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International Harvester Service Manual

340

Service Manual

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Steering and Front
Axle Assembly

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International 300
Tractor

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Steering wheel nut	30 to 40 ft. lbs.
Axle extension clamping bolts (Absolute Max.)	75 to 100 ft. lbs.
Axle extension through bolt (Absolute Max.)	80 to 100 ft. lbs.
Axle pivot pin bracket bolts	120 to 135 ft. lbs.
Springs, Active Plunger	
Free length	.703 inch
Length under 13 ± 2 pounds load	.638 inch
Hydraulic cylinder bore, I.D.	3.249 to 3.251 inches
Lubrication, Steering Gear	
Type lubricant	Special, undiluted 365 798 R1
Capacity, manual gear	20 ounces (1-1/4 pints)
Capacity, hydraulic gear	35 ounces (1-1/8 quarts)



Illustr. 1. The International 300 tractor is available with either mechanical or hydraulic power steering.

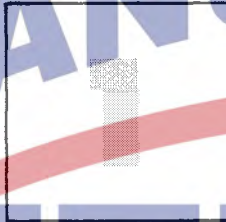
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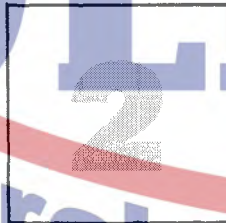
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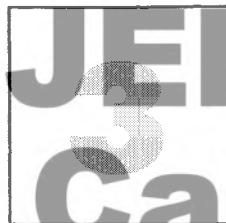
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ENGINE



GASOLINE FUEL SYSTEM®



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GENERAL DATA

Number of cylinders	4
Type of cylinder sleeves	Replaceable Dry
Bore and stroke - inches	3-11/16 x 3-7/8"®
Displacement - cubic inches	166"
Engine speed - rpm	
Full load	2000
High idle	2180 ± 40
Low idle	625 to 675
Compression ratio	19.2:1
Compression pressure at 100 R.P.M. (cranking speed) with Motorite tester	250 to 300 psi
Firing order	1-3-4-2

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b. Using a new gasket and sealer, install the retainer on the crankcase. Screw five hexhead cap screws with lockwashers through the retainer and into the crankcase finger-tight.

Note: Do not tighten the cap screws with the wrench until the seal is seated as this will allow the retainer to position itself with the seal.



Illust. 19. Checking thrust bearing end clearance.

c. Inspect seal installing tool FES 6-3 for nicks which could cut or damage the oil seal. Check closely at the large end of the tool. Polish out any nicks or burrs. Oil the installing tool and the oil seal. Place the seal over the installing tool (Part number up) as shown in Illust. 20.

d. Oil the seal bore in the retainer and the crankshaft rear flange. Place the installing tool over the crankshaft flange and push forward so that the seal is in contact with the retainer.



Illust. 20. Placing crankshaft rear oil seal on the installing tool FES 6-3.

e. Push the seal forward by hand to insure that the sealing lip on the O.D. of the seal has entered the chamfer on the retainer around the entire circumference of the seal. Place oil seal driver FES 6-2 over the seal installing tool. Hold tool square with rear surface of retainer and tap seal in place as shown in Illust. 21. The seal driver should position the seal properly in its bore.

Remove installing tool from the crankshaft flange.



Illust. 21. Installing crankshaft rear oil seal.

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Service and Adjustment**

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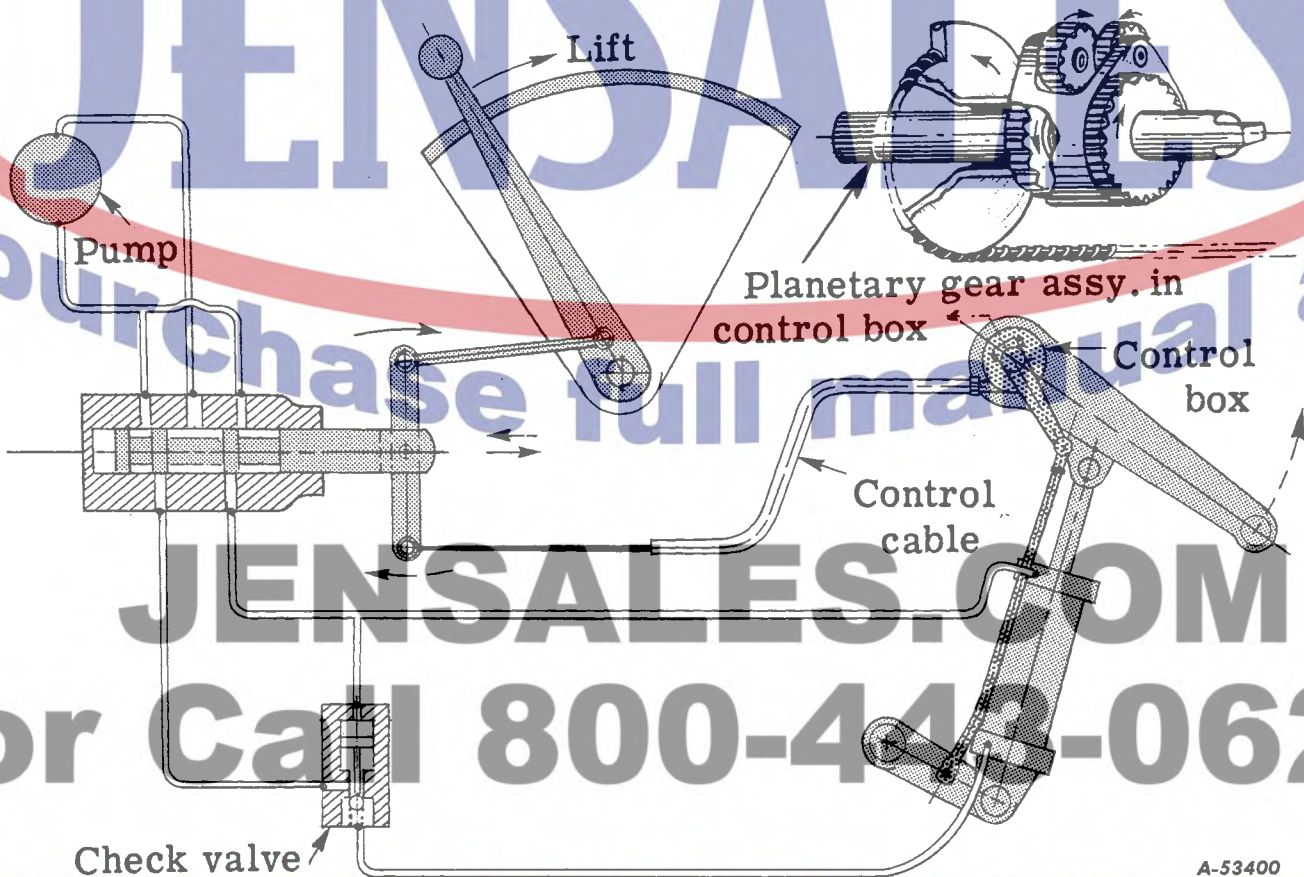
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CHICAGO 1, ILLINOIS

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A-53400

Illustr. 1. Schematic diagram showing the principal parts and their functional connection in a Tel-A-Depth system.



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Form GSS-1051

Brake Service

Super M-TA Tractor

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TRACTORS

TORQUE AMPLIFIER,
Super M-TA and Super W6-TA Series

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SPECIFICATIONS

Type	IH planetary gear reduction unit
Type of Planetary system	Compound planet gears
Gear Ratio	1.482 to 1
Control	Manual
Bearings:	
Front sun gear	Needle (2) (Torrington)
Rear sun gear	Needle (Torrington) at <u>front</u> , and Ball at <u>rear</u>
Planet gears	Needle
Clutch release	Ball, thrust
Planet carrier	Ball (2)
Clutch, TA Drive:	
Size	7 in.
Type	Spring-loaded, single plate, dry disc
Clutch, TA unit overrunning:	
Type	Ramp and roller
Number of rollers	8

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CASE *III*

FOREWORD

The instructions and special tools shown in this Blue Ribbon Service Manual are for use by International Harvester Dealers and their factory trained servicemen.

The specifications as listed in this manual are current as of the printing date. Due to changes and improvements in our products, dealers are periodically issued service bulletins to keep this manual up-to-date. We suggest you refer to the most recent information when performing service work on this equipment.

International Harvester Factory Trained servicemen are best qualified to service I.H. equipment.

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INTRODUCTION

The information in this manual applies to both the Farmall and International tractors unless otherwise specified.

The following chart has been prepared to show the variation of service parts, parts that may be used and parts that should be used on the different models of tractors covered in this manual whenever transmission and/or final drive service is performed.

The chart should be used when performing regular maintenance or overhaul.

IMPORTANT: The disassembly and reassembly procedure will vary, depending on the type of parts used.

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340 and 460 Tractors

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CASE *III*

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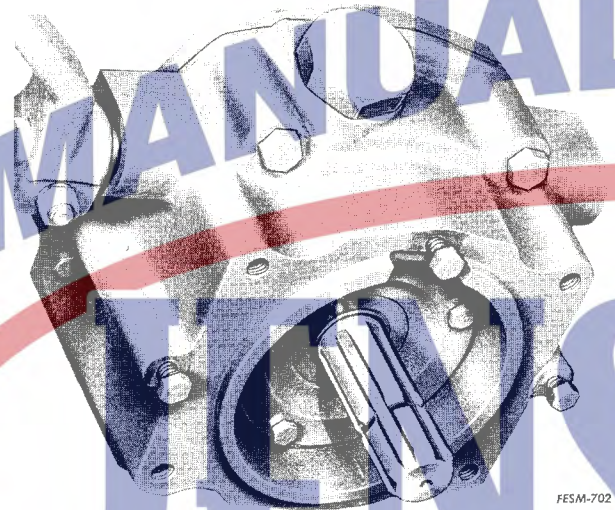
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5. (a) Install the housing assembly as outlined in steps 20 and 21 of reassembly on page 12.

(b) Install the unit. (Refer to "INSTALLATION.")

Units with External Adjustment



Illust. 19. Rear unit housing cover.

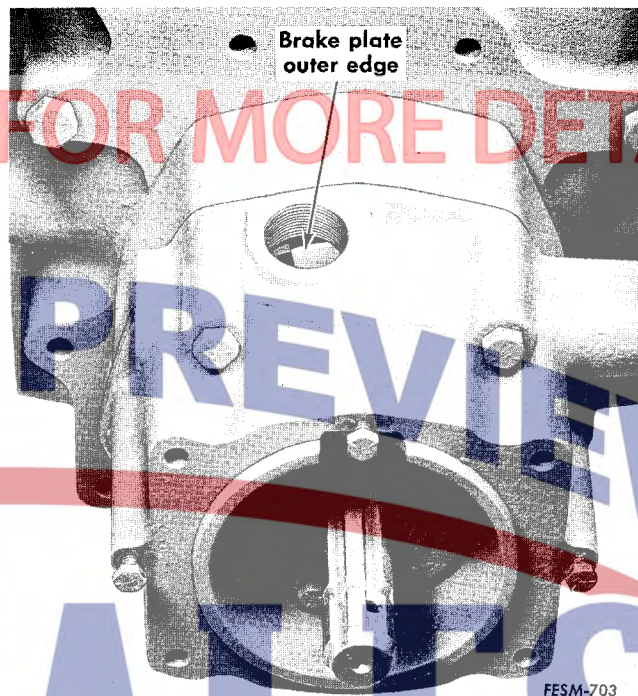
The independent power take-off clutch is externally adjusted without requiring removal of the unit from the tractor. Be sure the engine is not operating, and place the independent power take-off handle in the neutral (middle) position.

1. Remove the plug from the adjustment hole. See Illust. 19.

2. Rotate the output shaft by hand and note that the rotation of the outer edge of the brake plate (Illust. 20) is visible through the adjustment hole. Continue turning the output shaft until the flat portion of the brake plate outer edge is in line with the adjustment hole. See Illust. 21. The lock pin is now properly aligned with the adjustment hole so that it can be disengaged with the adjusting tool. See Illust. 23.

3. Insert the adjusting tool (Illust. 22) through the adjusting hole, over the flat portion of the brake plate and into the slot of the adjusting spider, thus engaging the spring loaded lock pin. See Illust. 24.

Note: Hold the forward end of the adjusting tool down as much as possible as it



Illust. 20. Outside edge of the brake plate.



Illust. 21. Flat portion of the outer edge of brake plate in line with adjustment hole.

is inserted over the brake plate so the tool will be in contact with the lock pin. See Illust. 24.

4. Push the adjusting tool forward to disengage the lock pin from the adjusting spider. See Illust. 24. While holding the