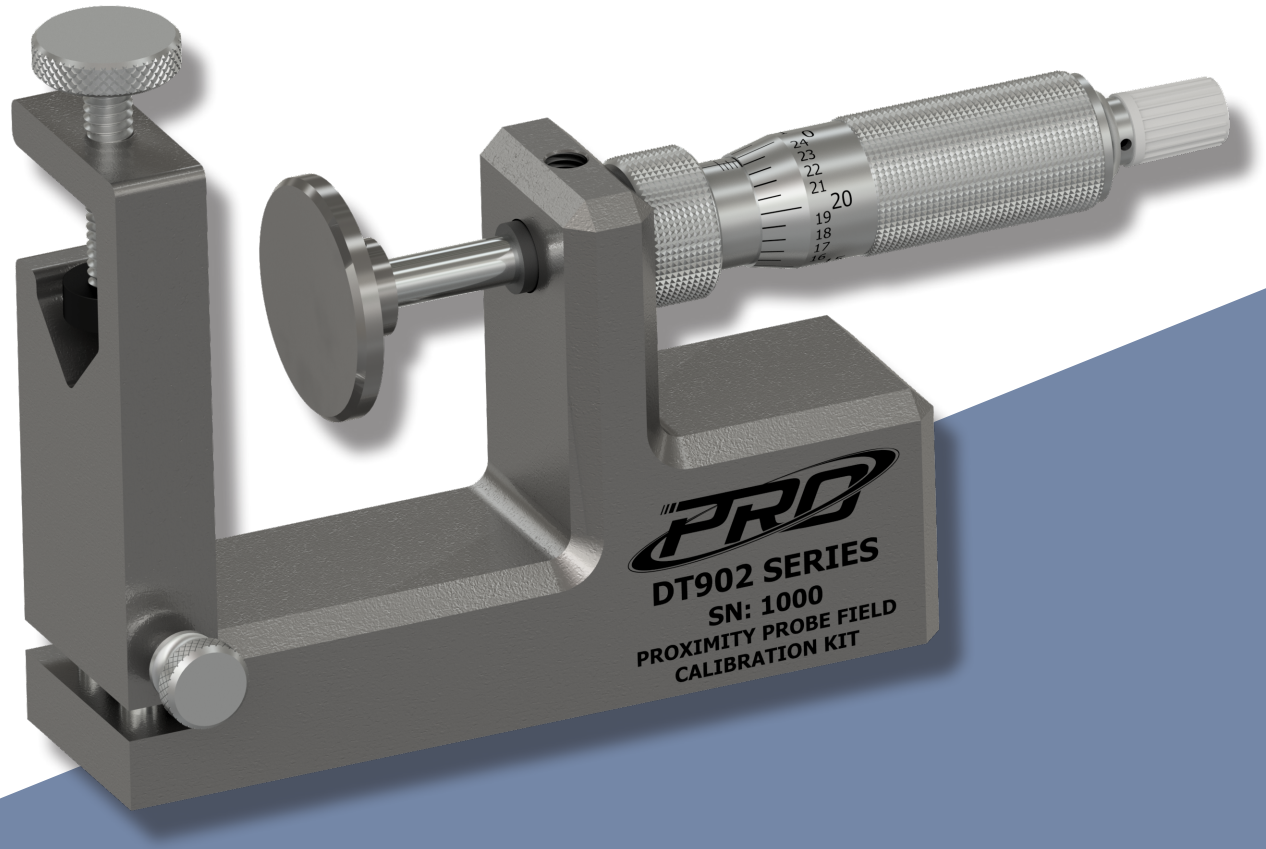
PROXIMITY PROBE SYSTEMS



DT902 Linear Field Calibration Kit
Product Manual

Table of Contents

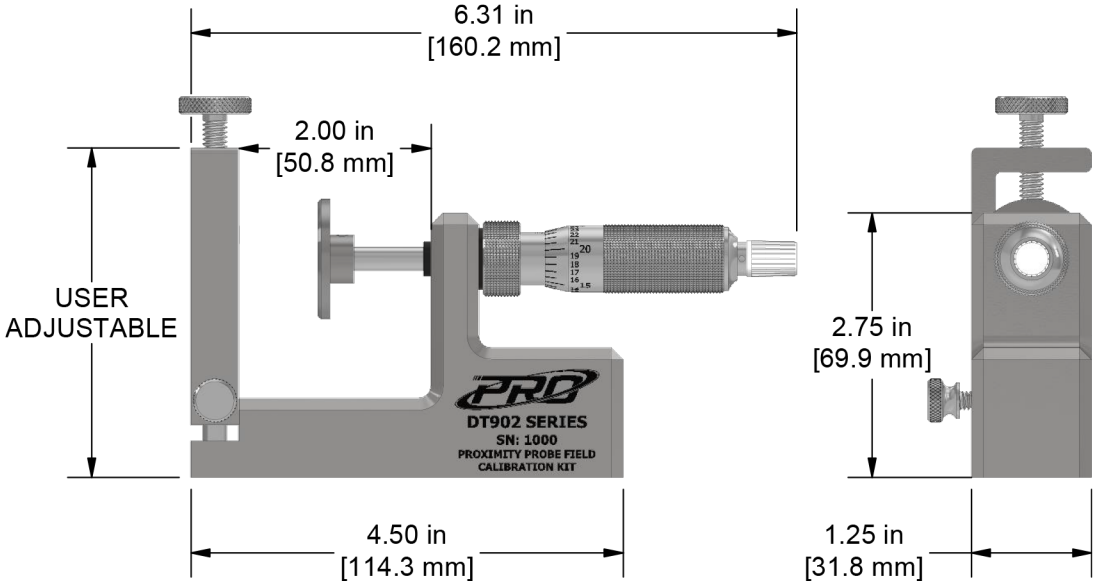
Introduction

This document contains information on the operation, installation, and maintenance of the DT902 Series Linear In-Field Calibration Kit.

DT902 Series Overview

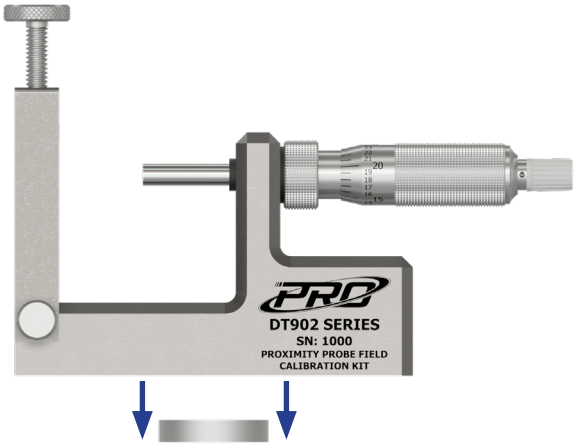
The DT902 Series allows the user to verify proximity probe system specifications in the field. It features an adjustable design compatible with PRO Line FFv™, 8 mm, and 11 mm proximity probe systems. It also features a magnetic mounting base for secure attachment to a workbench.

CTC offers a variety of target materials to test probes against, designed to match the material of the shaft the probe driver was factory configured to be monitoring. **Always ensure that field verification testing is using the correct target material.**

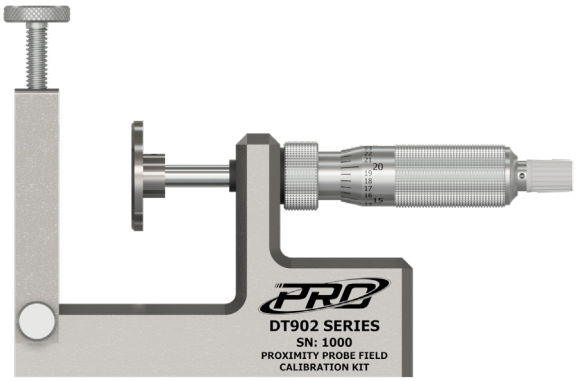


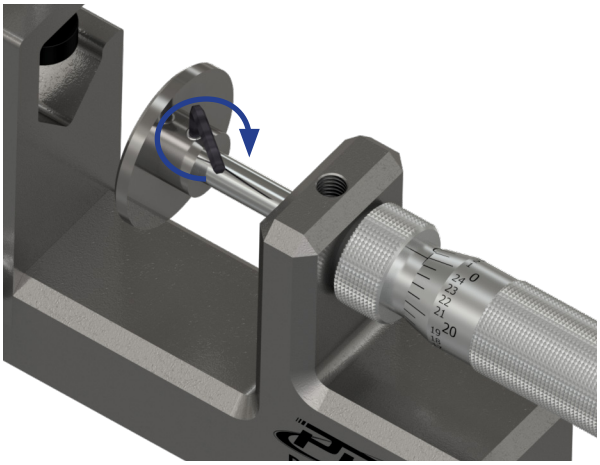
Installation

Remove the magnet shunt from the bottom of the frame. Ensure the frame is mounted on a flat, stable surface.

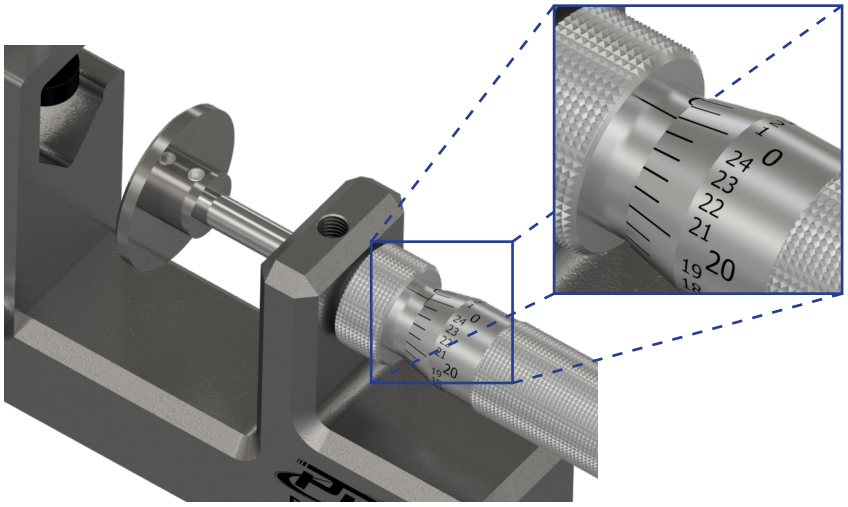


Place the target onto the micrometer shaft and tighten the set screw with the included allen wrench. **It is recommended to wear gloves while handling the target.** Ensure the target is free of scratches, oils, rust, and other contaminants.

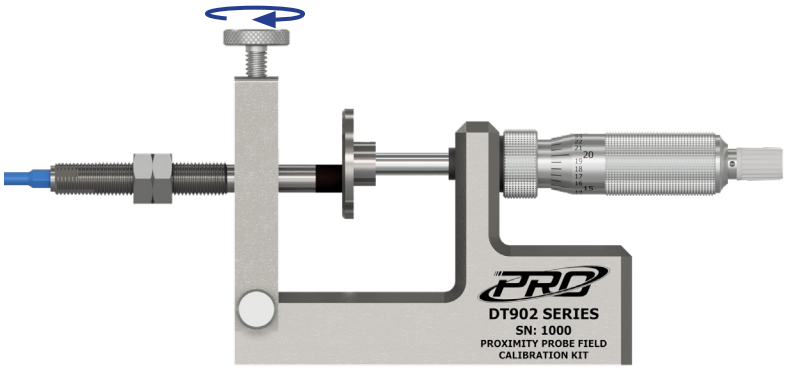




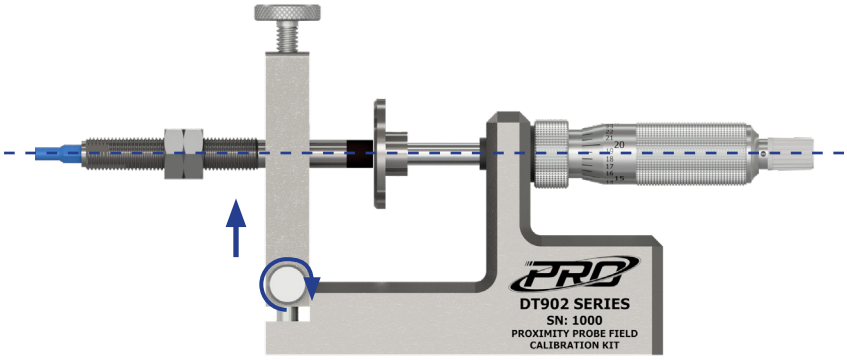
Zero the micrometer.



Connect the probe system. This includes the probe, extension cable (if applicable), and driver. Place the probe into the cradle on the opposite arm. Ensure that the probe tip is touching the target, then tighten the top thumbscrew to secure the probe in place. Back the target off slightly.

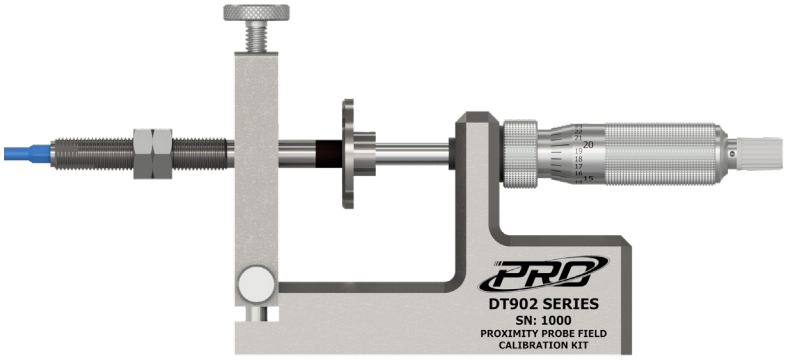


Adjust the height of the arm so that the center axis of the probe and target are aligned. Tighten the lower thumbscrew to hold position.

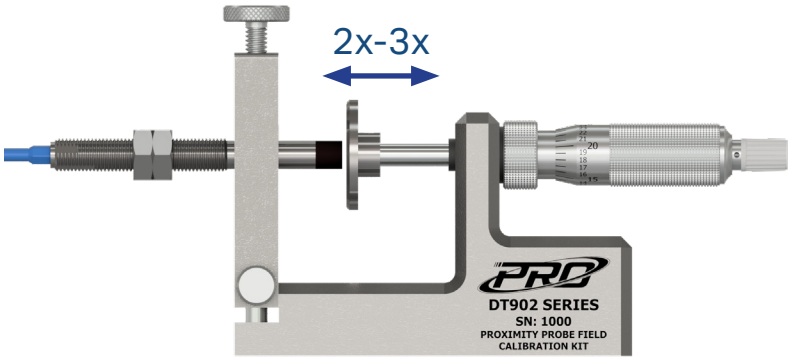


Operation

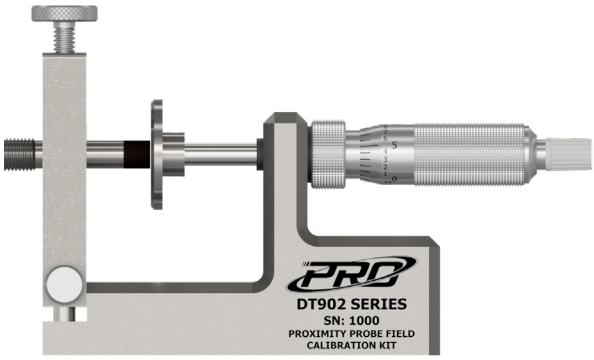
Once the probe has been aligned, bring the micrometer back to zero. The probe tip and target should again be touching.

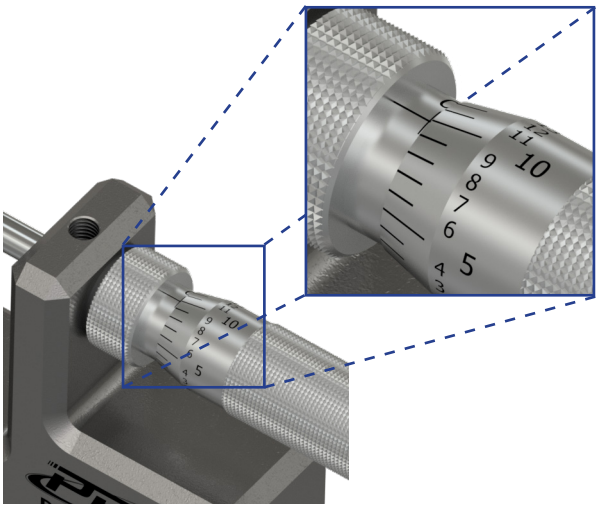


Back the target off and repeat this process two or three times to verify there isn't any deflection in the probe tip.

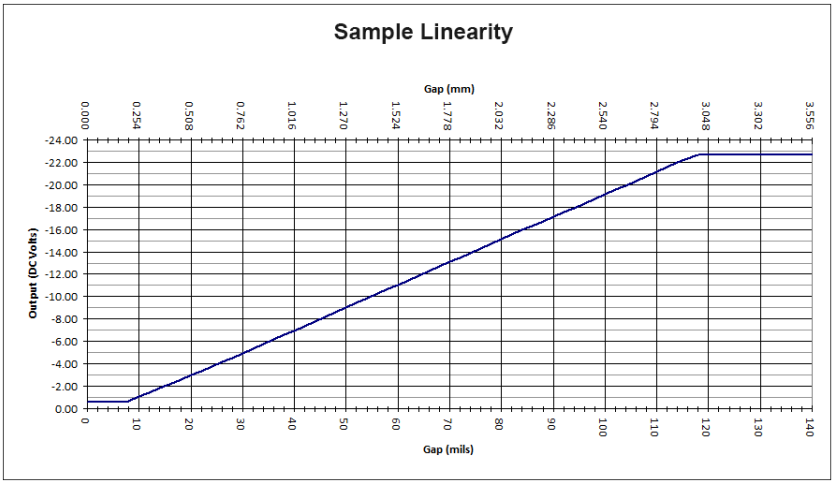


Connect voltmeter to the probe driver. Move the target 10 mils away and record the voltage.





Repeat this process in 10 mil increments until the entire desired linear range has been recorded.



Maintenance

There are no customer replaceable parts on the calibration kit. Once the proximity probe assembly has been installed, minimal maintenance will be required. Basic visual checks should be made periodically to ensure integrity and proper function. It is designed to provide trouble-free continuous service under normal operating conditions. Should the instrument require repair, visit ctconline.com for a return material authorization.

- Wipe both the instrument and the target after each use to avoid the accumulation of dust, grease, moisture or other particulates.
- To clean the instrument, use a soft cloth soaked in a diluted neutral detergent. Do not use any organic solvent, as it may deform or damage the instrument.
- Dirt on the spindle may cause a malfunction. If the spindle gets dirty, thoroughly wipe with a cloth dipped in alcohol to remove the dirt.
- Certain target materials may be susceptible to rust. Always store the target in the supplied corrosion inhibiter bag after use and cleaning. Press out all the air before sealing the bag to limit oxidation. Store in a cool, dry place.
- If rusting occurs, clean the target with a commercial, non-abrasive rust remover. Ensure the surface finish was not altered by rust prior to use, as it may impact results.

WARRANTY

Please visit www.ctconline.com to view a complete recapitulation of our warranty and refund policies.

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