

# INSTALLATION, OPERATION, & MAINTENANCE MANUAL

Models # MM-30, MM-30HT, MM-50, MM-50HT,  
& MM-50 EXL

with Special HP Tool and Special HP EXL Tool

## INSTALLATION INSTRUCTIONS FOR THE MODEL MM-30 & MODEL MM-50 COUPON HOLDERS AND INJECTION PROBES

- 1) Loosen the 5/8" rod / probe locking bolt and push the rod / probe to the fully inserted position.
- 2) Measure from the tip of the rod (allow for coupon length) / probe and mark with a permanent marker the desired depth of insertion required within the pipeline or vessel.
- 3) Loosen the 5/8" lock bolt and retract the rod / probe to the fully retracted position and tighten the lock bolt.
- 5) Attach the MM-30 / MM-50 to the process isolation valve (a full bore ball valve or gate valve).
- 6) Models **MM-30HT** and **MM-50HT** (with packing glands):
  - a) Once the unit is firmly affixed to the isolation valve, and the bleeder valve is closed, slowly open the isolation valve to apply process pressure to the unit.
  - b) Snoop the sealing area around the top of the unit for leaks. If leaks are present, shut the isolation valve and loosen the packing assembly lock bolt (or allen screw) and turn the body slowly clock wise and repeat the preceding steps until no leak is present.

**CAUTION:** Over tightening the graphoil packing puts friction on the rod / probe requiring more force to insert and prevents a smooth travel during retraction.

## **INSTALLATION AND USE OF THE SPECIAL HP TOOL FOR INSERTION AND RETRACTION OF THE MODEL MM-30 AND MODEL MM-50**

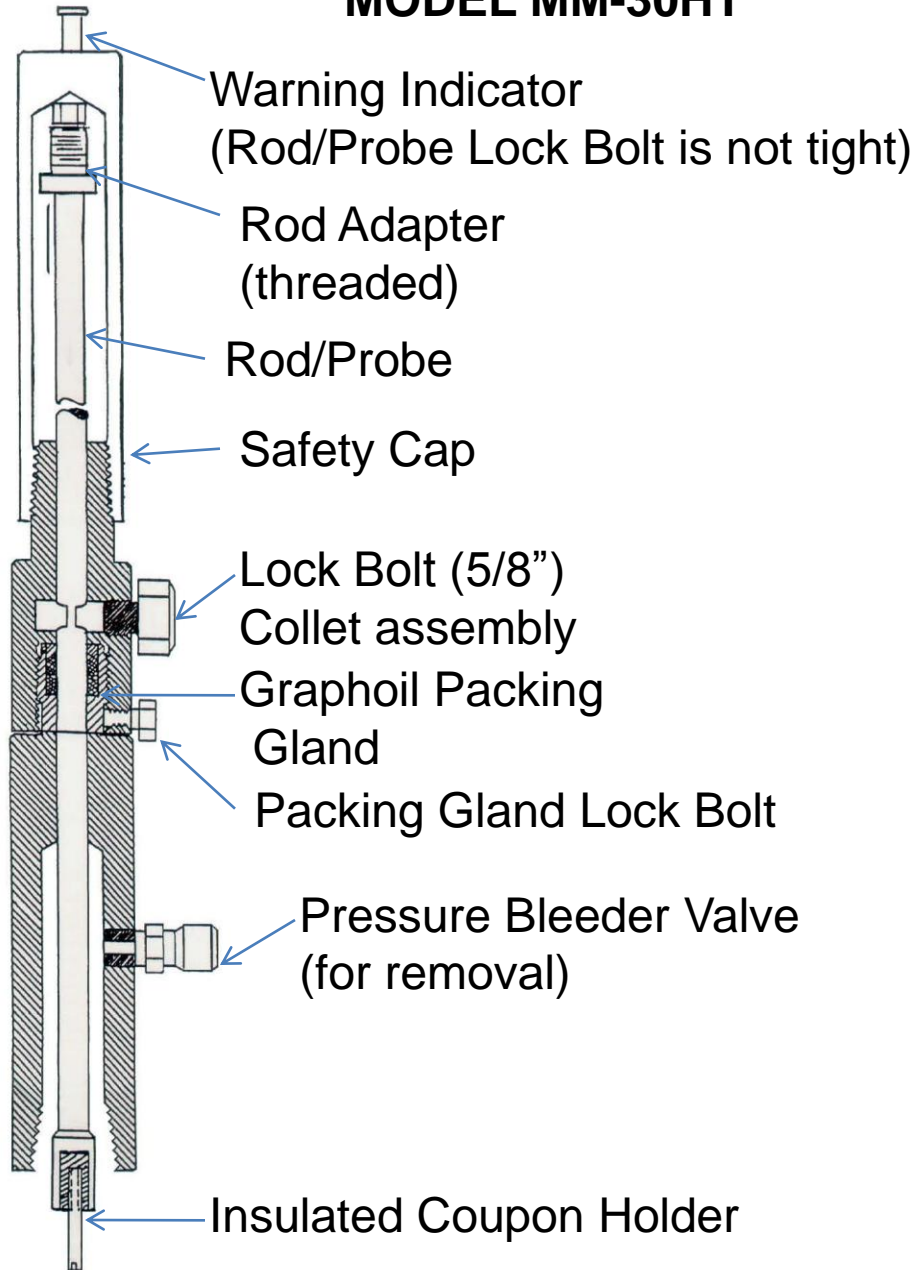
- 1) Turn the hand crank counter clockwise to move the draw bar to the fully retracted position or top of the tool.
- 2) Position the brass swivel mounting nut on the base of the tool where the slot is open.
- 3) Slide the slot over the rod/probe of the MM-30 / MM-50 and tighten the swivel nut on the adjacent male threads of the MM-30 / MM-50.
- 4) Adjust the draw bar position with the hand crank until the rod adapter threads are exposed through the draw bar.
- 5) Remove the 5/8" nut from the storage post (Special HP Tool only) on the top of the tool.
- 6) Thread the 5/8" nut onto the rod/probe adapter and tighten.
- 7) Loosen the rod / probe locking bolt and turn the hand crank clockwise to insert to the desired depth (permanent mark made in the previous step).
- 7) Tighten the rod / probe locking bolt and remove tool.
- 8) Attach safety cap or safety chain.

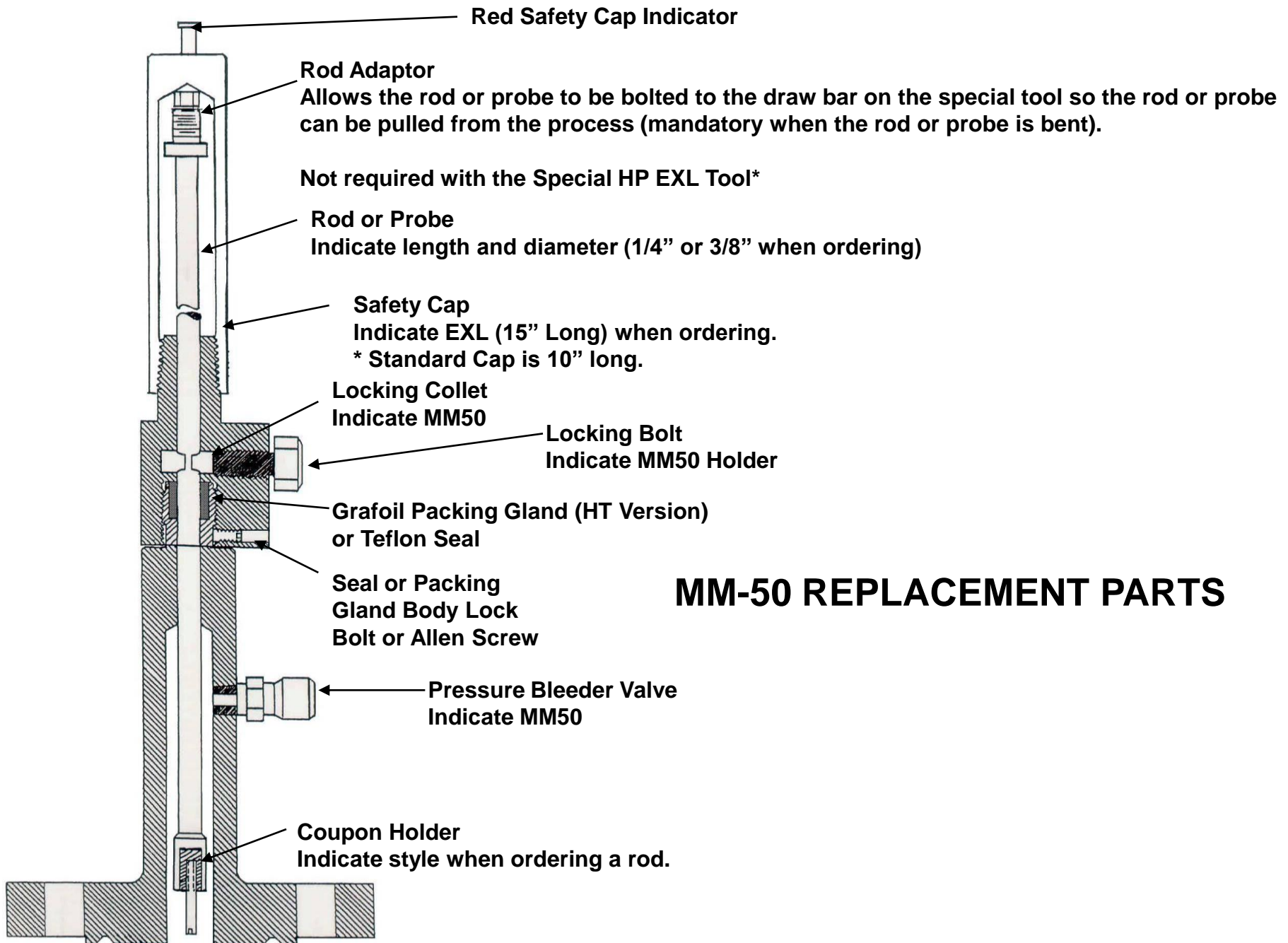
## **INSTALLATION AND USE OF THE SPECIAL HP EXL TOOL FOR INSERTION / RETRACTION OF THE MODEL MM-30 AND MODEL MM-50**

- 1) Turn the hand crank counter clockwise to move the draw bar to the fully retracted position of the rod / probe (measurement required).
- 2) Remove the locking collet assembly from the draw bar.
- 3) Position the brass swivel mounting nut on the base of the tool where the slot is open.
- 4) Slide the slots of the mounting swivel nut, draw bar, and top bar (top bar may have an optional support tube) over the rod / probe of the MM-30 / MM-50 and tighten the swivel nut on the adjacent male threads of the MM-30 / MM-50.
- 5) Attach the locking collet assembly to the draw bar and tighten (for multiple draw bar travels on extended length rods/probes merely loosen the lock bolt each pass).
- 6) With the locking collet 5/8" bolt tight against the rod/probe, and the locking bolt tight on the MM-30 / MM-50, slowly open the process isolation valve.
- 7) With a hand on the tool crank handle, loosen the rod / probe locking 5/8" bolt and turn the hand crank clockwise to insert to the desired depth (permanent mark made in the previous step).
- 8) Tighten the rod / probe locking bolt and remove tool.
- 9) Attach safety cap or safety chain.

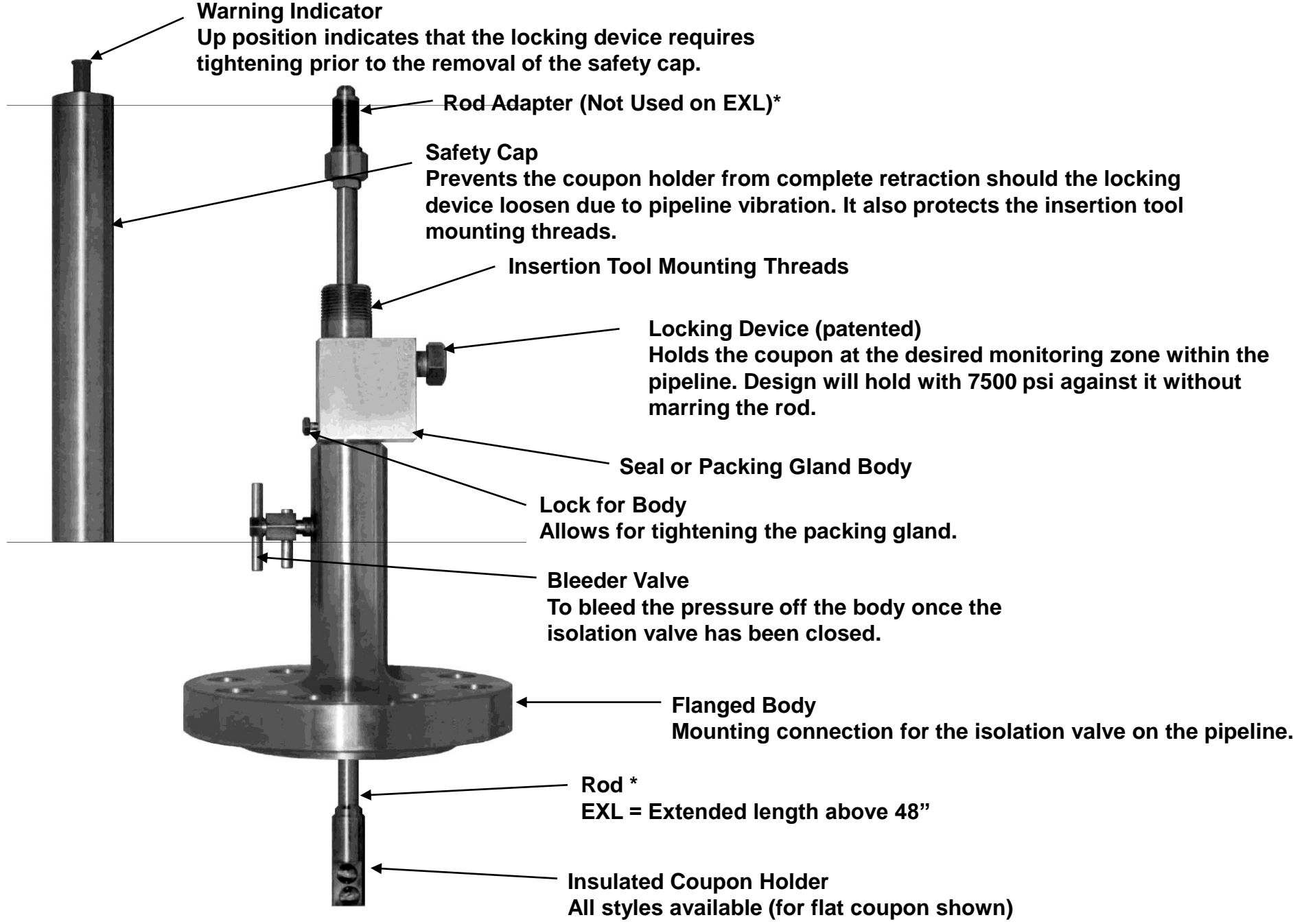
**REPEAT # 5-8 FOR ROD/PROBE LENGTHS OVER 48"**

# MODEL MM-30HT





## MM-50 REPLACEMENT PARTS



**Warning Indicator**

Up position indicates that the locking device requires tightening prior to the removal of the safety cap.

**Rod Adapter (Not Used on EXL)\***

**Safety Cap**

Prevents the coupon holder from complete retraction should the locking device loosen due to pipeline vibration. It also protects the insertion tool mounting threads.

**Insertion Tool Mounting Threads**

**Locking Device (patented)**

Holds the coupon at the desired monitoring zone within the pipeline. Design will hold with 7500 psi against it without marring the rod.

**Seal or Packing Gland Body**

**Lock for Body**

Allows for tightening the packing gland.

**Bleeder Valve**

To bleed the pressure off the body once the isolation valve has been closed.

**Flanged Body**

Mounting connection for the isolation valve on the pipeline.

**Rod \***

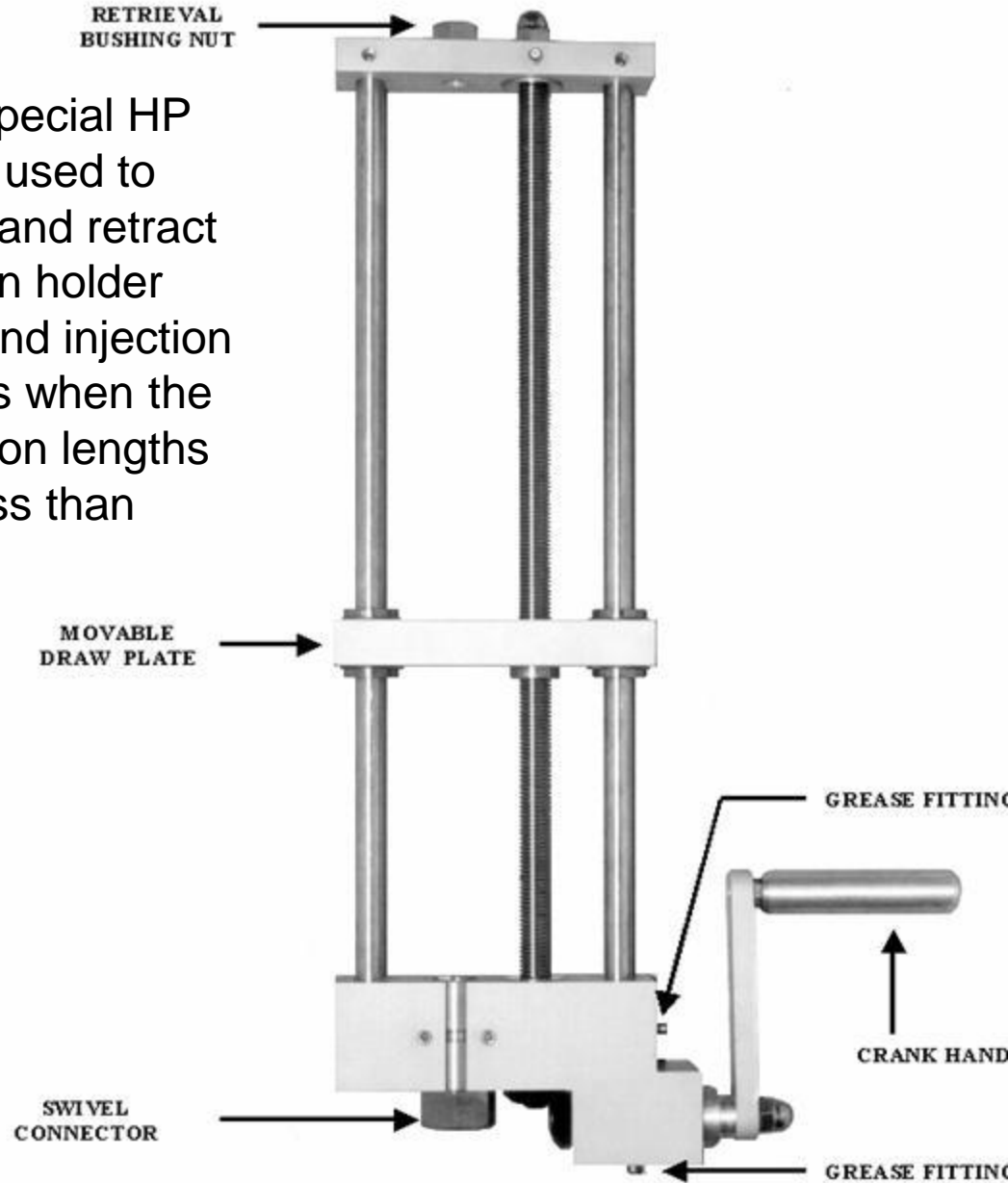
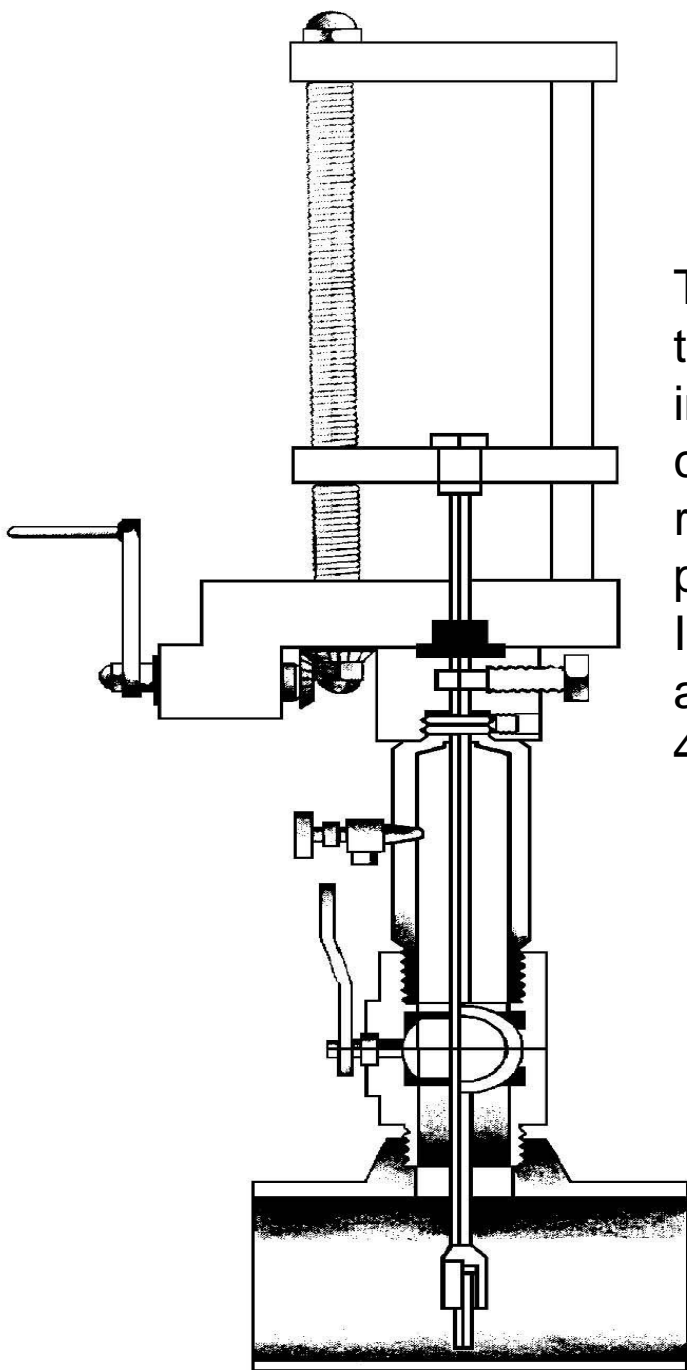
EXL = Extended length above 48"

**Insulated Coupon Holder**

All styles available (for flat coupon shown)

# MODEL HP TOOL SPECIAL RETRACTOR TOOL

The Special HP tool is used to insert and retract coupon holder rods and injection probes when the Insertion lengths are less than 48".





**Special HP EXL Tool  
For Extended Length (+48")  
Rods and Probe shafts  
7500 psi MAOP**

