NEW HOLLAND

LS 140
LS 150

Workshop
Manual

NEW HOLLAND

PROVEN PERFORMANCE

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SECTION 00 – GENERAL INFORMATION

CONTENTS

Section	Description	Page
	Introduction	00-2
	About Improvements	00-2
	Company Policy	00-3
	Parts and Accessories	00-3
	Model Codes	00-3
	Precautionary Statements	00-4
	Safety Precaution Information	00-5
	General Safety Information	00-7
	Machine Model and Serial Number Location	00-9
	Engine Model and Serial Number Location	00-9
	Hardware Torque Specifications	00-10
	Installation of Adjustable Fittings in Straight Thread O Ring Bosses	00-12
	Standard Torque Data for Hydraulic Tubes and Fittings	00-12
	Pipe Thread Fitting Torque	00-13
	Lubricants and Coolants	00-13
	Sealants	00-13
	Properly Support a Raised Machine	00-14
	Properly Support Boom on Boom Lock Pins	00-14
	Raising Boom Without Hydraulic Oil Flow	00-14
	Raising Boom Without Battery Voltage (12V)	00-15
	Reattaching Cylinders After Repair with Boom Resting on Boom Lock Pins	00-17
	Major Unit Overhaul	00-18
	Cab and Boom Tilt Procedure	00-19
	Craning the Skid Steer	00-26
	Special Tools	00-29
	Specifications	00-30
	Dimensions	00-33

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SECTION 10 – ENGINE

Chapter 1 – LS140-N843, LS150-N843H

CONTENTS

Section	Description	Page
10 000	General Engine Information	10-3
	General Description	10-3
	Engine Component Descriptions	10-3
	Engine Model and Serial Number Location	10-5
	Safety Precautions	10-6
	General Engine Specifications	10-7
	Troubleshooting	10-9
	Specifications - Service Standards	10-12
	Torque Specifications	10-17
	Engine Components Electrical Diagram	10-18
10 001 10	Engine Removal	10-19
	Engine Disassembly Sequence	10-25
	Engine Component Maintenance	10-33
10 101 55	Valve Seat	10-36
10 101 56	Cylinder Block	10-39
10 105 22	Piston and Piston Rings	10-40
	Connecting Rod	10-44
10 103 10	Bearing Holder	10-48
	Front Crankshaft Bearing (Bushing)	10-50
10 103 30	Crankshaft	10-52
10 103 76	Flywheel and Ring Gear	10-54
10 106 40	Camshaft Assembly	10-55
10 106 66	Camshaft Gear and Bearing Assembly	10-55
	Timing Gear	10-56
10 304 41	Oil Pump	10-56
	Port Block	10-57
10 304 10	Oil Filter	10-58
10 402 28	Water Pump Assembly and Thermostat Housing	10-59
10 402 30	Thermostat	10-59
10 230 24	Governor	10-60
	Governor Operation	10-61
10 304 38	Engine Reassembly Sequence	10-63

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SECTION 29 – HYDROSTATIC TRANSMISSION

Chapter 1 – Neutralizer, Pumps, Motors

CONTENTS

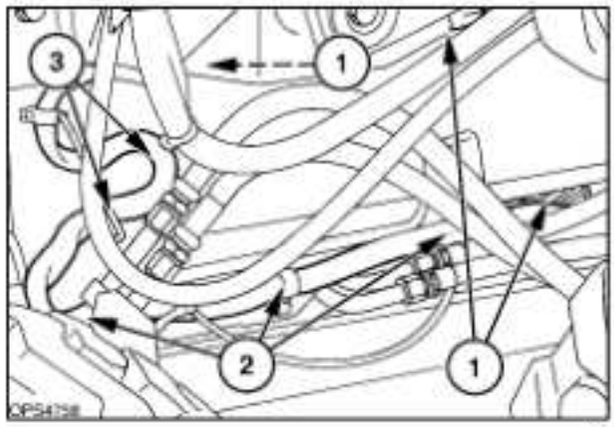
Section	Description	Page
29 100	General Information	29-3
	Operation	29-3
	Specifications	29-5
29 100 01	Troubleshooting	29-6
	Hydrostatic Drive System Testing	29-8
	Hydrostatic System Oil Flow	29-11
	Hydrostatic Charge System Pressure Test	29-14
	Hydrostatic Pump Case Drain Test	29-16
	Hydrostatic Pump High Pressure Test	29-19
	Hydrostatic Pump Efficiency Test	29-21
	Hydrostatic Motor Case Drain Test	29-23
	Hydrostatic Motor Efficiency Test	29-24
	Hydraulic, Hydrostatic System Air Ingress Test	29-26
	Hydrostatic Pumps	29-27
29 100 40	Hydrostatic Pump Removal	29-27
29 100 46	Hydrostatic Pump Disassembly	29-31
	Hydrostatic Pump Parts Inspection	29-37
	Hydrostatic Pump Reassembly	29-40
	Hydrostatic Pump Reinstallation	29-46
	Hydrostatic Motor	29-48
29 100 60	Hydrostatic Motor Removal	29-48
29 100 66	Hydrostatic Motor Disassembly	29-52
	Hydrostatic Motor Parts Inspection	29-55
	Hydrostatic Motor Reassembly	29-59
	Hydrostatic Motor Reinstallation	29-63
	Hydraulic System Cleaning Procedure	29-66
	Start-up Procedure After Rebuild (After Pump or Motor Replacement)	29-69
	Charge Check Valve	29-71
29 100 36	Charge Check Valve Removal and Replacement	29-71

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Inspection Item		Standard Dimension	Standard Value	To Be Repaired	Allowable Limit	Remarks
OIL PUMP						
Oil pressure switch actuating pressure		0.3 bar (4.3 PSI)	0.2 - 0.4 bar (2.8 - 5.7 PSI)			
Relief valve opening pressure		3.1 bar (45.5 PSI)	2.4 - 3.5 bar (35 - 50 PSI)			
Tip clearance (rotor to vane gap)			0.010 - 0.15 mm (0.0004" - 0.006")		0.25 mm (0.010")	
Axial clearance (rotor to cover)			0.1 - 0.15 mm (0.004" - 0.006")		0.2 mm (0.008")	
INJECTION PUMP						
Pump plunger diameter	N843	5.5 mm (0.217")				
	N843H	6.0 mm (0.236")				
Pump plunger stroke		7.0 mm (0.276")				
Injection timing	Before top dead center	N843 22° N843H 21°	N843 21° - 23° N843H 20° - 22°			
	Piston displacement (BTDC) - N843		3.895 - 4.655 mm (0.153" - 0.183")			
	Piston displacement (BTDC) - N843H		3.539 - 4.426 mm (0.139" - 0.168")			
INJECTION NOZZLE						
Injection pressure		147 bar (2133 PSI)	152 - 162 bar (2204 - 2346 PSI)	128 bar (1849 PSI)		
COOLING						
Cooling system		Water cooled forced circulation				
Coolant capacity		9.2 L (9.8 qt.)				
Thermostat opening temperature		82° C (180° F)				
Thermostat full open temperture		95° C (203° F)				
V-belt (fan) slack - 1 kg (2 lbs) pressure		3 mm (0.125")				
STARTER MOTOR						
Type		NIPPONDENSO (12V-2kw Reduction)				
Pinion gear # teeth		11				
Pinion gear shift system		Magnetic shift				
Commutator diameter wear		35 mm (1.38")			34 mm (1.34")	
Commutator diameter eccentric wear			0.02 mm (0.0008")		0.05 mm (0.002")	
Armature shaft bending				0.05 mm (0.002")		
Brush length		15 mm (0.59")			9 mm (0.35")	
Brush spring pressure		2.7 - 3.6 kg (5.9 - 7.8 lbs)			2.2 kg (4.7 lbs)	

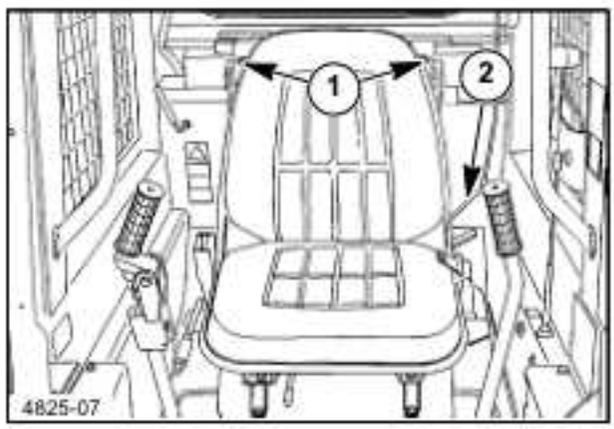
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23. Removing the slack from the wire harness along the top of ROPS at 1, and along the top of the final drive case at 2, pull the slack to the front and retaining loop at 3. Secure the wire harness with clamps and ties previously removed.



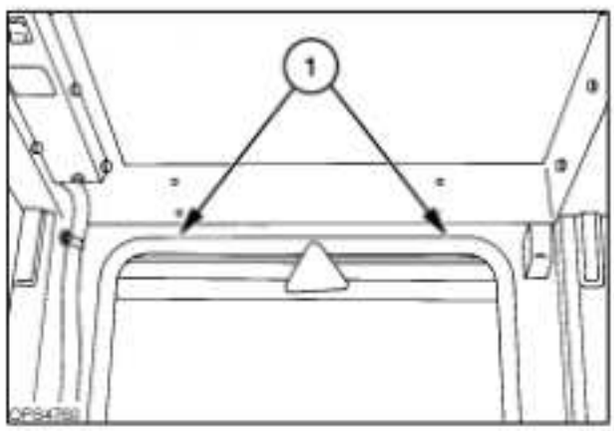
38

24. Reinstall the seat/seat pan support assembly retaining hardware, 1, and connect the seat/seat belt wire harness to the main wire harness. Make sure the wire harness is to the inside of the boom lock linkage to prevent interference when the seat pan support assembly is pivoted up to the raised, latched position. Reattach the latch rod, 2, and install the retaining pin.
25. Reinstall the headliner and supports.



39

26. Reinstall the rear window glass and molding, 1, if removed, and reinstall the locking strip to secure the glass in the molding.



40

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ALTERNATOR - SYSTEM TESTING AND TROUBLESHOOTING

NO CHARGING

FAULT LOCATION	POSSIBLE CAUSE	CORRECTION
Wiring	Loose connection, short circuit	Repair
Alternator	Loose connection, no ground, short circuit	Repair or replace
	Defective rectifier	Replace
	Loose connection of RF resistor	Replace
Regulator	Defective regulator	Replace
	Loose connection of alternator or regulator	Repair or replace

INSUFFICIENT CHARGING

FAULT LOCATION	POSSIBLE CAUSE	CORRECTION
Wiring	Loose connection or short circuit	Repair
Alternator	Loose drive belt	Repair
	Short in rotor coil	Replace
	Short in stator coil	Replace
	Defective rectifier	Replace
	Insufficient brush contact	Repair or replace
Regulator	Defective regulator	Replace
	Loose connection of alternator and regulator	Repair
Battery	Defective battery	Replace

OVERCHARGE

FAULT LOCATION	POSSIBLE CAUSE	CORRECTION
Battery	Internal short	Replace
Regulator	Defective regulator	Replace

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