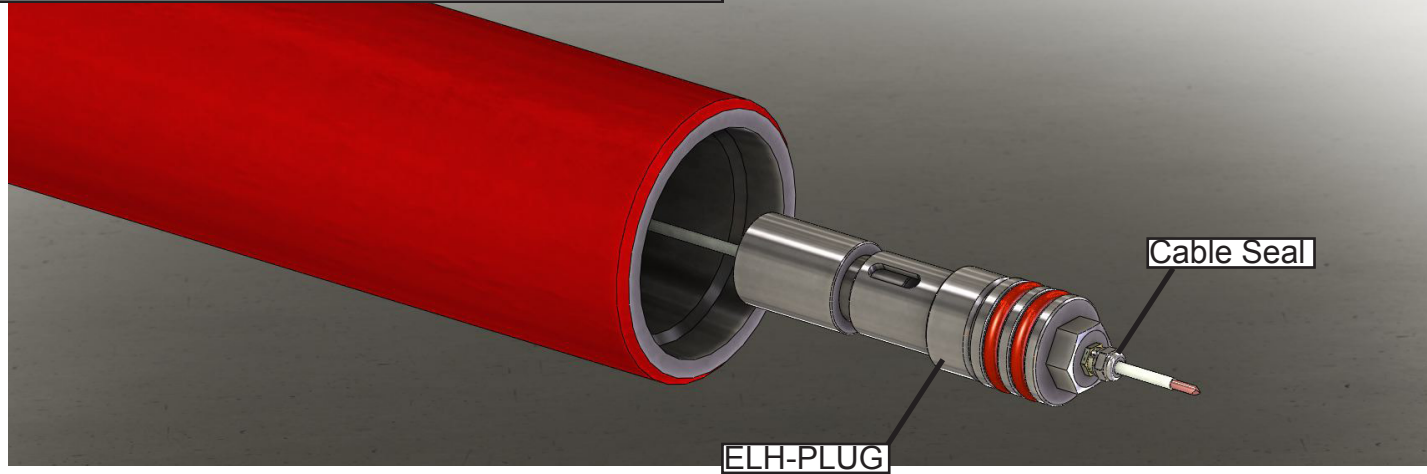


Unscrew and remove "ELH-TOOL" from the transmitter. Be careful not to pull transmitter off of timing groove.



ELH-WIRE Assembly Instructions

Install "ELH-PLUG" by inserting wire through plug.
Ensure cable seal is loose when installing.



Tighten "ELH-PLUG" first using large end of socket tool.
Tighten cable seal second using small end of socket tool.

