Cub/Cub Lo-Boy Tractors

Operators Manual

1014488R8

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.



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 The Owner

We are glad to welcome you as an owner of a product of International Harvester Company. You have a fine product designed and built to give you many years of efficient operation. The way you operate and the care you give this product will have much to do with its successful performance.

To help you operate your equipment with utmost efficiency we have provided this operator's manual. It has been carefully prepared to give you the benefit of many years of experience gained in field testing and normal usage of this and similar products.

We urge you to study this manual so you will understand your new equipment thoroughly before operating it. We also urge you to take care of your manual so you will have it available for reference when you need it.

If your manual is lost or destroyed, a new copy may be ordered from the International Harvester dealer at a nominal price. Your International Harvester dealer will also be glad to answer any questions you may have on the operation or care of this product.

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SAFETY INSTRUCTIONS



This symbol is used to call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.

Disengage all clutches and shift into neutral before starting the engine.

Disengage power to any attachments and stop engine before leaving operator's seat or making any repairs or adjustments.

Know the controls and how to stop quickly READ THE OPERATOR'S MANUAL.

Do not allow children or adults to operate the equipment without proper instructions.

Clear work area of objects which might be picked up by the mower and thrown.

Disengage power to any attachment when transporting or not in use.

Do not carry passengers. Keep children and pets a safe distance away.

Take precautions, such as disengaging power take-off, shifting into neutral, setting the parking brake, stopping the engine and removing ignition key when leaving machine unattended.

Reduce speed on slopes and in sharp turns to prevent tipping or loss of control.

Stay alert for holes in terrain and other hidden hazards.

Don't stop or start suddenly when going uphill or downhill.

Use care when pulling loads or using heavy equipment: A. Use only approved drawbar hitch points. B. Limit loads to those you can safely control. C. Don't turn too sharp, and use care when backing. D. Use counterweight or wheel weights when suggested in Operator's Manual.

Watch out for traffic when crossing or near roadways.

When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the machine while in operation.

Handle gasoline with care - it is highly flammable: A. Use approved gasoline container. B. Never remove the fuel tank cap or fill the fuel tank when the engine is running, is hot, or fill the fuel tank indoors. Also, do not smoke when working around inflammable fuel. Wipe up spilled gasoline. C. Replace gasoline cap securely. D. Open doors if engine is in a garage - exhaust gasses are dangerous.

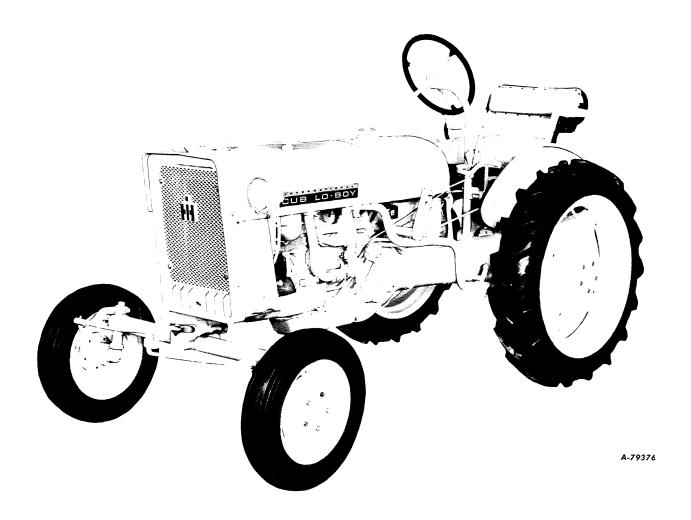
Use gasoline only as a fuel, and never as a cleaner.

Keep machine in good operating condition and keep safety devices in place. Use guards as instructed in Operator's Manual.

It is recommended that the machine be stopped and inspected for damage after striking a foreign object and that any damage be repaired before restarting and operating the machine.

Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid, see a doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic system. To find a leak under pressure use a small piece of cardboard or wood. Never use hands.

INTRODUCTION



Illust. 2
International Cub Lo-Boy Tractor.

Assembled in this manual are operation, lubrication, and maintenance instructions for International Cub and Cub Lo-Boy Tractors. This material has been prepared in detail in the hope that it will help you to better understand the correct care and efficient operation of the tractor.

Your International Harvester dealer has factory-trained servicemen, modern tools, and IH service parts to assure you of satisfactory tractor operation. To get the most out of the tractor, and to assure economical operation and top performance, the tractor should be inspected periodically by your International Harvester dealer.

Depending upon your use of the tractor, these inspections should be performed as needed, or at least once a year, at which time a tune-up or other necessary service work should be performed. Proper pre-season maintenance will assure you of minimum lost time when your tractor is most needed.

Dealers are kept informed on the latest methods of servicing tractors. They carry stocks of IH parts, and are backed in every case by the full facilities of a nearby International Harvester district office and parts depot.

INTRODUCTION

In order to provide a tractor equipped as nearly as possible to suit each customer's needs, a variety of extra equipment and accessories is available. Refer to page 76.

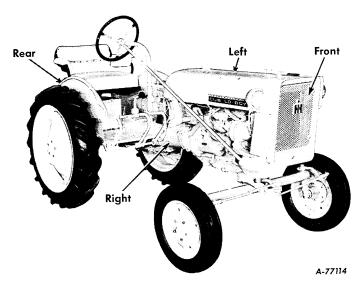
Where operating and maintaining instruction on these items is required, it is included in the instructions for operating or maintaining the tractor. Disregard the instructions for equipment not on your tractor.

The illustrations in this manual are numbered to correspond with pages on which they appear; for example, Illusts. 3, 3A and 3B, are on page 3.

Throughout this manual the use of the terms LEFT, RIGHT, FRONT, and REAR must be understood to avoid confusion when following instructions. LEFT and RIGHT indicate the left and right sides of the tractor when facing forward in the driver's seat. Reference to FRONT indicates the radiator end of the tractor; to REAR; the hitch end. See Illust. 3.



Illust. 3A
Location of the tractor serial number.

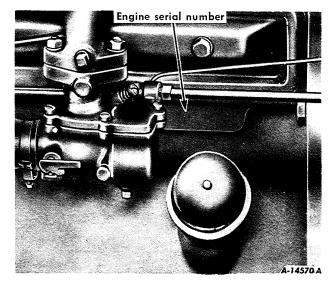


Illust. 3
Terms of location.

When in need of parts, always specify the tractor and engine serial numbers including prefix and suffix letters. The tractor serial number is stamped on a name plate attached to the right side of the steering gear housing.

See Illust. 3A.

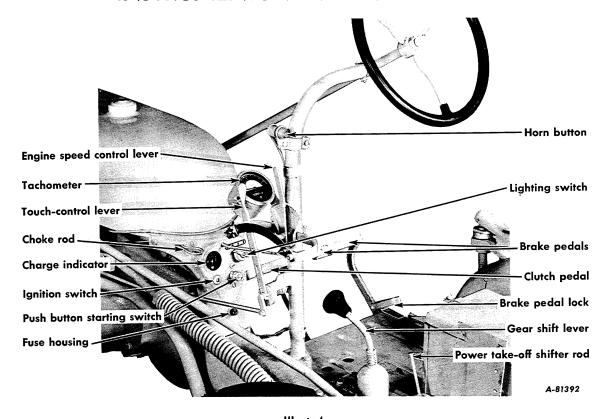
The engine serial number is stamped on the left side of the engine crankcase to the right of the carburetor. This serial number is preceded by the letters FCUBM. See Illust. 3B.



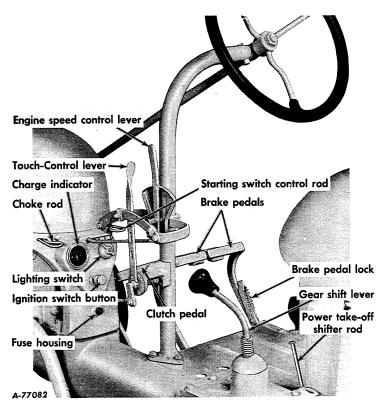
Illust. 3B

Location of engine serial number.

INSTRUMENTS AND CONTROLS



Illust。 4
Instruments and controls (12-volt system)。



Illust. 4A
Instruments and controls (6-volt system).

BRAKE PEDALS

These pedals are used to stop the tractor, to hold the tractor in a stationary position, or to assist in making sharp turns.

The brake pedal latch (behind the left brake pedal) is used to latch both brake pedals together, causing the brakes to operate simultaneously.

To stop the tractor, latch the pedals together so both brakes will operate simultaneously when the pedals are pressed down.

To hold the tractor in a stationary position, latch the pedals together, depress and lock them in this depressed position by using the brake pedal lock.

To assist in making a sharp turn, the pedals must be operated individually, depressing the pedal on the side toward which the turn is to be made.

INSTRUMENTS AND CONTROLS

BRAKE PEDALS - Continued

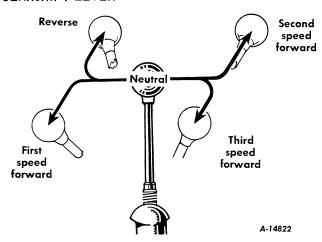
Caution! Always latch the brake pedals together when driving the tractor in high gear. To latch the pedals together, engage the latch (located in back of the left pedal) in the slot in back of the right pedal. When the brake pedals are not latched together, the latch should rest in the slot in back of the left brake pedal.

The brake pedal lock (Illust. 12A) is used to lock the brake pedals in the depressed position. This prevents the tractor from moving.

CLUTCH PEDAL

This pedal, when depressed all the way, disengages the engine from the transmission.

GEARSHIFT LEVER



Illust. 5 - Gear shifting positions.

This lever is used to select various gear ratios provided in the transmission. There are three forward speeds and one reverse speed. See Illust. 5. Refer to "Specifications" on page 74.

CHOKE ROD

The choke rod makes possible the regulation of the carburetor choke from the driver's seat. Pulling out on the choke rod closes the carburetor choke for starting the engine; pushing it back in opens the choke.

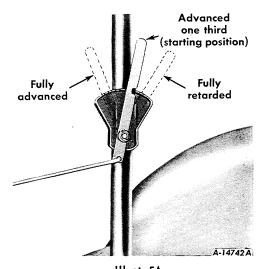
CARBURETOR CHOKE LEVER

The carburetor choke lever controls the air supply to the carburetor. When the choke lever (Illusts. 9 and 9A) is moved up all the way (closed position) the air supply is cut off, thereby enriching the fuel mixture for starting the engine. If your tractor is not equipped with a cranking motor and choke rod, move the choke lever up all the way before cranking the engine. Moving the choke lever back down opens the choke for normal engine operation.

ENGINE SPEED CONTROL LEVER

This lever controls the speed of the engine and, when set in a given position, will maintain a uniform engine speed even though the engine load may vary.

Do not permit the engine to run below the minimum idle speed for any length of time, or operate the engine at more than the regular. governed speed. Excessive speed is harmful. Refer to the "Specifications" on page 74.



Illust. 5A Various positions of the engine speed control lever.

GOVERNOR

The governor is set at the factory and should require no adjustment. Consult your International Harvester dealer if the governor does not function properly.

IGNITION SWITCH (12-Volt System)

A key-type ignition switch (Illust. 4) is located on the instrument panel. Turn the key clockwise to a horizontal position to turn on the ignition. The key cannot be removed when in this position.

Note: When the engine is not operating, or the engine has stalled and the operator leaves the tractor, the key must be turned to the "OFF" position to prevent battery discharge.

PUSH BUTTON STARTING SWITCH (12-Volt System)

Pushing the button in completes the electrical circuit between the battery and the cranking motor and causes the cranking motor pinion to engage the flywheel ring gear, thereby cranking the engine. See Illust. 4.

INSTRUMENTS AND CONTROLS

IGNITION SWITCH BUTTON (6-Volt System)

This button (IIIust. 4A) closes and opens the electrical circuit for operating and stopping the engine. Pull the button out for operating and push it in to stop the engine.

Note: On tractors with battery ignition, when the engine is not operating or the engine has stalled and the operator leaves the tractor, the ignition switch button must be pushed all the way in, so that the switch is in the "OFF" position, to prevent battery discharge.

STARTING SWITCH CONTROL ROD (6-Volt System)

To start the engine, adjust the choke rod and pull out on the starting switch control rod as explained on pages 9 and 10. See Illust. 4A.

LIGHTING SWITCH (Tractors Equipped with Electric Starting and Warning Light)

The switch has two positions; "OFF" and "ON". Placing the switch in the "ON" position activates the warning light.

LIGHTING SWITCH (Tractors Equipped with Electric Starting and Lighting)

The switch has four positions: "OFF" position; "D" position for dim headlights, bright instrument lights, a red taillight, and a warning light; "B" position for bright headlights, instrument lights, a red taillight, and a warning light; and "R" position for bright headlights, instrument lights, and a white rear light. The red taillight should always be used when traveling on the highway at night or during times of poor visibility. The white rear light is for field use only and should not be used on the highway.

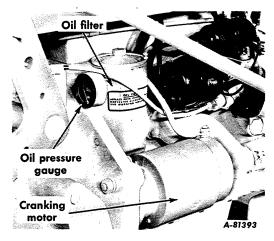
BELT PULLEY AND POWER TAKE-OFF SHIFTER ROD

The shifter rod is used to engage or disengage the belt pulley or the power take-off.

Refer to pages 19 and 20 for operating instructions.

OIL PRESSURE GAUGE

This gauge (Illusts. 6 and 6A) indicates whether lubricating oil is circulating through the engine. The indicator needle should move at least one-third of the distance between "0"



Illust. 6
Location of oil pressure gauge.

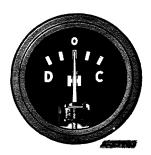
and the first mark when the engine is running at speeds approximately 100 r.p.m. above slow idle speed. If it does not, stop the engine immediately and investigate the cause of the oil pressure failure. If you are unable to find the cause, consult your International Harvester dealer before operating the engine.



Illust. 6A Oil pressure gauge.

CHARGE INDICATOR

This instrument indicates whether the generator is charging or the battery is discharging. If it shows discharge continuously, investigate the cause to avoid completely discharging the battery and possible damage to the generator. Refer to pages 33 and 34 for additional information.



Illust. 6B Charge indicator.

BEFORE OPERATING THE TRACTOR

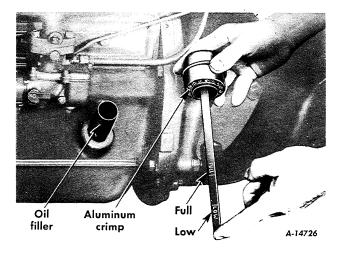
TRACTOR BREAK-IN PROCEDURE

Never operate an engine immediately under full load. Break it in carefully, no load, light load, and medium engine load for the first 25 hours.

Period	Engine Speed Control Lever Position	Load
lst hour	Fully advanced	Maintain en- gine speed 100 RPM above full load gov- erned speed.
2nd Thru 5th hours	Fully advanced	Full load gov- erned speed with occasional short periods of lighter load.

Note: Do not use heavy tillage implements such as plows or disk harrows during this period.

LUBRICATION



Illust. 7
Crankcase breather and oil level gauge.

Lubricate the entire tractor, using the "Lubrication Guide."

Check the oil levels of the engine crankcase air cleaner, transmission, belt pulley housing and all gear cases to see that they are filled to the correct levels with oil of the proper viscosity for the prevailing temperature. Refer to "Lubrication Guide" on pages 66 to 71.

Tractors packed for export have all oil drained from the engine crankcase, air cleaner and all gear cases.

PNEUMATIC TIRES

Before moving the tractor, check the air pressure in the pneumatic tires and inflate or deflate the front tires to twenty pounds and the rear tires to twelve pounds. Refer to the tables on pages 50 and 51 for more complete information.

ENGINE COOLING SYSTEM

Be sure the drain plug underneath the radiator is closed. See Illust. 22.

Tractors shipped to destinations in the United States and Canada have the cooling system filled with antifreeze solution. Check the coolant level in the radiator. When cold, the coolant level should be slightly below the bottom of the filler neck.

If water is added, use only clean water; soft or rain water is recommended, as it does not contain alkali, which forms scale and eventually clogs the passages.

Never start or operate the engine without water or antifreeze solution in the cooling system.

For further information, see "Cooling System" on pages 21 to 24. If the tractor is to be operated in freezing temperatures. refer to "Cold Weather Precautions" on page 55.

FUEL SYSTEM

International Harvester gasoline burning engines are specifically designed for use with regular grade gasoline having a 90 minimum octane rating — Research Method (approximately 84 Motor Method).

Use clean fuel and keep it clean. Store fuel in tanks equipped with hose and nozzle to prevent contamination of the fuel. The use of funnels, cans, and drums is not recommended because they are difficult to keep clean.

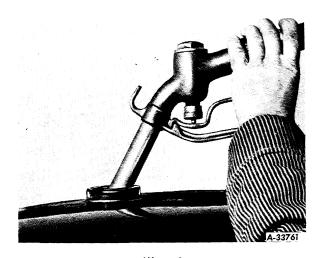
INSTRUMENTS AND CONTROLS

Thoroughly acquaint yourself with all instruments and controls as described on pages 4 to 6.

PREPARING FOR EACH DAY'S WORK

Air	cleaner	cap	Remove any dirt or chaff.
Air	cleaner	oil cup	Remove, clean and refill. See the "Lubrication Guide."
Lub	rication	points	See "Lubrication Guide."
Coo	ling syst	em	Check the level of the coolant in the radiator.

FILLING THE FUEL TANK



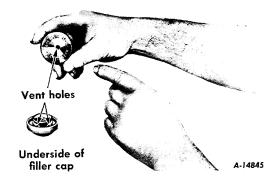
Illust. 8
Filling the fuel tank.

Fill the fuel tank, preferably at the end of each day's work. This will force out any moisture-laden air and prevent condensation.

Note: Do not fill the tank to its full capacity as space is required for vapor expansion in the event of a temperature change. A tank filled to capacity may overflow if exposed to a rise in temperature or direct sunlight.



Caution! Never remove the fuel tank cap or fill the fuel tank when the engine is running, is hot, or near an open flame.



Illust. 8A Vent holes in filler cap.

Do not smoke or use an oil lantern when working around inflammable fuels. When pouring fuel, keep the hose and nozzle or the funnel and container in contact with the metal of the fuel tank to avoid the possibility of an electric spark igniting the fuel. Do not light matches near inflammable fuels, as the air within a radius of several feet is mixed with a highly explosive vapor.

The fuel tank filler cap has air vents. See Illust. 8A. Keep these vents open at all times to assure proper flow of the fuel.

AIR CLEANER OIL CUP

The air cleaner cap should be cleaned, and the oil in the air cleaner oil cup should be changed more frequently than every ten hours of operation, if unusually dusty and dirty conditions are encountered.



Illust. 8B Oil level bead in air cleaner oil cup.



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