

Product: New Holland G140VP/G170VP/G170VP(AWD)/G200/G200(AWD) TIER 3 Grader Service Repair Manual  
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# NEW HOLLAND

## GRADER

### G140VP

### G170VP

# G170VP(AWD)

### G200

# G200(AWD)

# TIER 3

## REPAIR MANUAL

71114195 NA

Issued 01Nov 07

Sample of manual. Download All 1073 pages at:

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Product: New Holland G140VP/G170VP/G170VP(AWD)/G200/G200(AWD) TIER 3 Grader Service Repair Manual

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170vp-g170vpawd-g200-g200awd-tier-3-grader-service-repair-manual/

## REPAIR MANUAL

### GRADER

**G140VP  
G170VP  
G170VP(AWD)  
G200  
G200(AWD)  
TIER 3**

71114195 NA

1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4

## REPAIR MANUAL

### GRADER

**G140VP  
G170VP  
G170VP(AWD)  
G200  
G200(AWD)  
TIER 3**

71114195 NA

1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4

## REPAIR MANUAL

### GRADER

**G140VP  
G170VP  
G170VP(AWD)  
G200  
G200(AWD)  
TIER 3**

71114195 NA

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TYPE 1-4

## REPAIR MANUAL

### GRADER

**G140VP  
G170VP  
G170VP(AWD)  
G200  
G200(AWD)  
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71114195 NA

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TYPE 1-4

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# **REPAIR MANUAL**

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## **GRADER**

**G140VP**

**G170VP**

**G170VP(AWD)**

**G200**

**G200(AWD)**

**TIER 3**

CNH America LLC reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

All data given in this publication is subject to production variations. Dimensions and weights are only approximate. Illustrations do not necessarily show products in standard condition. For exact information about any particular product, please consult your Dealer.

This unit first became available 07-2008			
REVISION HISTORY			
Issue	Issue Date	Applicable Machines	Remarks
First Edition	01July 08	G140VP,G170VP,G170VP(AWD),G200,G200(AWD) Tier 3	71114195 NA

**G140VP  
G170VP & G170VP(AWD)  
G200 & G200(AWD)**

**Repair Manual  
71114195 GRADER**

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# Section 1001

## STANDARD TORQUE SPECIFICATIONS

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**NOTE:** NEW HOLLAND reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

## TORQUE SPECIFICATIONS - DECIMAL HARDWARE

Use the torques in this chart when special torques are not given. These torques apply to fasteners with both UNC and UNF threads as received from suppliers dry, or when lubricated with engine oil. Not applicable if special graphites, Molydisulfide greases, or other extreme pressure lubricants are used.

Grade 5 Bolts, Nuts, and Studs		
  		
Size	Pound-Inches	Newton metres
1/4 inch	108 to 132	12 to 15
5/16 inch	204 to 252	23 to 28
3/8 inch	420 to 504	48 to 57
Size	Pound-Feet	Newton metres
7/16 inch	54 to 64	73 to 87
1/2 inch	80 to 96	109 to 130
9/16 inch	110 to 132	149 to 179
5/8 inch	150 to 180	203 to 244
3/4 inch	270 to 324	366 to 439
7/8 inch	400 to 480	542 to 651
1.0 inch	580 to 696	787 to 944
1-1/8 inch	800 to 880	1085 to 1193
1-1/4 inch	1120 to 1240	1519 to 1681
1-3/8 inch	1460 to 1680	1980 to 2278
1-1/2 inch	1940 to 2200	2631 to 2983

Grade 8 Bolts, Nuts, and Studs		
  		
Size	Pound-Inches	Newton metres
1/4 inch	144 to 180	16 to 20
5/16 inch	288 to 348	33 to 39
3/8 inch	540 to 648	61 to 73
Size	Pound-Feet	Newton metres
7/16 inch	70 to 84	95 to 114
1/2 inch	110 to 132	149 to 179
9/16 inch	160 to 192	217 to 260
5/8 inch	220 to 264	298 to 358
3/4 inch	380 to 456	515 to 618
7/8 inch	600 to 720	814 to 976
1.0 inch	900 to 1080	1220 to 1465
1-1/8 inch	1280 to 1440	1736 to 1953
1-1/4 inch	1820 to 2000	2468 to 2712
1-3/8 inch	2380 to 2720	3227 to 3688
1-1/2 inch	3160 to 3560	4285 to 4827

**NOTE:** Use thick nuts with Grade 8 bolts.

## TORQUE SPECIFICATIONS - METRIC HARDWARE

Use the following torques when specifications are not given.

These values apply to fasteners with coarse threads as received from supplier, plated or unplated, or when lubricated with engine oil. These values do not apply if graphite or Molydisulfide grease or oil is used.

Grade 8.8 Bolts, Nuts, and Studs		
		
Size	Pound-Inches	Newton metres
M4	24 to 36	3 to 4
M5	60 to 72	7 to 8
M6	96 to 108	11 to 12
M8	228 to 276	26 to 31
M10	456 to 540	52 to 61
Size	Pound-Feet	Newton metres
M12	66 to 79	90 to 107
M14	106 to 127	144 to 172
M16	160 to 200	217 to 271
M20	320 to 380	434 to 515
M24	500 to 600	675 to 815
M30	920 to 1100	1250 to 1500
M36	1600 to 1950	2175 to 2600

Grade 10.9 Bolts, Nuts, and Studs		
		
Size	Pound-Inches	Newton metres
M4	36 to 48	4 to 5
M5	84 to 96	9 to 11
M6	132 to 156	15 to 18
M8	324 to 384	37 to 43
Size	Pound-Feet	Newton metres
M10	54 to 64	73 to 87
M12	93 to 112	125 to 150
M14	149 to 179	200 to 245
M16	230 to 280	310 to 380
M20	450 to 540	610 to 730
M24	780 to 940	1050 to 1275
M30	1470 to 1770	2000 to 2400
M36	2580 to 3090	3500 to 4200

## Grade 12.9 Bolts, Nuts, and Studs



Usually the torque values specified for grade 10.9 fasteners can be used satisfactorily on grade 12.9 fasteners.

## TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS

Tube OD Hose ID	Thread Size	Pound- Inches	Newton metres
<b>37 Degree Flare Fitting</b>			
1/4 inch 6.4 mm	7/16-20	72 to 144	8 to 16
5/16 inch 7.9 mm	1/2-20	96 to 192	11 to 22
3/8 inch 9.5 mm	9/16-18	120 to 300	14 to 34
1/2 inch 12.7 mm	3/4-16	180 to 504	20 to 57
5/8 inch 15.9 mm	7/8-14	300 to 696	34 to 79
Tube OD Hose ID	Thread Size	Pound- Inches	Newton metres
3/4 inch 19.0 mm	1-1/16-12	40 to 80	54 to 108
7/8 inch 22.2 mm	1-3/16-12	60 to 100	81 to 135
1.0 inch 25.4 mm	1-5/16-12	75 to 117	102 to 158
1-1/4 inch 31.8 mm	1-5/8-12	125 to 165	169 to 223
1-1/2 inch 38.1 mm	1-7/8-12	210 to 250	285 to 338

Tube OD Hose ID	Thread Size	Pound- Inches	Newton metres
<b>Straight Threads with O-ring</b>			
1/4 inch 6.4 mm	7/16-20	144 to 228	16 to 26
5/16 inch 7.9 mm	1/2-20	192 to 300	22 to 34
3/8 inch 9.5 mm	9/16-18	300 to 480	34 to 54
1/2 inch 12.7 mm	3/4-16	540 to 804	57 to 91
Tube OD Hose ID	Thread Size	Pound- Inches	Newton metres
5/8 inch 15.9 mm	7/8-14	58 to 92	79 to 124
3/4 inch 19.0 mm	1-1/16-12	80 to 128	108 to 174
7/8 inch 22.2 mm	1-3/16-12	100 to 160	136 to 216
1.0 inch 25.4 mm	1-5/16-12	117 to 187	159 to 253
1-1/4 inch 31.8 mm	1-5/8-12	165 to 264	224 to 357
1-1/2 inch 38.1 mm	1-7/8-12	250 to 400	339 to 542

<b>Split Flange Mounting Bolts</b>		
Size	Pound- Inches	Newton metres
5/16-18	180 to 240	20 to 27
3/8-16	240 to 300	27 to 34
7/16-14	420 to 540	47 to 61
Size	Pound- Feet	Newton metres
1/2-13	55 to 65	74 to 88
5/8-11	140 to 150	190 to 203

## TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS

Nom. SAE Dash Size	Tube OD	Thread Size	Pound- Inches	Newton metres	Thread Size	Pound- Inches	Newton metres
<b>O-ring Face Seal End</b>						<b>O-ring Boss End Fitting or Lock Nut</b>	
-4	1/4 inch 6.4 mm	9/16-18	120 to 144	14 to 16	7/16-20	204 to 240	23 to 27
-6	3/8 inch 9.5 mm	11/16-16	216 to 240	24 to 27	9/16-18	300 to 360	34 to 41
-8	1/2 inch 12.7 mm	13/16-16	384 to 480	43 to 54	3/4-16	540 to 600	61 to 68
					Thread Size	Pound- Inches	Newton metres
-10	5/8 inch 15.9 mm	1-14	552 to 672	62 to 76	7/8-14	60 to 65	81 to 88
Nom. SAE Dash Size	Tube OD	Thread Size	Pound- Inches	Newton metres	1-1/16-12	85 to 90	115 to 122
					1-3/16-12	95 to 100	129 to 136
-12	3/4 inch 19.0 mm	1-3/16-12	65 to 80	90 to 110	1-5/16-12	115 to 125	156 to 169
-14	7/8 inch 22.2 mm	1-3/16-12	65 to 80	90 to 110	1-5/8-12	150 to 160	203 to 217
-16	1.0 inch 25.4 mm	1-7/16-12	92 to 105	125 to 140	1-7/8-12	190 to 200	258 to 271
-20	1-1/4 inch 31.8 mm	1-11/16-12	125 to 140	170 to 190			
-24	1-1/2 inch 38.1 mm	2-12	150 to 180	200 to 254			

# Section 1002

1002

## FLUIDS AND LUBRICANTS

**G140VP  
G170VP  
G200  
G170VP(AWD)  
G200(AWD)**

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CAPACITIES AND LUBRICANTS  
**G140VP**

COMPONENTS	CAPACITY Liters	CAPACITY US Gal.	SPECIFICATIONS
<b>Fuel tank</b> Total capacity	341.0	90.0	DIESEL N° 2
<b>Engine oil</b> With filter change Without filter change	18.5 17.5	4.7 4.4	N° 1 ENGINE OIL SAE 15W-40 API CH4 / NH 330 H (AMBRA MASTER GOLD HSP)
<b>Engine Cooling System</b> Total capacity	40.0	10.5	50% WATER + 50% AGRIFLU
<b>Hydraulic System</b> Total Capacity Hydraulic tank with filter	180.0 94.6	47.5 25.0	AMBRA MASTERTRAN
<b>Transmission</b> Refill capacity (with filter change) Refill capacity (w/o filter change)	25.0 23.0	6.6 6.0	AMBRA MASTERTRAN
<b>Rear Axle (Graziano)</b> Center compartment	40.0	10.5	AMBRA AXF SAE 80W-90 API GL-5, Limited Slip / NH520C
<b>Tandem and Brakes</b> Refill capacity (each)	60.0	15.8	AMBRA TRX SAE 20W-40 API GL-4 / NH4388
<b>Circle Turn Gear Reducer</b> Refill capacity	2.8	0.75	SAE 80W-90 API GL-5 / NH 520 A (AMBRA HIPOIDE 90)
<b>Grease fittings, Rear Ripper Front Scarifier or Dozer Blade</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-9)
<b>Front Axle Wheel Hub and Bearings</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-75 MD)

## CAPACITIES AND LUBRICANTS G170VP

COMPONENTS	CAPACITY Liters	CAPACITY US Gal.	SPECIFICATIONS
<b>Fuel tank</b> Total capacity	341.0	90.0	DIESEL N° 2
<b>Engine oil</b> With filter change Without filter change	18.5 17.5	4.7 4.4	N° 1 ENGINE OIL SAE 15W-40 API CH4 / NH 330 H (AMBRA MASTER GOLD HSP)
<b>Engine Cooling System</b> Total capacity	40.0	10.5	50% WATER + 50% AGRIFLU
<b>Hydraulic System</b> Total Capacity Hydraulic tank with filter	180.0 94.6	47.5 25.0	AMBRA MASTERTRAN
<b>Transmission</b> Refill capacity (with filter change) Refill capacity (w/o filter change)	25.0 23.0	6.6 6.0	AMBRA MASTERTRAN
<b>Rear Axle (Graziano)</b> Center compartment	44.0	11.6	AMBRA AXF SAE 80W-90 API GL-5, Limited Slip / NH520C
<b>Tandem and Brakes</b> Refill capacity (each)	60.0	15.8	AMBRA TRX SAE 20W-40 API GL-4 / NH4388
<b>Circle Turn Gear Reducer</b> Refill capacity	2.8	0.75	SAE 80W-90 API GL-5 / NH 520 A (AMBRA HIPOIDE 90)
<b>Grease fittings, Rear Ripper Front Scarifier or Dozer Blade</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-9)
<b>Front Axle Wheel Hub and Bearings</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-75 MD)

CAPACITIES AND LUBRICANTS  
**G200VP**

COMPONENTS	CAPACITY Liters	CAPACITY US Gal.	SPECIFICATIONS
<b>Fuel tank</b> Total capacity	341.0	90.0	DIESEL N° 2
<b>Engine oil</b> With filter change Without filter change	18.5 17.5	4.7 4.4	N°1 ENGINE OIL SAE 15W-40 API CH4 / NH 330 H (AMBRA MASTER GOLD HSP)
<b>Engine Cooling System</b> Total capacity	40.0	10.5	50% WATER + 50% AGRIFLU
<b>Hydraulic System</b> Total Capacity Hydraulic tank with filter	180.0 94.6	47.5 25.0	AMBRA MASTERTRAN
<b>Transmission</b> Refill capacity (with filter change) Refill capacity (w/o filter change)	28.5 26.0	7.5 6.9	AMBRA MASTERTRAN
<b>Rear Axle (Graziano)</b> Center compartment	44.0	11.6	AMBRA AXF SAE 80W-90 API GL-5, Limited Slip / NH520C
<b>Tandem and Brakes</b> Refill capacity (each)	60.0	15.8	AMBRA TRX SAE 20W-40 API GL-4 / NH4388
<b>Circle Turn Gear Reducer</b> Refill capacity	2.8	0.75	SAE 80W-90 API GL-5 / NH 520 A (AMBRA HIPOIDE 90)
<b>Grease fittings, Rear Ripper Front Scarifier or Dozer Blade</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-9)
<b>Front Axle Wheel Hub and Bearings</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-75 MD)

## CAPACITIES AND LUBRICANTS

### G170VP(AWD)

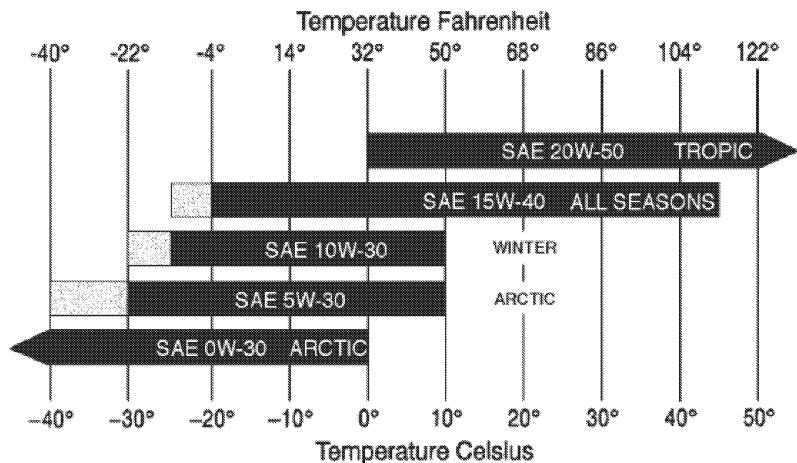
COMPONENTS	CAPACITY Liters	CAPACITY US Gal.	SPECIFICATIONS
<b>Fuel tank</b> Total capacity	341.0	90.0	DIESEL Nº 2
<b>Engine oil</b> With filter change Without filter change	18.5 17.5	4.7 4.4	Nº 1 ENGINE OIL SAE 15W-40 API CH4 / NH 330 H (AMBRA MASTER GOLD HSP)
<b>Engine Cooling System</b> Total capacity	40.0	10.5	50% WATER + 50% AGRIFLU
<b>Hydraulic System</b> Total Capacity Hydraulic tank with filter	200.0 94.6	53.0 25.0	AMBRA HYDROSYSTEM 68 HV MAT 3508
<b>Transmission</b> Refill capacity (with filter change) Refill capacity (w/o filter change)	25.0 23.0	6.6 6.0	AMBRA MASTERTRAN MAT 3505 / MS 1209
<b>Rear Axle (Graziano)</b> Center compartment	44.0	11.6	AMBRA AXF SAE 80W-90 API GL-5, Limited Slip / NH520C
<b>Tandem and Brakes</b> Refill capacity (each)	60.0	15.8	AMBRA TRX SAE 20W-40 API GL-4 / NH4388
<b>Front Axle (AWD)</b> Reducer	4.1	1.0	AMBRA AXF 80W-90 API GL-5, Limited Slip / NH520C
<b>Circle Turn Gear Reducer</b> Refill capacity	2.8	0.75	SAE 80W-90 API GL-5 / NH 520 A (AMBRA HIPOIDE 90)
<b>Grease fittings, Rear Ripper Front Scarifier or Dozer Blade</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-9)

CAPACITIES AND LUBRICANTS  
**G200(AWD)**

COMPONENTS	CAPACITY Liters	CAPACITY US Gal.	SPECIFICATIONS
<b>Fuel tank</b> Total capacity	341.0	90.0	DIESEL N° 2
<b>Engine oil</b> With filter change Without filter change	18.5 17.5	4.7 4.4	Nº 1 ENGINE OIL SAE 15W-40 API CH4 / NH 330 H (AMBRA MASTER GOLD HSP)
<b>Engine Cooling System</b> Total capacity	40.0	10.5	50% WATER + 50% AGRIFLU
<b>Hydraulic System</b> Total Capacity Hydraulic tank with filter	200.0 94.6	53.0 25.0	AMBRA HYDROSYSTEM 68 HV MAT 3508
<b>Transmission</b> Refill capacity (with filter change) Refill capacity (w/o filter change)	28.5 26.0	7.5 6.9	AMBRA MASTERTRAN MAT 3505 / MS 1209
<b>Rear Axle (Graziano)</b> Center compartment	44.0	11.6	AMBRA AXF SAE 80W-90 API GL-5, Limited Slip / NH520C
<b>Tandem and Brakes</b> Refill capacity (each)	60.0	15.8	AMBRA TRX SAE 20W-40 API GL-4 / NH4388
<b>Front Axle (AWD)</b> Reducer	4.1	1.0	AMBRA AXF 80W-90 API GL-5, Limited Slip / NH520C
<b>Circle Turn Gear Reducer</b> Refill capacity	2.8	0.75	SAE 80W-90 API GL-5 / NH 520 A (AMBRA HIPOIDE 90)
<b>Grease fittings, Rear Ripper</b> <b>Front Scarifier or Dozer Blade</b>	--	--	Lithium based Grease with Molydissulfide NLGI-2 / NH 720 A (AMBRA GR-9)

## ENGINE OIL RECOMMENDATIONS

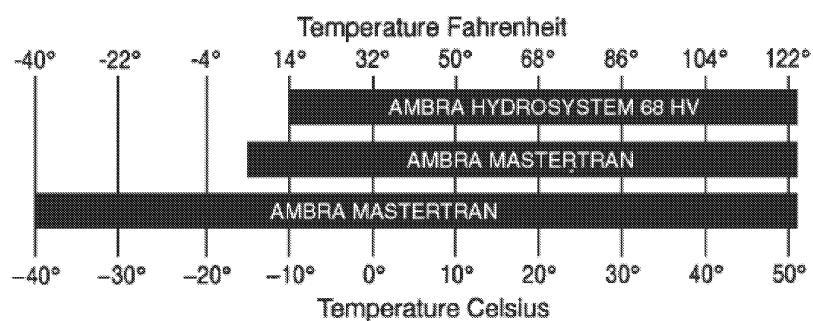
### OIL VISCOSITY AND TEMPERATURE RANGES



 **NOTE:** Use of an engine oil pan heater or an engine coolant heater may be required when operating temperatures are in Winter or Arctic conditions.

## HYDRAULIC / BRAKE SYSTEM / TRANSMISSION TEMPERATURE RANGES

### Hydraulic/Brake/Transmission System - Temperature Ranges



## DIESEL FUEL SYSTEM

Use No. 2 diesel fuel in the engine of this machine. The use of other fuels can cause the loss of engine power and high fuel consumption.

In very cold temperatures, a mixture of No. 1 and No.2 diesel fuels is temporarily permitted.

**NOTE:** See your fuel dealer for winter fuel requirements in your area. If the temperature of the fuel lowers below the cloud point (wax appearance point), wax crystals in the fuel will restrict the fuel filter and cause the engine to lose power or not start. The diesel fuel used in this machine must meet the specifications as shown below in, "Specifications for Acceptable No. 2 Diesel Fuel", or "Specification D975-81" of the American Society for Testing and Materials.

### Fuel Storage

If you keep fuel in storage for a period of time, you can get foreign material or water in the fuel storage tank. Many engine problems are caused by water in the fuel.

Keep the fuel storage tank outside and keep the fuel as cool as possible. Remove water from the storage container at regular periods of time. Fill the fuel tank at the end of the daily operating period to prevent condensation in the fuel tank.

### Specifications for Acceptable No. 2 Diesel Fuel

API gravity, minimum .....	34
Flash point, minimum .....	60°C (140°F)
Cloud point (wax appearance point), maximum .....	-20°C (-5°F) See Note above
Pour point, maximum .....	-26°C (-15°F) See Note above
Distillation temperature, 90% point .....	282 to 338°C (540 to 640°F)
Viscosity, at 38°C (100°F)	
Centistokes .....	2.0 to 4.3
Cetane number, minimum .....	43 (45 to 55 for winter or high altitudes)
Water and sediment, by volume, maximum .....	0.05%

**MAINTENANCE SCHEDULE**  
**G140VP**  
**G170VP**  
**G200VP**

	SERVICE POINTS	POINTS	CHECK	REPLACE	LUBRICATE	ADJUST	CLEAN- DRAIN
<b>As needed</b>	Air cleaner (Note 1)	1	*				
	Hydraulic filter (Note 2)	1	*				
	Cab Air Filter (if equipped)	1	*				
	Batteries	2					*
<b>10 hours or daily</b>	Engine oil level (including filters)	1	10				
	Radiator (coolant level) (Note 3)	1	10				
	Transmission oil level (warm, engine running)	1	10				
<b>50 hours or weekly</b>	Fuel Reservoir Filter (wash screen)	1					50
	Fuel Water Separator (drain water)	2					50
	Hydraulic tank (complete system)	1	50				
<b>100 hours or each 15 days</b>	Moldboard Lift Cylinder Pivots	4			100		
	Moldboard Lift Cylinders Balls	2			100		
	Moldboard Side Shift Cylinders Balls	2			100		
	Articulation of Tilt Cylinders	2			100		
	Moldboard Tilt Pivots	2			100		
	Articulation Cylinders Pivots	4			100		
	Articulation Bearings	2			100		
	Drawbar Ball and Socket	1			100		
<b>250 hours or monthly</b>	Alternator and Air Conditioner Belt	2	250				
	Universal Joints and Drive Shaft	2			250		
	Circle Turn Gearbox Oil Level	1	250				
	Front Axle Pivot	2			250		
	Front Wheel Lean Bar Pivots	2			250		
	Front Wheel Lean Cylinder Pivots	2			250		
	Front Wheel Knuckle Lean Pivots	4			250		

<b>250 hours or monthly</b>	Knucle King Pin Bearings	4		250		
	Moldboard Lift Cylinder Articulation Bearings	2		250		
	Tandem Swing Bearing	2		250		
	Tires Condition and Pressure	6	250			
	Cab Air Filter <b>(if equipped)</b>	1				250
	Steering Bar Ball Joints	4		250		
	Moldboard Articulation Pivots	4		250		
	Moldboard Side Shift Pivots	2		250		
<b>500 hours or each 3 months</b>	Fuel filters and water separator	2	500			
	Fuel tank drain plug	1				500
	Engine oil and oil filter	2	500			
	Hydraulic system oil filter	1	500			
	Transmission oil and oil filter <b>(Note 5)</b>	2	500			
	Front wheel bearing grease	2	500			
	Tandem wheel shafts bearing <b>(Graziano)</b>	8		500		
	Tandem case oil level	2	500			
	Rear axle differential and planetary gear oil level <b>(Graziano)</b> <b>(Nota 4)</b>	3	500			
	ROPS fixing bolts torque	16				500
	Seat belts fixing bolts torque	2				500
<b>1000 hours or each 6 months</b>	Transmission screen					1000
	Engine valves clearance <b>(Note 6)</b>	12				1000
	Circle turn gear housing oil	1	1000			
	Alternator and air conditioning belts	2	1000			
	Air cleaner elements	2	1000			
<b>2000 hours or yearly</b>	Rear axle differential and planetary gear oil <b>(Graziano)</b> <b>(Nota 4)</b>	1	2000			
	Hydraulic Fluid <b>(Nota 6)</b>	1	2000			
	Turbocharge fixing bolts torque	4				2000
	Tandem case oil	2	2000			
	Engine coolant	2	2000			

**NOTE:** See "FLUIDS AND LUBRICANTS" table on previous pages

**NOTE 1:** Service the air filter elements if air filter restriction indicator is in the red area.

**NOTE 2:** Service the hydraulic filters if hydraulic filter indicator lamp illuminates.

**NOTE 3:** Check the radiator coolant level if the coolant level warning lamp illuminates.

**NOTE 4:** Change the rear axle oil after the first **100 hours** of operation.

**NOTE 5:** Change the transmission oil and replace the filter after the first **100 hours** of operation.

**NOTE 6:** Change every **2000 hours or once a year, whichever comes first.**

\* As needed

## LUBRICATION AND MAINTENANCE SCHEDULE

### G170VP(AWD)

### G200(AWD)

		SERVICE POINTS		POINTS	CHECK	REPLACE	LUBRICATE	ADJUST	CLEAN- DRAIN
As needed	Air cleaner (Note 1)	1	*						
	Hydraulic filter (Note 2)	1	*						
	Cab Air Filter (if equipped)	1	*						
	Batteries	2							*
10 hours or daily	Engine oil level (including filters)	1	10						
	Radiator (coolant level) (Note 3)	1	10						
	Transmission oil level (warm, engine running)	1	10						
50 hours or weekly	Fuel Reservoir Filter (wash screen)	1							50
	Fuel Water Separator (drain water)	2							50
	Hydraulic tank (complete system)	1	50						
100 hours or each 15 days	Moldboard Lift Cylinders Balls	2				100			
	Articulation, Hydraulic Cylinders and Pivot Joints	4				100			
	Drawbar Ball and Socket	1				100			
	Moldboard Tilt Cylinders Balls	2				100			
	Moldboard Tilt Cylinder Pivot	2				100			
	Lift Cylinder Pivots	4				100			
	Moldboard Tilt Pivot	2				100			
250 hours or monthly	Alternator and Air Conditioner Belt	2	250						
	Universal Joints and Drive Shaft	3				250			
	Circle Turn Gearbox Oil Level	1	250						
	Front Wheel Knuckle	2				250			
	Wheel Lean Link AWD	2				250			
	Steering Arm Pivot AWD	4				250			
	Front Wheel Lean Cylinder AWD	2				250			
	Front Axle Spindle Pivot AWD	2				250			
	Lift Cylinder Bearings	2				250			
	Tandem Swing Bearing	4				250			

<b>250 hours or monthly</b>	Tires Condition and Pressure	6	250			
	Cab Air Filter (if equipped)	1				250
	Steering Bar Ball Joints	4		250		
	Moldboard Articulation Pivots	4		250		
	Moldboard Side Shift Pivots	2		250		
	Grease Fitting (front wheel drive axle AWD)	12		250		
<b>500 hours or each 3 months</b>	Fuel filters and water separator	2	500			
	Fuel tank drain plug	1				500
	Hydraulic Pump Filter (Front wheel drive axle) <b>AWD (Note 8)</b>	1	500			
	Engine oil and oil filter	2	500			
	Filter Hydraulic	1	500			
	Transmission oil and oil filter ( <b>Note 5</b> )	2	500			
	Ripper and cylinder pivots	8		500		
	Tandem wheel shafts bearing ( <b>Graziano</b> )	8		500		
	Tandem case oil level	2	500			
	Rear axle differential and planetary gear oil level ( <b>Graziano</b> ) ( <b>Nota 4</b> )	3	500			
	ROPS fixing bolts torque	16			500	
<b>1000 hours or each 6 months</b>	Seat belts fixing bolts torque	2			500	
	Transmission screen	1				1000
	Engine valves clearance ( <b>Note 6</b> )	12			1000	
	Circle turn gear housing oil	1	1000			
	Alternator and air conditioning belts	2	1000			
	Reducer gear housing oil - Front wheel drive <b>AWD (Nota 7)</b>	2	1000			
	Hydraulic system oil ( <b>Nota 6</b> )	1	1000			
<b>2000 hours or yearly</b>	Air cleaner elements	2	1000			
	Rear axle differential and planetary gear oil ( <b>Graziano</b> ) ( <b>Nota 4</b> )	1	2000			
	Tandem case oil	2	2000			
	Turbocharge fixing bolts torque	4			2000	
	Engine coolant	2	2000			

**NOTE:** See "FLUIDS AND LUBRICANTS AND CAPACITIES" table on previous pages

**NOTE 1:** Service the air filter elements if air filter restriction indicator is in the red area.

**NOTE 2:** Service the hydraulic filters if hydraulic filter indicator lamp illuminates.

**NOTE 3:** Check the radiator coolant level if the coolant level warning lamp illuminates.

**NOTE 4:** Change the rear axle oil after the first **100 hours** of operation.

**NOTE 5:** Change the transmission oil and replace the filter after the first **100 hours** of operation.

**NOTE 6:** Change every **1000 hours** or once a year, whichever comes first.

**NOTE 7:** Change the front wheel drive gear housing oil after the first **100 hours** of operation.

**NOTE 8:** Change the front wheel drive pump hydraulic filter after the first **100 hours** of operation.

\* As needed

Product: New Holland G140VP/G170VP/G170VP(AWD)/G200/G200(AWD) TIER 3 Grader Service Repair Manual  
Full Download: <https://www.arepairmanual.com/downloads/new-holland-g140vp-g170vp-g170vpawd-g200-g200awd-tier-3-grader-service-repair-manual/>  
1002-14



## NOTES :

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Sample of manual. Download All 1073 pages at:

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