



# Field Calibration of Impulse Torque Wrench

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## **ADB Airfield Solutions**

P.O. Box 30829  
977 Gahanna Parkway  
Columbus, OH 43230

Tel: (614) 861-1304  
Fax: (614) 864-2069

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# Record of Changes

<b>Page</b>	<b>Rev</b>	<b>Description</b>	<b>EC No.</b>	<b>Checked</b>	<b>Approved</b>	<b>Date</b>
All	A	Released new Service Bulletin	01272	WT	WT	5/21/04

# Wrench Calibration

## 1. Introduction

This service bulletin provides instructions for field calibration of the Ingersoll-Rand Power Pulse 45PS3 wrench. Read and follow all information found in the Ingersoll-Rand Operation and Maintenance Manual, Edition 3, June, 2003 supplied with the wrench. The wrench is used to install and torque the mounting bolts that are used to fasten the inset light to the L868 or L867 light base.



**NOTE:** THE WRENCH MUST BE CALIBRATED AT THE JOB SITE BEFORE USING BECAUSE OF VARIATIONS IN AIR PRESSURE AIR LINE VOLUME.

## 2. Special Tools and Equipment Required

Refer to Tables 1 and 2 for equipment and tools.

**Table 1. Required Equipment Supplied**

Part Number	Description	Quantity
Form P7528	Wrench Operation Manual	1
ALN107	Service Bulletin	1

### Notes:

**Table 2. Required Equipment Not Supplied**

Description	Part No.
Portable Air Compressor Tank & Nose	N/A
Micrometer Torque Wrench 0-200 In-Lbs	N/A
Assorted Sockets for Torque Wrench	N/A

## 3. General Instructions



**WARNING:** Disconnect equipment from line voltage. Failure to observe this warning may result in personal injury, death, or equipment damage.

## 4. Calibration Instructions

### Initial Calibration of the Impulse Wrench

1. Hook up the air supply from the portable compressor unit that is going to be used to install the bolts on the field and connect the impulse wrench.
2. Install a 3/8-16 mounting bolt into either the tapped hole in the light base flange or into a steel bar that has been tapped 3/8-16 thru. Install the bolt using the impulse wrench.
3. Using a micrometer-adjustable, click style, torque wrench verify if the bolt has been installed to 180/190 inch lbs of torque as recommended in the Siemens instruction manual for the inset light as follows:
  - a. Set the torque wrench to 175 inch lbs and see if the bolt moves when it is torqued. If bolt does not move, continue adjusting the torque wrench in 1 lb increments until the bolt moves. When bolt movement occurs the bolt torque is within 1 lb or less than the last setting on the wrench.
  - b. Compare the final torque reading and determine if it is within the required torque of 180/190 In-Lbs:

**IF WITHIN REQUIRED TORQUE**, stop and use the impulse wrench without any adjustment.

**IF TORQUE IS NOT WITHIN LIMITS**, see Torque Adjustment section in the wrench manual and then repeat Step 3 until specified torque has been achieved.

**NOTE:** Tools used to make adjustments are supplied by Ingersoll-Rand and are shipped in a bag with the wrench.

4. See Figure 1 below to locate and remove the Socket Plug described in the operations manual on page 3.

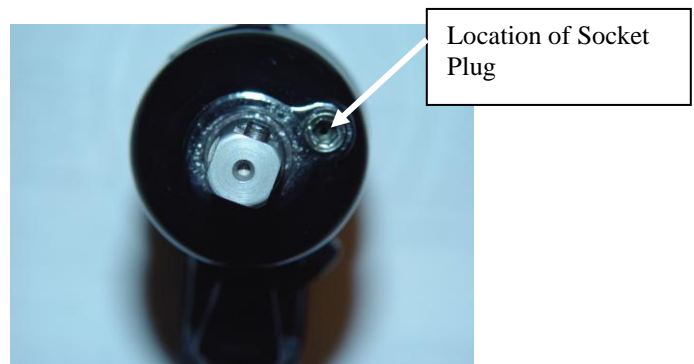


Figure 1 End View of Impulse Wrench

5. Make torque adjustments as described in the Ingersoll-Rand manual. Repeat Step 1 thru 4 until wrench torque setting has been verified to be within specified range.

FROM INGERSOLL MANUAL, Edition 3, June, 2002 – page 3

### **Torque Adjustment**

**To adjust the torque on these Twin Blade Impulse Wrenches, proceed as follows:**

1. **Remove the Socket Plug**
2. **Rotate the Drive Shaft until the Torque Adjustment Screw [small hex allen set screw] is visible in the opening. (There is color paint in the head of the Torque Adjustment Screw)**
3. **Using a 1.5mm hex wrench, rotate the Torque Adjustment Screw Clockwise to increase the torque. To decrease torque, rotate the Torque Adjustment Screw Counter-Clockwise. Do Not rotate the Oil Plug.**
4. **Replace the Socket Plug**

### **NOTICE**

**Make all final adjustments at the job**

### **Periodic Calibration of the Impulse Wrench**

**The impulse wrench torque should be checked any time there are changes in air pressure, air volume, or equipment changes.**

**The impulse wrench torque should be recalibrated periodically to insure settings have not changed.**