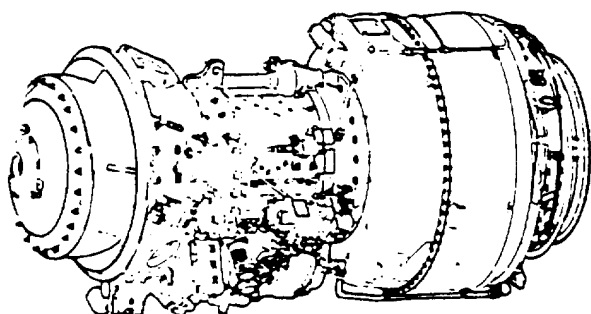


TECHNICAL MANUAL

AVIATION UNIT AND AVIATION INTERMEDIATE MAINTENANCE MANUAL

ENGINE ASSEMBLY



MODEL T53-L-13B
NSN 2840-00-134-4803
PART NUMBER 1-000-060-22

MODEL T53-L-13BA
NSN 2840-01-093-7451
PART NUMBER 1-100-060-10A

MODEL T53-L-703
NSN 28404-0-621-1860
PART NUMBER 1-000-060-23

This manual together with TM 55-2840-229-23-2
9 MARCH 1981, supersedes TM 55-2840-229-24,
23 APRIL 1971.

ENGINE - GENERAL	
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COMBUSTION SECTION	
TURBINE SECTION	
ACCESSORY GEARBOX	
FUEL SYSTEM	
ELECTRICAL SYSTEM	
OIL SYSTEM	
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APPENDIX C	SPECIAL TOOLS AND SUPPORT EQUIPMENT
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9 MARCH 1981

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 NO. 55-2840-229-23-1
 T.O. 2J-T53-16

HEADQUARTERS
 DEPARTMENT OF THE ARMY AND THE AIRFORCE
 WASHINGTON. D.C.. 9 March 1981

Technical Manual
 Aviation Unit and Intermediate Maintenance Manual

Model	Engine Assembly NSN	Part No.
T53-L-13B	2840-00-134-4803	1-000-060-22
T53-L-13BA	2840-01-093-7451	1-100-060-10A
T53-L-703	2840-00-621-1860	1-000-060-23

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of any 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, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898-5230. A reply will be furnished to you. You may also send in your comments electronically to our e-mail address: ls-lp:@redstone.army.mil or by fax 256-842-6546/DSn 788-6546. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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CHAPTER 1

ENGINE - GENERAL

OVERVIEW

This chapter contains information and descriptions pertaining to the T53-L-11 and T53-L-11D (hereafter referred to as T53-L-11 Series Engine), T53-L-13B and T53-L-703 (hereafter referred to as T53-L-13B/703 Engines) engines systems, system components, major assemblies, leading particulars and operation. General maintenance and support information is also provided for inspection, servicing, maintenance, troubleshooting and testing of the complete engine.

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1-1. SCOPE.

The shaft turbine T53-L-11 series engines and T53-L-13B/703 engines (figs. 1-1 and 1-2) are maintained on three levels of maintenance.

- a. Aviation Unit Maintenance (AVUM).
- b. Aviation Intermediate Maintenance (AVIM).
- c. Depot Maintenance.

This manual entails coverage for the first two levels of maintenance only (AVUM and AVIM).

The engine is broken down into eight areas of maintenance:

- a. Accessory Gearbox Assembly
- b. Compressor Assembly
- c. Combustor Assembly
- d. Turbine Section
- e. Electrical System
- f. Fuel System
- g. Lubrication System
- h. Drive System

Maintenance categories have been assigned to each task area and only personnel qualified to perform those tasks shall perform work in those areas. Refer to Appendix B, Maintenance Allocation Chart (MAC) for a complete description of maintenance levels and associated tasks.

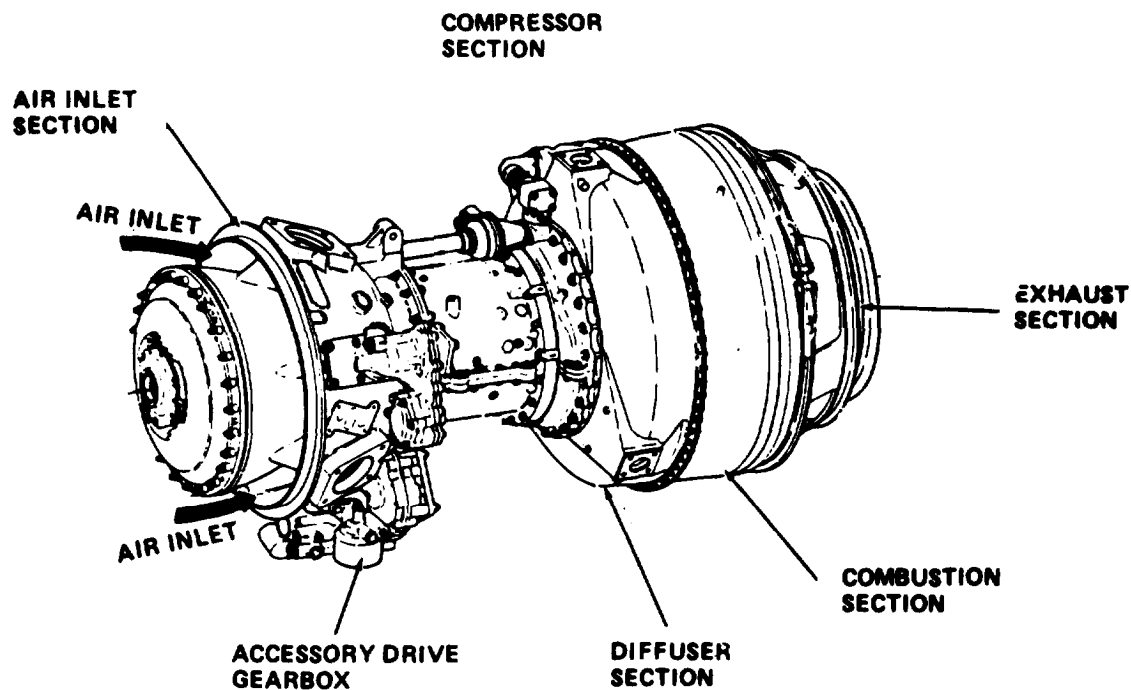


Figure 1-1. T53-L-11 Series Engines

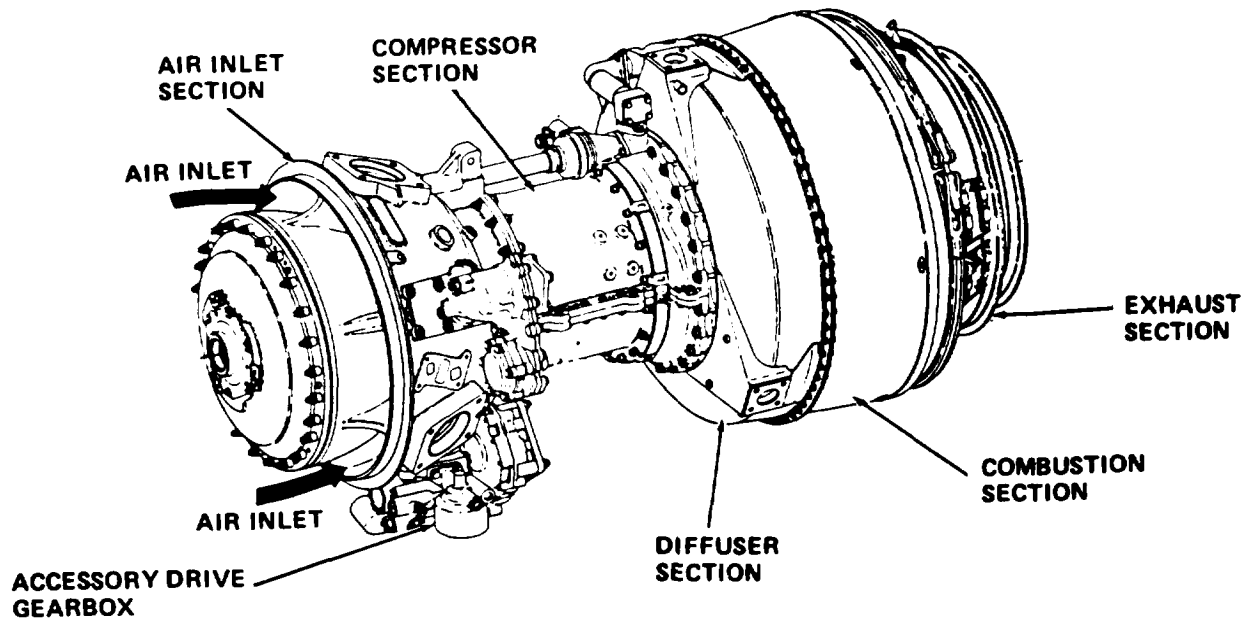


Figure 1-2. T53-L-13B/703 Engines

General Descriptions consists of:

- Engine
- Systems
- Components
- Accessories

Engine Procedures contained in this manual consist of:

- Removal
- Disassembly
- Cleaning
- Repair and replacement
- Assembly
- Installation
- Preservation
- Storage
- Activation of uninstalled engines

Airframe Procedures contained in airframe organizational maintenance manuals (table 1-1) consist of:

- Reservation
- Storage
- Activation of installed engines