

PT-150H

WIRE CRIMP PULL TESTER

DMC DANIELS
MANUFACTURING
CORPORATION

DATASHEET

1. SAFETY

The Alphatron PT-150H Wire Crimp Pull Tester is a force measurement device, and operators should wear safety glasses for eye protection because foreign objects can be thrown from the piece under test.

To prevent fire and shock hazard, do not expose this equipment to moisture. Always unplug the AC line cord prior to servicing.

DO NOT exceed the rated force capacity (150 lb., 68 kg) of the PT-150H. The unit may be damaged, and the operator or others in the immediate vicinity injured under extreme force conditions.

2. SETUP

The Alphatron PT-150H is shipped from the factory assembled, calibrated, and tested. For best results, users should familiarize themselves with the setup and operation of the unit before placing it in service.

To operate, set the PT-150H on a flat, level surface in a horizontal position. To prevent damage to the force sensing device, handle the unit by the base plate only. Six mounting holes in the base are provided to permanently bolt it in position, if desired. NOTE: The rubber feet in the base plate need to be removed if permanent mounting is desired.

3. OPERATION

With the switch on the left side of the unit turned off, plug the PT-150H into a 115VAC or appropriate outlet. Turn the zero knob fully clockwise, and turn the power switch to the on position. The display will light up and display the message "ALPHATRON WARMING UP". After one minute, the message "ADJUST ZERO" will appear. Slowly turn the zero knob counter clockwise until the display reads 000.0. It is important to stop turning the knob as soon as the 000.0 value is reached. The unit will automatically begin an internal self test to verify the accuracy of the tool. The unit will display the following message sequence during the automatic test depending on the outcome of the test. "CALIBRATING" followed by "CALIBRATION OK" if the unit passes the test, or "CALIBRATING" followed by "CONTACT DMC" if the test fails. If the test fails, turn the unit off, and repeat the start up sequence. Continuing to turn the zero knob after reaching 000.0 during the self test will cause the test to fail. If the internal self test fails repeatedly return the tool to DMC for repair/calibration.

WARNING: The internal calibration self test is a reliable verification of accuracy but it **DOES NOT** assure traceability to NIST.

Select the proper size slot, and place the crimped terminal end of the wire sample into the rear slotted grip so that wire passes thru, but the terminal is captivated. Use the lever on the forward self tightening grip to open it. Then place the free end of the wire between the cam wheels, and release the lever, so that the wire is gripped.

Pull the operating lever forward in a slow and consistent motion. The indicator will begin to display the amount of force exerted on the crimp. As the force is increased the display will continue to update the reading until the force is no longer increasing. (Usually this is the point at which the crimp is pulled loose, or the wire breaks.) If you reach 150lb and the crimp has not yet failed do not apply more force to the handle. Do not test crimps that require more than 150lb test load.

Upon completion of the test, release the wire and press the reset button on the right side of the unit prior to the next test.

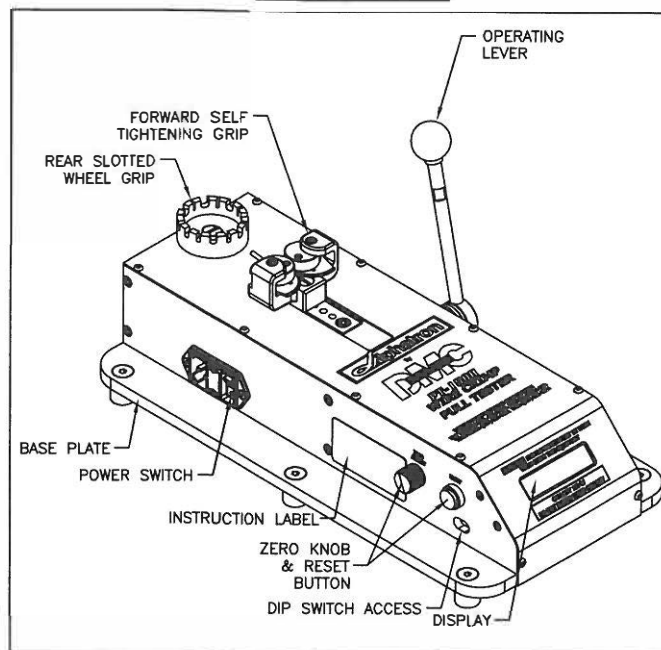
Best results are obtained with the PT-150H using a slow, consistent motion when pulling the lever. A quick, or hesitant motion can cause the wire to slip within the forward cams and the terminal also may become unseated from within the slots of the rear grip.

4. SERVICE

Repair and calibration services for the PT-150H wire crimp pull tester are available from Daniels Manufacturing Corporation.

Should it be necessary to return the unit for service, please

PT-150H



**DO NOT EXCEED THE RATED
FORCE OF 150 lb**

ship it to the address on this data sheet, freight prepaid. Enclose a letter, or purchase order with company name, address, phone number, the individual to be contacted and the reason for return.

5. SETTING OF DIP SWITCHES

The PT-150H is capable of making measurements in any of the following units: Pounds (lb), Kilograms (Kg), Newtons (N). To change the units displayed the dip switches inside of the unit need to be accessed. This is done by using a small screwdriver to flip switches through the access hole on the left side of the unit. The dip switch set that needs to be changed is labeled SW2 on the instruction label. The switches that need to be changed are labeled 2 & 3. **DO NOT CHANGE ANY OTHER SWITCHES!** Set switches 2 & 3 as follows for the units you want to measure in.

Pounds (lb)	Switch 2 Down, Switch 3 Up. (This is the factory setting)
Kilograms (Kg)	Switch 2 Up, Switch 3 Down.
Newtons (N)	Switch 2 Up, Switch 3 Up.

The PT-150H is also capable of displaying either the peak reading achieved during a test, or continuously displaying the reading on the load cell whether it increases or decreases. Peak Hold is the factory setting. The switch that needs to be changed is labeled 4. **DO NOT CHANGE ANY OTHER SWITCHES!** Set the switch as follows for the display mode that you want.

Hold Peak Force Reading on Display Switch 4 Down

Show Continuous Force Readings on Display Switch 4 Up

6. LEFT SIDE PANEL

FUSE – If the fuse requires replacement, install a .3A 125/250V slow blow fuse. The fuse compartment is located on the back of the unit and labeled as FUSE.

ON/OFF – Depress the rocker switch in order to turn the unit ON or OFF.

AC POWER – Insert the proper end of the supplied power cord into the receptacle.

7. CARE OF TOOL

We strongly recommend that you:

1. DO NOT immerse tools in cleaning solution.
2. DO NOT spray oil into tool to lubricate.
3. DO NOT attempt to disassemble the tool or make repairs.

This is a precision test unit and should be handled as such.

DMC offers complete refurbishing and recalibration services. DMC specially engineers and manufactures complete tool kits to satisfy individual customer requirements, such as total aircraft support, general shop maintenance or production, on board ship and vehicle service, etc..

LIMITATION OF LIABILITY

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LIMITED WARRANTY

DMC (Daniels Manufacturing Corporation) warrants each new product sold by it to be free from defects in material and workmanship under normal use and service. DMC's obligation under this warranty is limited to the free correction or, at DMC's option, the refund of the purchase price of any such product which proves defective in normal service within ninety (90) days after delivery to the first user, provided that the product is returned to DMC with all transportation charges prepaid and which shall appear to DMC's satisfaction, after DMC's inspection, to have been defective in material or workmanship, it being understood that DMC products are not consumer products. This warranty shall not cover any damage to any product which, in the opinion of DMC, was caused by normal wear, misuse, improper operation, tampering, neglect or accident. This warranty is in lieu of all other warranties express or implied. No warranty, express or implied, is made or authorized to be made or assumed with respect to products of Daniels Manufacturing Corporation other than those herein set forth.