# PT-40XP WIRE CRIMP PULL TESTER



#### 1. SAFETY

The Alphatron PT-40XP 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

DO NOT exceed the rated force capacity (40 lb., 170N) of the PT-40XP. The unit may be damaged, and the operator or others in the immediate vicinity injured under extreme force conditions.

#### 2. SETUP

The Alphatron PT-40XP 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-40XP on a flat, level surface in a horizontal position. To prevent damage to the force sensing device, grasp both ends of the unit while avoiding contact with the load cell. The load cell is very sensitive and can be damaged if the unit is dropped or struck.

#### CHARGING

Charge the unit, using only the AC Adaptor supplied. A minimum of 4 hours charging is recommended before use. It is best to unplug the unit after fully charged. Tests can be performed while charging the unit.

When a sufficient amount of energy is expended from the battery the low battery LED will illuminate. Accurate testing can still be performed, but charging is recommended. When the voltage output of the battery approaches a level where incorrect readings are possible, the unit will automatically shut off.

It is recommended that the unit be unplugged when fully charged and not in use.

## 4. OPERATION

Turn the unit on by switching the "On-Off switch" to the "On" position. Allow the unit to warm-up for 5 minutes before

performing any tests.

Zero the display by turning the zero knob then momentarily pressing the reset toggle and repeating until the display screen "- 00.0" or "00.0". It is important to push the reset button before taking the next reading. The unit is now ready to perform a test.

Turn the hand wheel to bring the movable grip close to the stationary grip.

Open the jaws of the stationary grip by sliding the release tab rearward. Insert the test sample between the jaws and release the tab, ensuring that the sample is held firmly. Similarly, secure the other end of the sample in the movable grip.

Turn the hand wheel so the grips move apart from one another until the sample fails. The highest load value is shown on the display screen and will remain there until the reset button is

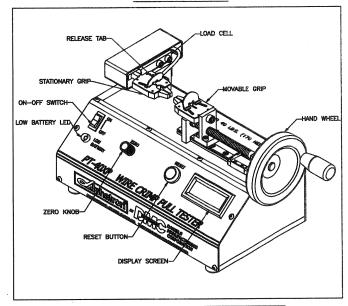
depressed. <u>DO NOT EXCEED 40lbf.</u>
Clear any debris from the unit and remove the wire and contact/terminal from the jaws.

Best results are obtained with the PT-40XP by using a slow, consistent motion when turning the hand wheel.

#### FUNCTIONAL CHECK

The PT-40XP Wire Crimp Pull Tester is factory calibrated with equipment traceable to the National Institute of Standards and

## PT-40XP



## DO NOT EXCEED THE RATED FORCE OF 40 lb

Technology (NIST). We recommend recalibrating the unit at intervals not to exceed one year in duration.

The functional check is executed using the R-cal switch built into the unit . The R-cal switch is located on the back of the unit, and its R-cal value is on the sticker applied to the back of the unit.

A functional check can be performed at any time:

- 1. Allow the unit to warm up for 5 minutes.
- 2. Depress and hold the reset button.
- 3. Zero the display by turning the zero knob fully counter clockwise. Press the reset button. Turn the knob clockwise until the display reads "-00.0" or "00.0".
- 4. Press the R-cal button on the back of the unit. Press the reset button to zero the display. Repeat this process several times to assure a repeatable value. The display value,

(R-cal # X .005 = tolerance

R-cal # plus & minus tolerance = range),should be within +/-.5% of the value recorded on the back of

EXAMPLE: R-cal #= 140.0 $140 \times .005 = 0.7$ 139.3 to 140.7 = range

5. If any of the procedures in steps 2-4 do not produce the expected results, the unit should be returned to DMC for repair and recalibration.

#### 6. SERVICE

Repair and calibration services for the PT-40XP Wire Crimp Pull Tester is available from Daniels Manufacturing Corporation. Spare parts are also available.

Should it be necessary to return the unit for service, please ship to the address on this datasheet, freight prepaid. Enclose a letter, or purchase order with company name, address, phone number to ensure DMC can contact you, and the reason for return.



## 7. CARE OF TOOL

We strongly recommend that you:

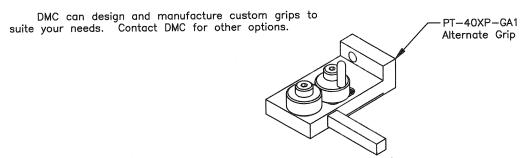
1. DO NOT immerse tools in cleaning solution.

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.

### 8. Alternate Grips



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

DANIELS MANUFACTURING CORPORATION IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE, OR MISUSE, OF ANY OF ITS PRODUCTS. OWNERS AND USERS OF DMC PRODUCTS ASSUME FULL RESPONSIBILITY FOR INSTRUCTING THEIR EMPLOYEES IN THE PROPER AND SAFE USE OF SUCH PRODUCTS.

## 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.