

Eastern Technology Corporation Product Guide

High Voltage Cable Tester E-5



The E-5 High Voltage Cable Tester tests H-Voltage aircraft engine ignition cables quickly and accurately. And it is easy to use: simply connect the three wires, push the test button and check the test window. That is all there is to it. By simulating the magneto's high output voltage, the E-5 instantly identifies both good and defective cables. And it operates on either 12 or 24 volts, D.C.

Aircraft Magneto Timing Light E-50



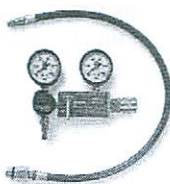
The Aircraft Magneto Timing Light E-50 is the industry standard. Designed specially for the internal timing and synchronization of aircraft magnetos, the E-50 safely absorbs the current from the magneto's impulse coupling, so there is no danger of engine firing while adjustments are being made.

The Drill Rite Precision Drill Guide



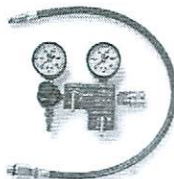
- Drill straight and true holes every time.
- Light and portable
- Your electric hand drill will perform like a professional drill press
- The easy accurate way to drill any pipe tubing or round stock while in the field.

Differential Cylinder Pressure Tester E-2A



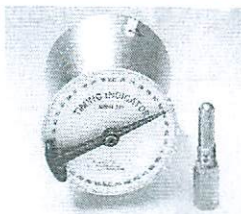
Eastern Technology's Differential Cylinder Pressure Testers quickly locate worn and cracked rings, defective intake and exhaust valves, scored, cracked cylinders, leaky head gaskets, worn and stripped spark plugs bushings; virtually every potential cause of pressure loss.

Differential Cylinder Pressure Tester E-2M



Eastern Technology's Differential Cylinder Pressure Testers quickly locate worn and cracked rings, defective intake and exhaust valves, scored, cracked cylinders, leaky head gaskets, worn and stripped spark plugs bushings; virtually every potential cause of pressure loss. Includes a built in Master Orifice, for fast and easy Master Orifice Test.

Aircraft Timing Indicator E-25



The Aircraft Timing Indicator E-25 is a unique device that locates the relative relationships between the crankshaft, magneto point openings, camshaft and valve timing. Easily attached to the propeller spinner with mounting bands that are included with the unit, the E-25 quickly and accurately locates top dead center. And with its easy-to-read dial and 18mm, hardened aluminum piston stop, the E-25 is a snap to use.

E2A Differential Cylinder Pressure Tester Instructions

Warning: This device is for use with aircraft by qualified A.P. Technicians only. All aircraft tests should be performed by two technicians. Air pressure can cause the propeller to rotate suddenly and without warning. It is not possible for one individual to safely perform these tests on aircraft.

Setup:

If you are testing a certified aircraft engine, perform Master Orifice manufacturer's documentation for procedure.

- Run engine until it reaches normal operating temperature.
- Remove the most accessible spark plug from each cylinder.
- Set the *Slow Fill Valve* to the **Off** position; handle vertical and pointing down.
- After making sure the *Slow Fill Valve* is **OFF**, connect an air source to the tester, via the male quick connect fitting. Air source must be at least 90 PSI.
- Pull Pressure Regulator knob to unlock, and adjust so the left hand gauge reads 80psi.

Operation:

- Hand tighten Test Adapter, with O Ring and hose, into cylinder under test.
- Place a thumb over the end of the hose fitting and rotate the prop until the piston's compression blows thumb off hose end. This will place the cylinder close to top dead center.
- Connect the hose from the cylinder under test to the tester via the female quick connect fitting.
- Slowly open the *Slow Fill Valve* approximately 1/8 Turn (3 or 4 tick marks), until moderate resistance is felt at the prop. Carefully rotate the prop back and forth through TDC until a positive detent is felt, and the air pressure holds the prop at TDC.

Warning: Cylinder pressure will slowly rise to 80psi, and prop may rotate. Exercise Caution!

- Open the *Slow Fill Valve* completely; handle horizontal, parallel to the **Pressurized Level**.
- If necessary, readjust the regulator to 80psi at the left hand gauge.
- Read the relative pressure in the cylinder under test, at the right hand gauge.

To Test Another Cylinder

- Set the *Slow Fill Valve* to the **Off** position, and allow the cylinder pressure to bleed off. The right hand gauge will slowly return to zero. There is no need to turn down the regulator pressure.
- When the right hand gauge reads to zero, with the *Slow Fill Valve* still closed, remove the test hose from the female quick connector.
- Remove the Test Adapter from the cylinder just tested, and hand tighten it into the next cylinder.
- Repeat the OPERATION procedure, listed above

Differential Cylinder Pressure Tester E2A

Important:

Ambient barometric pressure can significantly alter differential pressure readings. Good practice indicates that a Master Orifice Test be run every day, and preferably prior to every engine test. Always run a Master Orifice Test if an engine shows marginal readings, if noticeable weather changes occur, or if ground level altimeter settings change. Refer to the instructions and specifications provided with your Master Orifice, for proper procedure.

All cylinders will exhibit a certain amount of leakage due to standard engine clearance and normal wear; no cylinder is expected to maintain a perfect 80psi. It is important that all cylinders show relatively consistent readings. Good judgment should be used as to the allowable tolerance between cylinders. Always consult the manufacturers' engine specifications.

Tips:

By listening for escaping air at key engine locations, you can generally determine the source of low pressure readings:

Air Escaping From:	Indicates:
Carburetor Intake	Leaking Intake Valve
Exhaust System	Leaking Exhaust Valve
Crankcase Breather	Defective Rings
Radiator	Defective Head Gasket or Cracked Head/Block

WARRANTY

Eastern Technology Corporation agrees to repair or replace any of its products (parts and labor) if there is a defect in materials or workmanship within one year of the date of purchase. Eastern Technology Corporation limits its obligation to repair or replacement, the choice of which is at its sole discretion, and will not be responsible for subsequent or consequential damages. This warranty does not apply to equipment that has been damaged by accident, negligence, or misuse, or altered or modified in anyway.

For repairs return equipment to:
42 Nelson Street
East Hartford, CT 06108

OUR NEW SERVICE

If your tester, through hard use or damage,
Needs calibration or an overhaul,
Eastern's new expanded Service Dept.
Will be happy to help!

This service is available for your
Magneto Timing Light, Hi-Voltage Cable Tester,
and Differential Cylinder Pressure Tester.

We accept any brand of Tester for this service.
When necessary, we will retune, refit and
rebuild your Tester to "like new" condition.

For additional information and pricing
Please call or email us at
info@easterntech.com



42 Nelson Street East Hartford, CT 06108 USA
Phone: (860)528-9821 Fax: (860)289-7639

EASTERN TECHNOLOGY CORP.

*Reliable easy-to-use aircraft
testing equipment*

E2A Differential Cylinder Pressure Tester

