## MTBN "Break-Over" Wrenches

These production wrenches break-over once reaching preset torque and reset automatically. MTBN 2 \& 10 models can break-over at $20^{\circ}$ or $90^{\circ}$. MTBN $25,65,135 \& 200$ models break-over at $20^{\circ}$. Compact and well balanced, these wrenches can adapt to a variety of different "head" styles.


MTBN 2 \& 10 models are supplied with a removable stop collar, which restricts the "break" angle to $20^{\circ}$. If the collar is removed, the "break" angle increases to $90^{\circ}$.

## Calibrating Torque Wrenches

To calibrate torque wrenches either use a torque tester or torque sensor within the range of the torque wrench. For break-over torque wrenches, calibrate torque in "Peak" mode with a digital torque tester or torque sensor. Make sure you apply the torque slowly and smoothly at the center of the hand grip.

1. Select a torque tester or torque sensor that covers the torque range of the MTBN wrench. Connect wrench to the torque tester or torque sensor using the appropriate adapters as needed (not supplied).
2. Apply torque clockwise slowly until wrench 'breaks-over' and note reading.
3. Adjust wrench to the required torque setting as described below.
4. Test and repeat adjustment as necessary to obtain desired value.
5. Recalibrate torque wrench at prescribed intervals.

## Adjusting Torque Setting

1. Remove end cap from the wrench using the hex key. Increase Torque
2. Insert hex key and turn clockwise to increase torque. Using a torque tester or torque sensor, test the torque readings of the wrench at a minimum of 10 times to ensure the correct torque setting is set. Do not adjust torque above the recommended torque ranges.

## Decrease Torque

4. When adjusting, always approach the required torque from a lower setting. To reduce the torque setting, insert hex key and rotate counterclockwise past your setting. Then clockwise to increase torque to the required value. Using a torque tester or torque sensor, test the torque readings of the wrench at a minimum of 10 times to ensure the correct torque setting is set. Do not adjust torque below the recommended torque ranges.
5. Tighten end cap back on.


## Placing Heads on Wrench

For MTBN 2 \& 10 Models - Loosen side pin along the collar with hex key. Slide "head" in between the slit. Slide pin back in and tighten with hex key.

For MTBN 25, 65, 135 \& 200 Models - Slide "head" on to the end of wrench. Align the pin with the head's pin slot.

For MTBN 2 \& 10 models


For MTBN 25, 65, 135 \& 200 models


## Applying Torque

1. Tighten nut or bolt by applying a steady even pull. Wrench should be kept at 90 degrees to axis of bolt during tightening. When pre-set torque is reached, the wrench will 'break.'
2. The wrench will automatically reset itself for the next application.
3. With its unique design, it's impossible to over tighten beyond the preset load.

