FORM 12244-11

OPERATION AND MAINTENANCE INSTRUCTIONS

CATERPILLAR

D4 TRACTOR

SERIAL NUMBERS

6U1-UP

7U1-UP

Caterpillar Tractor Co., General Offices, Peoria, Illinois. • Caterpillar Americas Co., Peoria, Illinois. • Caterpillar Overseas S.A., Geneva. • Caterpillar of Australia Pty. Ltd., Melbourne. • Caterpillar Brasil S.A., São Paulo. • Caterpillar Tractor Co. Ltd., Glasgow. • Caterpillar of Canada Ltd., Toronto. • Caterpillar France S.A., Grenoble.

Warranty

The Manufacturer warrants its products for six (6) months after the date of delivery to the initial user. This warranty is limited to the repair or replacement, as the Manufacturer may elect, at one of its factories designated by it, of such parts as shall appear to the Manufacturer upon inspection to have been defective in material or workmanship but does not include any installation or transportation costs. No warranty is made with respect to items made by others when such items are warranted by their respective makers or when they are supplied by the Manufacturer on special order. This warranty is in lieu of all other warranties, express or implied, and no other warranty of any kind is made or authorized by the Manufacturer. No recommendation by the Manufacturer of items made by others shall imply or constitute any warranty with respect to such items.

T25495

Foreword

Caterpillar products are a result of advanced engineering, skilled manufacturing, and the finest materials metallurgical science can select. Thousands of satisfying, economical working hours are built into each machine.

Whether or not the owner derives the maximum service from his machine depends largely on the care exercised in its operation and maintenance. This book is written to give the operator essential information regarding the day-to-day operation, lubrication and adjustment of the machine. Careful adherence to these instructions will result in assured economy.

More and more Caterpillar owners are depending upon their dealer for service other than the care and adjustments described in this book. This practice is recommended because Caterpillar dealers have stocks of genuine Caterpillar parts and are equipped with tools designed and built by Caterpillar. Their servicemen are factory-trained and are kept closely informed by the factory regarding advanced methods of servicing Caterpillar products — thus, in all ways they are equipped to render the best of service.

T20841

Avoid Accidents

Most accidents, whether they occur in the air, in industry, on the farm, at home, on the highways, or at sea, are caused by someone's failure to follow simple and fundamental safety rules or precautions. For this reason most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

A careful operator is the best insurance against an accident.

The complete observance of one simple rule would prevent many thousands of serious injuries each year. That rule is: "Never attempt to clean, oil or adjust a machine while it is in motion."

T24352

Railroad Loading Rules

For domestic customers within continental limits of the United States.

The loading rules and specifications published in Association of American Railroads Pamphlet No. MD-6, must be complied with when shipping Tractors, Road Grading, Road Making, and Farm Equipment Machinery, on open top cars. Contact the local railroad agent or inspector for these specifications.

T24353

Table of Contents

Page

LUBRICATION INSTRUCTIONS 7-25

Service Meter — General Lubricating Information — Crankcase Lubricating Oil — Ball and Roller Bearing Lubricant — Transmission Lubricants Track Roller Lubricant — Lubrication Chart

OPERATION INSTRUCTIONS 27-48

Preparing the Tractor for Use — Starting the Engine — Gauges — Driving The Tractor — Steering The Tractor — Operating Over An Obstruction — Operating In Deep Mud Or Water — Drawbar Adjustment — Stopping The Tractor — Stopping The Diesel Engine — Daily Care — Operating In Cold Weather — Storage

MAINTENANCE INSTRUCTIONS 49-88

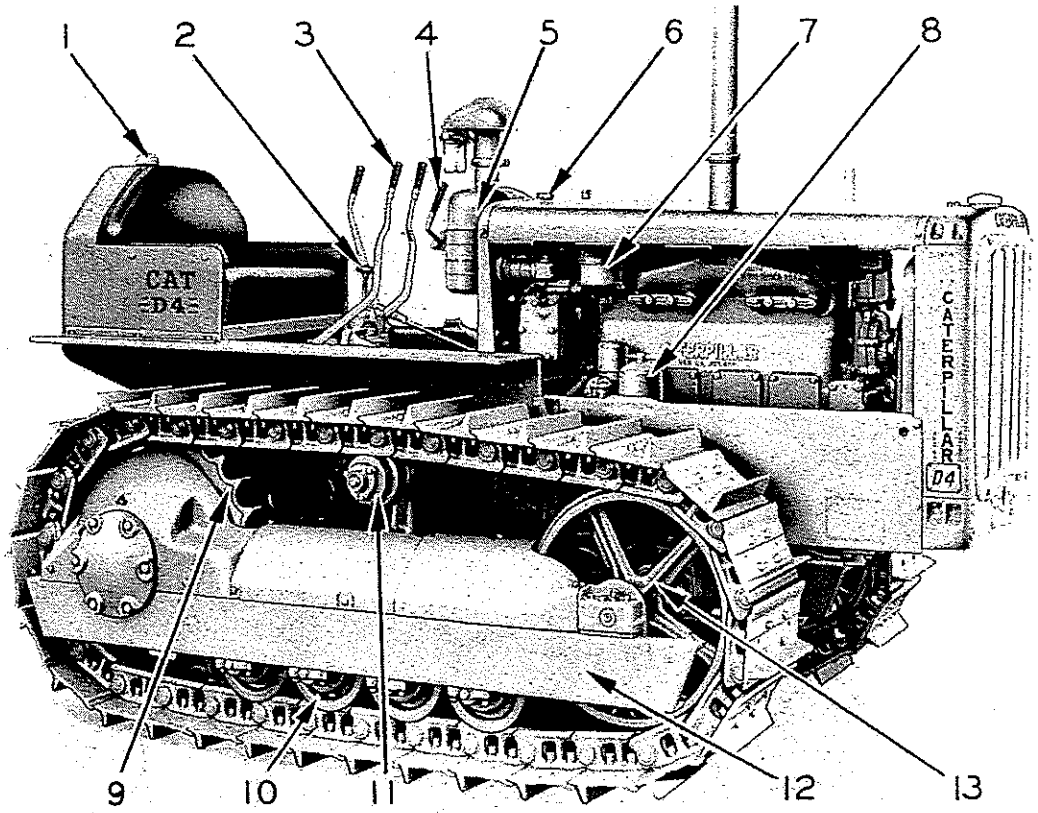
Air Cleaners — Crankcase Lubricating Oil System — Fuels — Care Of The Fuel Supply — Care Of The Diesel Fuel Tank — Fuel System — Care Of The Fuel Filter — Priming The Fuel System — Fuel Injection Equipment — Starting Engine Fuel System — Cooling System — Fan Belt Adjustment — Valve Clearance Adjustment — Spark Plug Adjustment — Starting Engine Magneto — Starting Engine Clutch — Flywheel Clutch — Steering Clutches And Brakes — Seat Adjustment — Tracks — Final Drive Sprocket Hub Bearings — Washing Gear Compartments

ATTACHMENT INSTRUCTIONS 89-102

Rear Mounted Equipment — Electrical System —Electric Starter — Lighting Systems — Glow Plugs — Ether Starting Aid — Fuel Priming Pump — Flywheel Clutch (Oil Type)

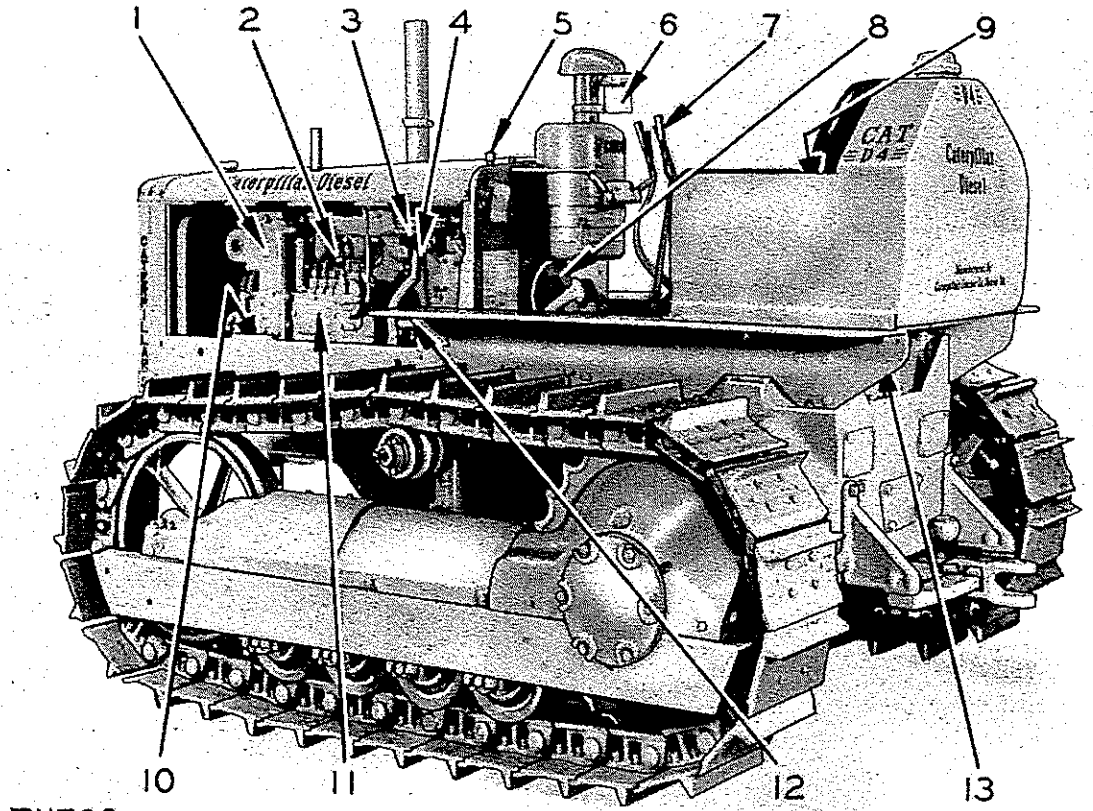
CAPACITIES . . . . . Inside Back Cover

INDEX 103-104



D4 TRACTOR
(RIGHT FRONT VIEW)

1. Diesel fuel tank filler cap.
2. Gear selector lever.
3. Steering clutch control levers.
4. Governor control lever. lever.
5. Diesel engine air cleaner.
6. Starting engine fuel tank filler cap.
7. Starting engine air cleaner.
8. Crankcase lubricating oil filter housing.
9. Sprocket.
10. Track rollers.
11. Track carrier rollers.
12. Track roller frame.
13. Idler.



T11799

D4 TRACTOR
(LEFT REAR VIEW)

1. Fuel filter housing.
2. Governor auxiliary control lever.
3. Compression release lever.
4. Starting engine clutch lever.
5. Starting engine crankcase oil filler cap.
6. Precleaner jar.
7. Flywheel clutch control lever.
8. Starting engine flywheel.
9. Tool box under the seat.
10. Hour meter.
11. Fuel injection pump housing.
12. Starter pinion control lever.
13. Fuel tank drain valve.