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MANUAL PREVIEW

International Harvester

Service Manual

TD-14, TD-14A, TD-15,
TD-18, TD-18A & TD-20
Crawlers

Volume 1 of 2

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CRAWLER TRACTOR

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TRACK FRAME ALIGNMENT

47. PREPARATION FOR ALIGNMENT CHECK

1. With clean tracks and rollers, set the tractor on a flat area, preferably concrete.
2. Operate the tractor back and forth several times to settle clearances. Place a spirit level across the back of the main frame to check the level from sprocket to sprocket (Illust. 74). Use a jack to level the main frame if necessary.
3. Make all checks and align one track frame at a time. Clamp two wood pieces to the track shoes as shown in Illust. 75. Suspend a plumb bob from each of the wood pieces so that both lines (preferably linen fish line) are equal distances from the main frame machined surface which holds the sprocket drive carrier.



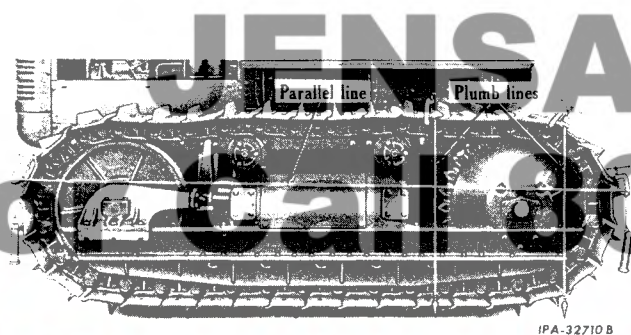
Illust. 74 - Levelling the Main Frame.

parallel line. Measure the distance from the machined surface of the main frame from points as indicated in Illusts. 76 and 77 to the vertical plumb lines. This establishes a true parallel with the main frame and is the basis for measurement to determine toe-in or toe-out.

5. Mark the center line of the sprocket on one of the sprocket teeth at approximately the same height as the parallel line. Mark the center line of the front idler on the rim in the same manner.



Illust. 76 - Checking Parallelism of Horizontal Line and Main Frame.



Illust. 75 - Horizontal and Plumb Lines Set for Establishing Parallel.



Illust. 77 - Checking Parallelism of Horizontal Line and Main Frame.

4. Run a linen fish line parallel to the tractor so that it just touches both plumb lines. Be careful not to move the plumb lines with the

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ENGINE

INTERNATIONAL DIESEL ENGINES[®]

FOR

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AND

14, 18 and 691 Series Power Units

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Air Cleaner: Donaldson, oil bath.
Battery: Auto-Lite (2).
Brakes: Two; operated by individual foot pedals.
Carburetor: Own, 1¼ in. (for starting only).

Clutch: Rockford, single plate, over-center, with automatic clutch brake.

Diesel: Own, injection pump.

Generator: Delco-Remy.

Governor: Own, centrifugal, variable speed.

Ignition: Own, magneto (for starting only).

Lamps: Guide Lamp (special).

Lighting: Delco-Remy (special).

Oil Filter: Purolator, replaceable element.

Radiator: Own, fin and flat tube.

Radiator Cover: Hardy shutter (special).

Spark Plugs: Champion 44 or AC-18, ⅞-18 (for starting only).

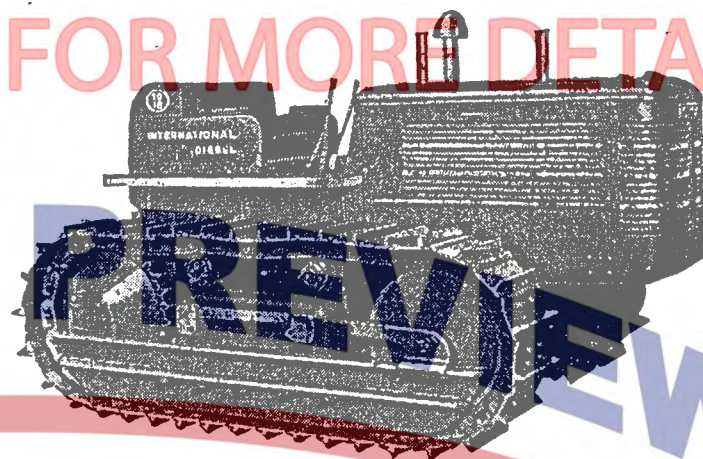
Starting: Delco-Remy.

Data: H.P.—Neb. Test No. 315; Max. Belt 80.32; Max. D.B. 70.66; Max. lbs. pull 18,973 at 1.43 m.p.h. Weight as tested (with operator) 23,360 lbs. Number of plows recommended.....

Engine: Own; 4¼x6½, 1,200 r.p.m., 6 cylinders, cast en bloc, vertical, valve-in-head; piston displacement 691.1 cu. in.; removable sleeves, yes.

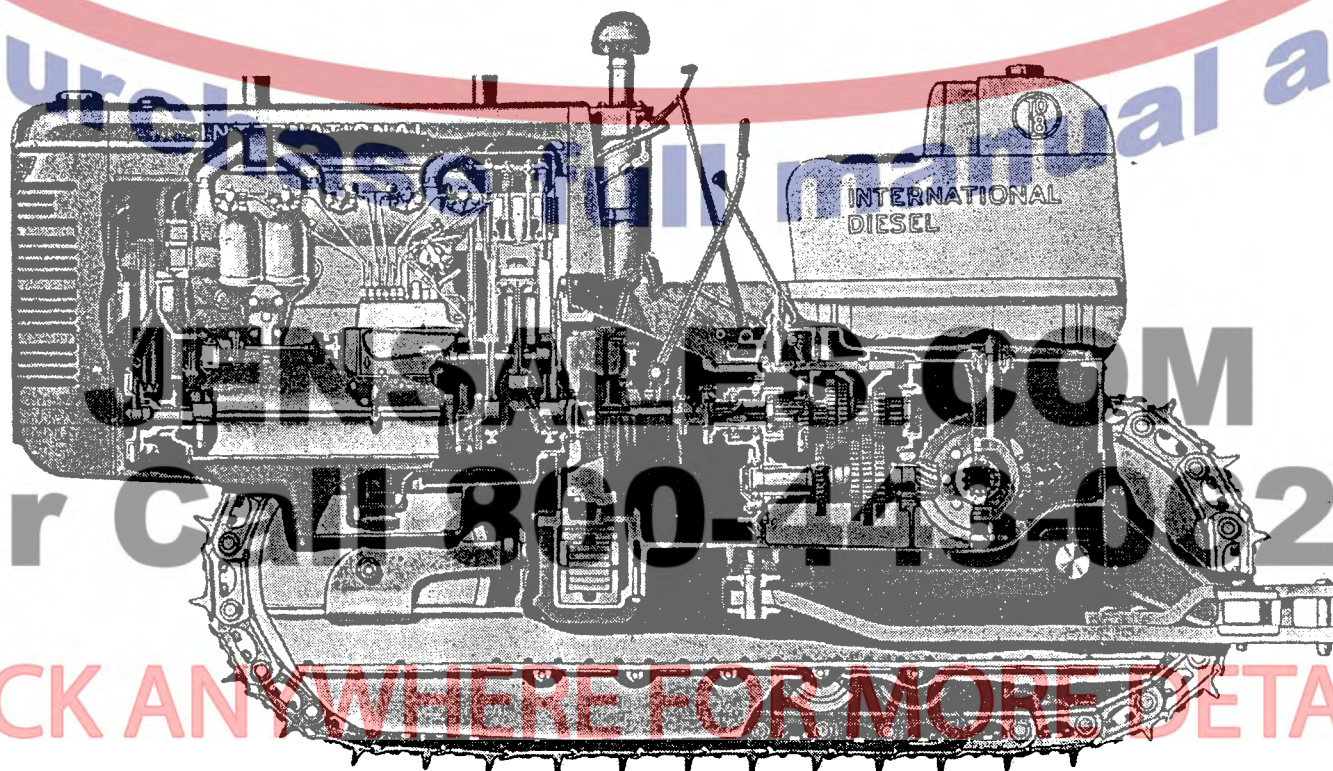
Pulley: 13¼x12½, 750 r.p.m. and 2,601 f.p.m. at normal engine speed (special).

Speeds: M.P.H. forward 1.5, 2.0, 2.5, 3.3, 4.6, 5.7, and 1.5, 3.3 reverse.



INTERNATIONAL TD-18 DIESEL CRAWLER

International Harvester Co., Chicago, Ill.



International "TD-18" Crawler Tractor

INTERNATIONAL DIESEL ENGINES
14, 18, AND 20 SERIES TRACTORS
AND 14, 18 AND 691 SERIES POWER UNITS

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FUEL TRANSFER PUMP

Viking Transfer Pump (Illust. 4)

1. Reassemble the rotor shaft (19) to the housing (18). The cover (22), together with idler gear (20) and gasket (21), can then be installed.
2. Insert the seal assembly (17), followed by bearing (16) and packing nut (15). Turn down the packing nut with a spanner wrench until it is tight.

IH Transfer Pump (Illust. 1)

1. Press the oil seal into the pump body. Be careful not to damage the seal.
2. Install the idler gear on the shaft mounted in the pump body.
3. Install the drive gear and shaft into the pump body.
4. Install a new "O" ring in the groove in the pump body, then secure the cover to the pump body with cap screws.

6. INSTALLATION

Tuthill and Viking Pumps

The installation procedure is the same for the Tuthill and the Viking pumps.

1. Attach the transfer pump support bracket (3, Illust. 4) to the pump body (4).
2. Slide pump pulley (2) onto the rotor shaft; then turn in the set screw and tighten the jam nut.
3. Attach the pump support bracket, complete with the pump and pulley, to the top side of the front engine support (Illust. 7).
4. Connect the fuel pipe from the transfer pump strainer to the lower fitting of the transfer pump, and connect the remaining fuel pipe to the upper fitting of the transfer pump. (Illusts 6 and 7.)
5. Install the belt over the pulley on the end of the crankshaft; then, with the pump pushed as far toward the engine as possible, slip the belt over the pump pulley.
6. Pull back on the pump until the belt can be depressed three-quarters to one inch midway between the pulleys by thumb pressure. To

adjust tension, loosen mounting screws holding pump bracket to engine support. (Illusts. 6 and 7.) Push in to decrease tension; pull out to increase tension.

7. Tighten the cap screws which secure the pump support bracket to the front engine support.

IH Transfer Pump

1. Install pump and new gasket. Engage the slot of the transfer pump drive housing drive shaft with the pump drive shaft.

2. Secure the pump to the front gear cover with cap screws and install fuel lines.



Illust. 5 - I.H. Fuel Transfer Pump and Strainer (Late UD-18A).

TRANSFER PUMP STRAINER

7. REMOVAL (See Illust. 6 and 7)

1. Shut off flow of fuel at the filter.
2. Remove the fuel inlet pipe from the strainer and remove the cap screws securing the bracket to the engine support. Remove the strainer and bracket.

8. DISASSEMBLY

1. Unscrew the strainer plug and gasket.
2. Disconnect the screen by unscrewing the integral nut from the plug. Lift the screen from the strainer.