



International
Harvester
Operator's Manual
500
Crawler

Operator's Manual

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or Call 800-443-0625



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IH-O-500 CRWLR

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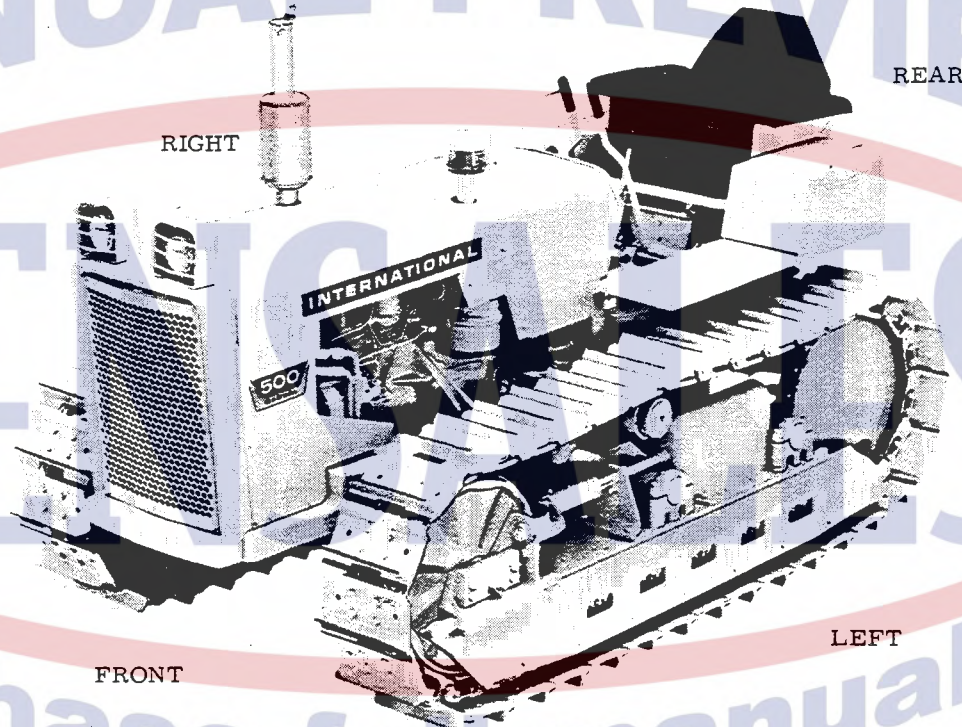
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INTRODUCTION

CLICK ANYWHERE FOR MORE DETAILS



Illust. 3A

H 1264

Instructions on operation, lubrication and maintenance for the basic tractor and attachments are covered in this manual. Disregard any instructions that are not applicable to your tractor. To protect your investment, study your manual thoroughly **BEFORE** starting or operating in the field.

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Throughout this manual the terms **LEFT**, **RIGHT**, **FRONT** and **REAR** are used and must be understood to avoid confusion. Refer to the illustration above.

The illustrations in this manual are numbered to correspond with the pages on which they appear. Illustrations 5A and 5B are to be found on page 5.

CLICK ANYWHERE FOR MORE DETAILS

HYDRAULIC SYSTEM

The hydraulic system provides power for operating various implements and attachments used with this tractor. The hydraulic system consists of a gear-type pump, a filter and a control valve.

The gear-type pump is either a 9 gallon per minute, timing gear driven pump (gasoline tractors only), a 10 GPM timing gear driven pump (diesel tractors only), a 12 GPM, or 17 GPM front PTO driven pumps.

The hydraulic filter in the right frame channel prevents dirt and other foreign material from entering the system. The filter must be cleaned during the first 25 to 50 hours of operation and every 150 hours of operation thereafter. The filter should also be cleaned any time loss of hydraulic pressure occurs or when the hydraulic pump appears noisy.

HYDRAULIC CONTROL VALVES

The hydraulic control valves supply fluid pressure to the hydraulic equipment. The tractor may be equipped with either a single, double or triple spool main control valve with an additional single spool auxiliary valve. The valve is operated by a control lever which provides the operator with complete instantaneous and effortless control of all hydraulic equipment.

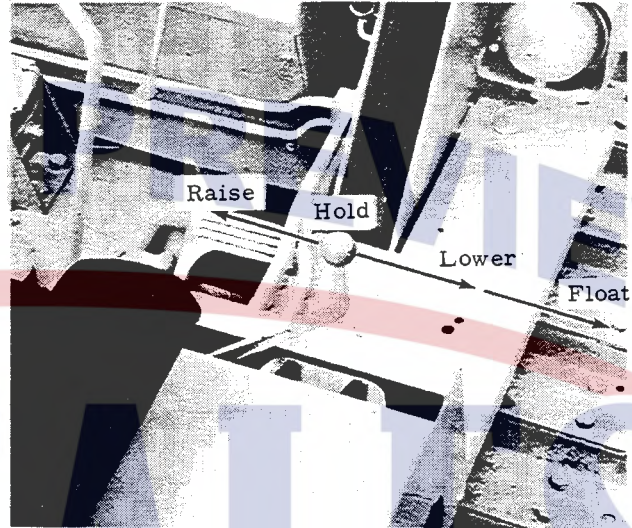
The operation of each valve is described below, under the equipment with which the valves are used.

THREE-POINT HITCH

The three point hitch is operated by the control lever of either a single or double spool main valve or a single spool auxiliary valve. The rear control lever of a double spool valve will operate the three-point hitch. There are four positions of the control lever for operation of the three-point hitch -- RAISE, HOLD, LOWER and FLOAT. Refer to Illusts. 16A, 16B or 17A.

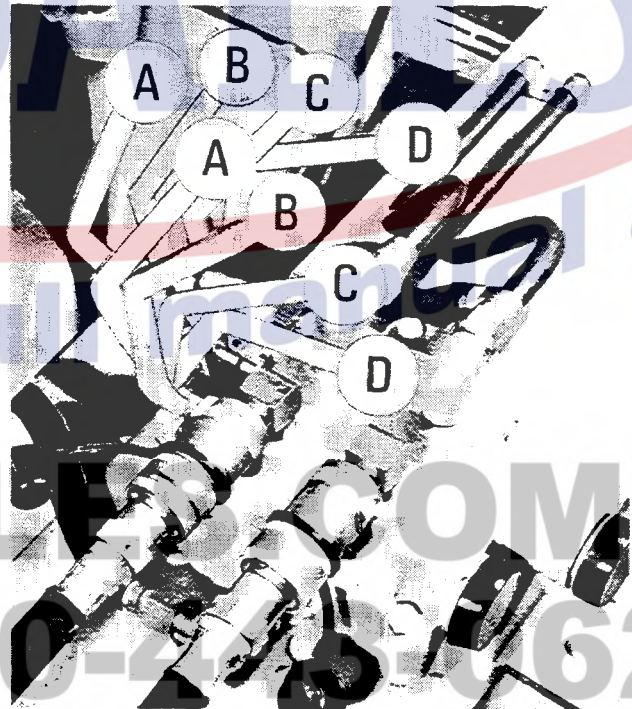
INTERNATIONAL 11 BULLGRADER

This bullgrader is controlled by either a single spool main valve or the forward control lever of a double spool main valve. The control lever for the operation of this bullgrader has four positions -- RAISE, HOLD, LOWER and FLOAT. See Illust. 16A or 16B.



Illust. 16A
Single Spool Valve

H 1466



Illust. 16B
Double Spool Valve

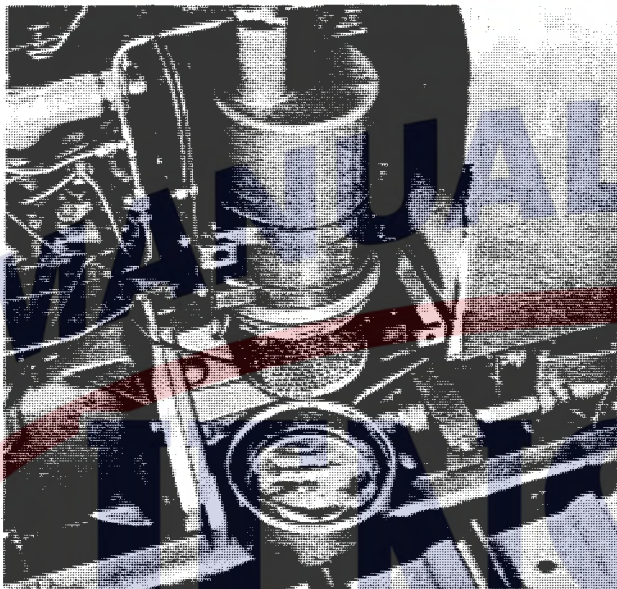
H 4436

INTERNATIONAL 5G2 BULLGRADER

The operation of the control valve for the International 5G2 Bullgrader is the same as the International 11 Bullgrader.

AIR CLEANING SYSTEM

DRY-TYPE AIR CLEANER - Continued
 Removing the Filter Element - Continued

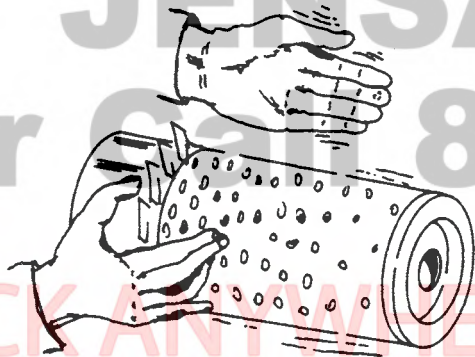


Illust. 26A H 1294

3. Loosen the clamp securing the dust cup to the air cleaner body and remove the dust cup.
4. Remove the thumbscrew holding the element to the air cleaner and withdraw the element.
5. Remove any dirt found inside the air cleaner body.

Cleaning the Filter Element

The element can be cleaned by either of two methods - compressed air or washing. The preferred method is by use of compressed air, however, washing is especially effective for oily and soot laden filters. Only as a temporary measure in the field should the element be cleaned by tapping the side or end against the palm of the hand as shown in Illust. 26B.

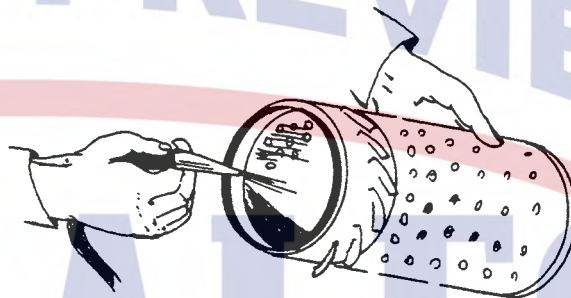


Illust. 26B HE 193

IMPORTANT: An element will be damaged by tapping against a hard surface.

NOTE: A filter element must be replaced after 10 cleanings or one year of service, whichever comes first.

When cleaning with compressed air, direct clean dry compressed air up and down the pleats on the "CLEAN SIDE" (inside) of the element. Continue this until the element is clean.

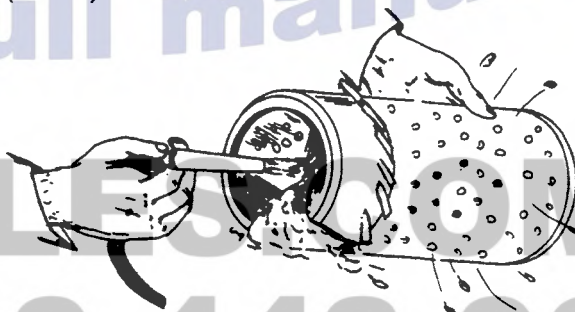


Illust. 26C HE 193

An element cleaning tool (Package No. 407 073 R1), for use with compressed air, available from your International Harvester dealer, will do a faster and more efficient job of removing dust than a regular air gun or nozzle.

NOTE: Air pressure at the nozzle must not exceed 100 psi. Maintain a reasonable distance between the nozzle and the filter.

Wash the element using a garden hose with clean, clear water (+120°F or less). High water pressure (maximum 40 psi) can damage the element. Direct water up and down the clean side (inside) of the element until it is clean.



Illust. 26D HE 193

The element may be washed with an element cleaner, available at your International Harvester dealer. Follow instructions on the package.

Washing may also be accomplished in a tub of clean water (+120°F or less) containing a non-sudsing detergent "after" all dust has been removed. Agitate the element gently in the water and allow time for the oil to dissolve. Rinse the element in clean water.

TORQUE AMPLIFIER CLUTCH ADJUSTMENT - Continued

3. Reinstall pin "N", tighten the lock nut "M" and reinstall the spring "J".

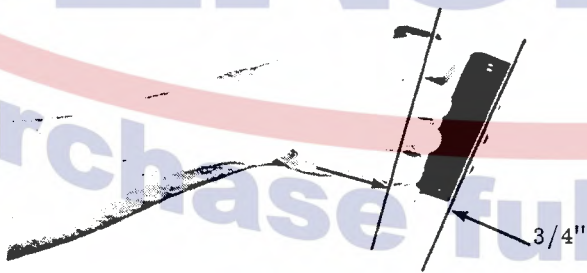
4. Adjust clevis "A" and assemble pin "L" to the shortest free length without altering the position of the torque amplifier clutch release shaft lever "O" previously established. Tighten lock nut "K".

IMPORTANT: Repeat the entire adjustment when the engine clutch has a free movement of only $\frac{3}{4}$ " or when the clearance provided in item 2 above measures only $\frac{1}{8}$ ".

BRAKE AND STEERING CLUTCH ADJUSTMENT

NOTE: Before making any adjustments, be sure that all parts are free to move and no binding occurs.

The brake bands and steering clutches were adjusted at the factory and should require no further attention during the break-in period. However, at the end of approximately 50 hours of operation, both the brake bands and steering clutches should be carefully checked for proper adjustment.

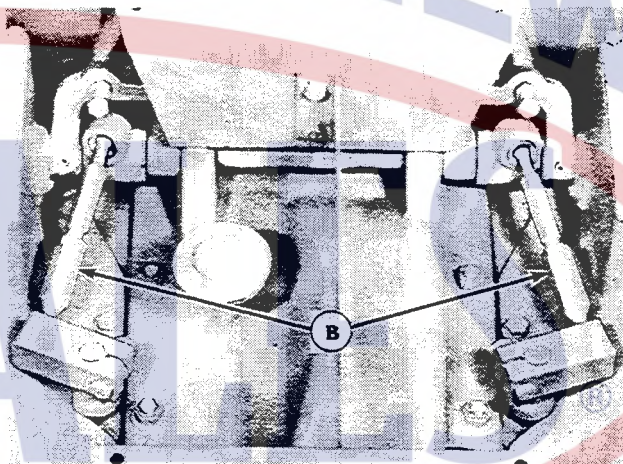


Illust. 39A

H 510

It should be noted the brake bands are individually operated by each steering lever and simultaneously by the foot pedal. No further adjustment other than that indicated is provided for the brake pedal, but it is extremely important to maintain this adjustment to prevent the brakes from being partially applied when the brake pedal is in the rear position.

Back off all adjusting bolts.



Illust. 39B

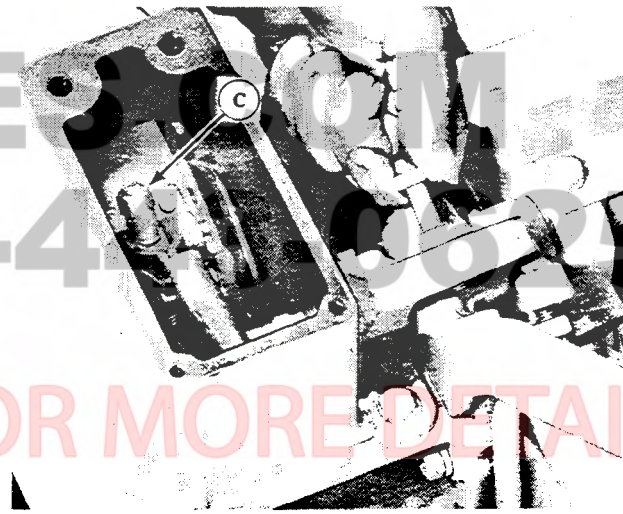
H 516

Adjust the steering clutch control linkage by expanding the linkage, indicated at "B" in Illust. 39B, up until there is no slack, then contact the control linkage exactly $\frac{2}{3}$ of a turn. Do not use a wrench to expand the linkage. If it cannot be turned by hand, remove and free it up. This will allow $\frac{3}{4}$ " movement of steering clutch lever (see Illust. 39A). If it does not, repeat this adjustment.



Illust. 39A

H 510

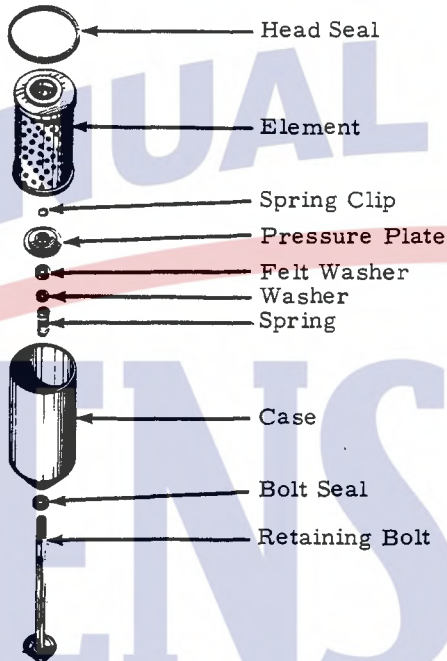


Illust. 39C

H 515

CHANGING THE ENGINE OIL FILTER ELEMENT - Continued

Diesel Engine - Continued



Illust. 59A
Oil Filter Disassembled

H 1416

8. Place the new filter element on the retaining bolt and into the case.

9. Slide the bolt and case into the filter head and securely tighten the retaining bolt.

To replace the retaining bolt rubber seal, reach inside the filter case and remove the spring steel clip from the groove in the bolt. Remove the pressure plate assembly, felt washer, metal washer, and pressure plate spring from the retaining bolt. Then remove the bolt from the case and replace the rubber seal with a new one. Reassemble the bolt, filter case, pressure plate spring, metal washer, felt washer, pressure plate assembly and the spring steel clip in the reverse order of removal. Be sure the spring steel clip is seated in the groove in the retaining bolt, to prevent the pressure plate assembly and spring from falling out when changing elements.

10. Bolt the filter to the side of the engine with the two hex. hd. bolts.

11. Drain and refill the crankcase oil pan with new oil.

12. Start the engine and check the oil pressure gauge to see whether the lubricating oil is circulating through the engine. Then inspect the oil filter for leaks.

TRANSMISSION OIL LEVEL

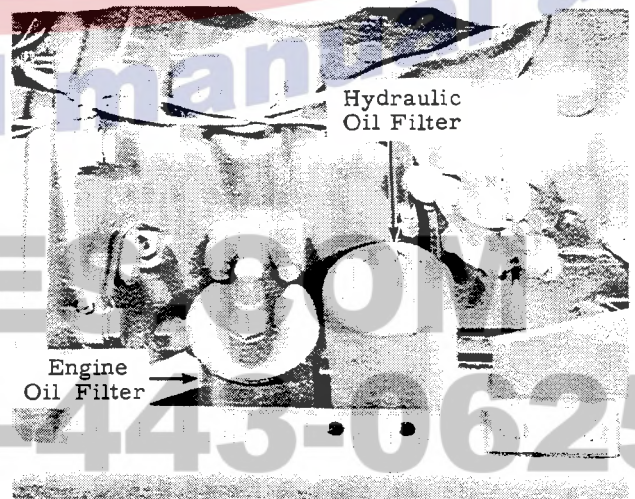
Check the transmission oil level after every 10 hours of operation. The reading should be taken with the engine stopped, all hydraulic cylinders in the retracted position and the dipstick screwed into the transmission and not resting on the housing. When your tractor is equipped with a standard transmission or torque amplifier, the level should be "(NO HYDRAULICS) FULL". When equipped with a power shift reverser and/or hydraulic system the level should be "FULL (HYDRAULICS)".

FINAL DRIVE HOUSING

At least once a year the fluid in the final drive housing should be replaced. This must be done more frequently if operating in water.

Drain the oil from each housing. To clean the housing fill with kerosene or diesel fuel and operate without a load, around a yard for a few minutes. Drain the kerosene or diesel fuel and refill with SAE-90 lubricating oil.

HYDRAULIC OIL FILTER



Illust. 59B

H 1312

The hydraulic oil filter is used to prevent dirt from circulating through the hydraulic system of either the 9, 10, 12 or 17 GPM hydraulic pump attachments. The hydraulic oil filter for the 9