

NEW HOLLAND

REPAIR MANUAL

T1010
T1030
T1110
Tractors

NEW HOLLAND AGRICULTURE

SERVICE

87739173

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REPAIR MANUAL
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The following pages are the collation of the contents pages from each section and chapter of the T1010, T1030, T1110 Repair manual. Complete Repair part # 87739173.

The sections used through out all New Holland product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in each book.

The sections listed above are the sections utilized for the T1010, T1030, T1110 Tractors.

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SECTION 00 - GENERAL INFORMATION

BOOK 1 - 87739174

Chapter 1 - General Information

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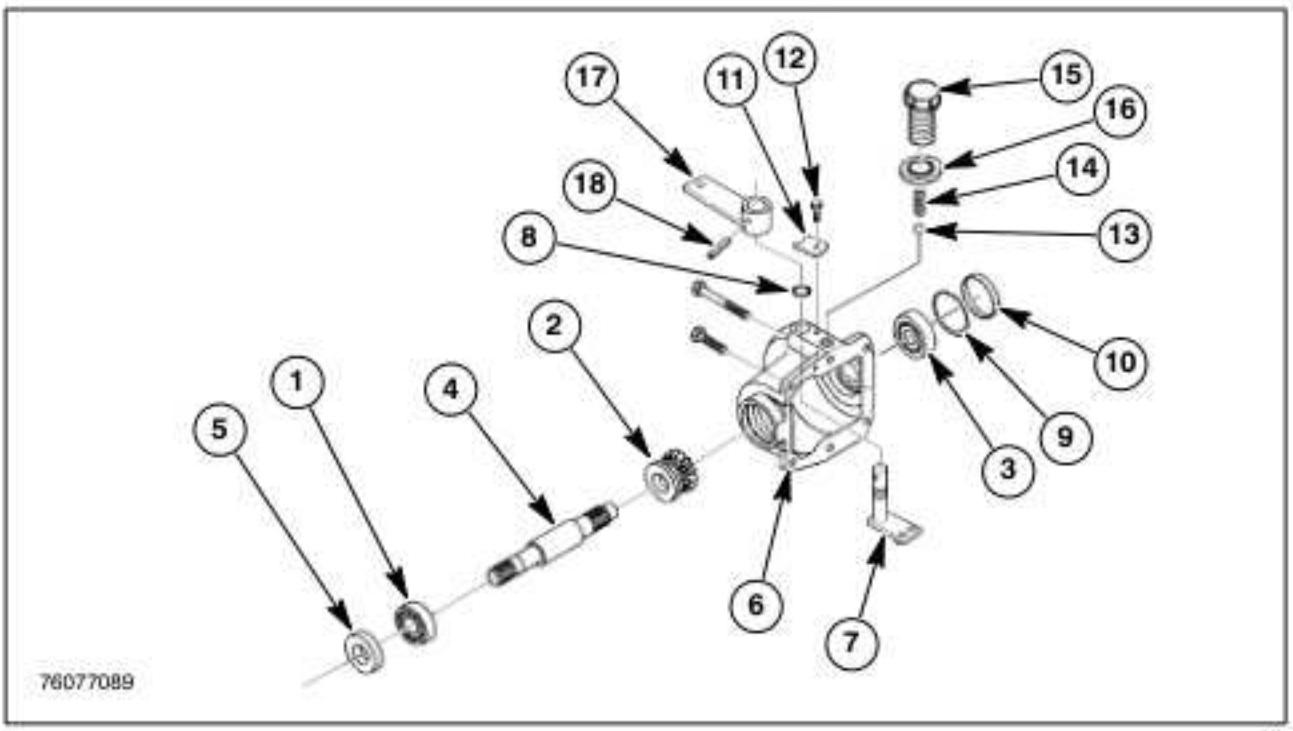
SPECIFICATIONS

	Model T1010 Hydrostatic	Model T1030 Hydrostatic	Model T1110 Hydrostatic
ENGINE			
Type	S753 Diesel	S773L Diesel	S773L Diesel
Engine Gross Horsepower	20.0	26.0	28.0
Cylinders	3	3	3
Bore	75 mm (2.95")	77 mm (3.03")	77 mm (3.03")
Stroke	72 mm (2.83")	81 mm (3.19")	81 mm (3.19")
Displacement	0.954 L (58.2 cu. in.)	1.13 L (69.0 cu. in.)	1.13 L (69.0 cu. in.)
Compression Ratio	23.5:1	22.8:1	22.8:1
Firing Order	1 - 2 - 3	1 - 2 - 3	1 - 2 - 3
Low Idle Speed	1350 ± 50 rpm	1350 ± 50 rpm	1350 ± 50 rpm
Maximum Speed			
High Idle	3200 ± 25 rpm	3225 ± 25 rpm	3325 ± 25 rpm
Rated	3000 ± 50 rpm	3000 ± 50 rpm	3000 ± 50 rpm
Valve Clearance (Cold):			
Intake	0.20 mm (0.008")	0.20 mm (0.008")	0.20 mm (0.008")
Exhaust	0.20 mm (0.008")	0.20 mm (0.008")	0.20 mm (0.008")
CAPACITIES			
Fuel Tank	26.0 liters/ 7.1 U.S. gals	26.0 liters/ 7.1 U.S. gals	26.0 liters/ 7.1 U.S. gals
Cooling System	3.5 liters/ 3.7 U.S. qts	3.5 liters/ 3.7 U.S. qts	3.5 liters/ 3.7 U.S. qts
Engine Crankcase			
With Filter	3.3 liters/ 3.5 U.S. qts	3.3 liters/ 3.5 U.S. qts	3.3 liters/ 3.5 U.S. qts
Rear Axle & Transmission	13 liters/ 13.8 U.S. qts	13 liters/ 13.8 U.S. qts	13 liters/ 13.8 U.S. qts
Power Steering	Using Transmission Oil (Common Use)	Using Transmission Oil (Common Use)	Using Transmission Oil (Common Use)
Front Axle Differential/ Final Reduction Gear Case	2.0 liters/ 2.12 U.S. qts	2.0 liters/ 2.12 U.S. qts	2.0 liters/ 2.12 U.S. qts

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Assembly

1. Install the front bearing, 1, sliding gear, 2, and rear bearing, 3, on the drive shaft, 4.
2. Install the oil seal, 5, in the housing, 6.
3. Install the shift arm, 7, into the housing, 6.
4. Install the O ring, 8, on the shift arm, 7.
5. Install the drive shaft assembly into the housing while aligning the shift arm boss and sliding ditch.
6. Install the snap ring, 9, and press the plug, 10, into the rear of the housing, 6.
7. Install the fixing plate, 11, for the shift arm, 7, with the bolt, 12.
8. Install the detent ball, 13, and detent spring, 14, and retaining bolt, 15, with seal washer, 16. Tighten bolt to 40–45 Nm (29.6–33.3 ft-lbs).
9. Place the change lever, 17, on the shift arm, 7, and align the roll pin's hole and scribe mark.
10. Drive the roll pin, 18, in the change lever and shift arm.



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HORN CIRCUIT (ALL TRACTORS)

NOTE: *The tractor horn is operational regardless of the position of the engine start switch.*

1. Current flow for the horn circuit starts at the battery positive (+) terminal and is transferred to the starter battery terminal by the positive (+) battery cable.
2. From the starter, current flows to the 40-amp main slow blow fuse. The slow blow fuse supplies current to the 15-amp fuse in the fuse box.
3. Current flows from the 15-amp fuse to terminal "R" of the combination light/flasher/horn switch. When the horn button is in the ON position (pushed in), current is then transferred from terminal "R" to terminal "G" of the combination switch. Current flows from terminal "G" to the front light connector and then to the horn. The ground circuit, is completed through the main harness to the tractor frame.

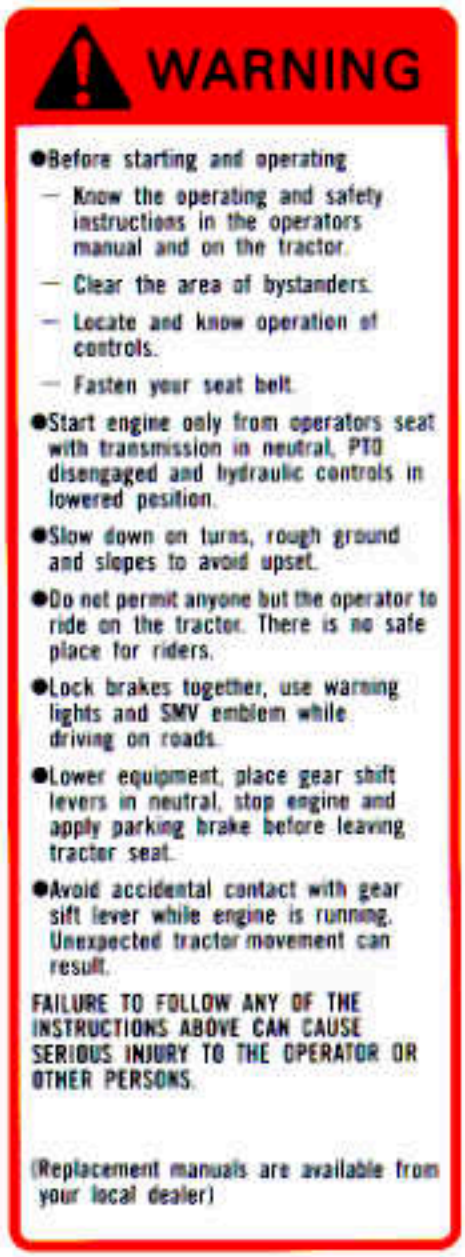
TROUBLESHOOTING HORN CIRCUIT		
CONDITION	**POSSIBLE CAUSE**	**REMEDY**
Horn is not alarmed	Malfunctioning horn switch Improper ground circuit Improper connections at flasher harnesses	Test the switch and replace if necessary Check ground source at bottom of steering column Check connections beneath the hood and/or the harness connectors at horn
	Blown 15-amp fuse	Replace 15-amp fuse

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SAFETY DECALS

The following safety decals have been placed on your machine in the areas indicated. They are intended for your personal safety and for those working with you. Please take this manual and walk around your machine to note the content and location of these warning signs. Review these warning signs and the operating instructions detailed in this manual with your machine operators.

Keep the decals legible. If they are not, obtain replacements from your authorized dealer. The decal replacement part numbers are listed with each decal.



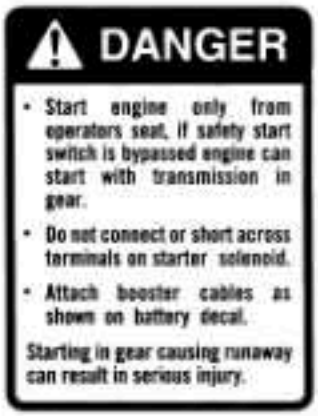
WARNING: Before Starting and Operating
PART NO: SBA390198380
LOCATION: In Front of Operator's Seat
Left Side of Platform



WARNING: Pull Only From Drawbar
PART NO: SBA390198910
LOCATION: Top of PTO Shield

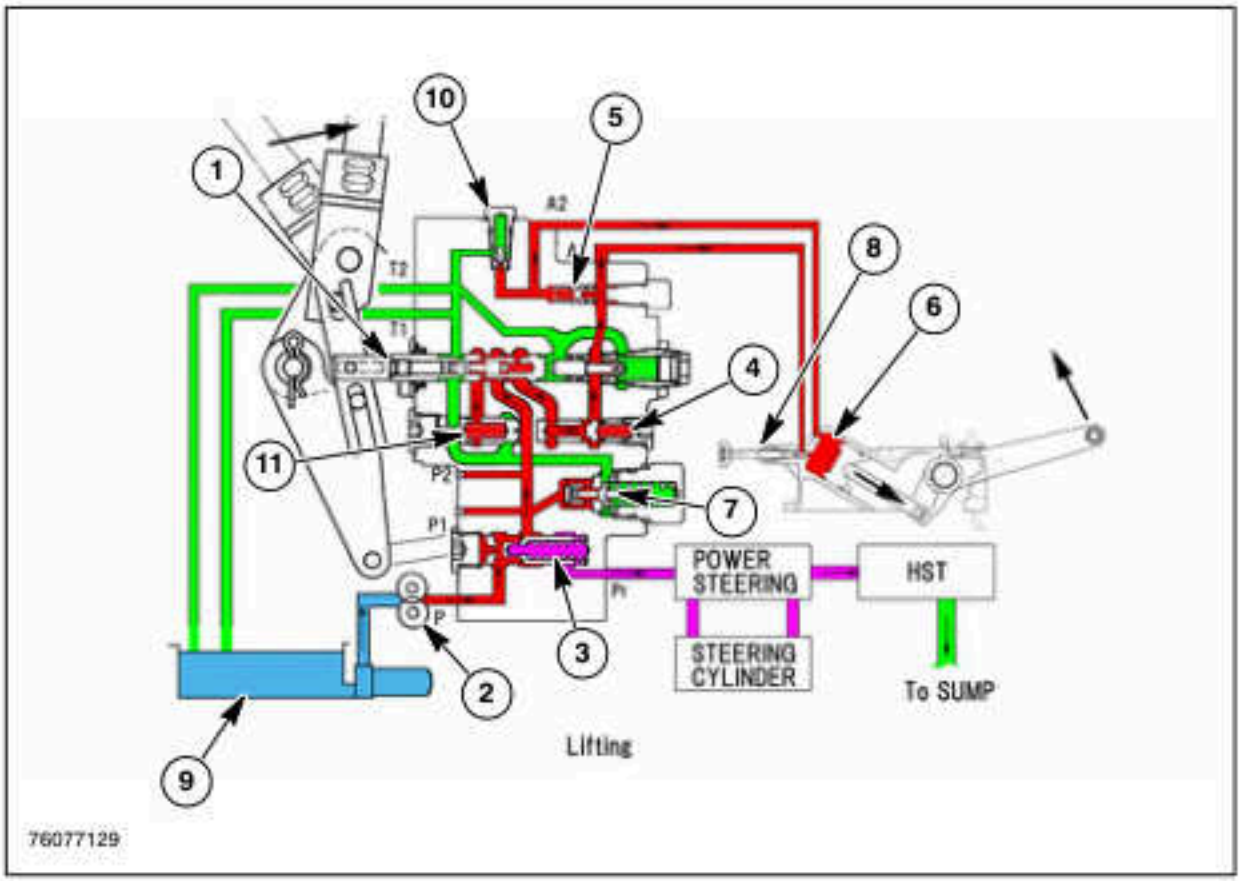


WARNING: Do Not Operate With Shield Removed
PART NO: SBA390198480
LOCATION: Inside of Engine Side Shields



DANGER: Start Engine Only from Operator's Seat
PART NO: SBA190196683
LOCATION: On the Starting Motor

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1. Control Valve Spool
2. Hydraulic Pump
3. Flow Priority Valve
4. Check Valve
5. Lift Check Valve
6. Hydraulic Cylinder
7. Relief Valve
8. Drop Rate Control Valve
9. Sump
10. Safety Valve
11. Unload Valve

Lifting Position

When the control lever is moved to the "raise" position the control valve spool, 1, is moved forward. Pressurized oil from the hydraulic pump, 2, is directed in to the valve body and separated by the flow priority valve, 3. The priority flow of 7 L/min (1.85 gpm) is directed out the "Pr" port to the power steering and HST circuits. Te remaining oil flow is directed to the control valve spool.

Pressurized oil flows to the front of the check valve, 4. When it overcomes the static pressure in the hydraulic cylinder line (via port "A1"), the check valve, 5, opens, allowing oil flow to the hydraulic cylinder, 6, through both ports "A1" and "A2", to lift the implement. To stop the lift arms, the feed back rod is pulled rearward and the spool, 1, slides rearward (neutral position), then the lift arms stop lifting.

If oil pressure in the system exceeds 147 bar (2132 psi), the relief valve, 7, opens and diverts the oil to the reservoir via the second tank line (T2).

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