

INSTRUCTIONS FOR USE OF SKIDMORE-WILHELM MODEL W TORQUE WRENCH CALIBRATOR

The calibrator can either be bolted to a bench using the mounting holes or can be clamped to a bench with a "C" clamp, or may be gripped in a vise. Leveling is not necessary since the instrument will operate accurately in any position.

Remove socket from your torque wrench and insert square driver of wrench in female square coupling on the calibrator. Use the coupling on the right side for right hand wrenches and the coupling on the left side for left-hand wrenches.

Now pull up slowly on the torque wrench while observing the torque reading indicated on the calibrator gage. When the wrench signals by clicking, flashing, or releasing, the torque at this signal is accurately indicated on the gage. Wrench should now be adjusted up or down so that the signal occurs at exactly the desired torque value.

INSTRUCTIONS FOR REFILLING THE UNIT WITH HYDRAULIC FLUID

It is never necessary to change oil in the Skidmore-Wilhelm Torque Wrench Calibrator. However, if the oil should get low after long usage, it will become evident, since the gage will not register. This oil may be replaced very easily by following this procedure.

1. Remove hydraulic gage (#1) by using a wrench on the square stem.
2. Insert stiff wire, such as a 1/8" welding electrode, in fitting (#2) and push piston (#5) all the way down.
3. Fill oil reservoir with SAE 10 hydraulic fluid through the hole in the fitting (#2).
4. Replace gage and tighten. Use a good pipe dope on the pipe threads.
5. If gage now registers a reading other than zero, it is because there is too much oil in the system. To correct this, back the gage off one turn and apply a torque wrench to coupling (#11). This will cause leakage around the gage stem, After a small amount of oil has leaked out retighten gage and the instrument should be ready for use.

PARTS LIST:

- | | |
|-------------------|-------------------|
| 1. Hydraulic Gage | 7. Shaft |
| 2. Angle Fitting | 8. Needle Bearing |
| 3. Body | 9. Snap Ring |
| 4. Piston | 10. Coupling |
| 5. O Ring | 11. Base |
| 6. Pin | 12. Carrying Case |

IN ORDER TO AVOID ERRORS WHEN ORDERING PARTS, PLEASE SPECIFY:

(A) Model Number (B) Serial Number (C) Part Number

USE OF MAXIMUM HAND ON TORQUE WRENCH CALIBRATORS

The Model W comes with a following or maximum hand which indicates the final torque reading when the actual torque is released or goes to zero. The max hand feature is normally used with dial or beam type wrenches to indicate the torque setting.

To operate, turn the center knob attached to the max hand, so that the hand is at zero. When the wrench is released, the gage pointer will drop back to zero, while the max hand will hold its position. When using "click type" wrenches, be careful to avoid surges, which may cause the max hand to jump. Rotate the center knob counterclockwise to return the max hand to zero before running another test. If you do not want the max hand to operate, simply rotate it clockwise past the max hand reading.

The max hand is a delicate device, which must be used with care. It must be mounted on the center knob with enough spring tension to stay in place, yet must not be too tight in order to not retard the pointer. The tension of the max hand can be adjusted manually by removing the max hand lens from the unit. While holding the outside knob stationary, use a wrench to tighten the bronze nut on the inside of the lens. Make sure not to over-tighten, remembering that the max hand must spin freely in order to perform its function. Also care should be used so the wrench doesn't slip and scratch the lens.

Adjusting the gage.

During a calibrator accuracy test, compare the gage reading to the applied load at a number of different points. If the gage is off by the same small increment at each point, adjust it as follows:

a. For gages with a face "Recalibration Screw":

- 1) Remove the gage lens.
- 2) Place a small screwdriver into the recalibration screw slot and turn the screw right or left (as necessary) so that the pointer moves by the amount of the error.

b. For gages with a "micrometer" style pointer:

- 1) Remove the gage lens.
- 2) With one hand, carefully hold the pointer.
- 3) Insert a screwdriver into the slot in the top of the gear that adjusts the pointer. Turn the screw right or left to move the pointer by the amount of the error.