



J.I. Case
Operator's Manual
730 & 830 Diesel
Case-O-Matic

Operator's Manual

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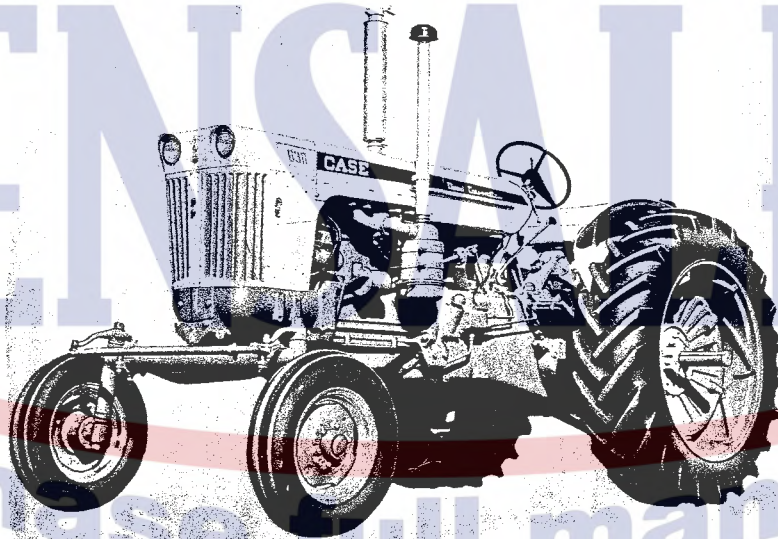
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CA-O-730/830 D

RAC FORM 9-862

OPERATOR'S MANUAL



730-830 DIESEL CASE-O-MATIC TRACTORS

J.I. CASE COMPANY

ESTABLISHED 1842

INCORPORATED

RACINE, WISCONSIN, U.S.A

LITHO U.S.A.

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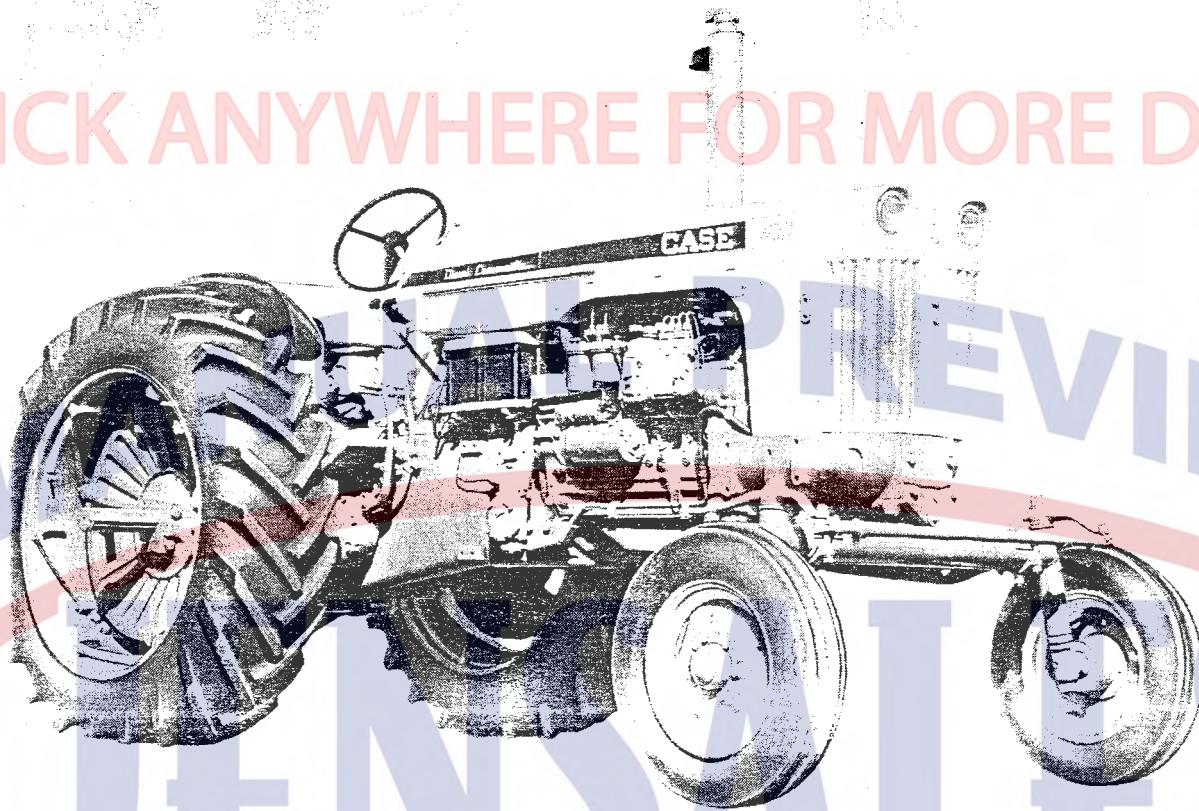
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INTRODUCTION



830 Series Diesel Tractor

Case-o-matic DRIVE

Easy handling... comfort... automatic control... an entirely new experience in tractor operation.

Case-o-matic Drive with its 8 "working ranges" in both Direct and Torque Converter drive give the exact speed for every job on the farm.

Heavy Tillage - Case-o-matic drive allows you to use a higher working range—can be operated in direct drive for maximum speed—simply flip into torque converter drive for additional power necessary to pull up a hill or for heavy draft demands.

Cultivating or Planting - Torque converter drive and tiptoe acceleration give you complete control of travel speed for turning at the head lands or when approaching small plants.

Harvesting - Direct drive may be desirable for most harvesting operations. When heavy crops tend to overload your harvester, flip into torque converter drive and slow down forward speed while engine and PTO RPM stay high to clear the machine.

Hauling and Chore Work - Torque converter drive gives you that smooth easy start when transporting loads in 8th working range—after the load is moving, switch to direct drive for maximum speed.

DRAWBAR

Type.....Reversible Full Swinging Roller
Mounted, Self-Locking
Drawbar Pin Hole Size.....Will Accommodate 1 Inch Pin
Height Adjustment.....Refer to Diagrams on Pages 86 thru 88

BRAKES

Type.....Heavy Duty, Double Disc,
Self Energizing Differential Brakes
Brake Pedals.....Can Be Locked Together for Road Travel;
Can Be Used Individually for Steering Assistance

BELT PULLEY (Extra Equipment)

Method of Engaging.....PTO Clutch Hand Lever
Pulley Diameter.....10½ Inches
Pulley Face Width.....7¼ Inches
Pulley Speed at No Load Governed
Engine Speed of 2060 RPM (545 RPM PTO Attachment).....1112 RPM
(1000 RPM PTO Attachment).....1370 RPM
Pulley Speed at Full Load Governed
Engine Speed of 1900 RPM (545 RPM PTO Attachment).....1027 RPM
(1000 RPM PTO Attachment).....1261 RPM
Pulley Speed at 600 RPM Engine
Idling Speed (545 RPM PTO Attachment).....324 RPM
(1000 RPM PTO Attachment).....399 RPM
Belt Speed (545 RPM PTO Attachment)....2820 Feet Per Minute Under Load
(1000 RPM PTO Attachment)....3470 Feet Per Minute Under Load
Ratio Engine Speed to Belt Pulley Speed
(545 RPM PTO Attachment).....1.850 to 1
(1000 RPM PTO Attachment).....1.506 to 1

INDEPENDENT POWER TAKE-OFF

(Extra Equipment)

Rotation.....Clockwise
PTO Shaft Speed at 1700 Engine RPM.....545 or 1000 RPM
PTO Shaft Speed at 600 RPM Idle Speed
(545 RPM PTO Attachment).....192 RPM
(1000 RPM PTO Attachment).....355 RPM
Spline Size.....Standard 1⅝ Inch Diameter
Location on Tractor.....Tractor Center Line
Distance from Center of PTO Shaft to
top of Drawbar.....See Figures 69 thru 72, Page 87
Method of Engaging.....PTO Clutch Hand Lever
Type PTO Clutch.....Oil Bath, Multiple Disc, Over
Center Adjustable Type
With Cone Brake
Fluid Recommendation.....Automatic Transmission Fluid - Type A
or Case Hi Lo-TCH

COOLANT HEATER

The engine cylinder block on your Case tractor is provided with a passage, located on the left hand side of the engine, Figure 48. The passage has $\frac{3}{8}$ inch pipe tap and will accommodate most types of Cylinder Block Coolant Heating Elements. The MAXIMUM Depth the Coolant Heater can be submerged in cylinder block is $5\frac{1}{2}$ inches.

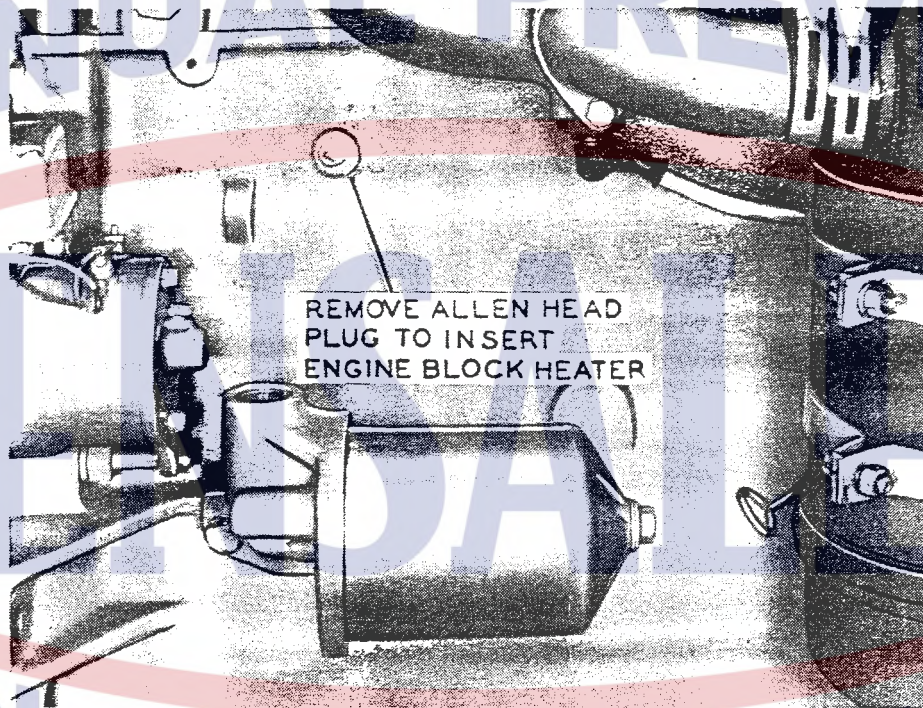
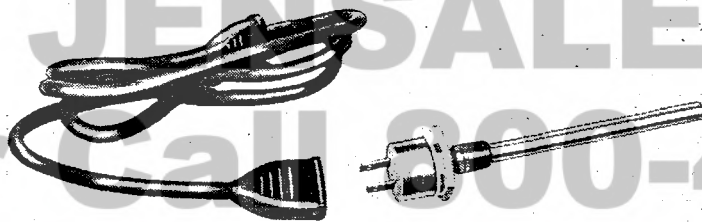


Figure 48. Holes for Coolant Heater Located on Right Hand Side of Engine



Typical Coolant Block Heater

To install the Coolant Heater, remove the Allen Head pipe plug from the cylinder block, Figure 48 and follow the Heating Element Manufacturer's instructions for installation.

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