

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE
MANUAL INCLUDING REPAIR PARTS LIST**

FOR

TESTER, CYLINDER

MODEL 2093A

(STEWART-THOMAS INDUSTRIES INC.)

(NSN 4910-00-250-2423)

TECHNICAL MANUAL

No. 9-4910-582-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 26 September 1980

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS LIST
FOR
**TESTER, CYLINDER
MODEL 2093A
(NSN 4910-00-250-2423)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished directly to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial **manual** for the use of the personnel to whom this cylinder tester is issued.

Manufactured by: Stewart-Thomas Industries, Inc.
100 Cabot Street
West Babylon, NY 11704

Procured under Contract No. DAAK09-78-C-4437

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number- 31077
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number - Model 2093A
- 5 - Manufacturer's Serial Number (End Item)
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

(a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 31077 followed by a colon and manufacturer's Part Number for the repair part.

(b) Complete Remarks field as follows:
Noun: (nomenclature of repair part)
For: NSN: 4910-00-250-2423
Manufacturer: Stewart-Thomas Industries, Inc.

Model: 2093A
Serial: (of end item)

Any other pertinent information such as Frame Number,
Type, Dimensions, etc.

OPERATING INSTRUCTIONS

MODEL 2093A

COMPRESSION TESTER

The Model 2093A tester is equipped with a dial calibrated from 0 to 300 lbs. pressure. A valve, located in the bottom of the check valve fitting, is provided to release the air pressure in the gauge.

A set of adapters, Figure 1, with threads to match the spark plugs of various engines is provided. A flexible extension is also furnished for use in restricted places. The cone adapter fitting is used for quick succession cylinder tests.

COMPRESSION TEST. The engine oil level, grade and cleanliness should be noted before making this test. When removing spark plugs for a compression test, first loosen the plugs slightly and then with an air hose blow out all the accumulation of dirt and foreign substances, which usually become pocketed around the spark plug. This will prevent a particle of foreign matter from dropping into the combustion chamber and becoming lodged under a valve. A valve thus held open will cause an erroneous compression reading of the cylinder. After the plugs are removed, it is a good plan to apply the air hose for blowing out the combustion chambers. Observe the spark plugs as they are removed for evidence of fouling, burning, heat range, etc.

The engine should be up to normal operating temperature before starting this test to assure normal oil and metal expansion conditions.

Crank the engine with the starting motor with the ignition OFF. In case of ignition switch-operated starting motor, ground ignition coil high-tension wire and use the ignition switch.

When making a compression test of an engine, the operator should take care to see that the highest gauge reading is obtained for each cylinder with the same number of turns of the starting motor. Usually about eight turns (which easily can be counted) of the motor is sufficient for each cylinder.