

TOOL MAINTENANCE

Tools should be kept clean so that foreign objects and debris (chips, oils, and dirt) will not clog the drive contour of the Mandrel. Operator misuse can contribute to premature wear and/or damage to the Mandrel.

- Regularly inspect the tool for wear.
- Clean the drive contour by dipping it in rubbing alcohol.

SAFETY

Always wear eye protection when working with KATO tools.

PARTS REPLACEMENT

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

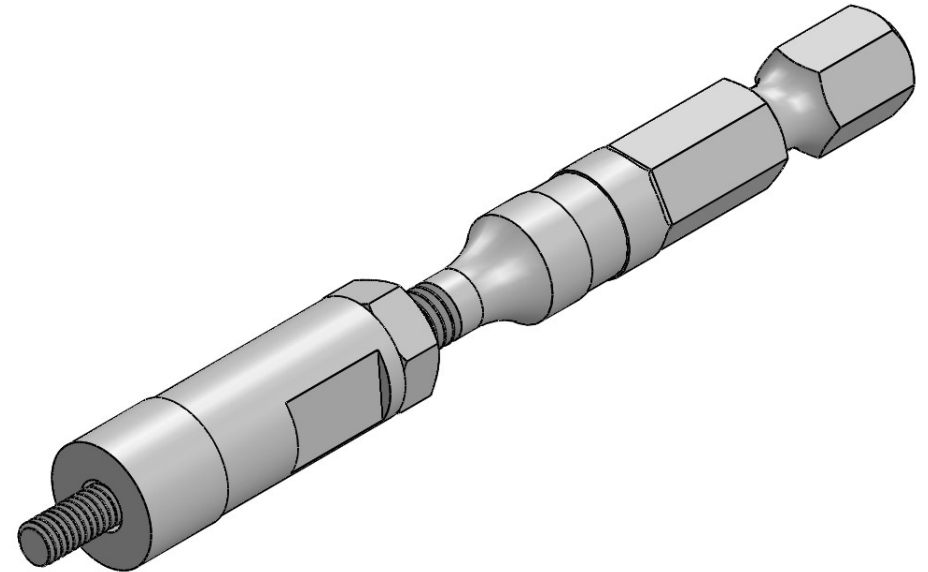


Via degli Andreani, 9
40037 Sasso Marconi (BO) ITALY
Tel +39 051 735744
info@tecnimetal-tm.com
www.tecnimetal-tm.com
www.tecnimetal-tm.eu

KATO®

INSTRUCTIONS FOR USING KATO TANGED COILTHREAD® INSERT TOOLS

THE FOLLOWING INSTRUCTIONS ARE APPLICABLE TO THE
KATO TANGED HEX ELECTRIC INSTALLATION TOOL (KHE Series)



BEFORE YOU BEGIN PLEASE REVIEW...

- Proper hole preparation procedures.
- The KFS-20 (CT5420) instructions prior to use.
- The KATO Linear Arm (2KLRM-1) to reduce operator fatigue and injury.

IMPORTANT NOTES

- A step by step instructional video can be found in the KATOpedia section of the KATO website www.katofastening.com.
- The Installation Mandrel (see figure 1) is designed to be used with the KATO KFS-20 Electric Driver CT5420 (sizes 2-56 to 1/4" and M2.5 to M8).
- Low torque range spring (light blue) is for installing insert sizes 2-56 to 6-32, and M2.5 to M4.
- High torque range spring (light silver) is for installing insert sizes 6-32 to 1/4", and M4 thru M8.

REQUIRED COMPONENTS

The KATO Hex Electric Installation System requires:

- CT5420: KFS-20 Brushless Electric Driver & T-45BL Power Transformer
- KHE Series: KATO Hex Electric Tool (one for each thread size)
- 2KLRM-1: KATO Linear Torque Arm (recommended)

COMPONENTS LIST

The KHE Series Installation Mandrel Assembly includes the following parts:

- 1 Hex Mandrel
- 1 Adjusting Sleeve Housing
- 1 Nylon Guard (already assembled on housing)
- 1 Lock Nut

DEPTH ADJUSTMENT AND TOOL ASSEMBLY

1. Use two wrenches (not provided) to loosen the Lock Nut and Adjusting Sleeve on the Mandrel.
2. Thread the Lock Nut and Adjusting Sleeve towards the back of the Mandrel to fully expose the front threads.
3. Thread the insert to be installed onto the Mandrel until the Drive Contour engages the tang.
4. Turn the Adjusting Sleeve until the Nylon Guard is approximately 1 thread behind the end of the insert. This will ensure proper installation depth of 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.
Note: Inserts may vary \pm 0.25 coil. KATO recommends that the installation depth of each lot be tested using a sample tapped hole prior to installing the inserts into the production part.
5. Use the two wrenches to lightly tighten the Lock Nut against the Adjusting Sleeve. (Be careful not to move the Adjusting Sleeve when tightening)
6. To use the quick-disconnect feature of the KFS-20 Brushless Electric Driver (CT5420) pull the Sleeve back while inserting the Mandrel into the hex shaft. Then, release the sleeve to lock the Mandrel in place.

TORQUE ADJUSTMENT & INSERT INSTALLATION

BULK INSERTS:

7. Always use the minimum amount of torque that will install the insert. Start with a very low torque setting on the electric driver. To adjust the torque, pull back on the Torque Adjustment Knob tightening it to increase torque (clockwise direction) and loosening it to decrease torque (counterclockwise direction). The Torque Adjusting Knob will lock into place every 180°.
8. Hold the electric tool perpendicular to the tapped hole and align the insert. Straight alignment will provide smooth installation and longer tool life.
9. Actuate the driver by pressing the Trigger.
10. Continue to hold down the Trigger as the Installation Mandrel threads the insert into the tapped hole.

11. Once the insert is fully installed, the Electric tool will automatically reverse. Be sure to hold the Trigger down until the Mandrel fully retracts from the installed insert. If you release the Trigger prematurely the Electric Driver will reset. When the Trigger is depressed again the Driver will run forward. Hold the Trigger until the Mandrel exits the tapped hole.

Note: The insert can be loaded onto the mandrel manually, or you can hold the insert in one hand and tap the Trigger on the Electric Driver with the other hand.

STRIP-FEED INSERTS:

KATO does not recommend using strip-feed inserts with non-rewinder electric tools. The KATO Rewinder Electric Tool (KPE Series) is strongly recommended when using strip-feed inserts.

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.

TANG REMOVAL

In accordance with NASM33537 Section 13.3 "The Tang should be removed from the insert after installation." For easy Tang removal use the KATO Tang Break-Off Tool (KTBT Series).

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

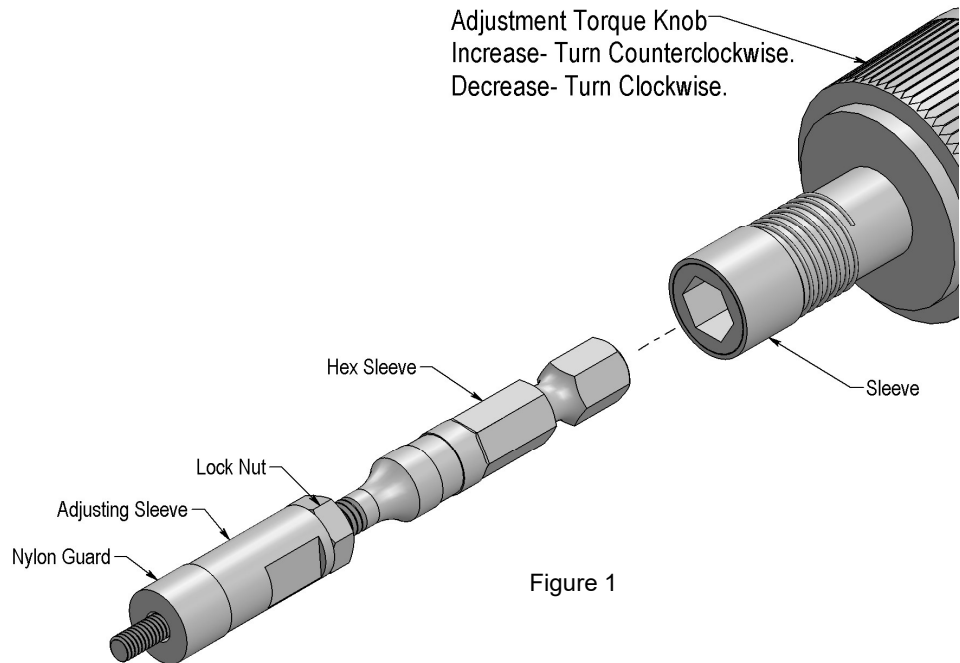


Figure 1

TIPS & TRICKS

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

- Tap the Trigger on the Electric Driver in short intervals until the insert begins to enter the tapped hole.
- Dipping the insert in Alcohol or another non-residual solution will provide lubrication and help facilitate installation. **USING ALCOHOL ON LOCKING INSERTS WILL CAUSE THE RED DYE TO BLEED.**