

645E

**BLOWER-TYPE ENGINE
MAINTENANCE MANUAL**

5th Edition

January 1980



• • • • **A Service Department Publication** • • • •

Electro-Motive Division Of General Motors LaGrange, Illinois 60525

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FOREWORD

This manual contains maintenance information for the 8, 12, and 16 cylinder Model 645E diesel engines. The material describes the basic engine and common extra equipment. However, the coverage of any particular system or component does not imply that the equipment is part of any specific order.

The illustrations generally depict the 16-cylinder model as representative of the location, size, and relative shape of various components and accessories.

Units of measurement appearing in this manual are shown in metric units and U.S. standard units. A conversion table is provided to convert U.S. standard to metric units.

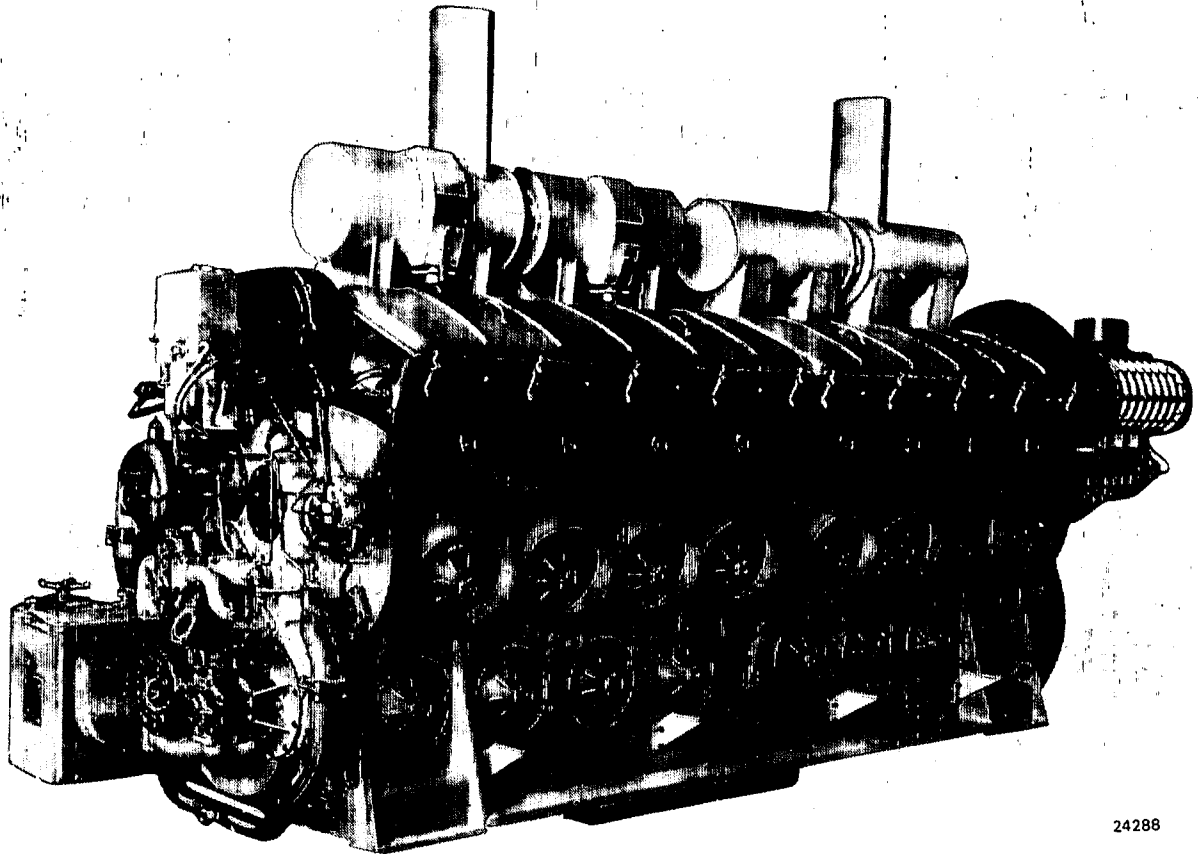
Special tools, referred to in the text and shown in many of the illustrations, are not supplied with the engine, but are available on order.

File numbers contained in this manual represent detailed drawings for the construction of fabricated tooling. These drawings are available from Electro-Motive Service Department.

References, specifications, and a list of service equipment are presented as Service Data at the end of most sections.

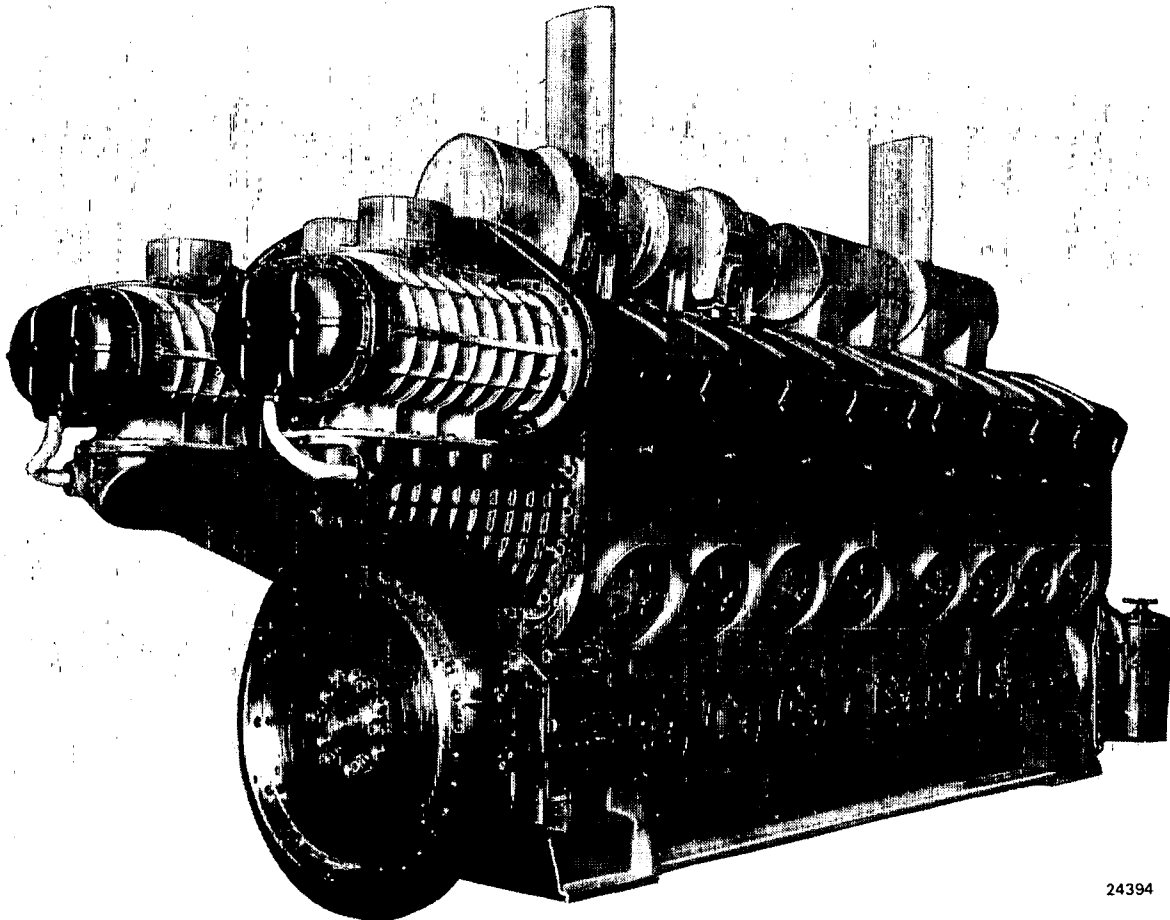
Clearance and dimensional limits listed in Service Data are defined as follows:

1. New limits are those to which new parts are manufactured. (Drawing tolerances.)
2. Minimum, maximum, and tolerance measurements are provided as service limits. At time of rebuild or any time unscheduled maintenance is performed, the service limits should *not* be exceeded. Engine components within these limits may be reused with the assurance that they will perform satisfactorily until the next scheduled overhaul.



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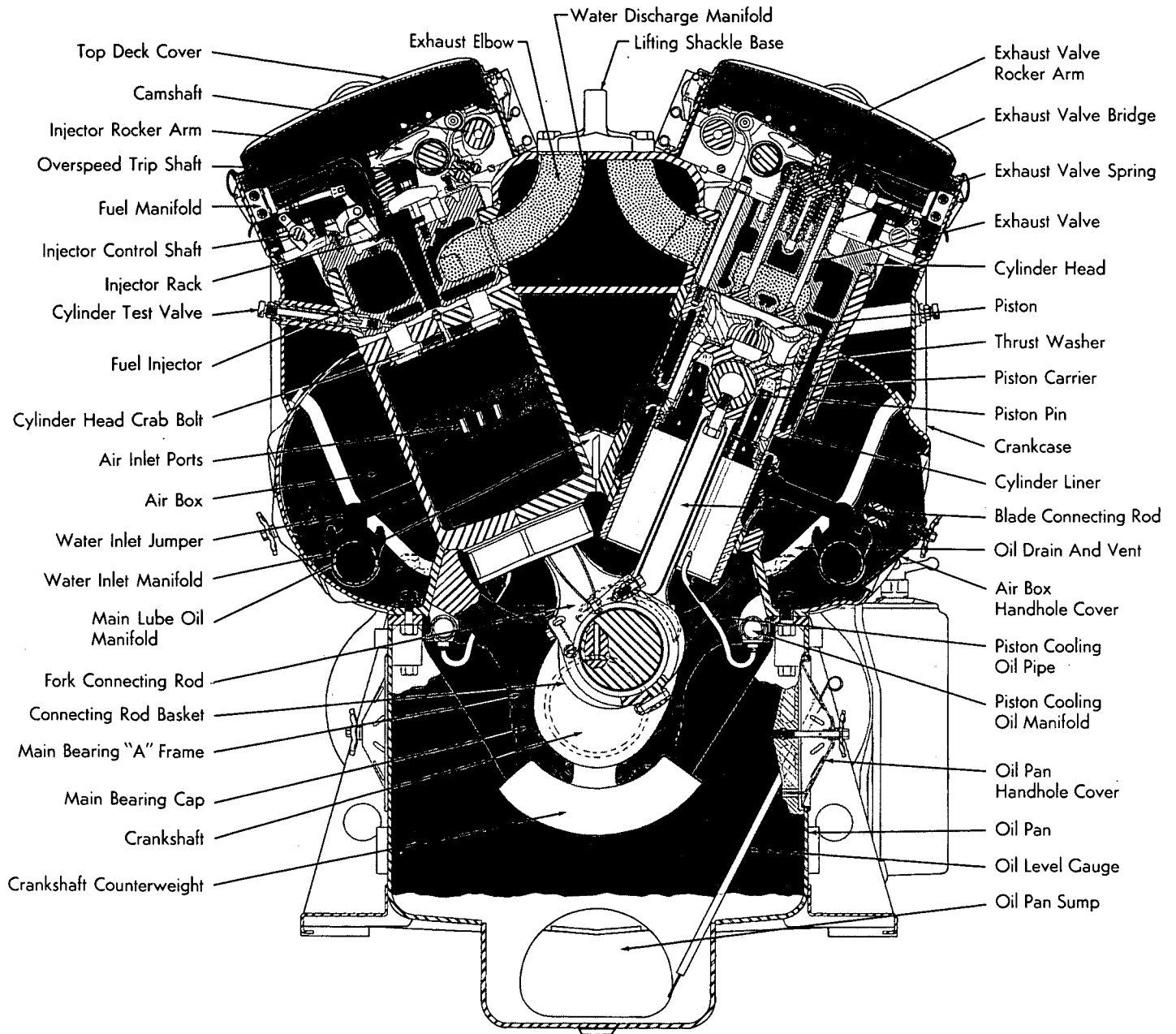
Three-Quarter Left Front View, 16-Cylinder



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Three-Quarter Right Rear View, 16-Cylinder

25E180



SCAVENGING AIR
 LUBRICATING OIL
 EXHAUST
 WATER
 FUEL OIL

645 SERIES DIESEL ENGINE

ELECTRO-MOTIVE DIVISION
 GENERAL MOTORS CORPORATION
 LA GRANGE, ILLINOIS, U.S.A.

LINE U.S.A.

PLATE 13003