# TO 19-75AJ-61 WAR DEPARTMENT TECHNICAL MANUAL

TRACTOR, CRAWLER
DIESEL, 70-to 90-DBHP
STANDARD
CATERPILLAR
MODEL D7
74-IN. GAGE

(Tractor Serial Numbers 7Ml and up, 3Tl and up, and 4Tl and up)

TM 5-3068

This Technical Manual supersedes the Operation and Maintenance Instructions of TM 5-3068 authenticated 1 June 1943. TM 5-3068A, when published, will supersede the Repair Instructions of TM 5-3068 authenticated 1 June 1943. ENG 9-3068, when published, will supersede the Parts Section of TM 5-3068 authenticated 1 June 1943.

TRACTOR, CRAWLER,
DIESEL, 70 to 90-DBHP,
STANDARD,
CATERPILLAR,
MODEL D7,
74-IN. GAGE

(Tractor Serial Numbers 7M1 and up, 3T1 and up and 4T1 and up)

OPERATION AND MAINTENANCE INSTRUCTIONS



WAR DEPARTMENT 19 MARCH 1945

## WAR DEPARTMENT

Washington 25, D. C., (19 March 1945)

TM 5-3068, Tractor, Crawler, Diesel, 70 to 90-DBHP, Standard, Caterpillar, Model D7, 74-in Gage, (Tractor Serial Numbers 7M1 and up, 3T1 and up and 4T1 and up) is published for the information and guidance of all concerned.

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Refer to FM 21-6 for explanation of distribution formula.

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# PART ONE INTRODUCTION

## SECTION I

#### 1. SCOPE.

- a. These instructions are published for the information and guidance of the personnel to whom this equipment is assigned. They contain information on the operation and maintenance of the equipment as well as descriptions of the major units and their functions in relation to the other components of the equipment. They apply only to the Caterpillar D7 Tractor and are arranged in four parts: Part one Introduction; Part two Operating Instructions; Part three Maintenance Instructions; Part four Auxiliary Equipment. Part five Repair information is contained in a separate Technical Manual, TM5-3068A. Parts information is contained in Supply Catalog ENG9-3068.
- b. Supply Catalogs, Standard Nomenclature Lists, Technical Manuals and other publications applicable to the material covered by this manual are listed in Section XXX at the end of the book.

#### 2. RECORDS.

Maintenance record forms listed and briefly described in the following subparagraphs shall be used in the maintenance of this equipment.

- a. W.D., Form No. 48, Driver's Trip Ticket And Preventive Maintenance Service Record.—This form shall be used by equipment operators for reporting the accomplishment of daily preventive maintenance services, and for reporting any equipment deficiencies observed during operation.
- b. Standard Form No. 26, Driver's Report—Accident, Motor Transportation.—One copy of this form shall be kept with the equipment at all times. In case of an accident resulting in injury or property damage, Form 26 should be filled out immediately (or as promptly thereafter as is practical) by the operator.
- c. W.D., A.G.O. Form No. 464, Preventive Maintenance Services And Technical Inspection Work Sheet For Engineer Equipment.—This form is used by personnel of the using organization and higher echelons for reporting the results of preventive maintenance services and technical inspections.

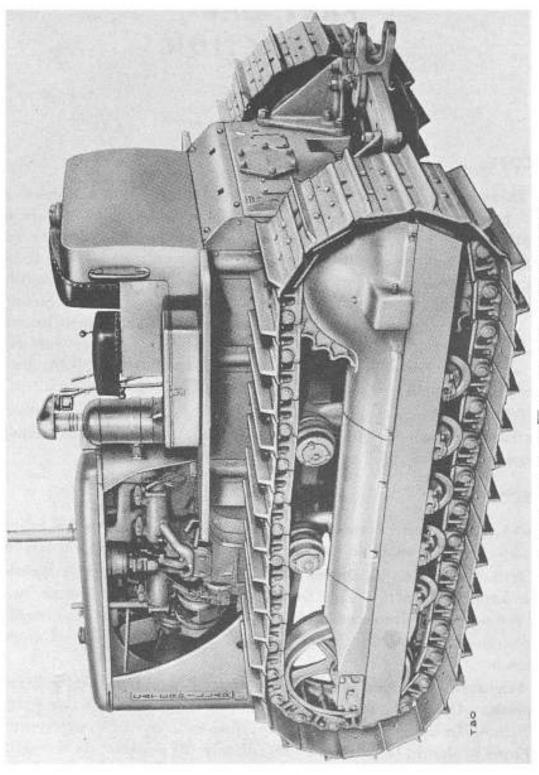


Figure 1—Caterpillar D7 Tractor Left Rear View

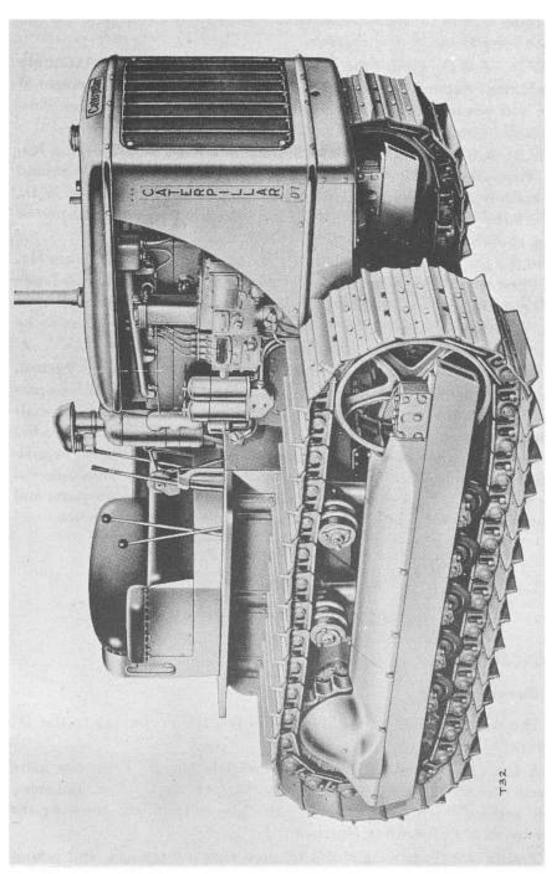


Figure 2—Caterpillar D7 Tractor Right Front View

- d. W.D., A.G.O. Form 460, Preventive Maintenance Roster.—This form shall be used for maintaining an operating time record of the item of equipment, and for the scheduling of lubrication and preventive maintenance services at proper intervals.
- e. W.D., A.G.O. Form No. 478, MWO And Major Unit Assembly Replacement Record.— Major repairs or rebuilding, the replacement of major unit assemblies, and the accomplishment of equipment modifications shall be recorded on this form.
- f. W.D., A.G.O. Form No. 9-68 (Supersedes W.D., A.G.O., Form No. 9-70, Formerly 7353), Spot Check Inspection Report For Wheeled And Half-Track Vehicles.—This form may be used in lieu of W.D., A.G.O. Form No. 464 as a check list for applicable items to be inspected during spot-check inspection.
- g. W.D., A.G.O. Form No. 9-69 (Supersedes W.D., A.G.O. Form No. 9-70, Formerly 7353), Spot Check Inspection Report For All Full-Track And Tank-Like Wheeled Vehicles.—This form may be used in lieu of W.D., A.G.O. Form No. 464 as a check list for applicable items to be inspected during spot-check inspection.
- h. W.D., A.G.O. Form No. 468, Unsatisfactory Equipment Record.—This form shall be used in reporting manufacturing, design, or operational defects in material, with a view to correcting such defects; it shall be used also in recommending modifications of material. Form No. 468 shall not be used for reporting failures, isolated material defects, or malfunctions of material resulting from fair wear and tear or accidental damage. Form No. 468 shall not be used to report the issue of parts and equipment; nor for the reporting of replacements and/or repairs.

## SECTION II DESCRIPTION AND DATA

## 3. DESCRIPTION. (See figure 3.)

### a. General.

- (1) The tractor described in this manual is a track-type Caterpillar D7 Tractor.
- (2) A track-type tractor differs from a wheel-type tractor in two main respects. Tracks are used instead of wheels to obtain traction, and steering is accomplished by disengaging the power from one track or the other by means of steering clutches.
- (3) Tracks distribute weight and traction over a large area and permit the tractor to operate over a wide variety and condition of terrain. This feature makes a track type tractor particularly adaptable to earthmoving.