

NEW HOLLAND

REPAIR MANUAL

HW300,
HW320,
HW340,
HW300,
HW320,
HW340,
Windrower

NEW HOLLAND AGRICULTURE

SERVICE

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HW SERIES REPAIR MANUAL
COMPLETE CONTENTS

SECTION 00 - GENERAL INFORMATION 2

SECTION 10 - ENGINE 2

SECTION 25 - FRONT MECHANICAL DRIVE 7

SECTION 27 - REAR AXLE 7

SECTION 29 - HYDROSTATIC TRANSMISSION 8

SECTION 33 - BRAKES AND CONTROLS 9

SECTION 35 - HYDRAULIC SYSTEMS 9

SECTION 50 - CAB CLIMATE CONTROL 10

SECTION 55 - ELECTRICAL 12

SECTION 88 - OPTIONAL EQUIPMENT 16

SECTION 90 - PLATFORM, CAB, BODYWORK, AND DECALS 17

The following pages are the collation of the contents pages from each section and chapter of the HW Series Repair manual.

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 HW Series Speedrower Windrowers.

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SECTION 00 - GENERAL INFORMATION

BOOK 1 - 86900679

Chapter 1 - General Information

CONTENTS

Section	Description	Page
00 000	Precautionary Statements	2
	Safety	3
	General Safety Information	5
	Introduction	8
	Specifications	17

SECTION 10 - ENGINE

BOOK 1 - 86900679

Chapter 1 - Engine

CONTENTS

Section	Description	Page
10 000	Specifications	2
	Special Tools	13
	Description of Operation	14
	Engine Troubleshooting	16
	Engine Compression Test	19
	Diesel Engine Exhaust Smoke	20
	Engine Removal and Installation	21
	Disassembly and Overhaul	53
	Cylinder Head, Valves, and Related Parts	54
	Front Cover and Timing Gear	66
	Oil Pan	73
	Connecting Rods, Bearings, Pistons, and Rings	74
	Cylinder Block Overhaul	78
	Balancer, Main Bearings, Flywheel, and Crankshaft	88
	Camshaft	104

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SECTION 10 - ENGINE

BOOK 1 - 86900679

Chapter 2 - Fuel System (4-Cylinder Engine)

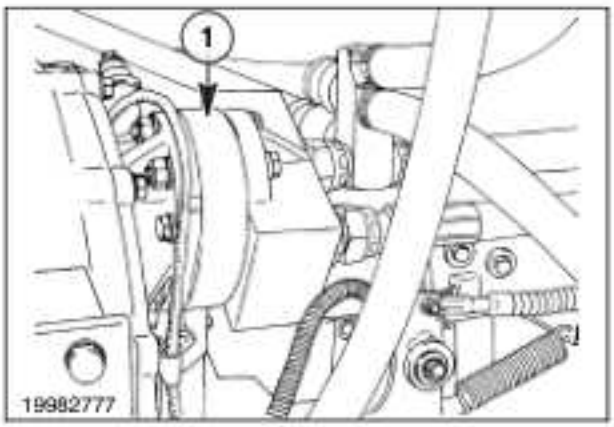
CONTENTS

Section	Description	Page
10 000	Specifications	2
	Special Tools	4
	Description of Operation	5
	HW300/320 (4-Cylinder) Fuel and Induction System	5
	Fuel Shutoff (Injection Pump)	6
	Sedimenter	7
	Electric Lift Pump	7
	Fuel Filter	7
	Cold Start Assist (Optional)	8
	Troubleshooting	9
	Fuel System Priming/Bleeding	16
	Electric Lift Pump	17
	Speed Adjustments	18
	Throttle Linkage	19
	Fuel Tank	20
	Fuel Filter	23
	Sedimenter	24
	Fuel Lines	25
	Fuel Injection Pump: HW300/320 DP200 Distributor Types	26
	General Description	26
	Solenoid Shutoff Valve	27
	Injection Pump	27
	Injection Pump Timing	29
	Injection Pump Storage	31
	Fuel Injectors	32
	Description and Operation	32

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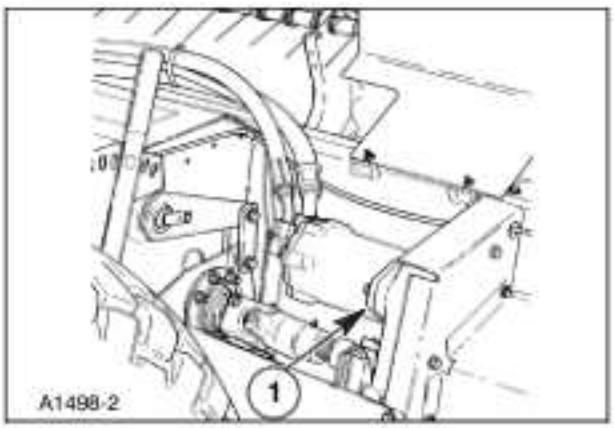
HW300/320 HEADER DRIVE

The header drive pump, 1, is a separate pump that is mounted to the engine flywheel gearbox.



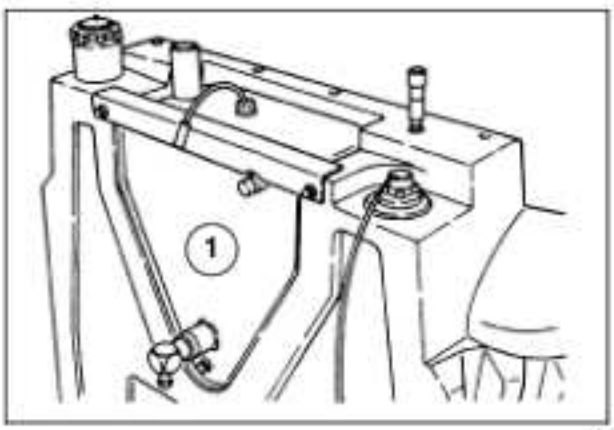
1

At its rated engine speed of 2100 RPM, the gear pump delivers 109.7 L/min. (29 GPM) at 276 bar (4000 PSI) to the header drive motor, 1, mounted on the header. It uses a common reservoir with the lift and hydrostatic drive systems.



2

The reservoir, 1, holds 36 L (9.5 gals.) of hydraulic oil. (Reservoir and fuel tank are shown removed from the machine.)



3

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HYDRAULIC OIL TEMPERATURE SWITCH CIRCUIT

Operation

The hydraulic oil temperature switch is mounted in a tee in the hydraulic line just behind the front frame. A small voltage is applied by the WES to the hydraulic oil temperature switch, S-16, which is normally open. If the temperature of the hydraulic oil exceeds 99° C (210° F), the switch closes and the current flow through the circuit is sensed by the EIC. After one second, the display will show "W06 HYD OIL TEMP".

Troubleshooting

Before attempting to troubleshoot a problem, review the information under the "General Troubleshooting" heading in this section along with the material in the "General Electrical" portion of this section.

Operate the machine and observe the problem. Match the problem to one of the headings on the following charts. Follow the systematic step-by-step instructions in the chart to locate and correct the problem. Follow all the instructions carefully.

Hydraulic Oil Temperature Sender Does Not Function

STEP	PRETEST INSTRUCTIONS	TEST	RESULT	PROBABLE CAUSE AND CORRECTION
1.	Press and hold the "open book" and "hand" buttons while turning the key on. Press the open book until menu item 6-DIAG: INPUTS is displayed.	Disconnect the hydraulic oil temperature sender. Jumper FM3-W and FM169-B.	Beep and flash. No beep or flash.	Defective sender. Replace. Go to next step.
2.	Same as step 1.	Ground FM3-W to frame.	Beep and flash. No beep or flash.	Open circuit or poor connection in FM169-B to ground point "B". Repair. Go to next step.
3.	Key off. Uncouple the front connector, C012, under the floor of the right console.	Check continuity of FM3-W between C012 at pin U and sender.	No continuity. Continuity.	Open circuit between C012 and sender. Repair. Go to next step.
4.	Key off. Disconnect C001 from top of the console module.	Check continuity of CM3-W between C001 at pin C12 and C012 at pin U.	No continuity. Continuity.	Open circuit in CM3-W between C001 and C012. Repair. Defective console module. Replace.

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Troubleshooting

If the flotation trim control is not functioning on either side, first make sure the master solenoid is working properly. (See the chart "Master Hydraulic Solenoid Does Not Work").

The following charts cover the double switch option. If the single switch option is provided, only the switch S-10 is used with L-08 and L-09 solenoids. For troubleshooting, use the charts for the left-side trim only.

Before attempting to troubleshoot a problem, review the information under the "General Troubleshooting" heading in this section along with the material in the "General Electrical" portion of this section.

Operate the machine and observe the problem. Match the problem to one of the headings on the following charts. Follow the systematic step-by-step instructions in the chart to locate and correct the problem. Follow all the instructions carefully.

No Float Trim Functions Work (HW320 and HW340)

STEP	PRETEST INSTRUCTIONS	TEST	RESULT	PROBABLE CAUSE AND CORRECTION
1.	Key off.	Check 10A hydraulic control fuse, F-08.	Fuse blown. Fuse good.	Replace fuse. Go to next step.
2.	Press and hold the "open book" and "hand" buttons on the warning module while turning the key on. Press the "open book" button until menu item 6-DIAG: INPUTS is displayed.	Place the 2-speed transmission switch in the high position.	No beep or flash of hazard lights. Beep and flash of hazard lights.	Faulty connection or open circuit in CM38-OMY between 2-speed switch and 10A hydraulic control fuse. Go to next step.
3.	Same as step 2.	Press the left flotation trim switch in each direction.	No beep or flash of hazard lights. Beep and flash of hazard lights.	Faulty connection or open circuit in CM132-O/GY between left trim switch and 2-speed switch. Go to next step.
4.	Same as step 2.	Press the right flotation trim switch (if equipped) in each direction.	No beep or flash of hazard lights. Beep and flash of hazard lights.	Faulty connection or open circuit in CM50-O/GY between left and right trim switches. Go to troubleshooting charts on the following pages.

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