

420B Gasoline Crawler
S/N 3012301 & After
Operators Manual

9-782





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.

FOREWORD

Incorporated into every product of J. I. Case Company are years of engineering experience, skilled manufacturing methods, and the finest materials available. With proper care and operation, your Case Crawler will perform years of dependable and economical service.

It is the purpose of this book to assist you in getting efficient, economical operation through proper care of your Crawler.

In the event that you need information not given in this manual, or require the services of a factory-trained, Case Serviceman, we recommend you use the facilities offered by the authorized Case Industrial Dealer or Branch in your locality. They are kept informed on the latest service procedures and are well equipped to supply your service requirements. All authorized Case Industrial Dealers stock genuine Case parts which should always be used to assure the utmost in economy and life for your Crawler.

When ordering parts, always specify the Crawler and engine serial numbers; also allied equipment serial numbers.

It is the policy of J. I. Case Company to make continuous improvements at all times, without incurring any obligation to make such changes on Crawlers previously sold.

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WARRANTY	(Inside Back Cover)

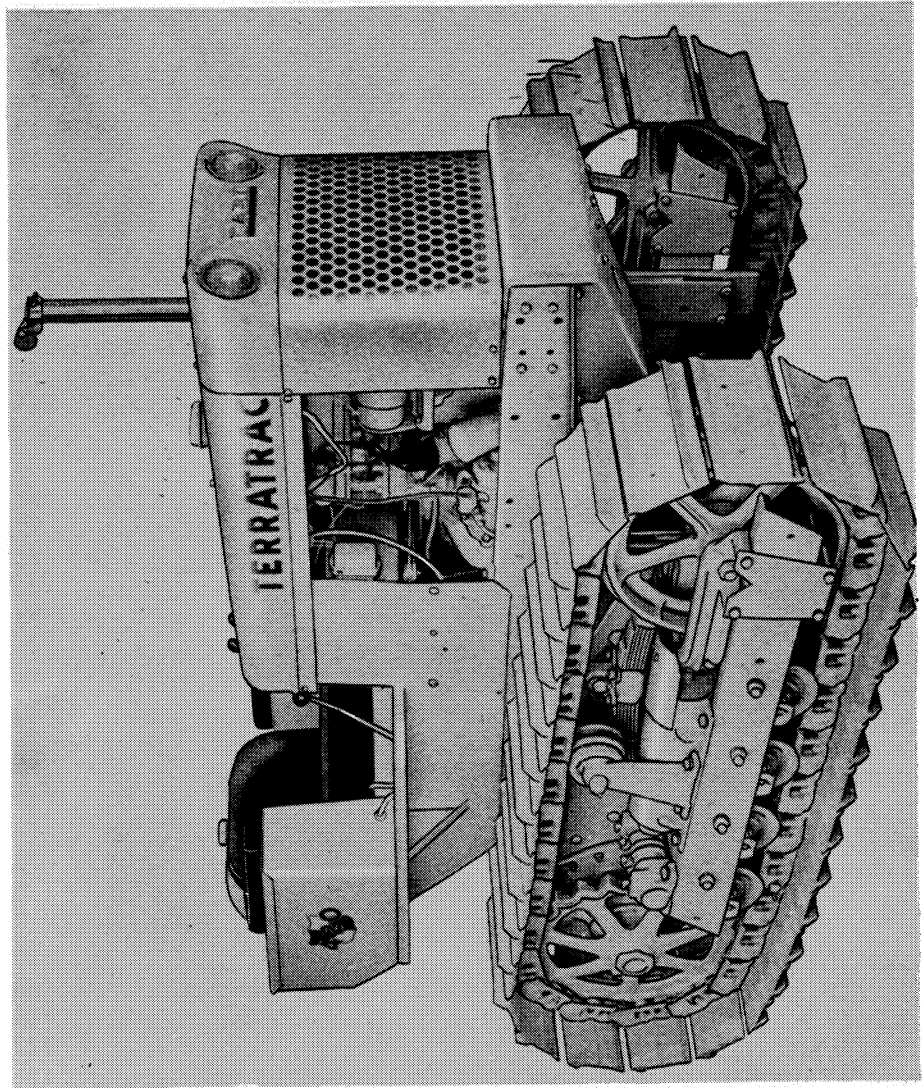


Figure 1 - Right Hand Front View Drawbar Model

INTRODUCTION

1. "POWER-TORQ" ENGINE. A high-compression, heavy-duty power plant with an extremely high torque that 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 steering Crawler or for stopping and holding on grades. Actuated by hand or foot levers.
5. TRANSMISSION. Three speed sliding gear type transmission.
6. HYDRAULIC ATTACHMENTS. Several types of hydraulic operated Allied Equipment can be 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.
10. SEAT. Stationary-type comfortable back, seat, and arm rests of foam rubber covered with durable synthetic leather. Roomy tool chest under the left arm rest.
11. LIGHTS. Seal-beam headlights recessed in streamlined hood, and recessed tail lights.
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. Rubber pads can be added to 11 and 12 inch Grousers for use in street.
13. MUFFLER. An underhood type muffler is available as optional equipment for installation on the Crawler.
14. PRE-CLEANER (OPTIONAL). A pre-cleaner, with settling bowl, is available for installation on Crawlers. This tube, which elevates the air intake level 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 of the Crawler in the spaces provided below.

MODEL	420B
NO.	
J. I. Case Co., Racine, Wis.	

Engine Serial Number

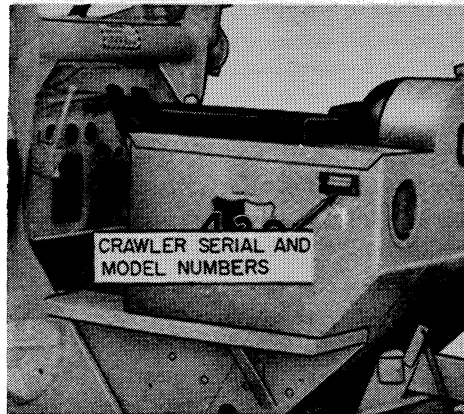


Figure 2

Crawler Serial and Model Numbers

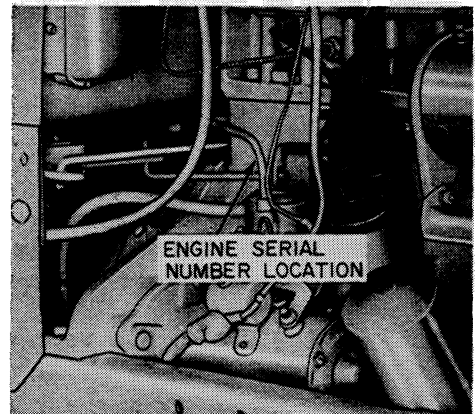


Figure 3

Engine Serial Number

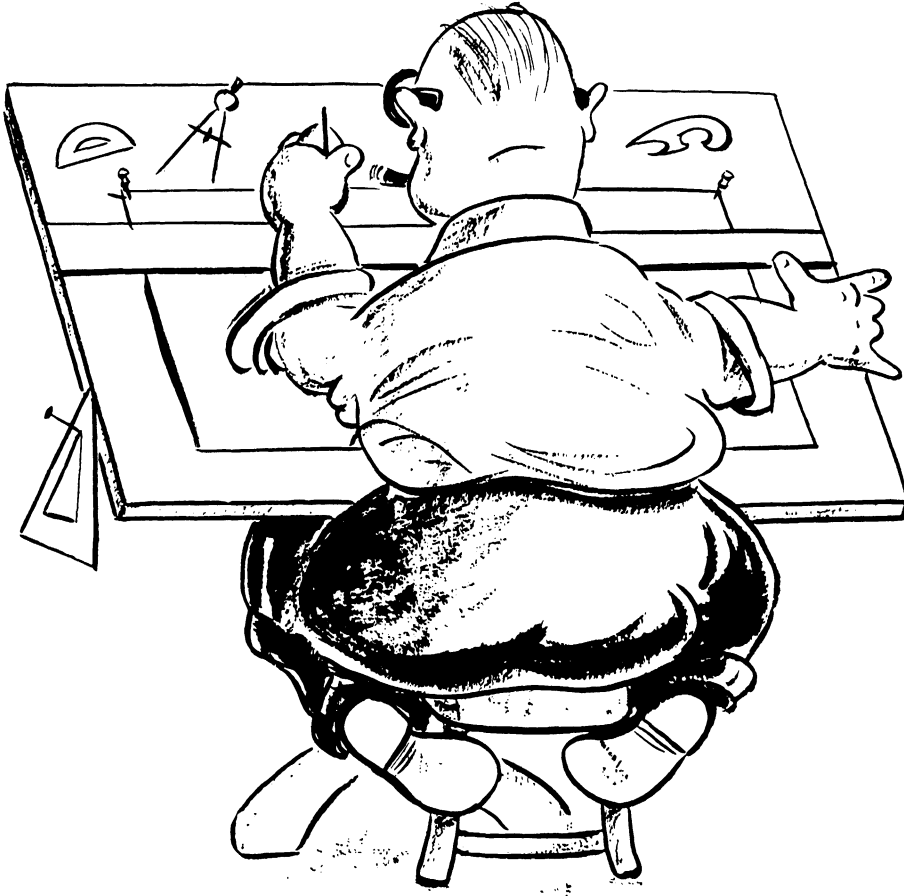
When ordering Crawler parts, specify the Crawler Model and Serial Numbers, located on the outside of the case, just below the left hand armrest.

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 factory 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

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ENGINE - General

Type (G148B)	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 - 2050 R. P. M.
Full Load Engine Speed	1850 R. P. M.
Engine Idling Speed	450 - 500 R. P. M.
Governor Type	Case Sensitive Flyweight (Weights on Timing Gear) Variable
Engine Speed Control	Speed 1100 to 1850 Engine R. P. M. (full load) Friction 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 1750 R. P. M.)
Oil Pump	Gear Type with Floating Intake
Oil Filter	Full Flow - Replaceable Cartridge