

TECHNICAL MANUAL

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

FOR

TESTER, ENGINE DISTRIBUTOR

PART NO. 7808

NSN 4910-00-392-2939

TECHNICAL MANUAL

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HEADQUARTERS
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**Operator's, Organizational, Direct Support And
General Support Maintenance Manual
Including Repair Parts List
For
TESTER, ENGINE DISTRIBUTOR
PART NO. 7808
(NSN 4910-00-392-2939)**

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 back of this manual direct to Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS-SE, Rock Island, IL 61299. A reply will be furnished 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 equipment is issued.

Manufactured by: Hydraulic Technology Inc.
9725 Lurline Avenue
Chatsworth, CA 91311

Procured under Contract No. DAAA09-79-C-4452

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.

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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. 29516
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number. 7808
- 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 - 29516 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: 4910-00-392-2939
 Manufacturer: Hydraulic Technology Inc.
 9725 Lurline Avenue
 Model: Chatsworth, CA 91311
 Serial: (of end item)

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

SECTION I INTRODUCTION AND DESCRIPTION

1-1. INTRODUCTION

1-2. This publication is issued as the basic manual for operation and service of the Tester, Engine Distributor NSN 4910-00-392-2939, Manufacturers Part No. 7808, Manufactured by Hydraulic Technology Inc. FSCM 29516, Chatsworth, California.

1-3. PURPOSE OF EQUIPMENT

1-4. The tester provides performance testing facilities for testing battery ignition distributors removed from the engine. The tester has the capabilities to test both standard breaker point distributors and pulse generator electronic types.

1-6. LEADING PARTICULARS

1-7. See table 1-1.

1-8. DESCRIPTION

1-9. The tester is completely self contained, requiring only connection to a proper electrical power source for operation. All of the tester components are housed in a steel cabinet assembly. A removable cover completely encloses the instrument and con-

trol panel when the tester is not in use. The tester is designed for bench mounting and has provision for bolting down to the bench. The tester is used to determine whether a distributor will meet its specified tolerances for proper operation in an engine. The distributor being tested may be driven at any required speed up to 2500 rpm in either direction of rotation. A vacuum system and controls are provided to simulate engine vacuum for vacuum advance systems. A stroboscope is provided to accurately measure cam angle, spark advance (vacuum and mechanical) and cam lobe accuracy of both single and dual distributors. An amplifier is provided for testing electronic pulse generator distributors. The tachometer is used to indicate the shaft speed of the distributor under test and the dwell meter provides a direct reading of the points dwell.

1-10. CAUTIONS AND IDENTIFYING MARKINGS

1-11. All cautions and identifying markings are located directly on the instrument panel and are self explanatory.

Table 1-1. Table of Leading Particulars

Operating Speed Range . . .	200 to 2500 rpm.	t o	2 5 0 0 r p m .
Electrical Power Requirements	. 115 volt 60 hz 6 amps 1 phase.		
Weight	. 130 lbs.		
Loose Equipment	Adapters and Spring Scale are stored in storage compartment (See table 2-1).		
Test Component Attachment	Self centering vise with height adjustment.		
Test Instrumentation:			
Stroboscope	. Measures cam angle, lobe accuracy, advance and retard.		
Tachometer	. Measures distributor speed; Dual range 0 to 500 and 0 to 2500 rpm.		
Dwell Meter	. Measures dwell angle on 4, 6 and 8 lobe distributors.		
Vacuum Gauge	. Measures vacuum to be applied for automatic advance systems.		
Rotation	. Clockwise and counterclockwise.		