

4 - OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

General instructions

Before starting the engine and driving the tractor, follow the instructions below:

- Do not drive the tractor forward or maneuver it in a small space.
- Before starting the engine, check that all of the controls are in neutral.
- All of the controls must be activated from the driving position only.
- Stop the engine before carrying out any service or maintenance operation on the tractor.
- Use the access steps to enter and exit the tractor.
- Keep protective features correctly installed.
- When driving on public roads, signal any stop, turn, or reduction in speed.
- Use the hazard lights to indicate that the tractor is moving slowly.

Engine Start Up

1. If the tractor is stopped for a long period, or if it is moved for the first time in a low ambient temperature, activate the transfer pump 20 times and start the motor for **5 - 10 s** with the injector pump solenoid disconnected.

2. Ensure that the gearshift is in neutral.
3. Press the clutch pedal fully down.
4. Position the hand throttle halfway along its travel.
5. Turn the ignition key to position **(3)**, as shown on page **4-3**. Release the key as soon as the engine engages.

NOTICE: If any warning light shows an abnormality, stop the engine and investigate the problem. If the warning light stays on, consult your dealer NEW HOLLAND.

To drive the tractor

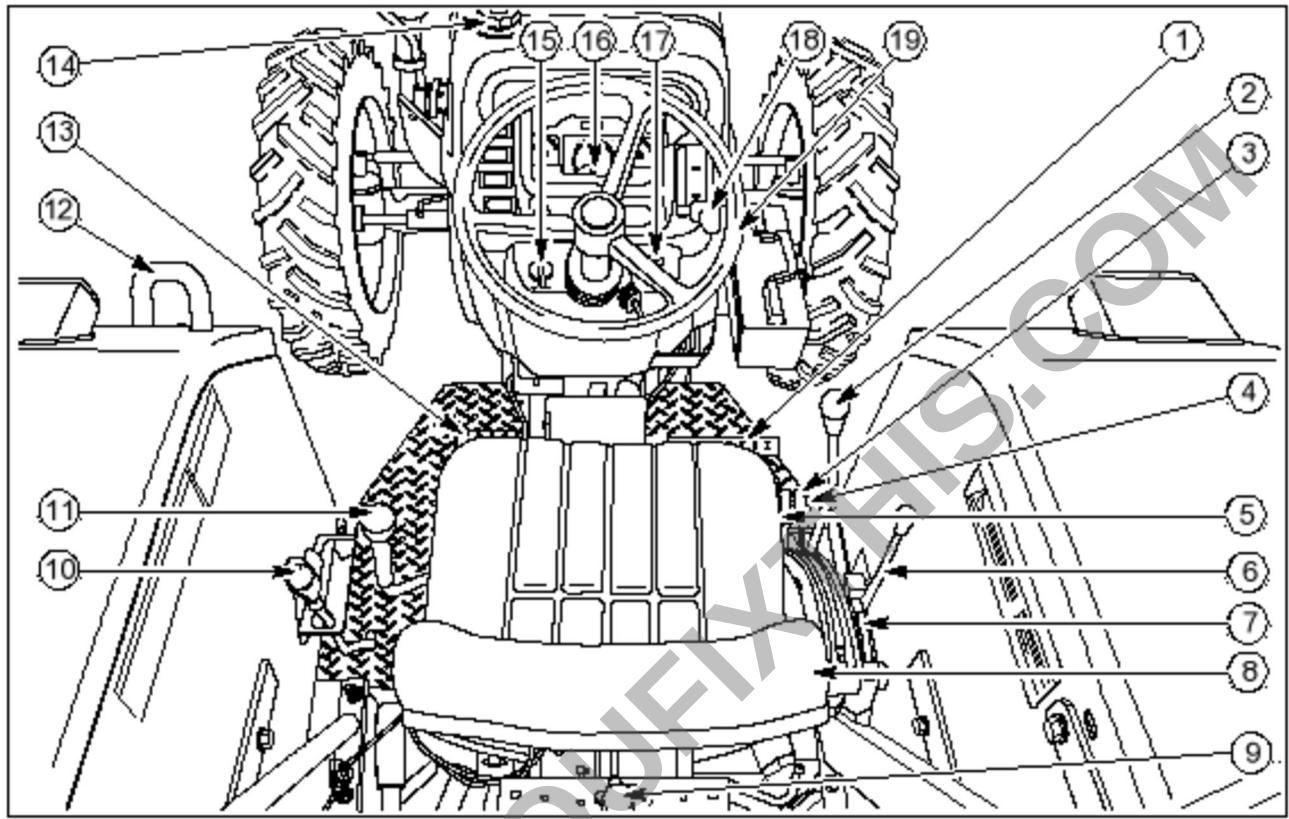
- Press the clutch pedal fully down. Select a gear and a range.
- Adjust the throttle to the correct position.
- Release the parking brake and slowly release the clutch pedal.

NOTE: In order to extend the life of the tires and transmission components, it is advisable not to use the tractor continuously at maximum power when working at speeds lower than **7 km/h**, especially if the tractor is heavily laden.

When towing heavy loads and moving at low speeds, it is not advisable to put a lot of weights on the tractor.

Overview of platform

NOTE: Depending on the model and the options installed, the illustration here may be different from your tractor.



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Item	Name	Item	Name
1.	Brake pedals	11.	Range levers
2.	Gear lever	12.	Operating platform access handrail
3.	Position control lever	13.	Clutch pedal
4.	Foot throttle pedal	14.	Fuel tank nozzle
5.	Effort control lever	15.	Direction arrows switch
6.	Remote control valve lever	16.	Instrument panel
7.	Control for Lift-o-Matic™	17.	Work lights switch
8.	Operator Seat	18.	Hand throttle
9.	Adjusting operator seat	19.	Flywheel
10.	Power Take-Off (PTO) clutch control lever		

MAINTENANCE CHART

Maintenance chart

Interval	Page no.	Maintenance action	No. of pts.	Cleaning	Check	Bleed	Drain fluid	Adjustment	Grease	Replace	Change fluid	Load
WHEN THE WARNING LIGHTS COME ON	7-11	Cleaning		X								
EVERY 10 HOURS OR EACH DAY	7-13	Checking the engine oil level			X							
	7-14	Engine coolant level			X							
	7-14	Hydraulic oil tank			X							
	7-15	Fuel system water separator				X						
	7-15	Fuel filter					X					
	7-16	Battery check			X							
	7-16	Cleaning		X								
INITIAL 50 HOURS	7-18	First 50 Hour Service			X							
EVERY 50 HOURS	7-19	Clutch							X			
	7-20	Service brakes - adjustment			X							
	7-20	Wheels			X							
	7-20	Engine fan belt						X				
	7-21	Grease points							X			
	7-24	Grease points							X			
EVERY 300 HOURS	7-26	Fuel filter									X	
	7-26	Fuel transfer pump		X								
	7-27	Hydraulic oil filter		X								
	7-27	Change engine oil and filter									X	
	7-29	Engine crankcase breather filter		X								
	7-29	Hydraulic oil level			X							
	7-30	Hydraulic oil filter								X		
	7-30	Front axle differential			X							
	7-30	Wheel hub										X
EVERY 1200 HOURS OR ANNUALLY	7-31	Oil From Transmission									X	
	7-32	Radiator drain and flush									X	
	7-33	Hydraulic steering oil reservoir									X	
	7-33	Hydraulic Oil									X	
	7-34	Fuel tank		X								
	7-34	Engine valve clearance			X							
	7-35	Air filter								X		
	7-36	Front axle drive shaft			X							
	7-36	Fuel Injectors			X							

8 - TROUBLESHOOTING

SYMPTOM(S)

Engine

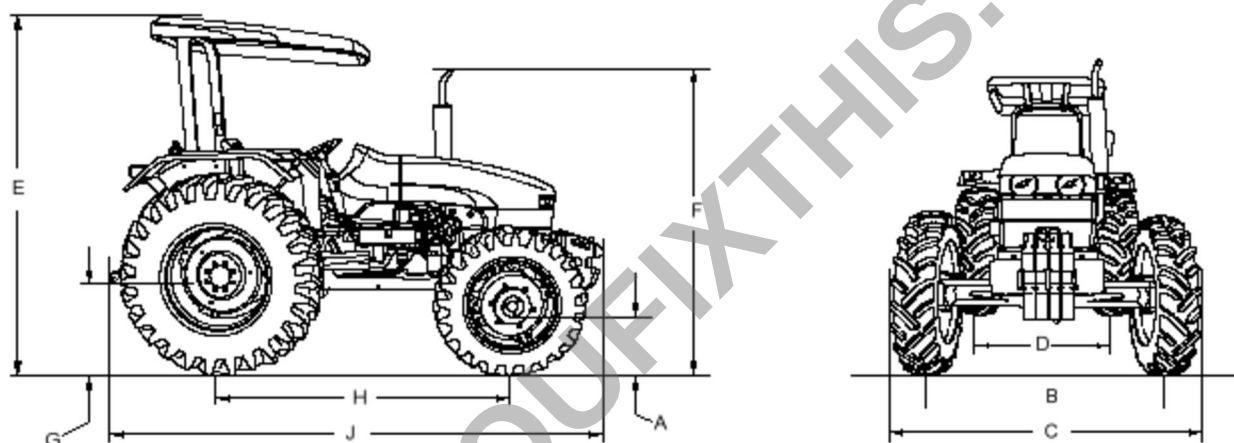
Problem	Possible Cause	Correction
Engine will not start or is difficult to start	Incorrect starting procedure.	Carry out the procedure on page 4-3.
	The tractor is in gear.	Place in neutral.
	Low or no fuel.	Carry out the procedure on page 4-2.
	Air in fuel lines.	Carry out the procedure on page 7-37.
	Clogged fuel system.	See your NEW HOLLAND dealer.
	Low ambient temperature.	Carry out the procedure on page 4-3.
	Fuel system contaminated.	Carry out the procedure on page 7-37.
	Clogged fuel filter(s).	Carry out the procedure on page 7-26.
	Malfunction of the injection pump or injectors.	See your NEW HOLLAND dealer.
	Malfunctioning fuel solenoid or solenoid relay.	See your NEW HOLLAND dealer.
	Incorrect viscosity engine oil.	See page 9-3 for information about fluid specifications and quantities.
	Incorrect fuel for operating temperature.	Refer to the fuel specifications on page 7-2 and 7-3.
Engine runs roughly and/or stalls	Slow starter motor speed.	See your NEW HOLLAND dealer.
	Fuel filter(s) restricted	Carry out the procedure on page 7-26.
	Poor quality fuel.	Drain the reservoir and fill with filtered fuel.
	Clogged fuel system.	See your NEW HOLLAND dealer.
	Fuel system contaminated.	Carry out the procedure on page 7-37.
	Faulty fuel injector.	See your NEW HOLLAND dealer.
	Fuel solenoid incorrectly adjusted.	See your NEW HOLLAND dealer.
Engine lacks power	Fuel cap vent blocked.	Wash cap in clean fuel oil.
	Engine overloaded.	Shift to a lower gear, reduce draft load, or reduce ballast carried.
	Blocked air filter.	Carry out the procedure on page 7-11.
	Low engine operating temperature.	See your NEW HOLLAND dealer.
	Engine overheats.	See your NEW HOLLAND dealer.
	Clogged fuel filter(s).	Carry out the procedure on page 7-26.
	Incorrect fuel.	See the fuel specifications on pages 7-2 and 7-3.
	Malfunctioning fuel injectors.	See your NEW HOLLAND dealer.
	Fuel injection pump malfunction.	See your NEW HOLLAND dealer.
	Maximum 'no-load' speed set too low	See your NEW HOLLAND dealer.
	Air inlet leak on the exhaust manifold tubes.	See your NEW HOLLAND dealer.
	Implement incorrectly set.	Consult the implement manual.
	Incorrect valve play.	See your NEW HOLLAND dealer.
	Throttle command lever mechanism is faulty.	See your NEW HOLLAND dealer.
Engine knocks	Fuel injection pump timing.	See your NEW HOLLAND dealer.
	Low engine oil level.	Carry out the procedure on page 7-13.
	Low engine oil pressure.	See your NEW HOLLAND dealer.
	Low engine operating temperature.	See your NEW HOLLAND dealer.
	Engine overheats.	See your NEW HOLLAND dealer.
	Incorrect valve adjustment.	See your NEW HOLLAND dealer.
Low engine operating temperature	Malfunctioning thermostat(s).	See your NEW HOLLAND dealer.
	Ventilator locked.	See your NEW HOLLAND dealer.
	Faulty coolant temperature gauge.	See your NEW HOLLAND dealer.

9 - SPECIFICATIONS

General dimensions

NOTE: The following dimensions are based on standard tractors fitted with tire size as shown. If your tractor has tires of a different size then the dimensions will vary due to the difference in the rolling radius and section width of the tires fitted.

Dimensions of models with standard tires



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The dimensions in table 01 were obtained for the following tire sizes:

TT4030 – front 11.2 x 24 and rear 16.9 x 30

Table 01: Overall machine dimensions

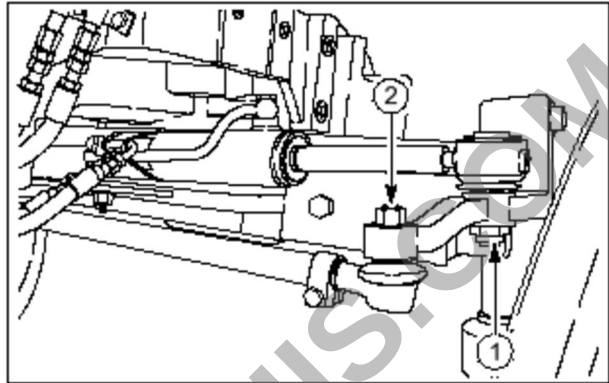
	TT4030
A. Lowest height from the ground	260 mm (10.2 in)
B. Front track width (standard)	1445 mm (56.9 in)
C. Overall width (standard)	1850 mm (72.8 in)
D. Rear track width (standard)	1475 mm (58.1 in)
E. Full height	2210 mm (87.0 in)
F. Height to top of exhaust pipe	-
G. Height to lower hydraulic lift arms	555 mm (21.9 in)
H. Wheelbase	2180 mm (85.8 in)
J. Total length	3480 mm (137.0 in)
Minimum radius of turning circle	
Version with auxiliary front wheel drive (AFWD)	6400 mm (252.0 in)
Version without AFWD	6800 mm (267.7 in)

WHEEL TRACK ADJUSTMENT

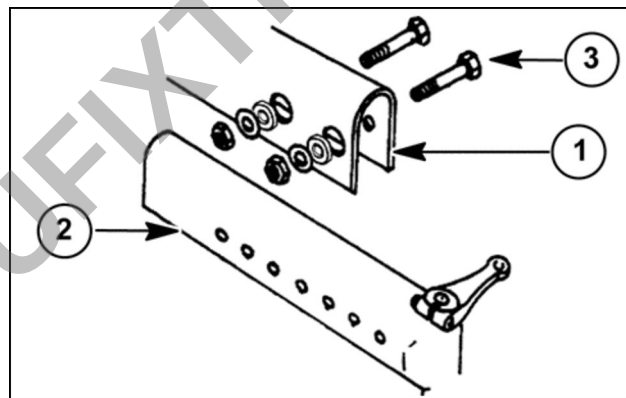
Adjustments of the front tread - Version without Auxiliary Front Wheel Drive (AFWD)

To adjust the track of the front wheels, proceed as follows:

1. Bring the machine to a stop.
2. Place an adequate device, taking into consideration the machine's weight, under the central part of the front axle.
3. Lift the front axle until the front wheels leave the ground. Install two trestles that can take the machine's weight. Support the machine's front axle on the two trestles.
4. Remove the (1) nut on the steering cylinder terminal.
5. Loosen the bolt (2). Remove the stabilizer bar from the eye ring of the semi-axe.
6. Loosen the nuts and remove the bolts (3). Pull the wheel and the semi-shaft (2) outwards until you obtain the required track and align the semi-shaft and the housing holes.
7. Install the bolts (3) and the nuts. Torque valve to **118 N·m (87.0 lb ft)**.
8. Perform steps 5 to 7 on the other side of the front axle.



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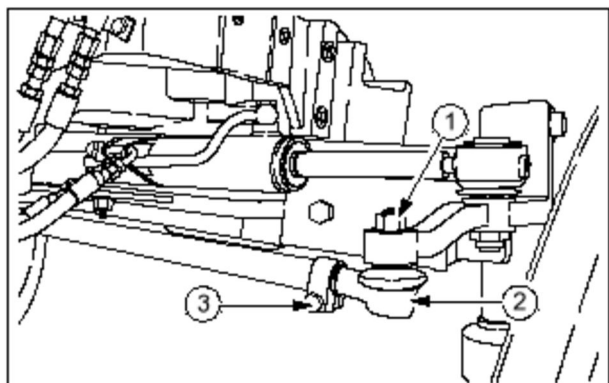
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8. Loosen the nut (1) and turn the stabilizer bar's terminal (2) until reaching the appropriate length.

NOTE: The auto-lock nut (1) must be replaced every time it is removed or partially loosened.

9. Align the stabilizer bar's terminal and tighten the nut (1). Torque valve to **24.5 N·m (18.1 lb ft)**.

Perform the toe-in adjustment procedure on the front wheels as described on page 6-29.



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2 - SAFETY INFORMATION

Safety precautions

Personal safety



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

 DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

 WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

 CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: Notice indicates a situation that, if not avoided, could result in machine or property damage.

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: Note indicates additional information that clarifies steps, procedures, or other information in this manual.

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

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MAINTENANCE CHART

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WHEN THE WARNING LAMP LIGHTS

Cleaning the air filter	7-11
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EVERY 10 HOURS OR EACH DAY

Checking the engine oil level	7-13
Engine coolant level	7-14
Hydraulic oil reservoir of the steering - Check	7-14
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FIRST 50 HOURS

First 50 Hour Service	7-18
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EVERY 50 HOURS

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Service brakes - adjust	7-20
Wheels - Check.....	7-20
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EVERY 300 HOURS

Fuel filter - Replacement	7-26
Fuel transfer pump - Cleaning	7-26
Hydraulic oil filter of the steering - Cleaning	7-27
Change engine oil and filter	7-27
Engine crankcase breather filter - Cleaning	7-29
Hydraulic oil level.....	7-29
Hydraulic oil filter - Replace	7-30
Front axle differential and hubs - Check the oil level	7-30
Wheel hub - Change fluid	7-30

EVERY 1200 HOURS OR ANNUALLY

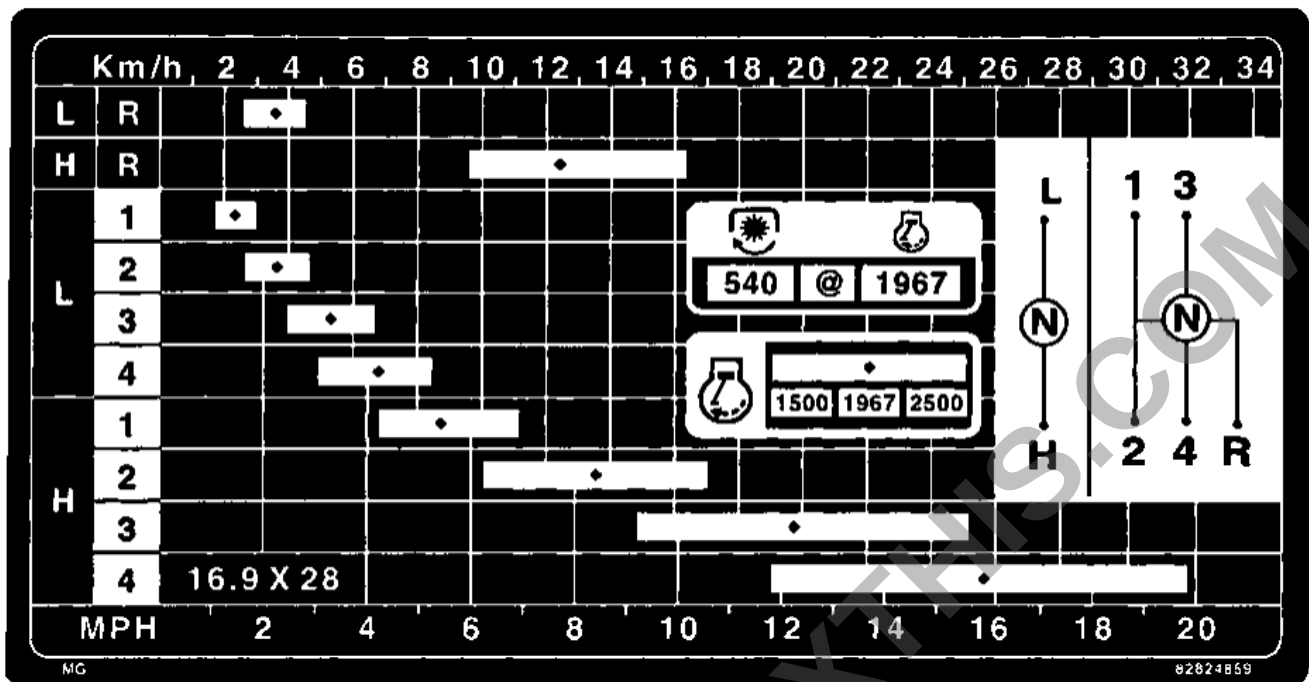
Transmission oil - Replace	7-31
Radiator drain and flush	7-32
Hydraulic steering oil reservoir - Change fluid.....	7-33
Hydraulic oil front differential - Replace	7-33
Fuel tank - Cleaning	7-34

Diesel fuel

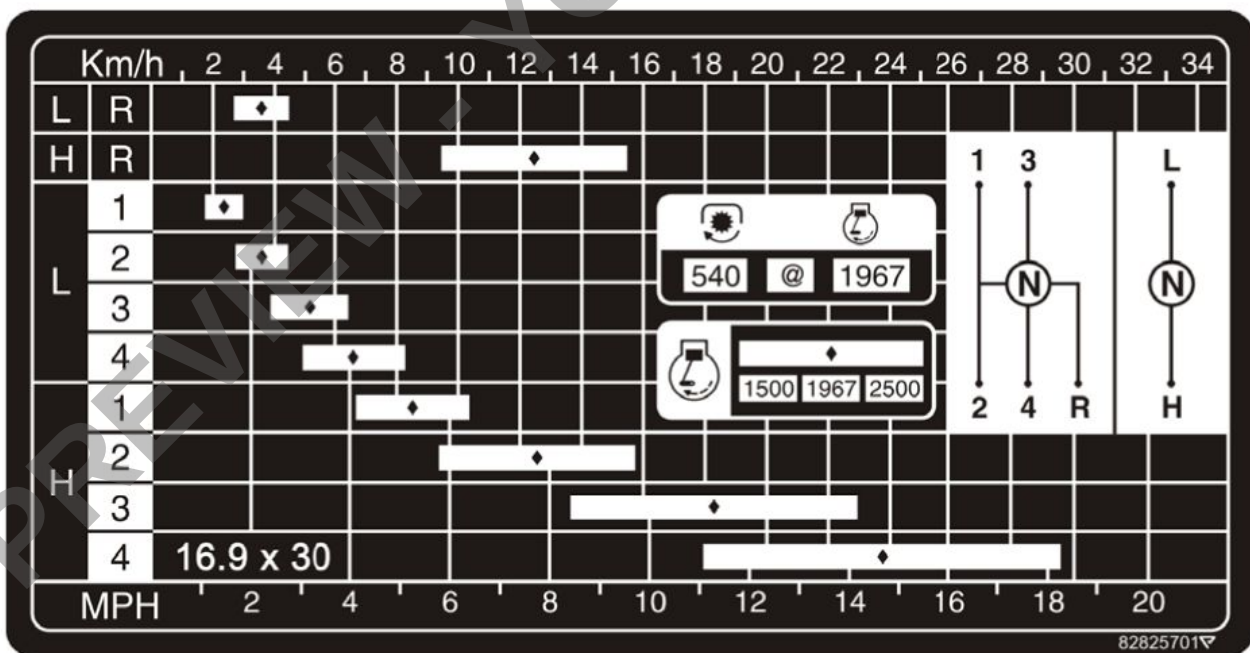
- Under no circumstances should gasoline, alcohol or blended fuels be added to diesel fuel. These combinations can create an increased fire or explosive hazard. In a closed container such as fuel tank, these mixtures are more explosive than pure gasoline. Do not use these blends.
- Never remove the fuel cap with the engine running or hot.
- Do not smoke when refilling the machine nor when standing near fuel. Keep any type of open flame away.
- Control the fuel refill pipe nozzle when filling the tank.
- Do not refill the fuel tank to capacity. Only fill to the lower edge of the filler nozzle to leave space for expansion.
- Wipe up spilled fuel immediately.
- Always tighten the fuel tank cap securely.
- If you lose the original fuel tank cap, replace it with an approved cap. A non-approved, proprietary cap may not be safe.
- Never use fuel for cleaning purposes.
- Arrange fuel purchases so that summer grade fuels are not held over and used in winter.



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Acceptable pressures and loads for rear tires (cross ply tires)

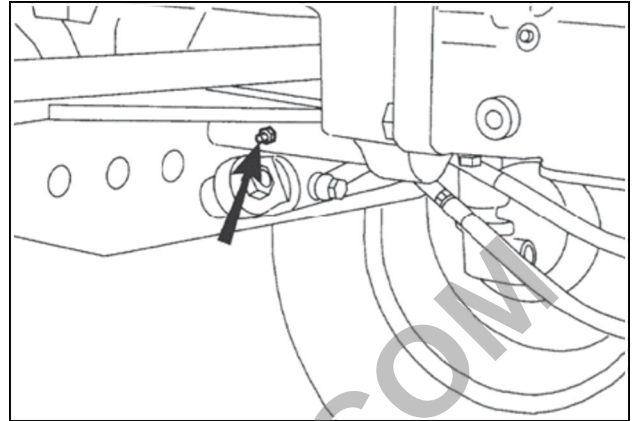
Tire	Cold calibration pressures - bar (psi)												
	0.9 (13)	1.0 (14.5)	1.1 (16)	1.25 (18)	1.4 (20)	1.5 (22)	1.65 (24)	1.8 (26)	1.9 (28)	2.1 (30)	2.2 (32)	2.35 (34)	2.75 (40)
	Maximum load per tire - Kg												
16.9 x 30	–	–	1770	1895	2020	2135	2245	2350	2485	–	–	–	–

To avoid the possibility of tire creep (movement of the tire on the rim), do not use tire pressure below **0.9 bar** with cross ply tires for operations that have a high torque requirement, e.g. sub-soiling, heavy transport, etc. When mounted implements are used on the tractor, loads may be increased by **20 %** with no increase in tire calibration pressure, if operated at speeds up to **6 km/h**.

For haulage service, it is recommended that the tire be inflated to the maximum pressure stipulated in the table.

The above chart is for guidance only. For exact information regarding calibration pressure and loads for your particular tires, consult your NEW HOLLAND dealer.

Front axle bearing.



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