FOREWORD

Appropriate service methods and correct repair procedures are essential for the safe, reliable operation of all equipment, as well as the personal safety of the individual performing the repair.

This Repair Manual provides troubleshooting, overhaul, and pressure-testing instructions using recommended procedures and equipment. Following these instructions will ensure the safe, efficient, and timely completion of the service or repair.

There are numerous variations in procedures, techniques, tools, and parts for servicing machines, as well as in the skill of the individual doing the work. This manual cannot possibly anticipate all such variations and provide advice or cautions as to each. Accordingly, anyone who departs from the instructions provided in this manual must first establish that their personal safety, the safety of others, and the integrity of the machine will not be compromised by the choice of methods, tools or parts.

The manual is divided into sections which are subdivided into chapters: Each chapter contains information on general operating principles, detailed inspection, overhaul and, where applicable, specific troubleshooting, special tools, and specifications.

Any reference in this manual to right, left, rear, front, top, or bottom is as viewed from the operator's seat, looking toward the engine.

All data and illustrations in this manual are subject to variations in build specification. This information was correct at the time of issue, but New Holland policy is one of continuous improvement, and, the right to change specifications, equipment, or design at any time, without notice, is reserved.

ABOUT IMPROVEMENTS

New Holland is continually striving to improve its products. We must, therefore, reserve the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PART AND ACCESSORIES

Genuine NEW HOLLAND parts and accessories have been specifically designed for NEW HOLLAND MACHINES.

We would like to point out that "NON GENUINE parts and accessories have not been examined and released by NEW HOLLAND. The installation and or use of such products could have a negative effect upon the design characteristics of your machine and thereby affect its safety. NEW HOLLAND is not liable for any damage caused by the use of "NON GENUINE" NEW HOLLAND parts and accessories.

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FUEL SYSTEM SPECIFICATIONS

Fuel Injection Pump

- Manufacturer . . . . . Bosch
- Model VE6/12F1100R584-1
- Model Number 0 460 426 303
- Type . . . . . Distributor type, integral speed governor and advance device
- Pump Rotation . . . . . Clockwise
- Pump Timing . . . . . 1.5° or 3° BTDC, refer to valve cover label
- Distribution Order 1-5-3-6-2-4

Fuel Injectors

- Type . . . . . Bosch Multi-Hole
- Injector Pressure Setting (Initial) . . . . . 278 bar (4031 psi)
- Injector Reset Pressure . . . . . Less than 270 bar (3915 psi)
- Injector Service Interval . . . . . 1800 hours

Lift Pump

- Supply Pressure . . . . . 34.5 kPa (5 psi)

Fuel Capacity . . . . . 208 liters (55 gal.)

Cold Start Aid

- Type . . . . . Electric Grid Heater
- Location . . . . . Intake Manifold Air Inlet

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INTRODUCTION

This section is organized as follows, including a table of contents and an index:

- *Specifications,* contains all the specifications necessary to repair and restore the splitter box and the hydrostatic drive to service.
- *Special Tools,* lists any special tools required and provides the tool part number, if the tool can be ordered from OTC (Owatonna Tool Company), or a dimensioned drawing, if the tool can be locally manufactured.
- *Introduction,* briefly describes the information contained in each section and a brief overview of the splitter box and hydrostatic drive. This part also contains safety procedures to be followed while servicing the splitter box and hydrostatic system.
- *Description* of Operation, describes how the splitter box, the hydrostatic drive, and related components operate.
- *Troubleshooting and Testing*, contains a troubleshooting chart and general guidelines to quickly identify and correct problems with the splitter box or the hydrostatic drive.
- *Disassembly and Repair*, contains the procedures to remove, repair, and replace major splitter box and hydrostatic drive components.

A Repair Time Schedule at the end of this section provides the time it should take to remove, disassemble, re-assemble, and install individual components.

SPLITTER BOX

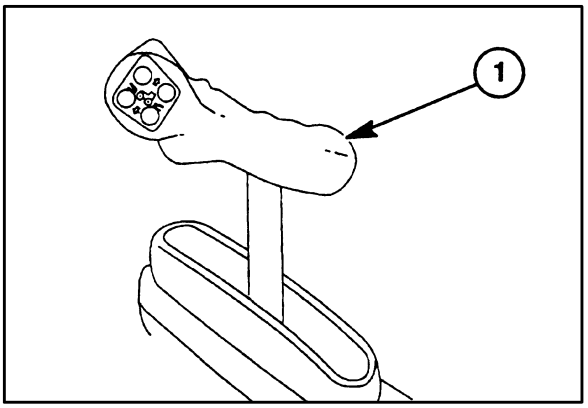
The splitter box is used to transmit power from the engine to the hydrostatic system, hydraulic system, and PTO drive system.

HYDROSTATIC DRIVE

The hydrostatic drive consists of a variable displacement hydrostatic pump, variable bent axis hydrostatic motor, range shift switch (1 through 8), FNR control lever and linkage, oil cooler, oil filter, and piping required to turn the engine-end and cab-end axles.

FNR Control Lever

The Forward-Neutral-Reverse lever (1) FNR lever, is located in the cab and allows the operator to control the direction and speed of the tractor.

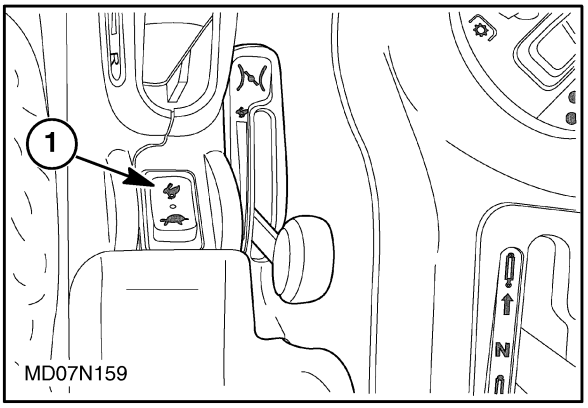


1

Hydrostatic Drive Range Switch

The hydrostatic drive has eight speed ranges. Using the range switch (1) the operator may select the desired range.

Use first and second range for high torque-low speed operations, third through six ranges for intermediate speeds and ranges seven and eight for road travel or high speed operations that require low torque.



2

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SPECIFICATIONS

AXLE SHAFT PRELOAD

Axle shaft rolling torque using a torque wrench: . . . . . 11.2 - 22.6 N·m (8.3 - 16.7 ft.-lbs.)

AXLE SHAFT SPACER SELECTION TABLE

Part Number	Spacer Thickness
C5NN4374AB	1.24 mm (0.049″)
C5NN4374L	1.35 mm (0.053″)
81803503	1.45 mm (0.057″)
C5NN4374N	1.55 mm (0.061″)
C5NN4374R	1.65 mm (0.065″)
C5NN4374S	1.75 mm (0.069″)
C5NN4374T	1.85 mm (0.073″)
C5NN4374U	1.95 mm (0.077″)
C5NN4374V	2.06 mm (0.081″)
C5NN4374Y	2.16 mm (0.085″)
C5NN4374Z	2.26 mm (0.089″)

DIFFERENTIAL BEARING PRELOAD

Differential bearing rolling torque using a spring pull gauge: 7 - 34 kg (15 - 75 lbs.)

DIFFERENTIAL BEARING SHIM TABLE

Part Number	Shim Thickness
81803515	0.991 mm (0.039″)
C5NN4548B	1.143 mm (0.045″)
81803517	1.295 mm (0.051″)
C5NN4548D	1.448 mm (0.057″)
C5NN4548E	1.600 mm (0.063″)
C5NN4548F	1.753 mm (0.069″)
C5NN4548G	1.905 mm (0.075″)
C5NN4548H	2.057 mm (0.081″)

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SPECIFICATIONS

CAB-END AXLE

Planetary Gears . . . . . 3 per side
Pitch Diam., Spiral Bevel . . . . . 333.5 mm (13.13 in)
Axle Shaft Diameter . . . . . 68.58 mm (2.7″)
Differential Lock . . . . . Electrohydraulic
Axle Oil Specification . . . . . AMBRA Multi G 134
Axle Oil Reservoir Capacity
Gals, U.S. 10.5
Litres 39.7
Brake Fluid . . . . . Mineral-Based

BRAKE COMPONENT TIGHTENING TORQUES

COMPONENTS	N·m	ft. lbs.
Master Cylinder Retaining Bolts	23	17
Hand Brake Adjuster Nut	27	20
Hand Brake Retaining Bolts	45	33

AXLE TIGHTENING TORQUES

Components	N·m	ft. lbs.
Axle Shaft Housing Retaining Bolts	176 - 258	130 - 190
Axle Shaft Retaining Bolt	339 - 542	250 - 400
Differential Ring Gear Retaining Nuts	115	85
Differential Case Retaining Bolts	92 - 125	68 - 92
Differential Lock Fork Pivot Shaft Retaining Bolts	57 - 76	42 - 56
Differential Lock Hanger Retaining Bolts	57 - 76	42 - 56
Inner Brake Housing Retaining Bolts	88 - 121	65 - 89
Drive Pinion Bearing Retaining Bolts	136 - 170	100 - 125
Ring Gear Thrust Block	37 - 50	27 - 37
Wheel Nuts (Disc to Hub) Manual Adjust Wheels	390	288

AXLE TO FRAME TIGHTENING TORQUES

Components	N·m	ft. lbs.
Frame cross member to splitter box (M16)	294	217
Frame to axle inboard front (M20)	671	495
Frame to axle inboard rear (M24)	839	619
Frame to axle outboard (M16)	240	177

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SPECIFICATIONS

CAB-END PTO

Operating Pressures

NOTE: *The pressure regulating valve is located on the top of the hydrostatic pump. The lubrication circuit relief valve is located in the implement pump filter housing.*

Pressure Regulating Valve (@ 2100 rpm)	17 - 19 bar (250 - 280 psi)
Lubrication Circuit Relief Valve	1.7 - 6.8 bar (25 - 100 psi)

End Float

Drive Gear End Float	0.13 mm (0.005 inch)
Available Shim Sizes	0.02 mm (0.001 inch) 0.08 mm (0.003 inch) 0.13 mm (0.005 inch) 0.30 mm (0.012 inch) 0.51 mm (0.020 inch)
PTO Drive Shaft End Float	0.46 - 10.20 mm (0.018 - 0.400 inch)
Available Shim Size	0.25 mm (0.010 inch)

Torque Specifications

PTO Drive Shaft Bearing Retainer Bolts	57 N·m (42 ft.-lbs.)
PTO Output Shaft Bearing Retainer	210 N·m (155 ft.-lbs.)
Solenoid Valve	16 - 22 N·m (12 - 16 ft.-lbs.)
PTO Valve Location Adjuster	
Front Pin	27 - 35 N·m (20 - 26 ft.-lbs.)
Rear Pin (back off 1/4 turn)	1 N·m (9 in.-lbs.)
Rear Pin Locknut	21 - 27 N·m (15 - 20 ft.-lbs.)
Brake Band Adjuster (Back off 2.5 turns)	1 - 1.2 N·m (9 - 11 ft.-lbs.)
Clutch Support Bolts	19 - 23 N·m (14 - 17 ft.-lbs.)
Top Cover Bolts	44 N·m (32 ft.-lbs.)

Thread Sealer

Use Loctite Gasket Eliminator 518, part ZPX51850 (50 ml tube), or equivalent to seal threads and flanges.

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SPECIFICATIONS

BRAKES

Axle Oil . . . . . Ambra Multi G 134D

Axle Oil Quantity
Gals, U.S. 13.5
Liters 51.2

Brake Oil . . . . . Mineral-Based (Ambra LHM)

AXLE TIGHTENING TORQUES

Components	N·m	ft.-lbs.
Axle Shaft Housing Retaining Bolts	216	160
Inner Brake Housing Retaining Bolts	105	78
Wheel Nuts (Disc to Hub) Manual Adjust Wheels	390	288

AXLE TO FRAME TIGHTENING TORQUES

COMPONENTS	N·m	ft.-lbs.
Frame cross member to splitter box (M16)	294	217
Frame to axle inboard front (M20)	671	495
Frame to axle inboard rear (M24)	839	619
Frame to axle outboard (M16)	240	177

BRAKE COMPONENT TIGHTENING TORQUES

COMPONENTS	N·m	ft.-lbs.
Master Cylinder Retaining Bolts	23	17
Hand Brake Adjuster Nut	27	20

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SPECIFICATIONS

Implement Pump Assembly

Pump Type . . . . . Variable displacement-pressure and flow compensating

System Type . . . . . Closed-Centre Load-Sensing (CCLS)

Shaft Type . . . . . Splined

Rotation (From Shaft End) . . . . . Clockwise

Max Speed . . . . . 3000 rpm

Max Over speed . . . . . 3200 rpm

Minimum Speed . . . . . 700 rpm

Max Temperature (at inlet)
- Continuous . . . . . 90° C (194° F)
- Intermittent . . . . . 110° C (230° F)

Min Temperature (at inlet)
- Normal . . . . . 0° C (32° F)
- Cold Start . . . . . -40° C (-40° F)

Displacement . . . . . 114 L/min (30 US.GPM)

Rated Speed . . . . . 3000 rpm

Max Pressure (Dead Head) . . . . . 200–214 bar (2900–3100 PSI)

Low Pressure Standby Pressure . . . . . 23–26 bar (333–377 PSI)

Charge Pump
- Flow . . . . . 106–121 L/min (28–32 US.GPM)
- Rated Pressure . . . . . 250 bar (3625 PSI)
- Rated Speed . . . . . 3000 rpm

Pressure Compensator Setting (HPSB) . . . . . 200-214 bar (2900-3100 PSI) at zero flow

Flow Compensator Setting (LPSB) . . . . . 23–26 bar (333–377 PSI) at zero flow

Filter (Charge Pump Discharge)
- Type (NH P/N 86989735) . . . . . Return-Spin On
- Filtration . . . . . 15 Micron absolute
- Filter Bypass Relief Valve . . . . . 3.4 bar (50 PSI)
- Charge Pressure Bypass Valve . . . . . 1.7 bar (25 PSI)

Filter (Charge Pump Suction)
- Type (NH P/N 87552298) . . . . . Spin On
- Filtration . . . . . 11 Micron

Oil Reservoir Capacity . . . . . 51.1 L (13.5 US.gal)

Oil Type 134D

Implement Valve Assembly (3 or 5 valve sections)
- Type . . . . . Closed-Centre Load-Sensing
- Flow Control Range
  - Blue (Detent) Valve Section . . . . . 11.4-114.6 L/min (3-30 US.GPM)
  - Tan (Float) and Green (Standard) Valve Sections . . . . . 30.3-114.6 L/min (8-30 US.GPM)
  - Engine End Grey and Black Valve Sections (Optional) . . . . . 11.4-114.6 L/min (3-30 US.GPM)
- Detent Kick Out Pressure . . . . . 171 ± 68 bar (2500 ± 100 PSI)

Steering Priority Valve Section
- Relief Valve Pressure . . . . . 193 bar (2800 PSI)
- Flow . . . . . 23 L/min (6 US.GPM)

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INTRODUCTION

Read this section completely before adjusting tread width.

The tread width dimensions (width from tire center to center) shown in this section and in the “Specification” section may vary from your actual measurements, depending on specific wheel and tire combination.

⚠ WARNING ⚠

Never operate the tractor with a loose wheel rim, disc, or hub. Always tighten hardware to the specified torque and at the recommended intervals.

⚠ WARNING ⚠

Tractor wheels are very heavy. Handle with care and make sure, when stored, that the wheels cannot fall and cause injury.

⚠ WARNING ⚠

Your tractor is produced with lights that meet lighting regulations when operating or traveling on the public highway. If the wheel track setting is adjusted beyond the initial factory position, you may be required to reposition the lights or fit auxiliary lighting to comply with legal requirements. Additionally, before traveling on the highway, make sure that the overall tractor width does not exceed the maximum permitted in your locality.

All TV6070 tractors are equipped with fixed-width cab end and engine end axles and, therefore, various wheel track settings are achieved through wheel adjustments.

The Model TV6070 tractor is available with 6-position manual adjust wheels.

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MINIMUM HARDWARE TIGHTENING TORQUES

IN FOOT POUNDS (NEWTON-METERS) FOR NORMAL ASSEMBLY APPLICATIONS

INCH HARDWARE AND LOCKNUTS

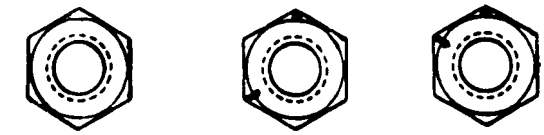
NOMINAL SIZE	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8		LOCKNUTS		NOMINAL SIZE
	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	GR.B w/GR5 BOLT	GR.C w/GR8 BOLT	
1/4	55* (6.2)	72* (8.1)	86* (9.7)	112* (13)	121* (14)	157* (18)	61* (6.9)	86* (9.8)	1/4
5/16	115* (13)	149* (17)	178* (20)	229* (26)	250* (28)	324* (37)	125* (14)	176* (20)	5/16
3/8	17 (23)	22 (30)	26 (35)	34 (46)	37 (50)	48 (65)	19 (26)	26 (35)	3/8
7/16	27 (37)	35 (47)	42 (57)	54 (73)	59 (80)	77 (104)	30 (41)	42 (57)	7/16
1/2	42 (57)	54 (73)	64 (87)	83 (113)	91 (123)	117 (159)	45 (61)	64 (88)	1/2
9/16	60 (81)	77 (104)	92 (125)	120 (163)	130 (176)	169 (229)	65 (88)	92 (125)	9/16
5/8	83 (112)	107 (145)	128 (174)	165 (224)	180 (244)	233 (316)	90 (122)	127 (172)	5/8
3/4	146 (198)	189 (256)	226 (306)	293 (397)	319 (432)	413 (560)	160 (217)	226 (306)	3/4
7/8	142 (193)	183 (248)	365 (495)	473 (641)	515 (698)	667 (904)	258 (350)	364 (494)	7/8
1	213 (289)	275 (373)	547 (742)	708 (960)	773 (1048)	1000 (1356)	386 (523)	545 (739)	1

NOTE: Torque values shown with * are inch pounds.

IDENTIFICATION
CAP SCREWS AND CARRIAGE BOLTS



SAE GRADE 2 SAE GRADE 5 SAE GRADE 8



REGULAR NUTS SAE GRADE 5 HEX NUTS SAE GRADE 8 HEX NUTS

LOCKNUTS



GRADE IDENTIFICATION
GRADE A NO NOTCHES
GRADE B ONE CIRCUMFERENTIAL NOTCH
GRADE C TWO CIRCUMFERENTIAL NOTCHES



GRADE IDENTIFICATION
GRADE A NO MARKS
GRADE B THREE MARKS
GRADE C SIX MARKS
MARKS NEED NOT BE LOCATED AT CORNERS



GRADE A NO MARK
GRADE B LETTER B
GRADE C LETTER C
GRADE IDENTIFICATION

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SPECIFICATIONS

Compressor

Type . . . . . Sanden U4033 Axial Piston

Refrigerant

System capacity . . . . . 1.6 Kg (3.5 lbs) R134a

Refrigerant Oil

System capacity . . . . . 207 ml (7 fl oz) SP–15 PAG Oil (Polyalkylene glycol)

SPECIAL TOOLS

FNH00855	Electronic Leak Detector
OEM1598	R134a Recovery/Recycling & Recharging Station
OEM1533	R134a Portable recovery Station
FHN02343A–3*	Seal Seat Remover
FHN02343A–4*	Pulley Bearing Installer
FHN02343A–5*	Pulley Bearing Installer Adapter
FHN02343A–6*	Universal Pulling Arbor
FHN02343A–7*	Universal Pulling Body
FHN02343A–8*	Clutch Holder
FHN02343A–9*	Armature Puller Assembly
FHN02343A–10*	External Retaining Ring Pliers
FHN02343A–12*	Seal Remover and Installer
FHN02343A–13*	Seal Protector
FHN02343A–14*	Clutch Face Plate Installer
FHN02343A–15*	Air Gap Feeler Gauges: 0.016 and 0.032 in.
FHN02343A–19*	Oil Level Checker
FHN02343A–20*	Oil Level Angle Gauge
FHN02343A–22*	Internal Retaining Ring Pliers
FHN02343A–25*	Pulley and Clutch removal Jaws and Thumbscrews
FHN2RT95*	Protector, Shaft/Jaw Separator
BSL750	UV Leak Detection Lamp and Goggles
BSL734	UV Dye Injector for R134a Recycling Station
B726012	UV Leak Detection Dye for R134a (case qty with labels)
B795016	UV Fluorescent Dye Cleaner
BSL634	Quick and Easy Dye and Charge for R134a (6–pack)

* The compressor tool kit #FNH02343B includes these tools.

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Audible/Visual Alarms 205
Critical Alarms 205,206
Non-Critical Alarms 209
EIC Additional Features 218
3-Point Hitch Controller 219
3-Point Hitch (HPL) Controller 220
Electronic Instrument Control System (EICS) 221
Harness-To-Harness Connectors 222
Wire Connections Directly To Components 234
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INTRODUCTION

There are numerous dealer installed accessories (DIA) and kits available to add to the TV6070 tractor. This section describes the uses and location of the different accessories and kits available for the TV6070. Listed below are several guidelines to follow when installing accessories and kit onto the TV6070.

- ALWAYS follow instruction manuals included with New Holland kits to ensure proper operation and maximum functionality.
- NEVER install a non-approved New Holland accessory or kit onto the TV6070.
- ALWAYS connect electrical kits and accessories to their proper connections as described in the instruction manual.
- ALWAYS make sure the parking brake is engaged and the key is removed from ignition when working on the TV6070.

This manual divides the kits into sections according to what the kit is for, such as hydraulic, electrical, frame, etc.

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SPECIFICATIONS

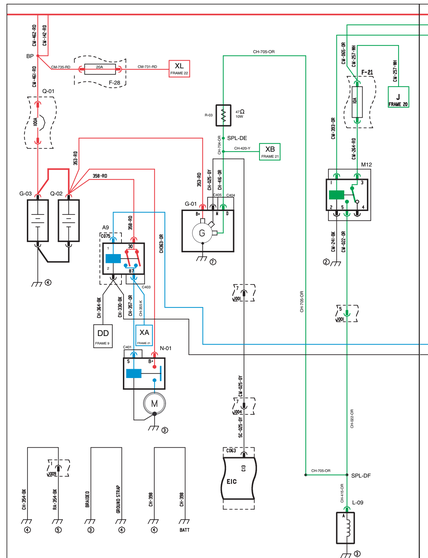
Cab Construction	Roll Over Protective Structure (ROPS)
Window Glass	
Type	Safety Glass (Tinted)
Area	5.7 sq. m (61 sq. ft.)
Mounting	Four Rubber Isolation Mounts
Cab Weight (includes internal components)	816 kg (1800 lbs)
Features	Rubber floor mats, dome lights, cigar lighter and ashtray, pocket for manuals, two adjustable convex rear-view mirrors mounted inside cab.
Seat	
Weight	64 kg (140 lbs)
Fore/Aft Isolation	51 mm (2″)
Fore/Aft Travel	178 mm (7″)
Swivel Ranges	Cab Forward or 15° left or right Engine End or 15° left or right

TORQUE SPECIFICATIONS

Cab Mounting Bolts	560 N·m (414 ft. lbs.)
Left Arm Rest Cap Screws	27 N·m (20 ft. lbs.)
Seat Adjustment Rail Isolator to Suspension Cap Screw/Nuts	27 N·m (20 ft. lbs.)
Seat Base to Mounting Plate Bolts	30 N·m (22 ft. lbs.)
Seat Belt Mounting Bolt (Male End)	40.7 N·m (30 ft. lbs.)
Seat Belt Mounting Bolt (Female End)	40.7 N·m (30 ft. lbs.)

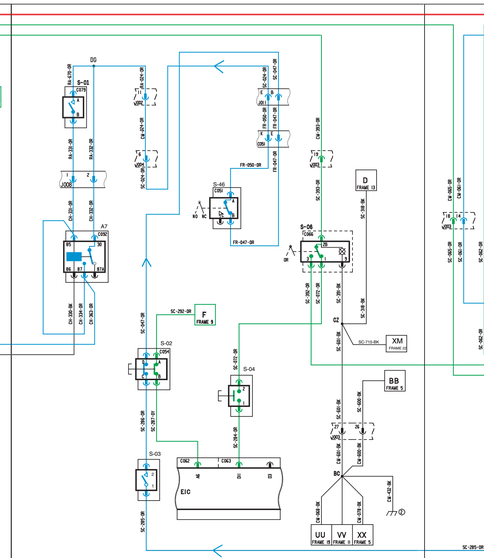
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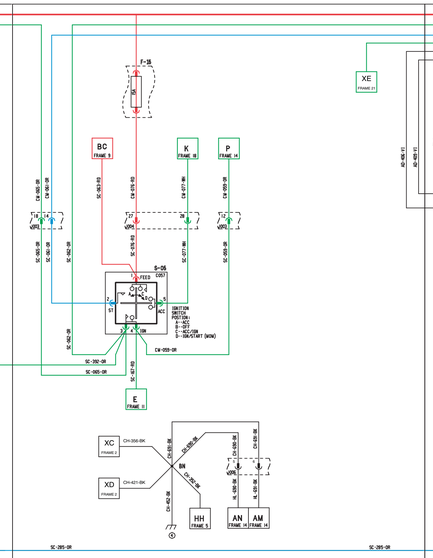
FRAME-1
STARTING CHARGING

F-20 = SHUTDOWN
G-01 = ALTERNATOR
G-02 = BATTERY
G-03 = BATTERY
M12 = SHUTDOWN RELAY
A9 = STARTER RELAY
L-09 = FUEL SOLENOID
R-01 = STARTER
R-08 = FUEL PUMP
D-01 = MAIN CIRCUIT BREAKER
R-03 = ALTERNATOR EXCITATION RESISTOR
F-28 = PAN REV. RELAY



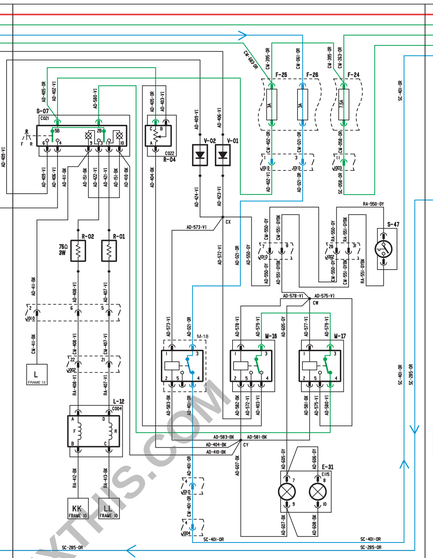
FRAME-2
SHUTDOWN OVERIDE

A7 = NEUTRAL LATCHING RELAY
S-01 = HYDROSTATIC NEUTRAL SWITCH
S-02 = PARK BRAKE SWITCH
S-03 = NEUTRAL SEAT LOCK SWITCH
S-04 = SHUTDOWN LOCK SWITCH
S-06 = SHUTDOWN OVERRIDE SWITCH
S-46 = FWR LOCK LIMIT SWITCH



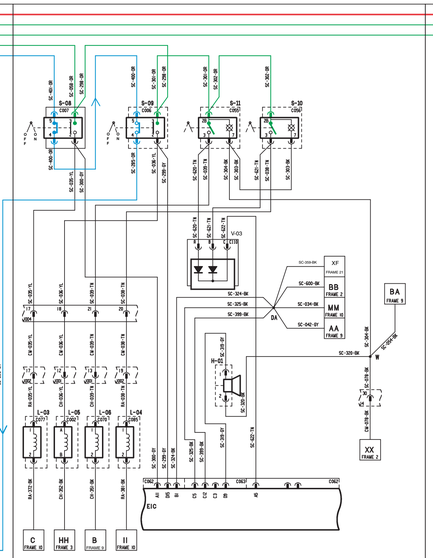
FRAME-3
COLDSTART IGNITION

F-18 = IGNITION SWITCH
L-13 = COLD START VALVE
L-14 = COLD START ENRICHMENT SOLENOID
S-05 = IGNITION SWITCH



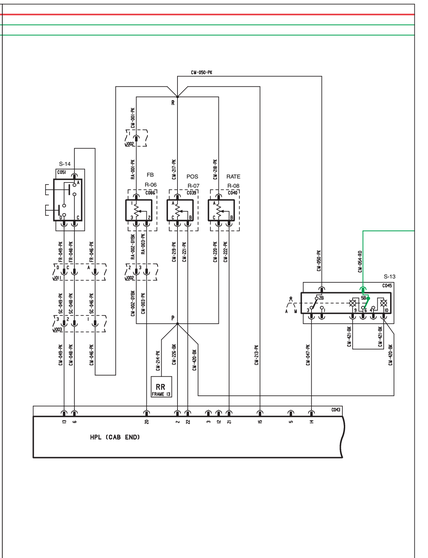
FRAME-4
AUXILIARY DRIVE

F-25 = NEUTRAL START
F-25 = AUXILIARY DRIVE
F-24 = PTO / DIFF LOCK
E-31 = AUX DRIVE OVER HEAT INDICATOR
L-12 = AUXILIARY DRIVE PUMP
R-04 = CURRENT LIMITING RESISTOR
R-02 = CURRENT LIMITING RESISTOR
R-04 = AUX DRIVE POTENTIOMETER
S-07 = AUXILIARY DRIVE SWITCH
S-47 = OVERTEMP SWITCH
V-02 = CURRENT FEEDBACK DIODE
V-02 = CURRENT FEEDBACK DIODE
M16 = AUX DRIVE/NEUTRAL START
M17 = OVER TEMP HOLD
M16 = OVER TEMP LATCH



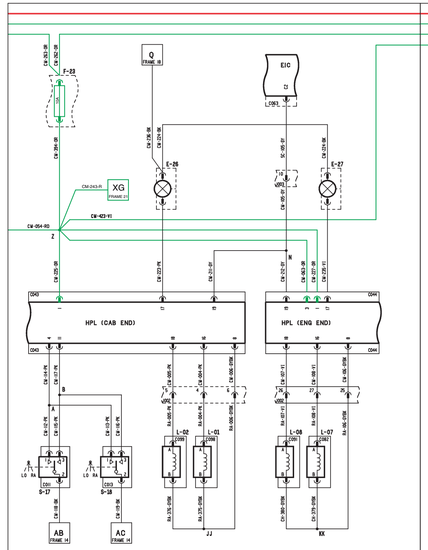
FRAME-5
PTO DIFF LOCK

H-01 = AUDIBLE ALARM
L-03 = CE PTO SOLENOID
L-04 = CE DIFF LOCK SOLENOID
L-05 = CE PTO SOLENOID
L-06 = CE DIFF LOCK SOLENOID
S-08 = CE PTO SWITCH
S-09 = CE PTO SWITCH
S-10 = CE DIFF LOCK SWITCH
S-11 = CE DIFF LOCK SWITCH
S-12 = COLD START SWITCH
V-03 = DIFF LOCK SIGNAL DIODES



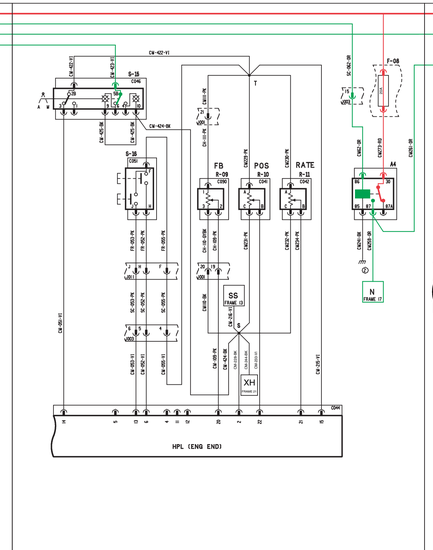
FRAME-6
CE HPL

R-06 = CE HPL FEEDBACK POTENTIOMETER
R-07 = CE HPL POSITION POTENTIOMETER
R-08 = CE HPL LOWER RATE POTENTIOMETER
S-13 = CE AUTO / MAN SWITCH
S-14 = CE RAISE / LOWER SWITCH



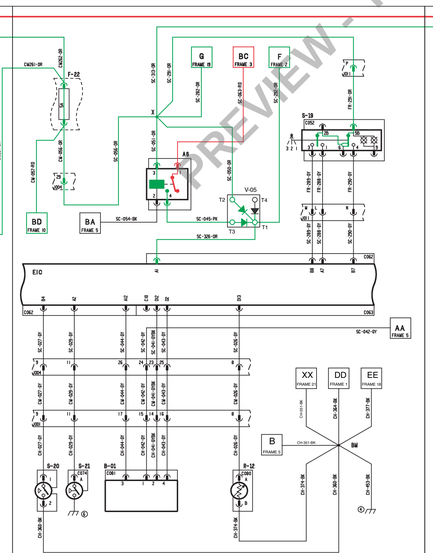
FRAME-7
DE HPL
EE HPL

E-26 = CE AUTO INDICATOR LAMP
E-27 = EE AUTO INDICATOR LAMP
F-23 = HPL MODULES
L-01 = CE HPL RAISE SOLENOID
L-02 = CE HPL LOWER SOLENOID
L-07 = EE HPL RAISE SOLENOID
L-08 = EE HPL LOWER SOLENOID
S-17 = CE LH FENDER SWITCH
S-18 = CE RH FENDER SWITCH



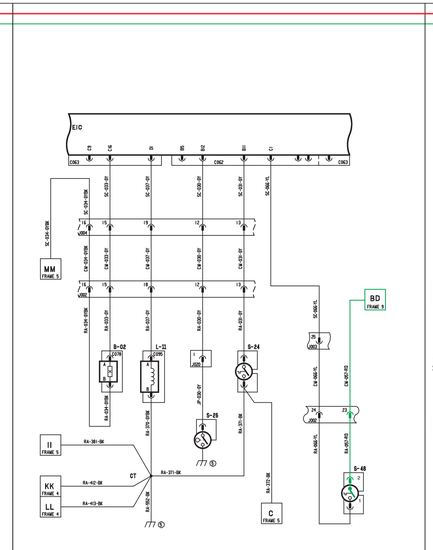
FRAME-8
EE HPL

F-08 = IGNITION POWER
A4 = IGNITION POWER RELAY
R-09 = EE HPL FEEDBACK POTENTIOMETER
R-10 = EE HPL POSITION POTENTIOMETER
R-11 = EE HPL LOWER RATE POTENTIOMETER
S-15 = EE AUTO / MAN SWITCH
S-16 = EE RAISE / LOWER SWITCH



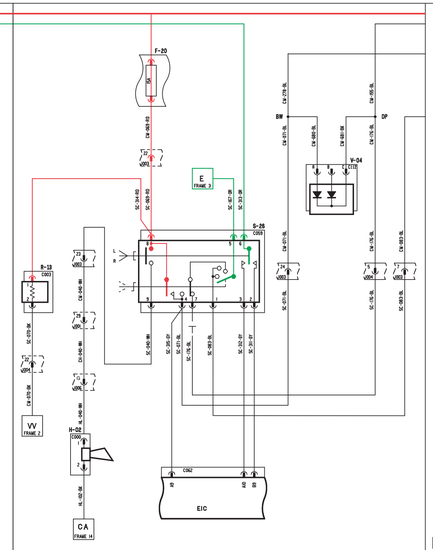
FRAME-9
ENGINE GEAR SELECT

B-01 = RADAR
A4 = 20 SECOND DELAY RELAY
F-22 = MONITOR POWER
R-12 = FUEL LEVEL SENDER
S-19 = GEAR SELECT SWITCH
S-20 = AIR RESTRICTION SWITCHSENSOR
S-21 = ENGINE OIL PRESSURE SWITCH
S-22 = COOLANT TEMPERATURE
V-05 = EIC/PARK BRAKE DUY PWR DIODES



FRAME-10
HYDRAULIC SENSOR I/P

B-02 = MAGNETIC AXLE PICKUP
L-14 = GEAR SELECT SOLENOID
S-24 = HYDRAULIC OIL HIGH TEMPERATURE SWITCH
S-25 = HYDRAULIC OIL FILTER RESTRICTION SWITCH
S-48 = HYD FLUID LEVEL SWITCH



FRAME-11
HORN/LIGHTER TURN SWITCH

F-29 = LIGHTER / HORN
H-02 = HORN
R-13 = CIGARETTE LIGHTER
S-26 = TURN SIGNAL SWITCH
V-04 = HEADLAMPS HI/LOW DIODE
V-05 = CURRENT FEEDBACK DIODE

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NEW HOLLAND TV6070 ELECTRICAL SCHEMATIC

RAC 87472382

LEGEND

INDICATES CONSTANT POWER

INDICATES POWER WHEN KEY SWITCH IS ON

INDICATES POWER WITH KEY SWITCH IN START POSITION

RAC 87472382S1S1

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CE DIFF LOCK

CAB END DIFF LOCK

BYPASS VALVE:
50 PSID 345 kPaD

CAB END PTO

brake

clutch

STG CYLINDERS
BORE: ø63.5mm
ROD: ø38.1mm
STROKE: 355.6mm

L

R

P T LS

DIAG PILOT PRESSURE

CAB END HPL

CAB END HPL
1 OR 2 AUX RAM

CE HPL
ROD: ø104.7mm
STROKE: 177.8mm

ROD: ø45mm
BORE: ø50mm
STROKE: 315MM

LS PP P T

ENGINE END HPL

EE HPL
ROD: ø63.5mm
BORE: ø76.2mm
STROKE: 215.1mm

LS PP P T

ENGINE END DIFF LOCK

EE DIFF LOCK

EE PTO APPLY

EE BRAKE APPLY

ENGINE END PTO

A N B

M3

HYDROSTATIC
PUMP

0.040

3000 rpm
ccw

A

DIAG HYDRO A

6250 psi

350 psi

6250 psi

DIAG HYDRO B

B

S

L1

DIAG HYDRO CASE

L2

P1

PR1

280
psi

300
psi

D2

D1

P2

PRESSURE
REDUCING
VALVE

L2 M4 M3

M1

HYDROSTATIC
MOTOR

A

V_g max

0.8

M5

M2

B

L1

DIAG HYDRO CHARGE

PLS

P

2800 PSI

90 PSI
CONTROL SPRING

(.042)

(.028)

PS

T

(.035)

LS

IMPLEMENT
VALVE

(.032)

(.062)

(.062)

(.062)

(.062)

(.062)

(.032)

P2

Y2

3/4" Couplers

AUXILLIARY DRIVE

0.094 in (1 GPM)

0.188 in
SPLITTER (4 GPM)

0.1285"

2.5 GPM

DIAG IP PRESSURE

IMPLEMENT
PUMP

2.32

2.5

3000-3100 PSI
250-300 PSI
3000 RPM CW

25psi

100 MESH

25psi

BYPASS VALVE:
50 PSID 345 kPaD

CHECK VALVE:
150 PSID 1,034 kPaD

SPIN-ON ASSY

NOTES:
HYDROSTATIC MOTOR ROTATION
CW - ENGINE END FORWARD
CCW - CAB END FORWARD

PUMP SERVO

FLOW OUT PORT A

FLOW OUT PORT B

AUXILLIARY DRIVE HYDRAULICS

4500
PSI

4500
PSI

260 PSI

2.80

2.5

503 kPa

HI-FLOW FILTER
5 MICRON

NEW HOLLAND TV6070
HYDRAULIC SCHEMATIC

RAC 87478091

LEGEND

IMPLEMENT PUMP FLOW

HYDROSTATIC CHARGE PUMP FLOW

IMPLEMENT CHARGE PUMP

HYDROSTATIC CASE DRAIN/LUBE

RETURN TO TANK/PUMP

RAC 87478091

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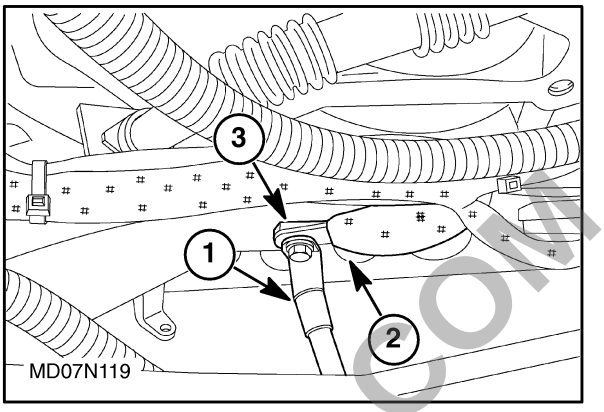
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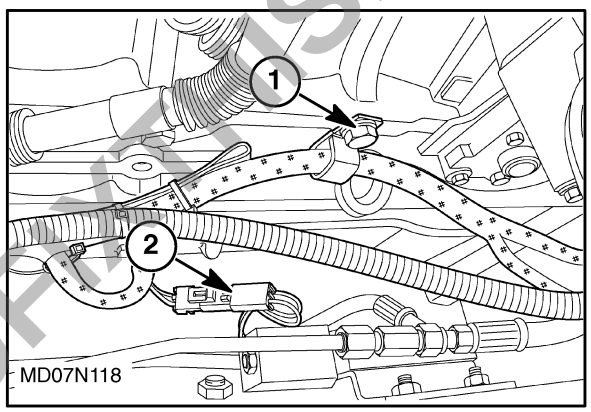
64. Install the battery ground cable (1) and wire harness ground strap (2) to the engine. Tighten the bolt (3).



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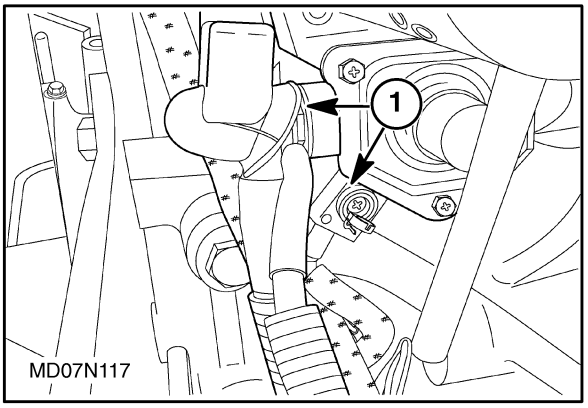
65. Install the wire harness P–clamp (1) to the right side of the engine.

    If equipped install the wire connector (2) to the engine and differential lock solenoid.



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66. Install the starter wires (1) to the starter.



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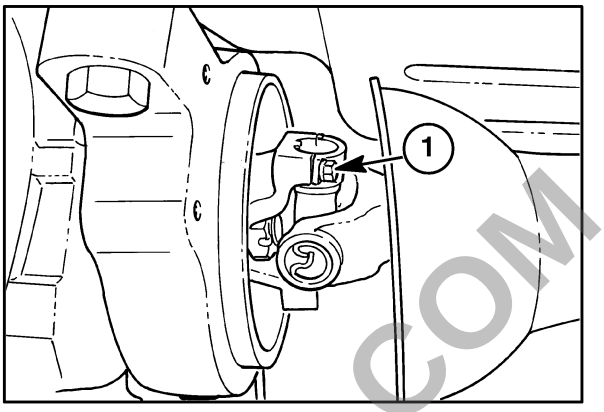
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6. Replace the bearing straps and capscrews, (1), and tighten them to 34 to 48 N·m (25 to 35 ft.-lbs.).

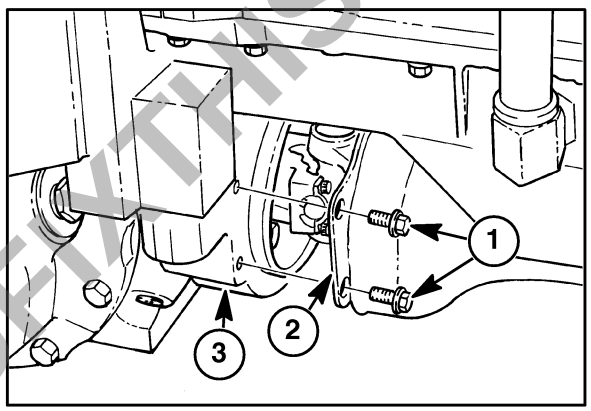
⚠ CAUTION ⚠

The bearing strap capscrews are designed and manufactured for this application. Do not substitute with standard hex head cap screws. Also, the self locking capscrews used with the bearing straps should not be reused more than five times. If in doubt as to how many times the cap screws have been used, or the head of the capscrew is rounded, replace them with new ones.



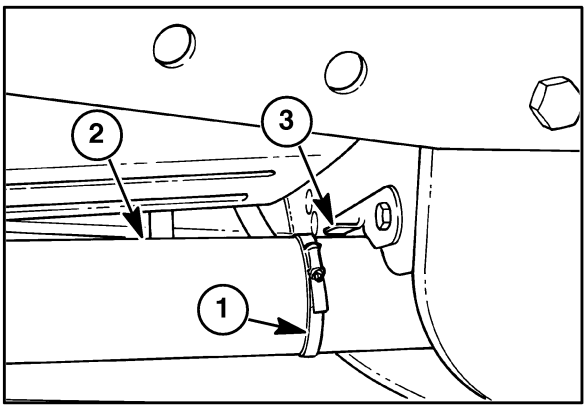
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7. Reattach the drive shaft cover, (2), to the axle housing, (3), with four bolts, (1).



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8. Tighten the hose clamp, (1), after sliding it over the retaining tab, (3).

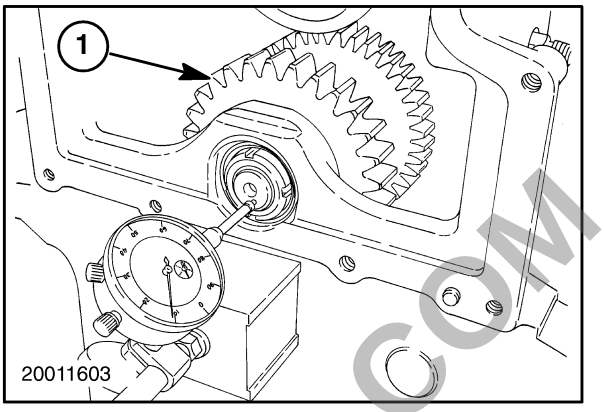


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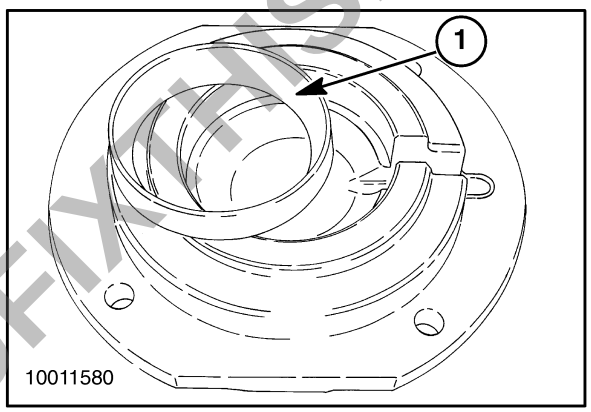
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Drive Gear End Play
Measure the endplay of the drive gear set (1) with a dial indicator as follows.



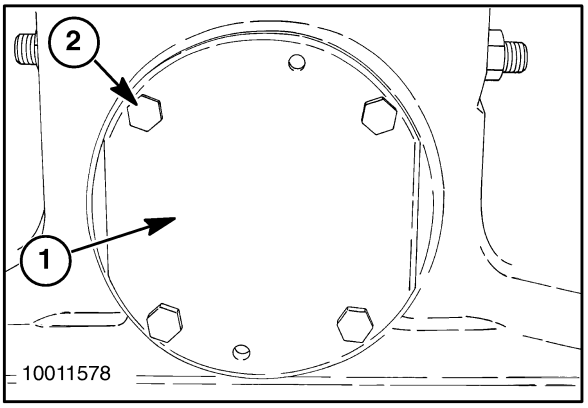
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1. Start the procedure with no shims behind the bearing cup (1) as installed during Gear and Output Shaft Installation.



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2. If not already in place, install the PTO drive gear bearing retainer (1) and tighten the M10 x 25 mm capscrews (2) to 57 N·m (42 ft.-lbs.).

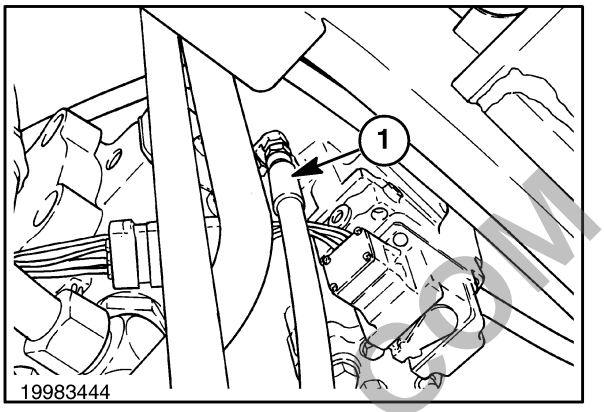


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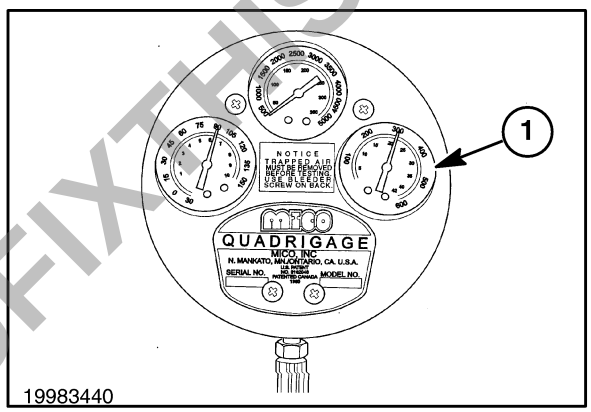
5. Install the OEM1212 quad gauge hose (1) to the end of the elbow and tighten the fitting securely.
6. Start the tractor and set the engine speed at 2200 rpm and allow the hydraulic oil to warm up to 43°C (110° F).



110

7. Observe the pressure reading on the OEM1212 quad gauge (1). Charge pump pressure should be 19 - 23 bar (280 - 330 psi).

   If the charge pump pressure reading is not within the specified range, this indicates a malfunction in the charge pump or the charge pump relief valve. Remove, repair or replace the auxiliary hydraulic pump as detailed in this section.
8. Remove the OEM1212 quad gauge and elbow fitting from the tractor. Install the test port plug and tighten the fitting securely.

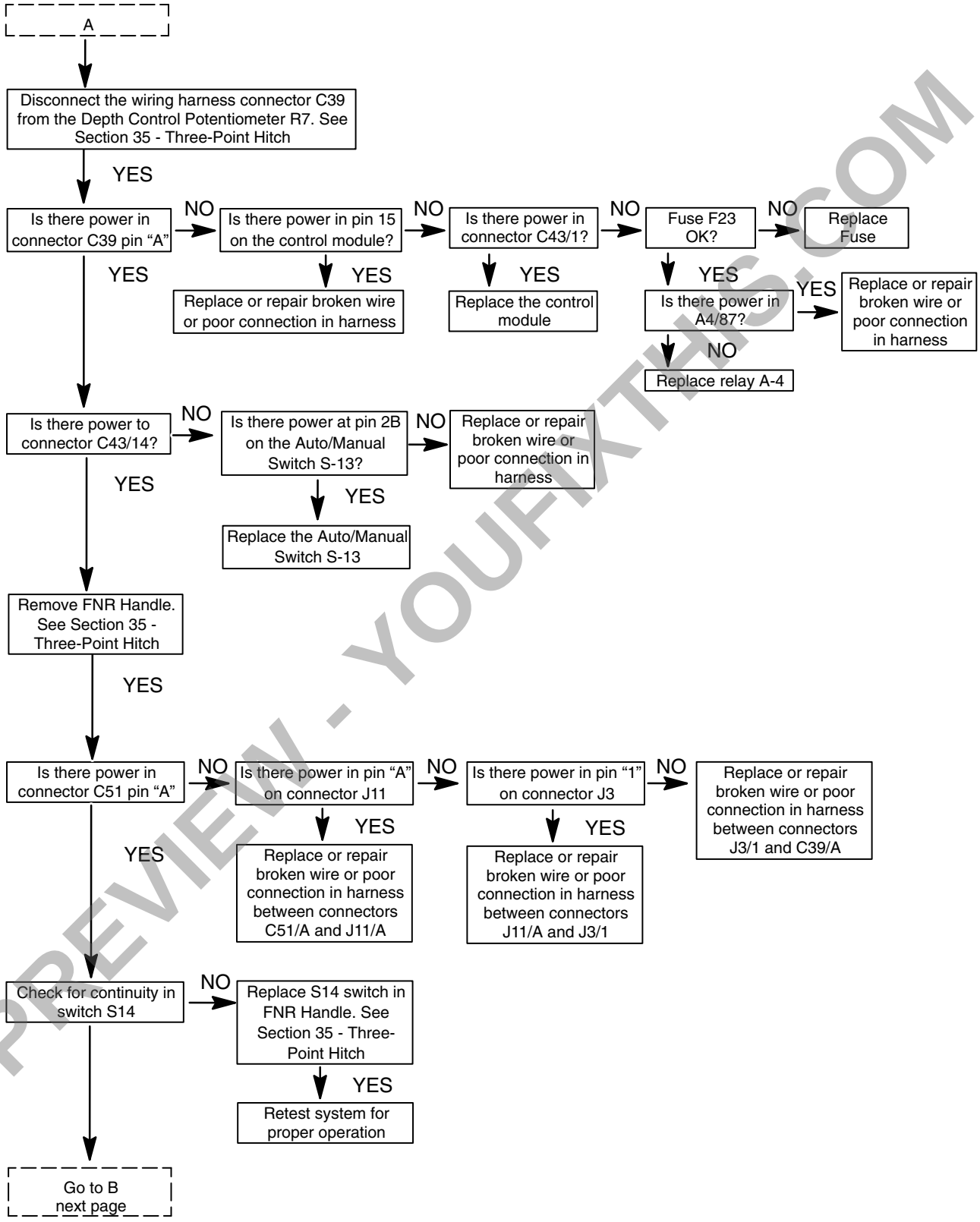


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MANUAL Mode- Hitch will not raise (Sheet 2 of 3)



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SECTION 37 - WHEELS, TIRES, AND BALLASTING

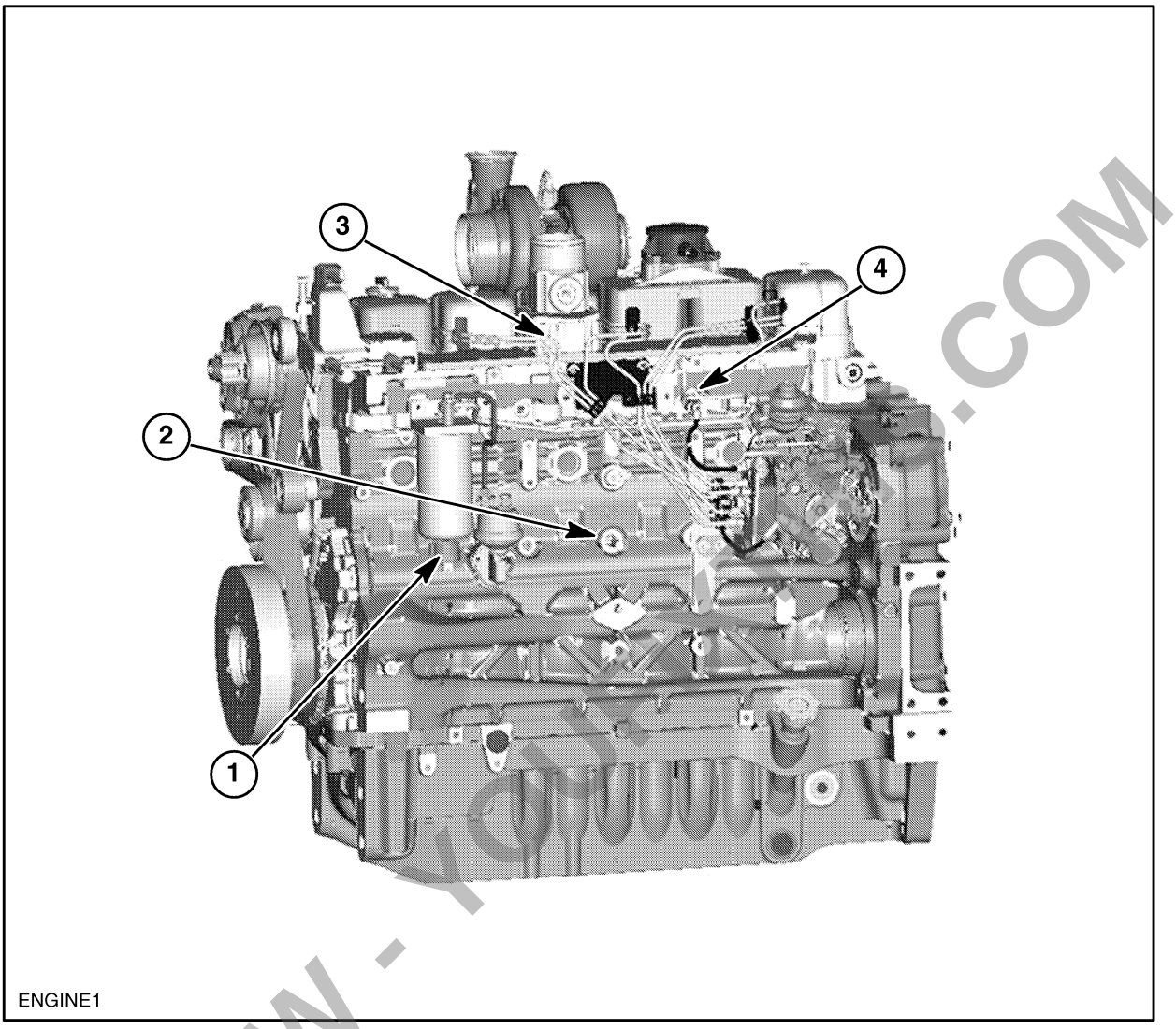
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Engine Components

1. Water in Fuel Switch
2. Oil Pressure Switch
3. Grid Heater
4. Water Temperature Switch

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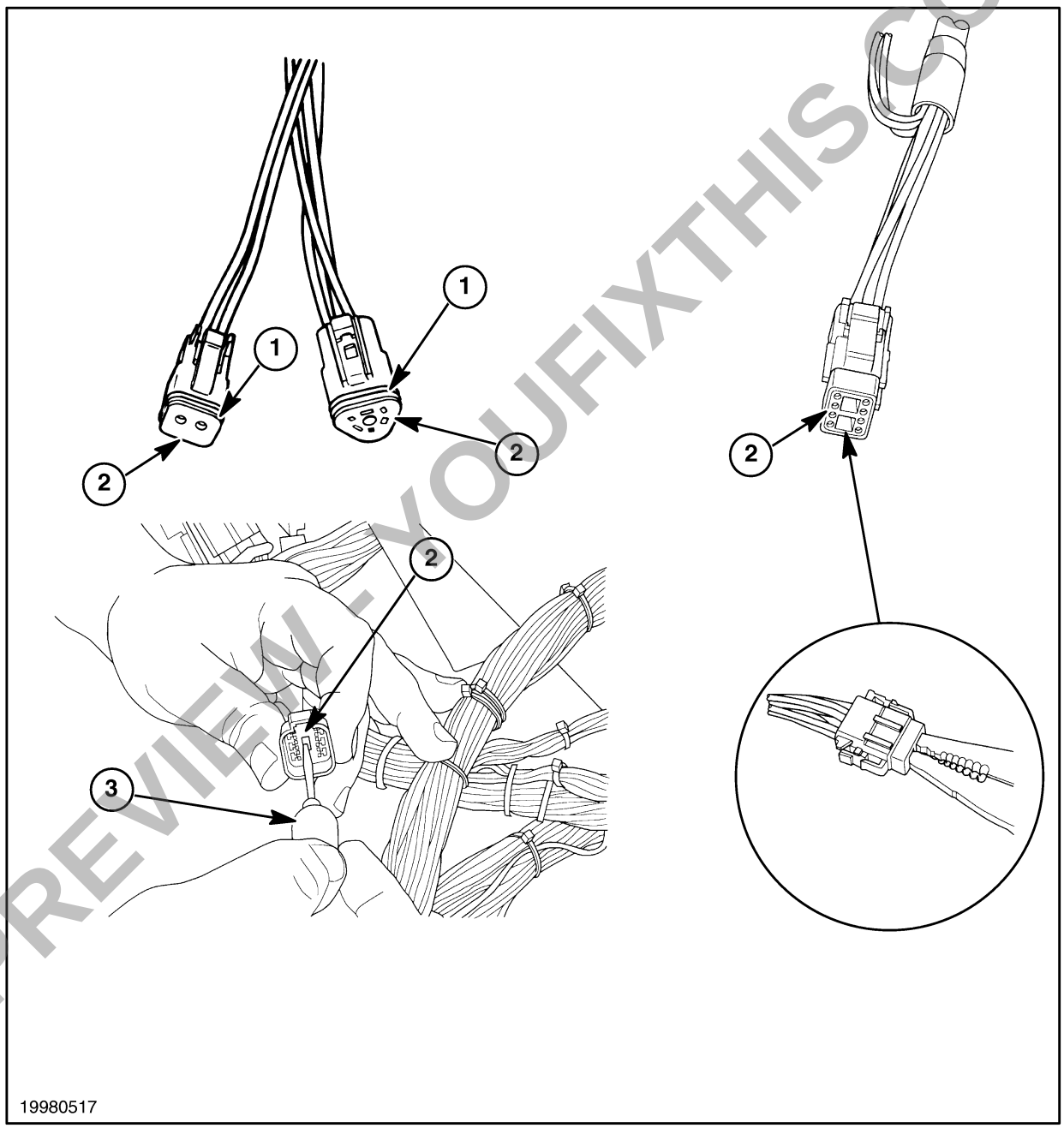
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Style 9 - Deutsch Weather-Tight Plastic Connector

Use these instructions to remove and replace pins and sockets in the following connectors:

Chassis/Rear Axle Harness J8, #2 Cab-End Work Lamp C009, #4 Cab-End Work Lamp C010, LH Cab-End Head Lamp C012, RH Cab-End Head Lamp C014, LH Engine-End Work Lamp C025, RH Engine-End Work Lamp C026, #1 Cab-End Work Lamp C030, #3 Cab-End Work Lamp C033, RH Front Stop/Tail Lamp C067, LH Front Stop/Tail Lamp C069, Aux Drive/Cab Main Harness J10 LH Fender Switch/Stop/Tail/Turn C011, and RH Fender Switch/Stop/Tail/Turn C013.

1. If necessary, remove weather seal, 1.
2. Pry off, or pull out, end cap, 2, with DT remover tool, 3.



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