


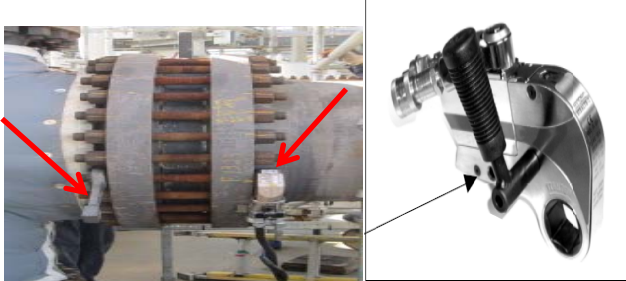




The following are guidelines. Client or Project Specifics may superseded this document. Consult Project Manager with conflicts.

Task Step	Step Hazard	Hazard Mitigation	Picture
1. Inspect equipment for damage to: a. Hydraulic Connections b. Electrical connections c. Air connections (if applicable) d. Hoses, cords, etc.	N/A	N/A	
2. Set up tool a. Connect hydraulic hoses b. Connect electrical c. Pressurize hydraulic hoses d. Set desired torque pressure e. Verify driver direction (clockwise/counter clockwise)	a. N/A b. Electrocutation c. High pressure fluids d. N/A e. Pinch points	a. N/A b. Utilize GFCI c. Ensure proper hose connections d. N/A e. Set wrench head on flat surface when checking drive direction, do not hold in hands	
3. Set the desired pressure a. Loosen the knurled locking ring b. Turn the pump on and slowly turn "T" handle and observe the pump gauge rise. c. Once pressure is reached then "Lock On" d. cycle head three times	a. Improper torque pressure could cause damage to piping system and a mechanical failure b. N/A c. High pressure leaks and electrocution d. Pinch Points	a. Refer to proper torquing conversion tables for selected head. b. N/A c. Ensure connections are fully engaged Utilize GFCI d. Set wrench on flat surface when cycling head, do not hold in hands.	
4. Apply wrench head to nut with reaction arm fully engaged <i>*Injuries incurred while placing head on nuts not utilizing handles.</i>	a. Pinch Points b. Backing wrench line of fire	a. Watch finger placement b. Place backing wrench in a manner that the bolts are used as leverage <u>If space permits utilize handle on wrench head</u>	
5. Torqueing a. Operate the wrench head with remote and cycle head until required torque is reached. <i>*Injuries incurring when head is engaged and hand was holding head. Pinched fingers between reaction arm and stud.</i>	a. Pinch points/finger amputations	a. Never have hands on wrench head when remote is activated. b. If using two people a clear communication plan shall be established to ensure others hands are out of area when remote is activated.	
6. Disengage wrench head from nut a. Disengage hydraulics if possible by valve b. Place remote on ground where nobody can activate head	a. N/A b. Pinch points/ finger amputation	a. N/A b. Ensure remote is in a controlled area where it cannot be activated while handling the wrench head.	
7. Continue to next nut/bolt/stud in pattern desired	Refer to step 4 and repeat	Refer to step 4 and repeat	



INDUSTRIAL-STRENGTH CONSTRUCTION

Title: Hydraulic Torque Wrench
Revision Date: N/A

TASK SAFETY PROCESS

TSP Number: T0015
Reviewed By: Clay West

Issue Date: 7/9/2014



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****SPECIAL NOTES****

1. ALL EMPLOYEES UTILIZING HYDRAULIC TORQUE WRENCHES MUST VIEW TRAINING VIDEO [VIDEO](#)
2. UTILIZE INDUSTRIAL BOLTING WHEN RENTING/PURCHASING HEADS. THEY WILL SUPPLY TOOLS WITH HANDLES.
3. HEADS MUST BE EQUIPPED TO ACCEPT HANDLES. HANDLES MUST BE USED WHEN POSSIBLE. WHEN WORK AREA HAS LOW HEAD ROOM AND HANDLE IS NOT POSSIBLE IN ORDER TO GET TOOL ON NUT, MUST BE NOTED ON THA AND APPROVED BY GENERAL FOREMAN OR HIGHER.



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BMW Constructors
Hydraulic Wrench and Pump Machine
Operator's Inspection Checklist

Inspector Name(s)	Date	Shift	Equipment #

Inspect Machine and Equipment Prior to Operations

NOTIFY SUPERVISION IF ANY DEFECTS FOUND BEFORE, DURING, OR AFTER OPERATION

DO NOT OPERATE THIS EQUIPMENT WITHOUT PROPER TRAINING

A. DAILY OPERATOR PRE-START INSPECTION – Check appropriate box

<i>Pre Operational Visual Inspection</i>	OK	Repair or Address
1. Hoses are not cut, kinked, or twisted in any way.		
2. Hose and fitting connections are tight and secure.		
3. Remote control, power cords, and cables are not cut and have no frayed wiring.		
4. Hex cartridge pin is engaged in tool.		
5. Remote “rocker” switch is in good working condition.		
6. Oil level in pump is adequate (<i>check sight glass</i>).		
<i>B. Operational Test Inspection and Procedures</i>		
1. Place tool on ground for test (<i>Do not test by placing on nut</i>).		
2. Pressure up the pump with tool connect by pressing and holding on top portion of “rocker” switch.		
3. While holding pressure, make sure there are no leaks in the connections or hoses.		
4. Cycle tool piston back and forth multiple times to ensure tool and cartridge are engaged.		
5. Avoid premature startup of tool. The pump remote should be operated by the tool operator only.		
6. Make sure the pump is OFF before placing tool on nut.		
7. Make sure the pump is OFF while moving tool from nut to nut.		

IF ANYTHING ON PUMP OR TOOL SEEMS OUT OF PLACE OR NOT WORKING CORRECTLY, STOP USE IMMEDIATELY AND CONTACT YOUR IMMEDIATE SUPERVISOR.

Inspected by: _____ **Date:** _____
(Signature)

*Separate Task Hazard Aalysis to be completed for use of Hydraulic Wrench & Pumps and attached to this Checklist
Must be turned into Safety Department at end of shift.*

COMMENTS:

SERIOUS INJURY MAY RESULT FROM IMPROPER USE OF THIS EQUIPMENT!