

# **300 and 301 Diesel Tractors**

## **Operators Instruction Manual**

RI-316

Reprinted

**CASE III**

SUPPLEMENT TO FORM RI-306  
"OPERATORS INSTRUCTION MANUAL  
CASE 300 SERIES TRACTORS"

**CASE**

**Models 300 and 301  
DIESEL TRACTORS**



Est. 1842

CASE CORPORATION

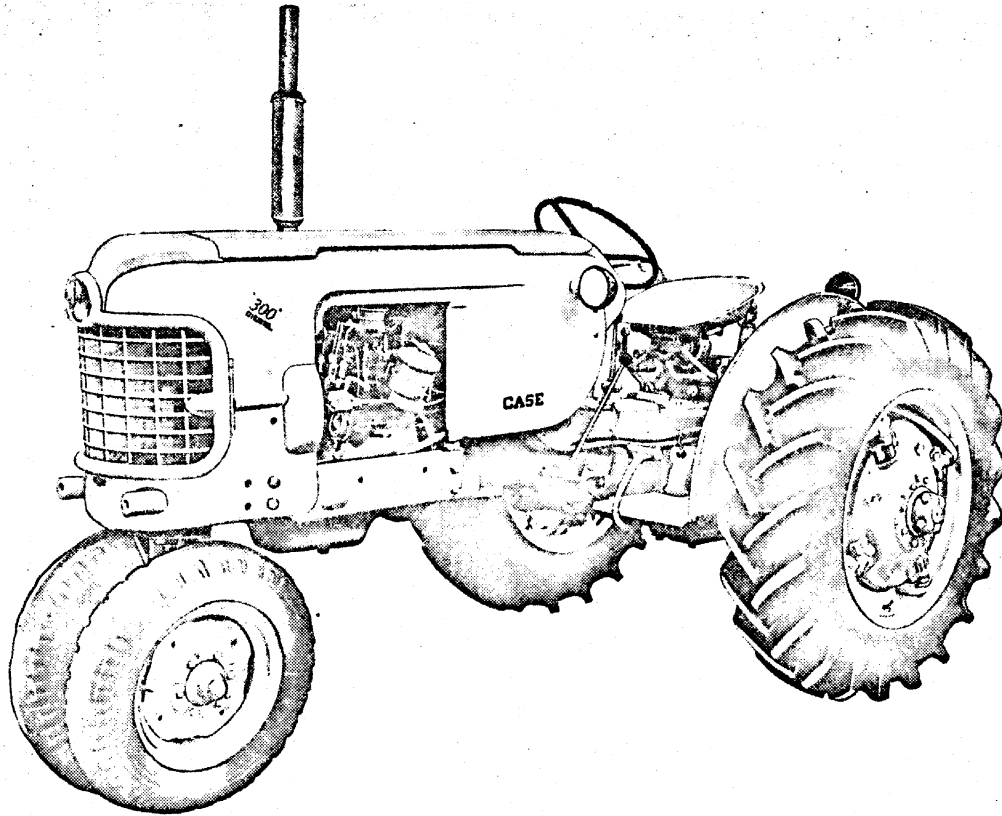
**Racine, Wisconsin, U. S. A.**

Form RI-316-2M-5-56

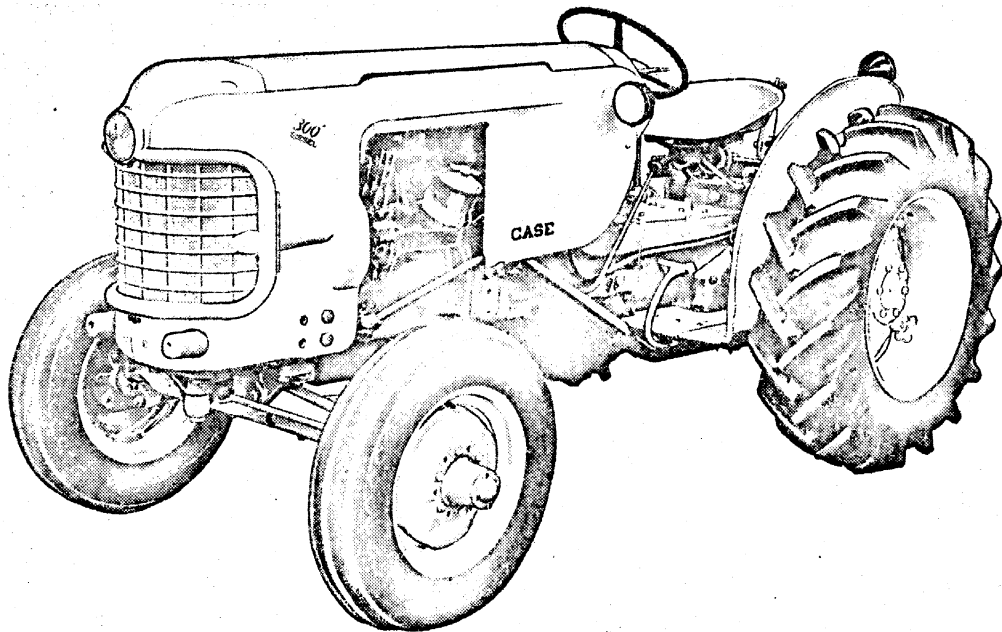
Printed in U.S.A.

## TABLE OF CONTENTS

	Page
Serial Numbers .....	6
General Specifications .....	7, 8
Diesel Engine Fuel .....	8
Specifications .....	9
Recommendations .....	12
Handling and Storage .....	12, 13
Precautions .....	13
Conditioners .....	14
Lubrication .....	15
Recommended Lubricants .....	15
Engine Lubrication .....	17
Operating Instructions .....	19
Run-In Procedure .....	19
Controls .....	20
Instruments .....	21
General Precautions .....	22
Starting .....	22
Cold Weather Operation .....	23
Starting Aids .....	23, 24
Stopping .....	23
Service Suggestions .....	25, 27
Preventative Maintenance .....	28
Fuel System .....	29
Priming Fuel System .....	30
Servicing Filters .....	31, 32
Air Cleaner .....	32
Engine Oil Filter .....	33
Engine Valve Clearance .....	34
Engine Idle Speed .....	34
Cooling System .....	35
Anti-Freeze Solutions .....	36
Radiator Shutter .....	37
Electrical System .....	37
Storage Batteries .....	37
Storing the Tractor .....	38
Removing Tractor from Storage .....	39



**Model 301 General Purpose Tractor**



**Model 300 Utility Tractor**

## INTRODUCTION

This supplementary manual covers information pertinent to the operation and preventive maintenance of the DIESEL engine used in CASE "300" SERIES TRACTORS. Use this supplement, along with Form RI-306, "300" Series Tractor Manual, for complete instructions on the use and care of these tractors.

The Case "300" Series Diesel Tractor is powered by a rugged four cylinder, four cycle, full diesel engine. This engine is capable of producing smooth dependable power with excellent fuel economy, providing these basic rules are followed:

1. **CLEAN FUEL:**

- (a) Use only No. 2 Diesel Fuel that meets the specifications listed on page 9.
- (b) Follow the precautions regarding the handling of fuel listed on pages 13 to 14.

2. **AIR CLEANER:**

Service the air cleaner regularly as noted on page 18 and 32.

3. **CRANKCASE OIL:**

Diesel engines require the use of a heavy duty engine oil. Be sure the oil used meets the proper service designations recommended in the Lubrication section of this supplement. See page 15.

4. **PERIODIC CHECKUPS:**

Your authorized CASE Dealer has the service knowledge necessary to keep your tractor in top running condition.  
Arrange to have him check your tractor at regular intervals.

**NOTE:** The terms "Right Hand" and "Left Hand," when used in this manual, apply to the tractor, or engine, when standing at the rear and facing the direction the tractor will move in forward operation.

## MODEL DESIGNATION NUMBERS

**Model 300**—Utility Diesel Tractor — extremely low silhouette, ideal for orchard and industrial applications. Available with heavy-duty solid front axle. Eagle Hitch and hydraulic system available as extra equipment.

**Model 301**—General Purpose Diesel Tractor — for all row crop and general field work. Dual front wheels or adjustable front axles optional. Eagle Hitch and hydraulic system standard equipment.

## TRACTOR SERIAL NUMBERS

When ordering parts from your authorized CASE Dealer, always specify the Serial Number and Model Number of your "300" Series Tractor.

As a means of ready reference, fill in the serial numbers of your tractor and engine in the spaces provided here.

When ordering Tractor Parts, specify both the Tractor Model and Serial Number, located on the tractor "dash."

When ordering Engine Parts, specify the Engine Number, located on the right side of the block.

MODEL

NO.

J. I. Case Co., Racine, Wis.

Fig. 1. Tractor Serial Number

	MADE IN U.S.A.		
	<b>CONTINENTAL MOTORS CORP'N.</b>		
DETROIT & MUSKEGON, MICH.			
MODEL	SPEC	ENGINE NO.	
<b>GD157</b>	<b>47</b>		
PATENTS:	1,605,040	1,724,599	1,743,276
	1,817,390	1,909,965	1,975,989
	1,985,284	1,985,943	2,003,984
	2,013,157	2,034,397	2,011,784
	2,137,802	2,055,630	2,080,662
TAP CL IN	<b>14</b>	EX <b>14</b>	OIL W <b>20</b> S <b>30</b>

Fig. 2. Engine Serial Number

**ACCIDENTS CAN BE PREVENTED WITH YOUR HELP  
BE A SAFE TRACTOR OPERATOR**

## GENERAL SPECIFICATIONS

### FOR CASE 300 SERIES DIESEL TRACTORS

Type .....	4 Cylinder, 4 Cycle, Valve-in Head
Firing Order .....	1-3-4-2
Bore and Stroke .....	3-3/8" x 4-3/8"
Piston Displacement .....	157 Cubic Inches
Compression Ratio .....	15.54 to 1
Engine Compression Pressure .....	(Min.) 325 P.S.I. at 150 R.P.M.
Maximum Torque .....	113.5 Foot Pounds at 1250 R.P.M.
Cylinder Sleeves .....	Removeable — wet type
Full Governed Engine Speed (at no load) .....	1950 R.P.M.
Full Governed Engine Speed (at full load) .....	1750 R.P.M.
Engine Idling Speed .....	600 R.P.M.
Governor .....	Fly-ball Type
Valve Clearance (both intake and exhaust) .....	.014" Hot
Cold Weather Starting Aid (Std.) .....	Electric Manifold Heater
Cold Weather Starting Aid (Extra) .....	Ether Capsule (use only 7 cc capsules)
Fuel Required .....	No. 2 Diesel Fuel (see page 9)
Piston Rings .....	3 Compression, 1 Oil Ring
Connecting Rod Bearings .....	Replaceable Insert Type
Main Bearings (3) .....	Replaceable Insert Type
Lubrication System .....	Forced Circulation
Oil Pump .....	Gear Type
Oil Filter .....	Replaceable Cartridge Element

### FUEL SYSTEM

Fuel Injection Pump .....	American Bosch (type PSB) (RPM controlled from engine governor)
Pump Timing .....	26° B.T.D.C.
Nozzle Opening Pressure .....	1750 P.S.I.
Fuel Filter, (first stage) .....	Combination edge type filter and moisture trap
Fuel Filter, (second stage) .....	Replaceable element cartridge
Fuel Filter, (final stage) .....	Replaceable sealed type
Fuel Gage .....	Electrically Operated

### COOLING SYSTEM

Radiator .....	Tube and fin with 4 pound pressure cap
Thermostat .....	177° to 182° F.
Water Pump .....	Sealed Impeller Type
Radiator Shutter and Controls .....	Extra Equipment

**Buy Now**



Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)