

# Hi-Force® HYDRAULIC TOOLS

## INSTRUCTION MANUAL:

Model Series: HTW – Break Back Series

### Hi-Force – Manual Torque Wrench Range – Break Back Type



#### **Important Note:**

Before putting this Hand Torque Wrench into operation, please validate the certificate (provided along with this tool) by completing the section “date of first issue, sign and stamp.”

#### **1.0 Inspection of the product upon receipt:**

On receipt of the product, visually inspect the item for any evidence of shipping damage. Please note shipping damage is not covered by warranty. If shipping damage is found notify the carrier immediately and refrain from putting the product into service. The carrier is responsible for repair and replacement costs resulting from damage in transit shipment.

#### **2.0 Safety Precautions:**



Read and follow all the instructions and safety warnings carefully prior to use of the equipment. Failure to do so could result in equipment damage or failure of the equipment or personal injury. Hi-Force will not be held responsible for any damage to the equipment or personal injury resulting from unsafe use of the product, lack of maintenance or incorrect operation. If in doubt on the correct usage of any Hi-Force equipment, contact your nearest Hi-Force office or distributor. If the operator has not been trained on high pressure hydraulic equipment and its safe use consult your local Hi-Force sales office who can offer you training courses for operators.



All operators should ensure that all necessary personal protective equipment as specified by their employer is worn when operating any hydraulic equipment. Safety shoes, safety glasses/ visor and protective gloves should be worn at all times. All relevant risk assessments should be completed prior to use of the equipment.

### Available Models:

MODEL NO.	SQUARE DRIVE	TORQUE RANGE		OVERALL LENGTH MM	RATCHET HEAD DIA MM	WEIGHT KG
		NM	LBF.FT			
HTW1000B	3/4"	300 - 1000	220 - 750	1475	70	7.3
HTW1500B	3/4"	700 - 1500	500 - 1000	1475	70	10.4
HTW1800B	1	700 - 1500	500 - 1000	1475	70	10.4
HTW2000B	1"	900 - 2000	600 - 1500	1920	70	13.0



Read this entire manual before operating the torque wrench.

Failure to observe the following warnings could result in serious bodily injury.

These instructions are part of the torque wrench.

They must be kept in a safe place for later use and be passed along with the torque wrench if it is sold, loaned, or otherwise transferred.

The torque wrench should be used only by TRAINED PERSONNEL who have been taught how to safely use and handle the torque wrench. Using the torque wrench without training may result in SERIOUS INJURIES or DEATH.

Employers purchasing this torque wrench MUST ensure employees using the torque wrench have read and understood these Operating Instructions prior to using the torque wrench. The Operating Instructions MUST be available to the employees for reference at all times.

#### **OVERLOAD HAZARD**

The torque wrench can be overloaded during use and break causing SERIOUS INJURY or DEATH.

ALWAYS use only original accessory parts.

Accessory parts not approved by the manufacturer may cause the torque wrench to overload or fail. ALWAYS inspect the torque wrench for damage BEFORE use.

NEVER use a damaged torque wrench.

NEVER use the torque wrench if it has been dropped, used to strike other objects, or if anything has fallen on it.

#### **GENERAL DESCRIPTION**

This operation manual covers the HTW range of manual torque wrenches. The HTW-B type tools feature a “break-back” design to give a very clear indication of the required torque being reached.

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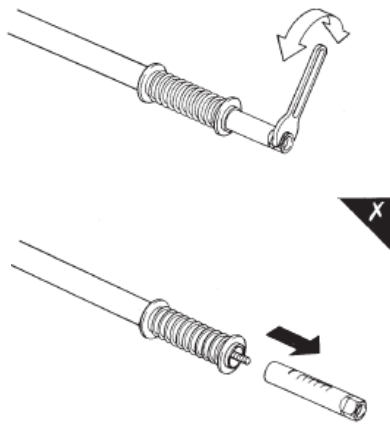
## INSTRUCTION MANUAL:

Model Series: HTW – Break Back Series

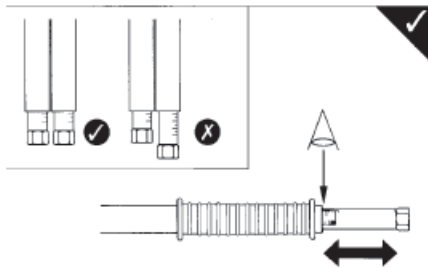
### Setting the Torque



**HTW-B models:** Turn the nut on the end of the torque wrench handle until the required setting aligns with the end of the handle tube. Never remove the adjusting nut completely or else calibration will be lost. On HTW1800B and HTW2000B models there are two adjustment nuts. It is important that both nuts are adjusted equally to the required torque value.



HTW1800B & HTW2000B

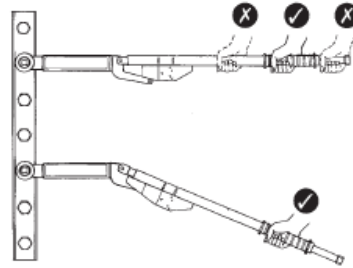


### Operation:

Select a socket of the correct size for the nut to be tightened, and with the correct size of square drive for the torque wrench. Ensure the socket is in good condition. Fit the socket to the square drive of the torque wrench. Engage the socket fully onto the nut and pull the torque wrench smoothly towards you. Make use of the ratchet mechanism to keep the tool in a comfortable working range. Always pull the wrench squarely from the centre of the handle.

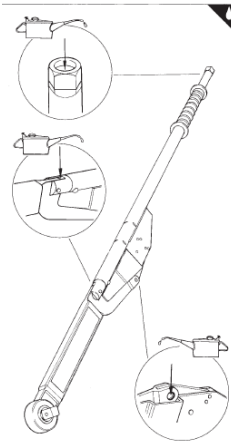
**HTW-B models:** When the required torque setting is reached, the wrench will “break” in the centre through a large and easily visible angle. The tool mechanism is designed to ensure a smooth “break” to minimise the risk of the operator losing balance.

When hand pressure is relaxed the tool will reset for the next tightening cycle.



### General Maintenance:

Lubrication points:



**Do** treat your torque wrench like a precision instrument.

**Do** operate the tool several times to re-distribute lubrication on the torque mechanism when it has not been used for some days.

**Do** refer to manufacturer's handbook or recognised repair manual for correct torque settings.

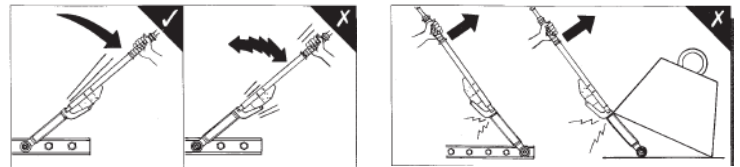
**Do** set the spanner at a lower figure (**75% of torque required**) tighten all nuts then re-set final figure and tighten again.

**Do** see that bolt threads are clean and lightly oiled before tightening.

**Do** reduce the torque setting to the minimum when the tool is put into storage.

**Don't** snatch the tool when tightening; a smooth continuous pull gives more accurate results.

**Don't** tilt the torque wrench away from 90° to the axis of the bolt when tightening.



For full and comprehensive details on this piece of equipment and all of the Hi-Force range of torque & tension bolting tools please go to:

[www.hi-force.com](http://www.hi-force.com)

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