730 - 830 Tractors

Operators Manual

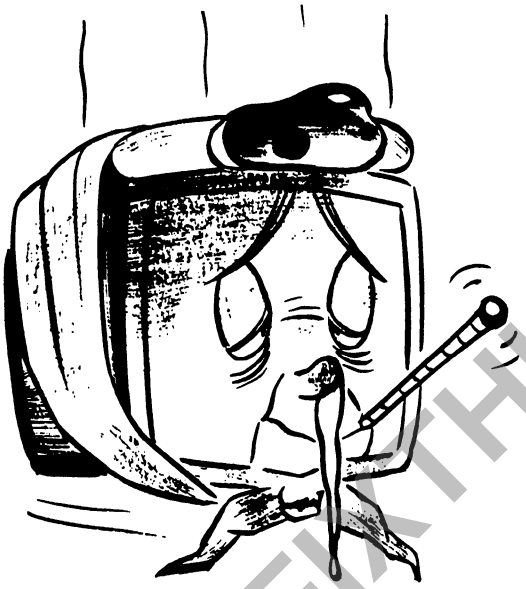
9-1566

CASE IH

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Cold Weather Precautions



As air temperatures drop, a storage battery's output capacity lowers. A battery actually becomes "numb" from the cold and will not turn an engine over as fast or for as long a period as it will during warm temperatures.

Since starting a Diesel engine is very dependent upon turning the engine over fast enough to cause self-ignition of the Diesel fuel, the importance of having fully charged batteries for cold weather starting cannot be over-emphasized.

Servicing the Battery's

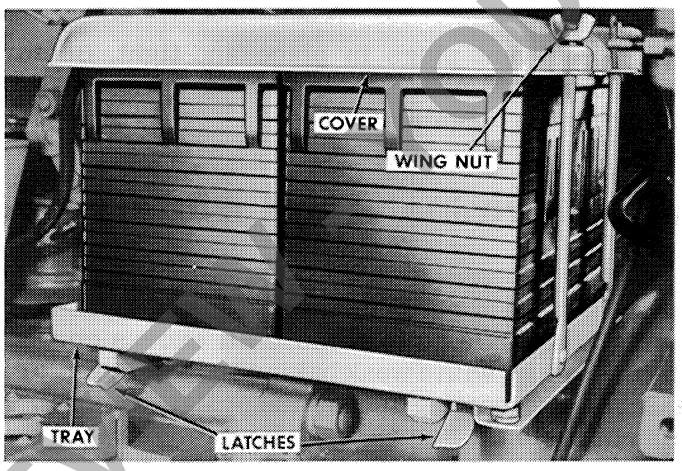


Figure 104

After the battery's have been serviced, reinstall the covers, wing nuts and push the tray back in until the latches engage (down position).

PREVIEW OUFIXTHIS.COM

Download full manual at youfixthis.com

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.

© 1995 Case Corporation

CASE and IH are registered trade marks of Case Corporation

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SERIAL NUMBERS

When ordering parts from your Authorized Case Dealer and in all contacts or correspondence with your dealer relative to the Tractor always specify the Serial, Model and Engine Numbers of your Tractor.

The Model and Serial Numbers are stamped on the number plate located on the instrument panel. See Figure 5. The Engine Number is stamped on a plate fastened to the right hand side of the engine on the fuel pump mounting flange, Figure 6.

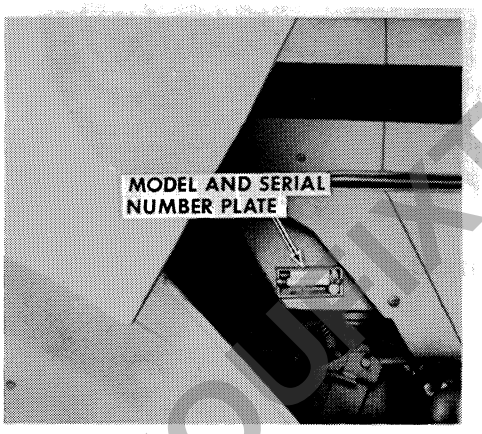


Figure 5

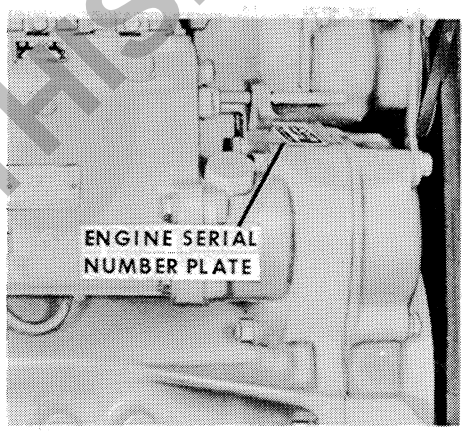


Figure 6

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

For reference, fill in the Serial Number, Model Number and Engine Number of your Tractor in the spaces provided below.

Model Number _____

Engine Number _____

Serial Number _____

Model Designations

730, 740, 830 and 840 -- Standard 4 Wheel
731, 741, 831 and 841 -- General Purpose
732, 742, 832 and 842 -- Western Special
733, 743, 833 and 843 --- High Clearance
734 and 744 ---------- Grove

Abbreviations

---------- 4 Wheel
---------- GP
----------Special
---------- Hi-Cl

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SPECIFICATIONS

General

Type ---------- 4 Cylinder, 4 Stroke Cycle, Valve-in-Head.
Firing Order ---------- 1-3-4-2
Bore (730 Series) ---------- 4-1/8 Inches
(830 Series) ---------- 4-3/8 Inches
Stroke ---------- 5 Inches
Piston Displacement (730 Series) ---------- 267 Cubic Inches
(830 Series) ---------- 301 Cubic Inches
Compression Ratio ---------- 15 to 1
Cylinder Sleeves ---------- Removable Wet Type
No Load Governed Speed (all except 730 std.clutch) ---- 2060 RPM
No Load Governed Speed (730 std.clutch) ---------- 1860 RPM
Rated Engine Speed (all except 730 std.clutch) -------- 1900 RPM
Rated Engine Speed (730 std.clutch) ---------- 1700 RPM
Engine Idling Speed ---------- 600 RPM
*Valve Tappet Clearance (Intake and Exhaust) --- .020 Inch (Hot)
Exhaust Valve Rotators (If So Equipped) ------- Positive Type
Diesel Fuel ---------- Number 2 Diesel Fuel

*Hot Settings Are Made At Low Idle After The Engine Has Operated At Thermostat Controlled Temperature For At Least Fifteen Minutes.

Piston and Connecting Rods

Rings Per Piston ---------- 4
Number of Compression Rings ---------- 3
Number of Oil Rings ---------- 1
Type Pins ---------- Full Floating Type
Type Bearing ---------- Replaceable Precision, Steel Back, Copper-Lead Alloy Liners.

Main Bearings

Number of Bearings ---------- 5
Type Bearings ---------- Replaceable Precision Steel Back, Copper-Lead Alloy Liners.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TIRE AND WHEEL EQUIPMENT

FRONT

TIRE SIZE	TIRE PLY	RIM SIZE	Std.4 Whl.	Single Whl.	Dual Whl.	Adj. Axle	Spec-ial	Grove	High Clear-ance
600-16	4-6	425-16	X		X		X		
600-16	4-6	450-16			X	X			
750-15	6	6LB-15			X	X			
750-16	4	550-16	X			X	X		
750-16	6	550-16						X	
750-18	4	550-18	X				X		
750-20	4-6	550-20					X		X
900-10	10			X					
950-15	6	8LB-15				X			
950-20	6	W7B-20					X		
1100-15	6	8LB-15				X			
1100-16	6	8L-16				X			

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

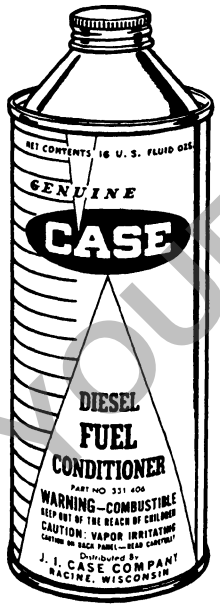
FUEL CONDITIONERS

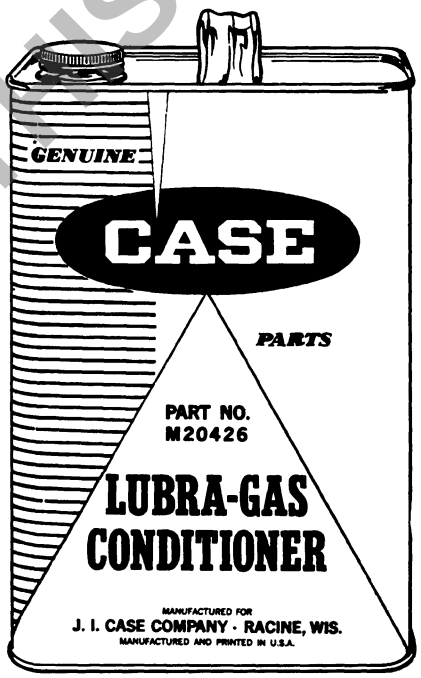
The following fuel conditioners are available from your Authorized Case Dealer to help insure continued fine performance that was designed into your Case Engine.

Case Diesel Fuel Conditioner is recommended for use in all Case Diesel engine fuel systems.

Case Lubra - Gas Conditioner is recommended for use in all Case Gasoline engine fuel systems.

These fuel conditioners should be used as directed on the container.





CASE DIESEL FUEL CONDITIONER

Prevents gummy deposits from forming in the fuel system.

Improved lubrication to the upper internal parts of the engine.

Eliminates fouling of injector nozzles, valves and manifolds.

Helps keep condensation suspended in the fuel, allowing it to be burned with the fuel.

Maintains a higher degree of fuel combustion and higher engine performance from the fuel the engine burns.

CASE LUBRA-GAS CONDITIONER

Improved lubrication to upper internal parts of the engine.

Reduces cylinder and ring wear, improved compression, reduced corrosion of the internal engine parts.

Reduces crankcase oil dilution.

Helps keep condensation suspended in the fuel, allowing it to be burned with the fuel.

Maintains a higher engine performance from the fuel the engine burns.

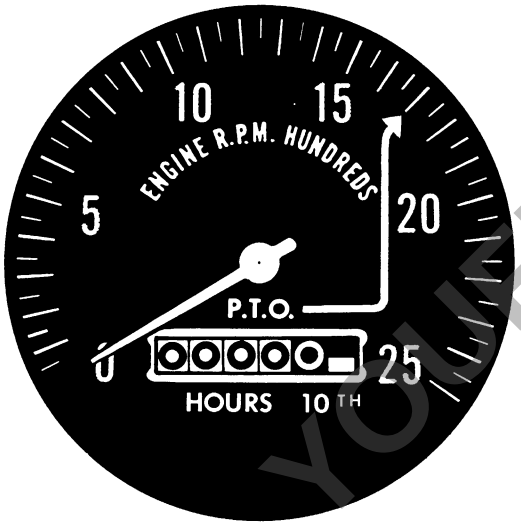
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

lubrication

Lubricating your Case Tractor will require only a few minutes of regular daily attention. Wherever possible, automatic lubrication or prepacked bearings have been provided to reduce the demand made on the operator's time.

Engine Hour Meter



To assure maximum engine service and complete satisfaction, two factors must be observed:

1. Have a regular schedule of inspection and lubrication. All time intervals in the Lubrication Section and the Preventive Maintenance Section are based on Hour Meter Readings. Reading the Hour Meter provided on your Tractor will tell you when to service it.

2. Use only high quality oils and greases of unvarying specifications. Always buy from a reliable dealer who handles reputable, well-known brand lubricants. Use only oil and grease of the specifications recommended in this manual.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

POWER STEERING SYSTEM

Filter Element

Change Interval ---------- 1000 Hours (More often in severe dust conditions).

NEVER change filter while engine is running!

A replaceable filter element is available for the reservoir body, Figure 14.

To replace the filter element, remove the cover wing nut, washers, rubber seal, cover spring, retainer and cover gasket. Lift the contaminated element and discard with cover gasket and rubber seal. Remove hose from reservoir tube and drain oil. Clean reservoir with lint free cloth. Install a new element (either end up), retainer, spring, new cover gasket, cover, new rubber seal and washer then tighten with wing nut, just enough to form a seal. Refill using dipstick as a guide. Operate engine and check for leaks. ***NOTE*** Use care not to damage the reservoir cover gasket when reinstalling the cover.

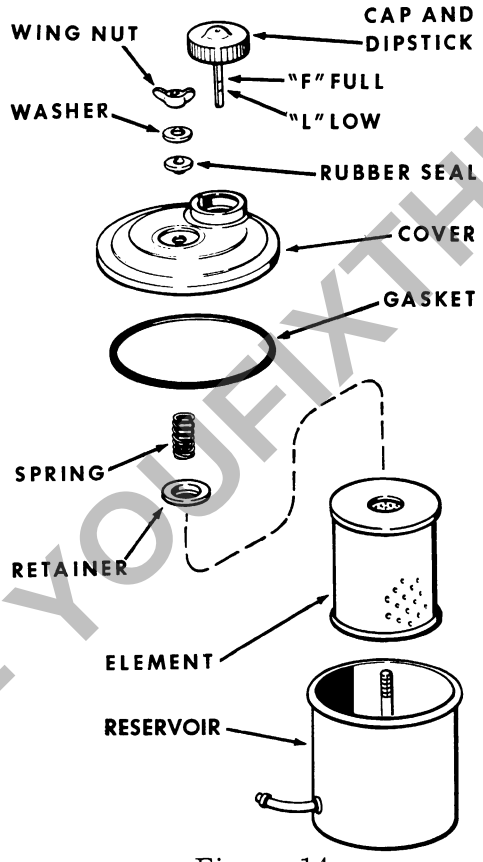


Figure 14

If proper care is taken to prevent the entry of dirt into the reservoirs, and if the filter element is changed periodically, it should not be necessary to ever drain and replace the complete hydraulic steering fluid.

Power Steering Fluid Temperature

After the engine has been operating for a few minutes, the steering fluid will reach its normal operating temperature and the pump will feel hot to the hand. This normal condition found in any hydraulic system is caused by the fluid from the reservoir being circulated through the pump and control valve at a very accelerated rate whenever the engine operates. This condition will cause no difficulty as long as the reservoir is kept at full level mark.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

operating instructions

RUN-IN PROCEDURE

Careful attention must be given to proper Run-In-Procedure. Piston rings and cylinder sleeves can be seriously damaged in a new engine if "run-in" instructions are not followed. The following procedure is recommended.

Load

For the 1st 50 hours, operate the engine at full throttle using one gear lower than normal field operation. Do not "baby" the engine but do not "lug" it. Engine must not be "lugged" below its Rated Engine RPM.

No Load

When the engine is not operating under load, but the operator wishes to keep the engine running, keep the radiator shutters (if so equipped) closed sufficiently to maintain correct operating temperature. Place the throttle control lever 2/3 open (approximately 1500 RPM). Do not idle the engine.

Crankcase Oil

Case Tractors are shipped from the factory with a special "run-in" oil in the crankcase. After the first 20 hours of operation, drain this oil while the engine is hot and replace it with fresh oil. Change the crankcase oil at the recommended 120 hour intervals thereafter. DO NOT DRAIN SPECIAL RUN-IN OIL UNTIL THE ENGINE HAS BEEN OPERATED 20 HOURS.

Change crankcase oil filter after first 20 hours of operation and each 240 hours of operation thereafter. Install only a new Genuine Case Filter element.

Clutch Adjustments

During the first 50 to 150 hours of operation, it may be necessary to adjust both traction and PTO clutches several times until the drive plate facings have "run-in". Failure to do so can cause serious clutch damage.

Transmission-Hydraulic Filter

Change filter after the first 20 hours of operation and each 240 hours thereafter.

Case-O-Matic Filter

Change filter after the first 20 hours of operation and each 240 hours thereafter.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

INTERCHANGING FRONT AXLE GP TRACTORS

The following important precautions must be observed:

SINGLE AND DUAL FRONT AXLES - Steering Gear Support Ring Figure 57, must be installed with (5) 5/8" x 3-3/4" bolts with lockwashers and 5/8" x 3-1/2" bolt with lockwasher - in front hole to avoid damage to steering valve. Torque to 150-165 ft. lbs. Use (4) 5/8" x 2" bolts to bolt spindles together. Torque 150 - 165 ft. lbs.

ADJUSTABLE FRONT AXLE - When changing over to Adjustable Front Axles - Steering Gear Support Ring, Figure 57, must be removed and six (6) 5/8" x 2-1/4" bolts installed. Torque 150 - 165 ft. lbs. to hold steering torque motor in place. Use (4) 5/8" x 1-1/2" bolts from steering arm to spindle. Torque 150 - 165 ft.lbs. DO NOT SUBSITUTE BOLT LENGTH AS DAMAGE COULD RESULT.

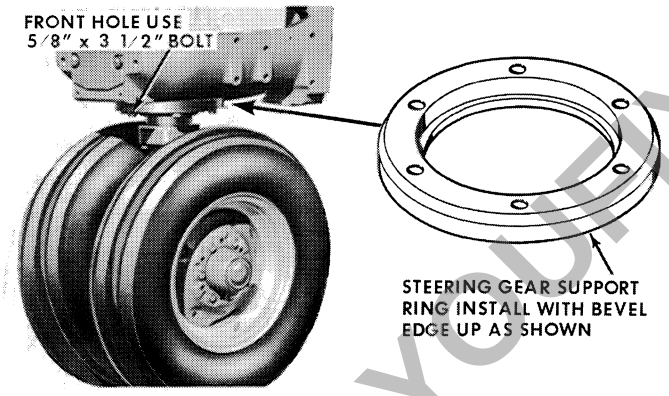


Figure 57

REAR WHEEL TREAD SPACING

STANDARD 4 WHEEL

1. The tires and rims can be moved in and out on the wheels to 4 tread positions. Refer to Page 18.

GENERAL PURPOSE - AND HIGH CLEARANCE.

Manual Shift Rear Wheels

1. The tires and rims can be moved in and out on the wheels to 4 tread positions. Refer to Page 18.
2. The wheels or hubs can be slid in and out on the axles.
3. The wheels can be mounted on the axles so the "dish" is either toward the tractor (in) or away from the tractor (out).

Power Shift Rear Wheels

1. Using the tractors own power, tires and rims can be moved in or out on the wheels. Refer to Page 17.
2. The wheels can be slid in and out on the axles.
3. By mounting the wheels on the axle in the "dish out" position the full range of adjustments can be obtained.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

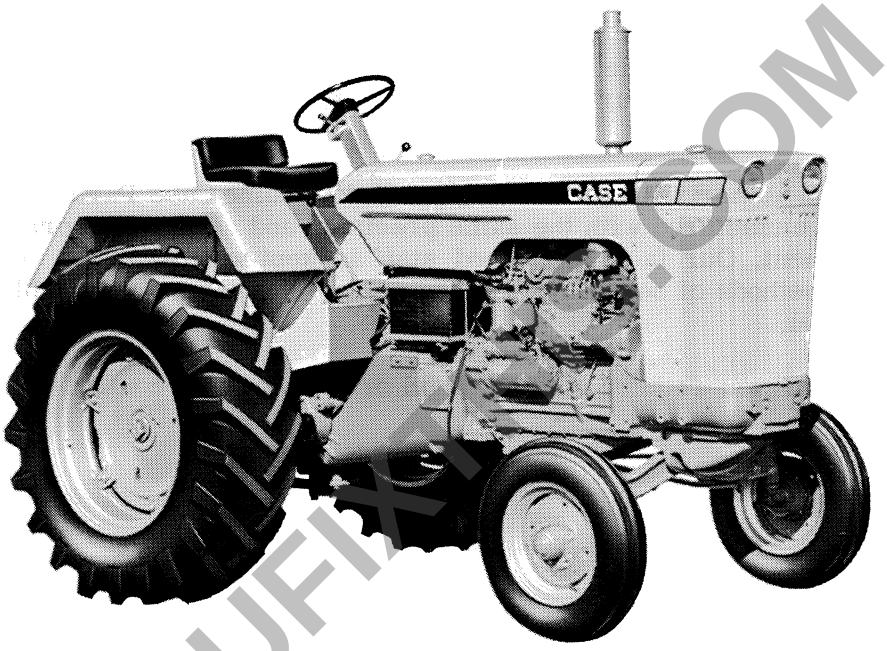


Figure 1

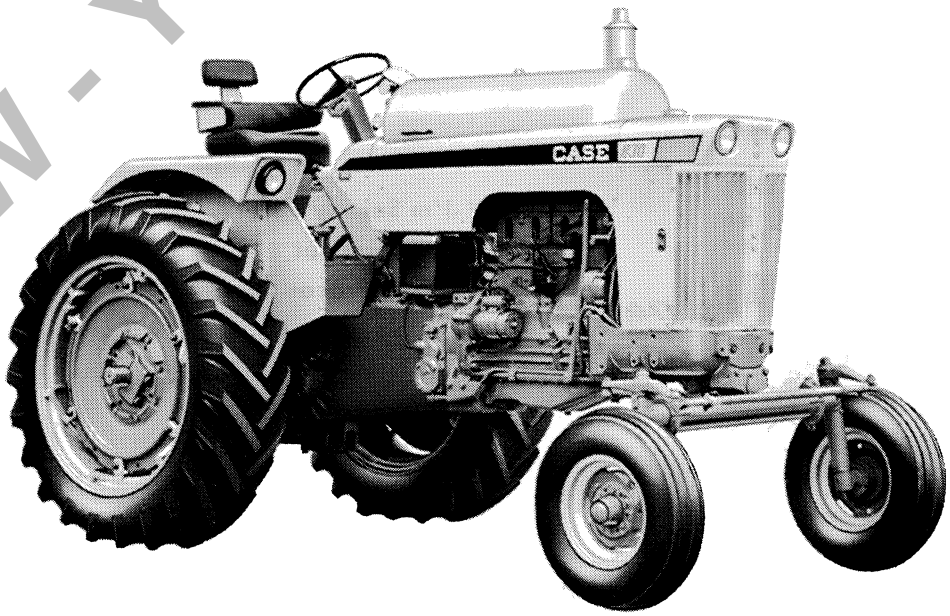


Figure 2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 131 pages

The full manual includes:

- All 131 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Case 730, 731, 732, 733, 734, 740, 741, 742, 743, 744, 830, 831, 832, 833, 840, 841, 842, 843 Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual