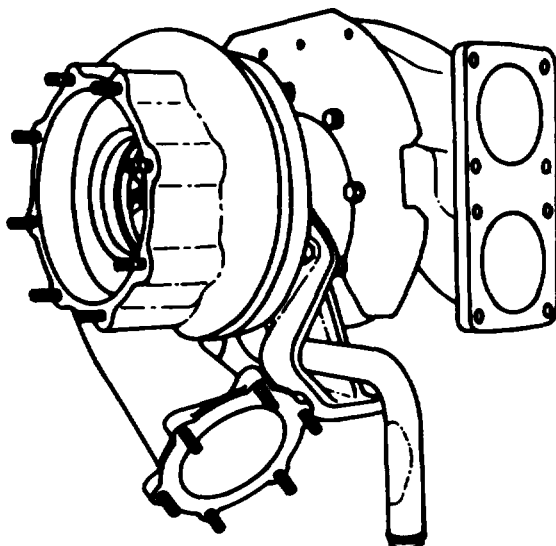


This copy is a reprint which includes current
pages from Changes 1 and 2.

TM 9-2990-206-34&P

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL [INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS]



TURBOSUPERCHARGER AIRESEARCH MODEL T18C01

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PRESERVATION
PAGE 4-1

NSN 2950-01-048-8870 [11669107-1],
AND 2950-01-167-1699 [466392-1]

HEADQUARTERS, DEPARTMENT OF THE ARMY
25 JANUARY 1980

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HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 25 January 1980

Direct and General Support Maintenance Manual
(Including Repair Parts, And Special Tools List)

for

TURBOSUPERCHARGER
AIRESEARCH MODEL T18C01

NSN 2950-01-048-8870 (11669107-1) and
2950-01-167-1699 (466392-1)

Current as of 15 December 1983

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 Tank-Automotive Command, Warren, MI 48090, ATTN: DRSTA-MB. A reply will be furnished to you.

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ALPHABETICAL INDEX INDEX

HOW TO USE THIS MANUAL

You must familiarize yourself with the entire maintenance procedures before beginning the maintenance task.

This manual describes the procedures to be followed to repair the AiResearch Model T18C01 turbosupercharger. It is divided into four chapters and three appendixes.

Chapter 1 includes general introductory information and description of the turbosuperchargers. There are two turbosupercharger configurations, standard and "clean air", covered by this manual. These two configurations are basically similar, and all descriptive information in Chapter 1 applies to both. The nomenclature cross-reference list (page 1-1) will help you find repair parts in the Repair Parts and Special Tools Lists by official nomenclature.

Chapter 2 includes troubleshooting procedures, and the tools required to repair the turbosupercharger.

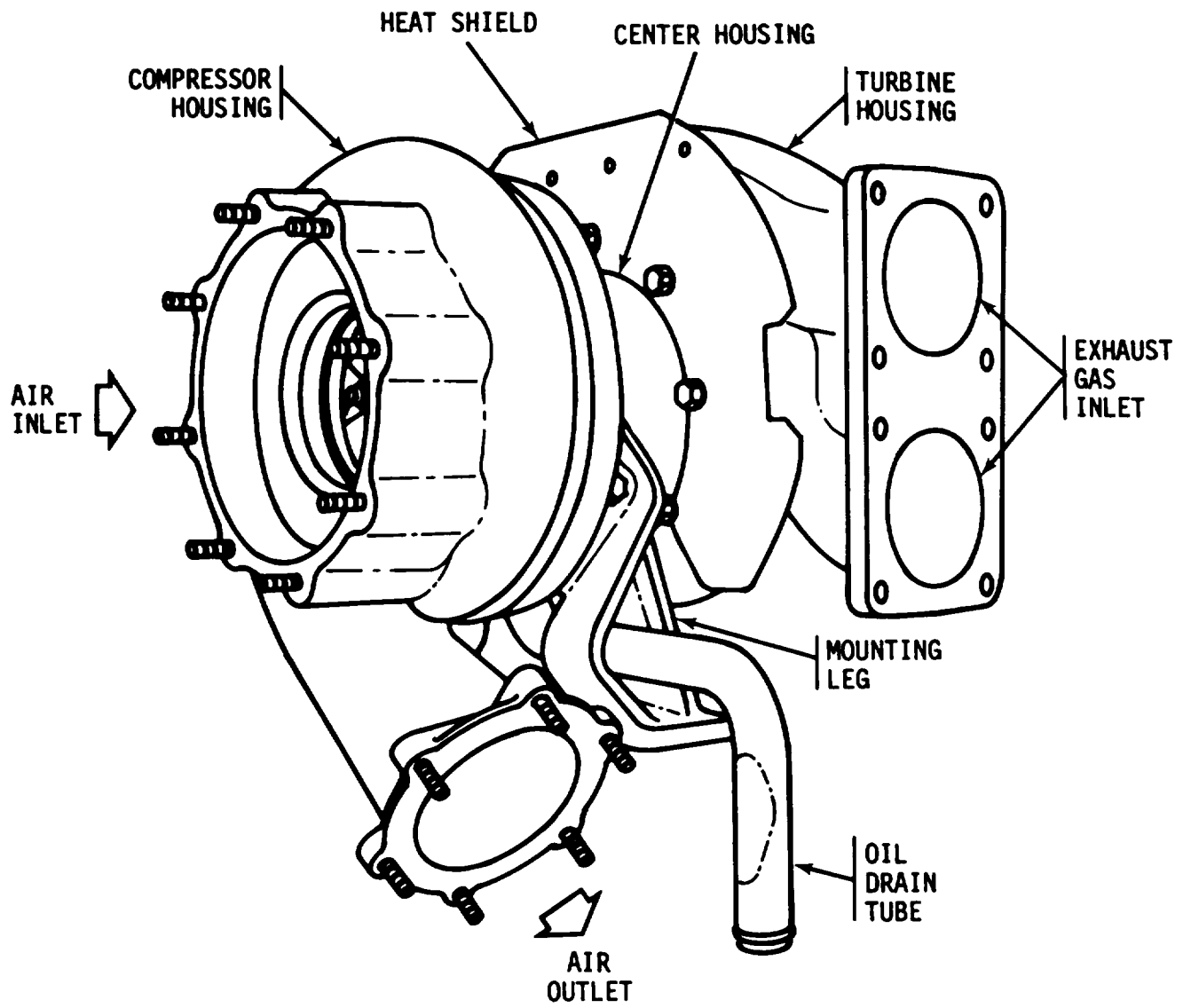
Chapter 3 includes instructions for disassembly, cleaning, inspection, repair, and assembly of the turbosupercharger. You will note that throughout the disassembly portion of this chapter, you are instructed to "remove and discard" certain items. These discarded items are furnished in the turbosupercharger parts kit, and all parts in the kit must be used during assembly.

Chapter 4 includes test and preservation information.

The three Appendixes are:

- Appendix A, References
- Appendix B, Repair Parts and Special Tools Lists
- Appendix C, Expendable Supplies and Materials

All referencing within this publication is by page number or to other technical manuals.



Turbosupercharger - typical
left hand mounting.

CHAPTER 1
INTRODUCTION

Section 1. GENERAL INFORMATION

1-1. SCOPE.

a. Type of Manual. This technical manual contains instructions for Direct and General Support Maintenance of the AiResearch Industrial Division Model T18C01 turbosupercharger.

b. Identification. The two configurations of Model T18C01 turbosuperchargers covered by this manual are part numbers 466392-1 ("clean air") and 11669107-1 (standard). These two configurations can be either right or left hand mounted on various AVDS-1790 series engines used in army vehicles.

c. Purpose of Equipment. Turbo-superchargers are exhaust gas driven centrifugal compressors. Their purpose is to increase the amount of air delivered to engine cylinders above that available through unassisted air intake

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS.

Department of the Army forms and records used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

1-3. NOMENCLATURE CROSS-REFERENCE LIST.

This listing includes nomenclature cross-references used in this manual.

<u>Common Name</u>	<u>Official Nomenclature</u>
Backplate	Back Plate, Supercharger
Bolt	Bolt, Machine
Center Housing	Housing Assembly, Center
Clamp	Coupling, Clamp, Grooved
Compressor Wheel	Impeller, Turbosupercharger
Compressor Wheel Nut	Nut, Impeller
Heat Shield	Shield, Turbosupercharger
Insert	Insert, Screw Thread
Lockwasher	Washer, Lock
Nut	Nut, Self-locking, Castellated, Hexagon
Nut	Nut, Self-locking, Hexagon
Oil Drain Tube	Tube Assembly, Metal
"O" Ring	Packing, Preformed
"O" Ring	Seal, Ring
Seal Ring	Seal, Ring, Metal
Shroud	Wheel, Shroud
Spacer Ring	Ring, Turbocharger
Stud	Stud, Plain
Thrust Ring	Ring, Thrust, Turbocharger
Thrust Washer	Washer, Bearing, Thrust
Turbine Wheel	Turbine Wheel Assembly