

310 Crawler

Operator's Manual

9-291

Reprinted





This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

SB001

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE, CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Case dealer for additional operator's manuals, parts catalogs, and service manuals.

TO CASE[®] UTILITY CRAWLER OWNERS

The care you give your Case Utility Crawler will greatly determine the satisfaction and service life you will obtain from it. Use this manual as your guide. By observing the instructions and suggestions in this manual, your Case Utility Crawler will serve you well for many years.

As an Authorized Case Utility Dealer, we stock Genuine Case Parts, which are manufactured with the same precision and skill as the original equipment. Our factory trained staff is kept well informed on the best methods of servicing Case equipment and is ready and able to help you.

Should you require additional aid or information, contact us.

Your Authorized Case Utility Dealer

To insure efficient and prompt service, please furnish us with the Model and Serial Numbers of your Crawler (and Allied Equipment, if used) in all correspondence or contacts.

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INTRODUCTION

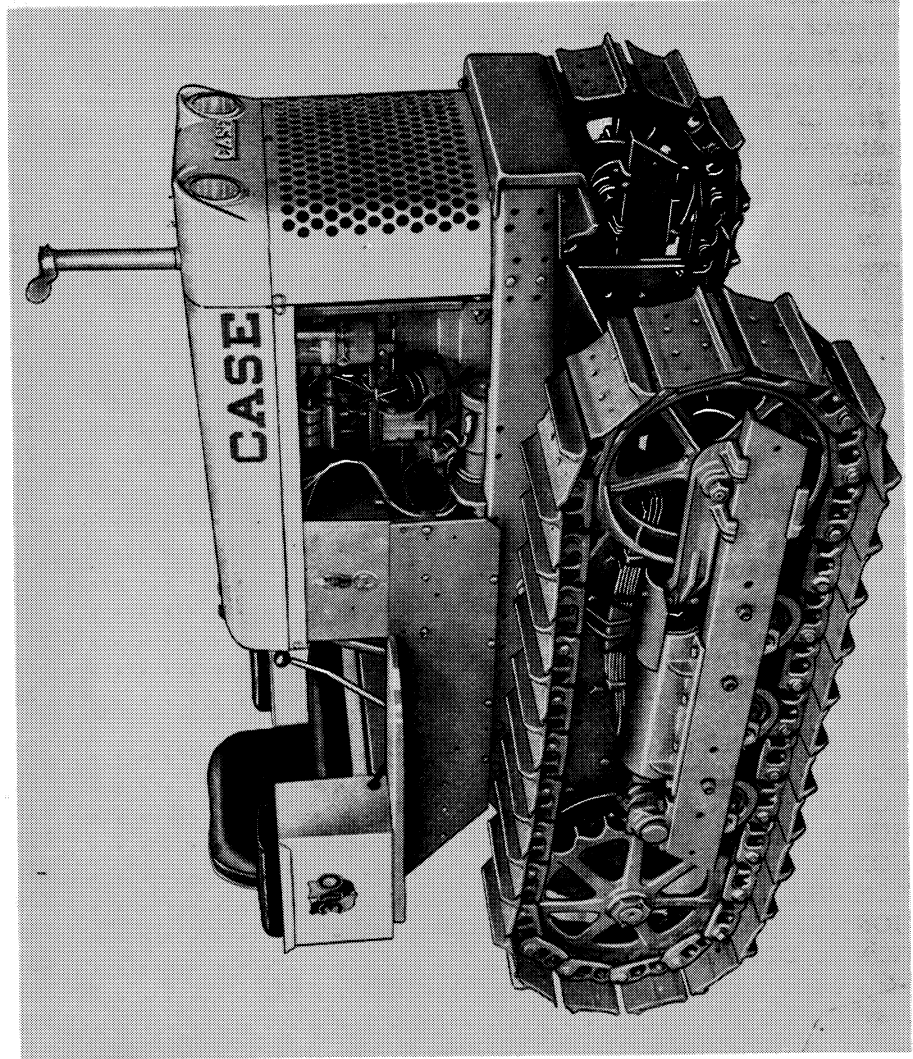


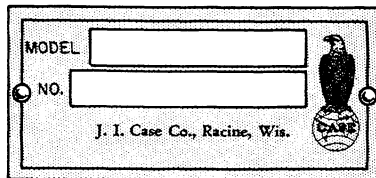
Figure 1 - Right Hand Front View - Drawbar Model

1. "POWER-TORQ" ENGINE. A high-compression, heavy-duty power plant with an extremely high torque. What's more it operates on regular grade gasoline.
2. HEAVY DUTY CLUTCH. New clutch design with 50% more "torque carrying" capacity, smooth, long life operation.
3. STEERING. Controlled planetary differential with power to both tracks while turning.
4. BRAKES. Bands on drums in differential for stopping and holding Crawler on grades and for steering.
5. TRANSMISSION. Three speed sliding gear type transmission.
6. HYDRAULIC ATTACHMENTS. Several types of hydraulic operated Allied Equipment can be factory installed. It is engineered for the Crawler.
7. SUSPENSION. Leaf type springs for track oscillation prevent undue shock to the Crawler.
8. TRACK AND TRACK FRAME. Heavy-duty steel channel, with side frames securely tied together by rigid transverse torque tube, which supports engine, dozer mounting brackets, etc. All track rollers mounted on anti-friction bearings. Frame is spring-mounted to absorb shocks, keeps stress from damaging power train.
9. UNIVERSAL JOINTS. Universal joints provide a flexible connection between transmission and clutch — no rigid cast iron drive housing to crack or break.
10. SEAT. Stationary-type comfortable back, seat, and arm rests of foam rubber covered with durable imitation leather. Roomy tool chest under the left arm rest.
11. LIGHTS. Seal-beam headlights recessed in streamlined hood, and recessed tail light.
12. TRACK PLATES. A large variety of track plates are offered to fit any particular need. Grousers, open mud grouser, ice and snow grousers, and steel ribbed street plates, heat treated or non-heat treated are offered as optional equipment.
13. MUFFLER. An underhood type muffler is available as optional equipment for installation on the Crawler.
14. PRE-CLEANER TUBE (OPTIONAL). A pre-cleaner tube, with settling bowl, is available for installation on Crawlers. This tube, which elevates the air intake level several feet above the hood, is recommended for use in dusty operating conditions.

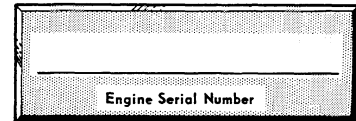
CRAWLER SERIAL NUMBERS

When ordering parts from your Authorized Case Dealer, always specify Serial Numbers and Model Number of the Crawler.

As a means of ready reference, fill in the serial numbers along with the model number of the Crawler in the spaces provided below.



A rectangular form with two horizontal input fields. The top field is labeled "MODEL" and the bottom field is labeled "NO.". To the right of the fields is a small illustration of a bird perched on a globe. Below the fields, the text "J. I. Case Co., Racine, Wis." is printed. A small circular logo with the word "CASE" is located at the bottom right corner of the form.



A simple rectangular form with a single horizontal input field. Below the field, the text "Engine Serial Number" is printed.

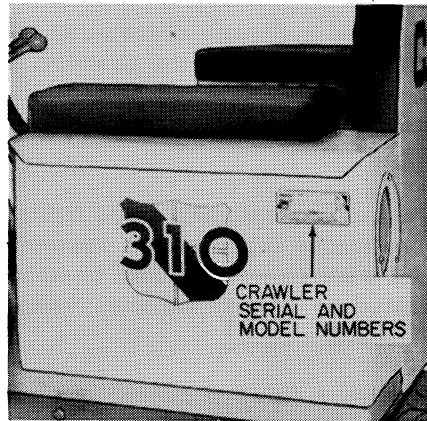


Figure 2
Crawler Serial and Model Numbers

When ordering Crawler parts, specify the Crawler Model and Serial Numbers, located on the outside of the case, just below the left hand armrest. (See Backhoe Section for location of Backhoe-Crawler serial number).

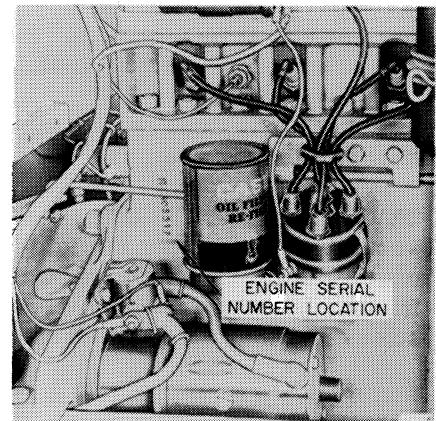


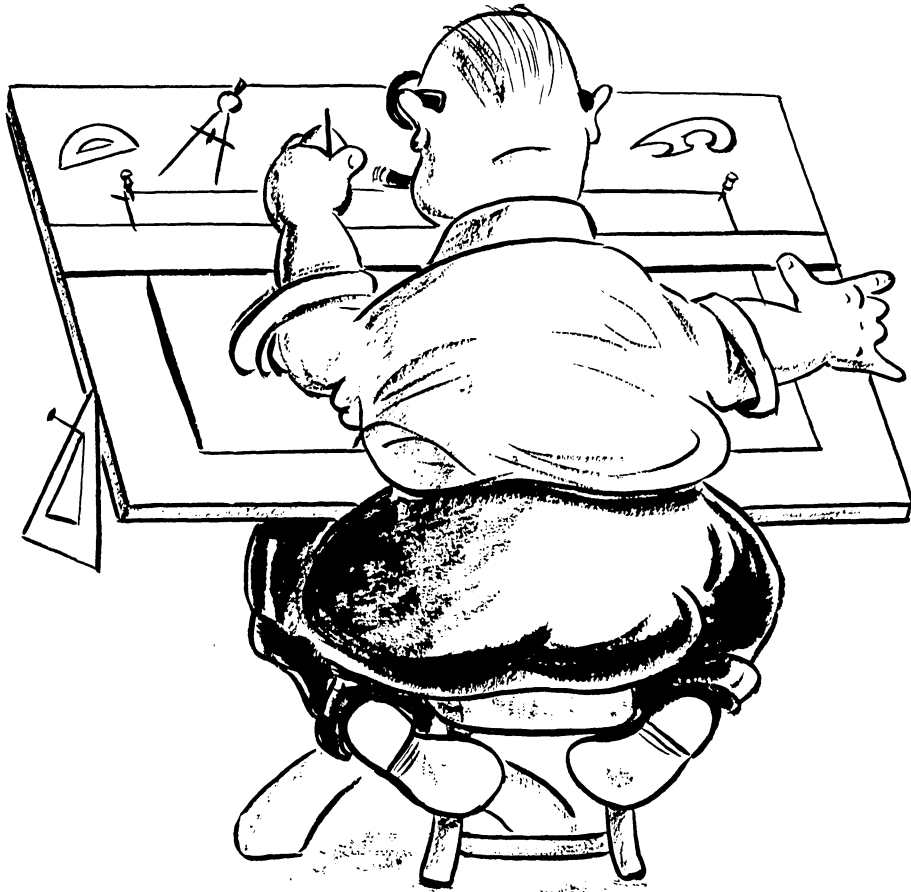
Figure 3
Engine Serial Number

Use the Engine Serial Number, stamped on the right hand side of the engine block, when ordering Engine parts.

The information compiled in this manual covers the operation and preventive maintenance of your Crawler. It is our hope that this manual will help you to understand the correct care and use of this Crawler.

If you should require additional information or services of a trained mechanic, be sure to see your authorized CASE DEALER.

NOTE: The terms "Right Hand" or "Left Hand" whenever used in this manual apply to the Crawler when facing in the direction the Crawler will move in forward operation.



SPECIFICATIONS
CRAWLER

SPECIFICATIONS

ENGINE - General

Type	Four Cylinder; Four Cycle, Overhead Valve
Firing Order	1 - 3 - 4 - 2
Cylinder Bore	3-3/8 Inches
Stroke	4-1/8 Inches
Piston Displacement	148 Cu. Inches
Compression Ratio	7.1 to 1
Valve Guides	Replaceable
Exhaust Valve Rotators	Positive Type
Valve Tappet Clearance (exhaust and intake)014 inch (cold)
Cylinders	4
Cylinder Sleeves	Wet Replaceable Type
Air Cleaner	Oil Bath Type
No Load Engine Speed	2000 R. P. M.
Full Load Engine Speed	1850 R. P. M.
Engine Idling Speed	500 R. P. M.
Governor Type	Case Sensitive Flyweight (Weights on Timing Gear) Variable Speed 1100 to 1850 Engine R. P. M. (full load)
Engine Speed Control	Pull Type Hand Control and Foot Throttle

Pistons and Rods

Rings Per Piston	4
Number of Compression Rings	3
Number of Oil Rings	1
Piston Pins	Full Floating
Connecting Rod Bearings	Precision Insert Type
Pistons	Aluminum Alloy

Main Bearings

Number of Bearings	3
Type of Bearings	Precision Insert Type

Engine Lubrication System

Oil Pressure	14-20 P. S. I. (at 1900 R. P. M.)
Oil Pump	Gear Type with Floating Intake
Oil Filter	Replaceable Cartridge