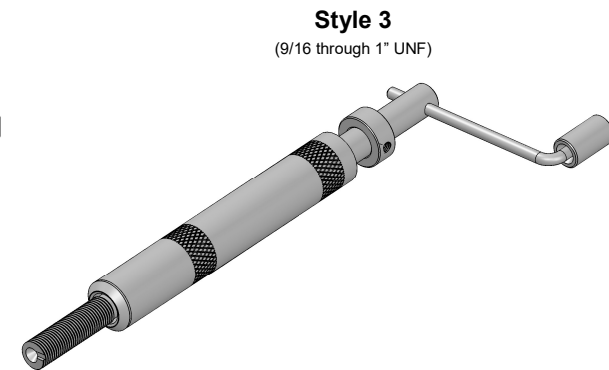
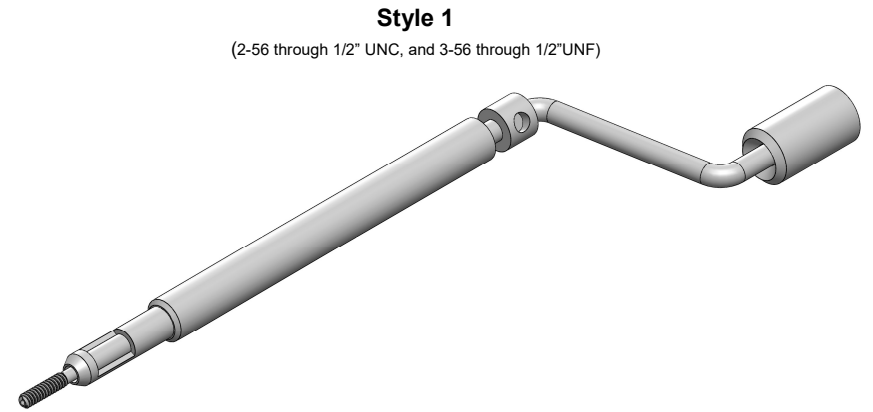
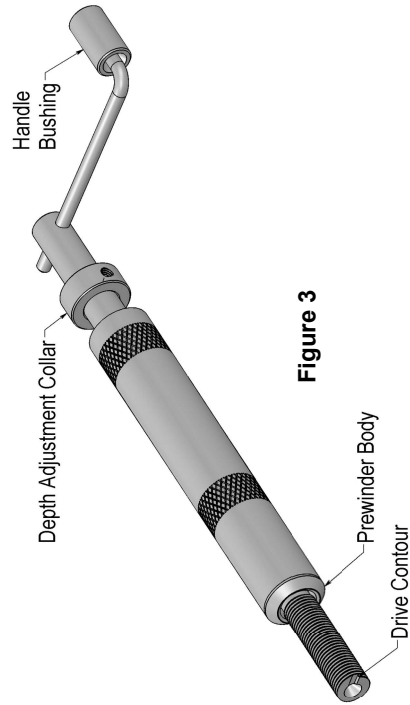
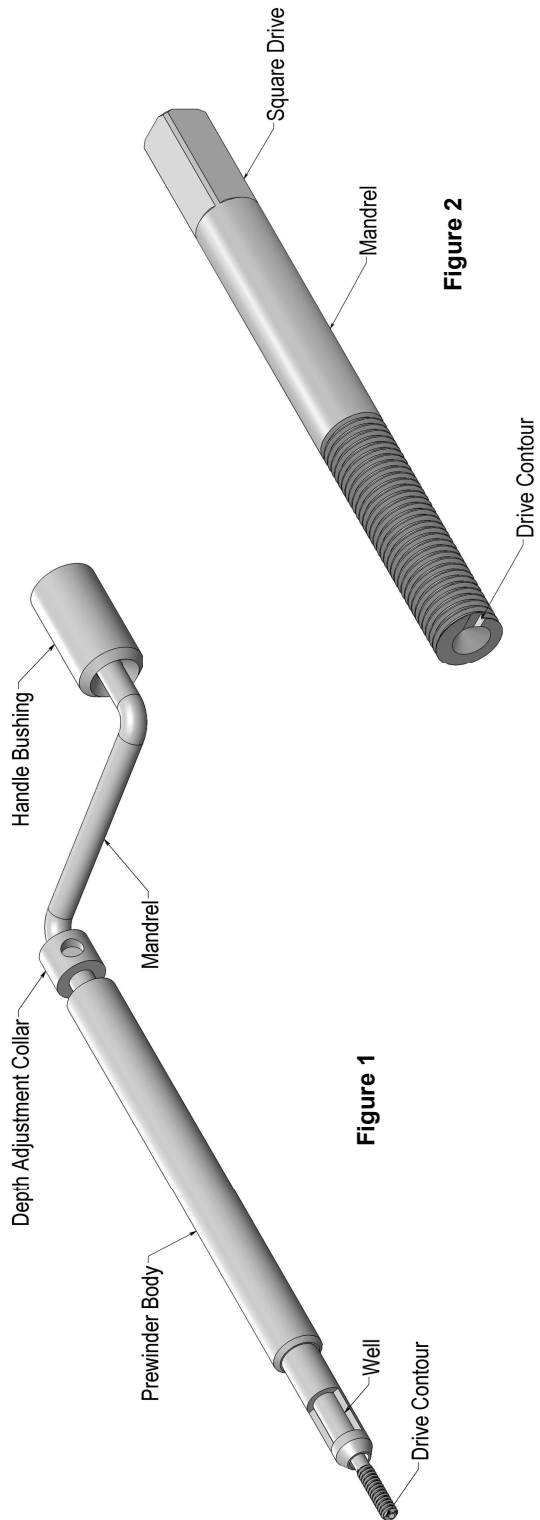


## INSTRUCTIONS FOR USING TANGED COILTHREAD® INSERT TOOLS

THE FOLLOWING INSTRUCTIONS ARE APPLICABLE TO THE  
KATO TANGED PREWINDER HAND INSTALLATION TOOL (KPH Series)



## BEFORE YOU BEGIN PLEASE REVIEW:

- Proper hole preparation procedures
- A step by step instructional video can be found in the KATOpedia section of the KATO website [www.katofastening.com](http://www.katofastening.com).

### PREWINDER (CAPTIVE SLEEVE TYPE), STYLE 1 DEPTH ADJUSTMENT

1. Loosen the Collar (by loosening the set screw with an Allen wrench) and slide it towards the back of the Mandrel.
2. Pull the Mandrel towards the back of the Prewinder Body and place an insert into the well with the tang of the insert pointed down towards the tip of the tool.
3. Slide the Mandrel forward until it reaches the insert, then rotate the Mandrel Clockwise until the drive contour at the tip of the Mandrel engages the insert's tang (do not push down on the mandrel). Continue to rotate the Mandrel until the tip of the insert begins to exit the Prewinder (no more than a coil).
4. Place the tool perpendicular to the tapped hole. Slowly rotate the Mandrel clockwise until the insert is installed to the correct depth (3/4 - 1 1/2 threads below the surface for a hole with a countersink; 1/4 - 1/2 threads below the surface for a hole without a countersink).
5. Slide the Collar forward until it is flush with the back of the Prewinder Body.
6. Hold the Collar against the Prewinder Body and tighten the set screw in the Collar.
7. Rotate the Mandrel counterclockwise until it exits completely out of the installed insert.
8. Check installation for proper depth and readjust the Collar if necessary.

### INSERT INSTALLATION

1. Pull the Mandrel towards the back of the Prewinder Body and place an insert into the well tang facing down.  
*(Eliminate insert orientation with KATO Tangless CoilThread Inserts, they're bi-directional)!*
2. Slide the Mandrel forward until it reaches the insert, then rotate clockwise until the drive contour of the mandrel engages insert's tang. Continue to rotate Mandrel until the tip of the insert begins to exit the Prewinder (no more than one half of a coil).
3. Place the tool perpendicular to the tapped hole. Rotate the Mandrel clockwise until the Collar reaches the back of the Prewinder Body. The insert is now installed.  
**CAUTION: Avoid excessive wobble of the tool as this may damage the Mandrel.**
4. Rotate the Mandrel counterclockwise until it exits completely out of the installed insert.

**DO NOT APPLY ANY DOWNWARD PRESSURE OR TRY TO FORCE THE INSERT INTO THE HOLE, LET THE WEIGHT OF THE TOOL DO THE WORK. FORCING THE INSERT INTO THE TAPPED HOLE MAY RESULT IN INSTALLATION FAILURE AND CAUSE DAMAGE TO THE TOOL AND/OR WORKPIECE.**

### THREADED MANDREL, STYLE 2 DEPTH ADJUSTMENT & INSERT INSTALLATION

1. Thread the insert onto the Mandrel (tang down) until the tang engages the Drive Contour.
2. Place the tool perpendicular to the tapped hole and rotate the Square Back using a tap handle (not included) or an adjustable wrench (not included) until the insert is installed to the correct depth (3/4 - 1 1/2 threads below the surface for a hole with a countersink; 1/4 - 1/2 threads below the surface for a hole without a countersink).
3. Due to the design of KPH Style 2 tool, KATO does not offer a depth adjustment Collar. Mark the Mandrel at the desire depth. This can be achieved by using tape.
4. Rotate the Mandrel counterclockwise until it exits completely out of the installed insert. Repeat steps 1, 2 and 4.

### PREWINDER (CAPTIVE SLEEVE TYPE), STYLE 3 DEPTH ADJUSTMENT

1. Slide the Mandrel out of the Prewinder, loosen the Collar (by loosening the set screw with an Allen wrench) and slide it towards the back of the mandrel.

2. Thread the insert onto the Mandrel (tang down) until the tang engages the Drive Contour.
3. Slide the mandrel into the Prewinder until the insert reaches the Prewinder's internal threads.
4. Rotate the handle clockwise until the tip of the insert begins to exit the Prewinder.
5. Place the tool perpendicular to the tapped hole. Slowly rotate the Mandrel clockwise until the insert is installed to the correct depth (3/4 - 1 1/2 threads below the surface for a hole with a countersink; 1/4 - 1/2 threads below the surface for a hole without a countersink).
6. Slide the Collar forward until it is flush with the back of the Prewinder.
7. Hold the Collar against the Prewinder and tighten the set screw.
8. Rotate the Mandrel counterclockwise until it exits completely out of the installed insert.
9. Check installation for proper depth and readjust the Collar if necessary.

### INSERT INSTALLATION:

1. Slide the Mandrel out of the Prewinder.
2. Thread the insert onto the Mandrel until the tang engages the Drive Contour.  
*(Eliminate insert orientation with KATO bi-directional Tangless CoilThread Inserts)!*
3. Slide the Mandrel into the Prewinder until the insert reaches the Prewinder's internal threads.
4. Rotate the handle clockwise until the tip of the insert begins to exit the Prewinder (no more than one half of a coil).
5. Place the tool perpendicular to the tapped hole. Rotate the Mandrel clockwise until the Collar reaches the back of the Prewinder. The insert is now installed.
6. Rotate the Mandrel counterclockwise until it exits completely out of the installed insert.

### TANG REMOVAL

In accordance with NASM33537 Section 13.3 "The Tang should be removed from the insert after installation." For easy Tang removal KATO recommends the KTBT series.

## TO ELIMINATE THE TANG BREAK-OFF PROCESS COMPLETELY SWITCH TO KATO TANGLESS INSERTS!

### TOOL MAINTENANCE

- Regularly inspect the tool for wear.
- Keep the drive contour clean and free of debris

### SAFETY

Always wear eye protection when working with KATO tools.

### PARTS REPLACEMENT

Due to the design of the KPH series tools, replacement parts are not available.



## TIPS & TRICKS

Having difficulty getting the insert started? Try one or more of these helpful tips:

- If the Mandrel seizes when it fully recedes into the hex shaft, tap the trigger a few times as if sending Morse code.
- Dipping the insert in Alcohol or other non-residual solution will provide lubrication and may help facilitate installation. **USING ALCOHOL ON LOCKING INSERTS WILL CAUSE THE RED DYE TO BLEED.**