4 - OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

Before starting the engine

⚠ WARNING

Inhalation/asphyxiation hazard!
Make sure there is proper ventilation before starting the engine.
Failure to comply could result in death or serious injury.

W0091A

⚠ WARNING

Hazard to bystanders!
ALWAYS make sure the work area is clear of bystanders and domestic animals before starting this procedure. Know the full area of movement of the machine. Do not permit anyone to enter the area of movement during this procedure.
Failure to comply could result in death or serious injury.

W0245A

⚠ WARNING

Unexpected machine movement!
Before starting the engine, move all operating controls to neutral or park lock position. This prevents accidental movement of the machine or start up of power-driven equipment.
Failure to comply could result in death or serious injury.

W0302A

First tractor use

Before starting your tractor for the first time, make the following checks:

- Make sure the tractor is properly lubricated and greased as described in the maintenance section of this manual.
- Check the engine oil level, engine coolant level, and transmission oil. See the maintenance section of this manual.
- Check that the tractor fuel tank is filled with clean fuel that meets the specifications given in this manual.
- Check the fuel system, cooling system and engine for leaks.
- Remove any water or sediment from the water trap of the fuel tank and primary filter.
- Check the air pressure in the tires and check the wheel bolt torque.
- Make sure the power takeoff guard is in the proper position.

Daily inspection

- Walk around and visually inspect the tractor daily. Check for such items as hoses or wires rubbing against other components, oil leaks, trash buildup, loose bolts or anything that would affect the normal operation of the tractor.
- Inspect the exhaust system and repair if leaking, failed, or damaged.
- Make any necessary corrections before operating the tractor.

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3 - CONTROLS/INSTRUMENTS

ACCESS TO OPERATOR'S PLATFORM

Tractor access

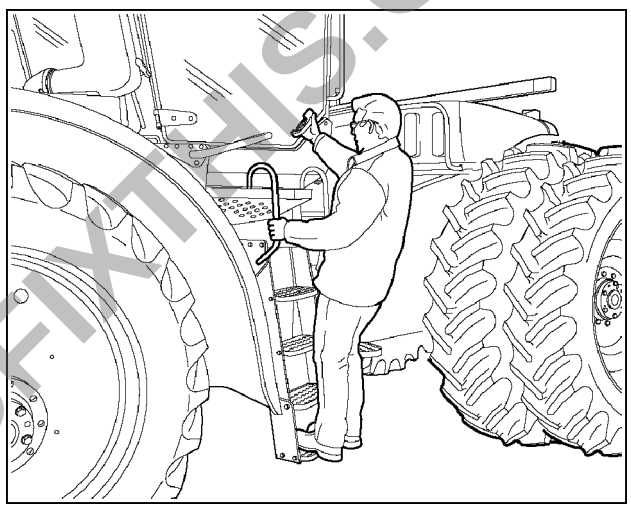
⚠ WARNING

Fall hazard!
Jumping on or off the machine could cause an injury. Always face the machine, use the handrails and steps, and get on or off slowly. Maintain a three-point contact to avoid falling: both hands on the handrails and one foot on the step, or one hand on the handrail and both feet on the steps.
Failure to comply could result in death or serious injury.

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When mounting or dismounting the tractor, use the hand rails and steps provided.

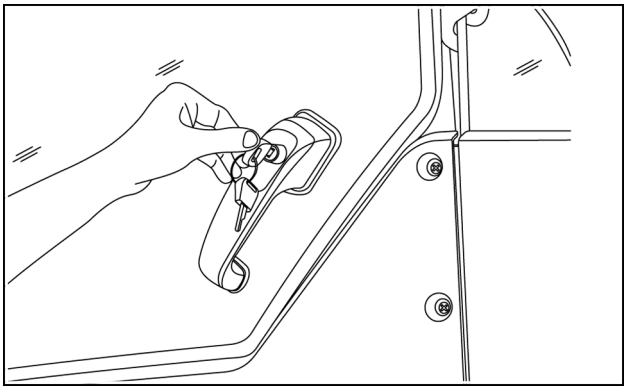
NOTE: *On the T9.390, T9.450, T9.505, and T9.560 models, the entry ladder has two positions possible to adjust for preference or tire size.*



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Cab door lock

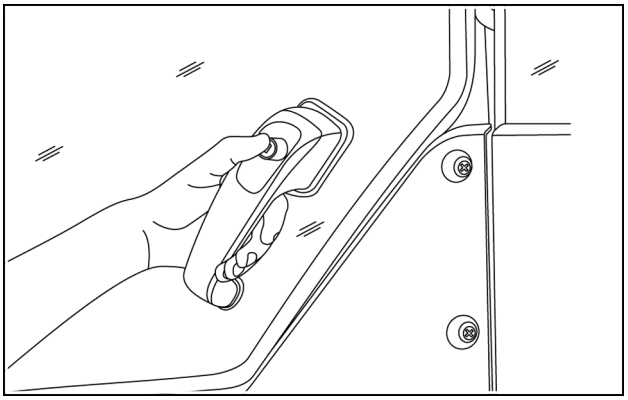
Use the key to lock or unlock the cab door from the outside.



RCPH10FWD115BAG 2

Control handle - outside

Push in on the handle button to open the cab door. The door is equipped with a dampener for opening.



RCPH10FWD116BAG 3

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7 - MAINTENANCE

GENERAL INFORMATION

General information

Environment

Before you service the machine and before you dispose of the old fluids, lubricants and filters, always remember the environment

- Do not pour oil or fluids on the ground, down drains or into containers that can leak.
- Dispose of all old fluids, lubricants and filters in accordance with local regulations.
- Check with your local environmental recycling center or you local dealer for correct information.

Plastic and resin parts

- Do not use gasoline, paraffin, paint thinner, etc., when cleaning plastic, e.g.; console, instrument cluster, monitors and gauges, etc. Using gasoline, paraffin, paint thinner, etc., will cause color fading, cracking or deformation of the parts being cleaned.
- Use only water, mild soap and a soft cloth when you clean these parts.

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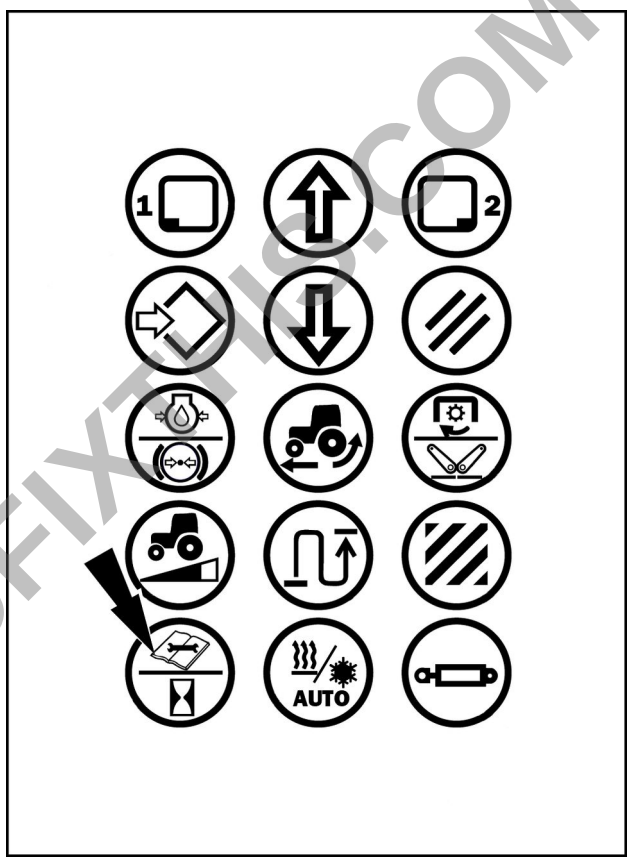
8 - TROUBLESHOOTING

FAULT CODE RESOLUTION

Fault code retrieval

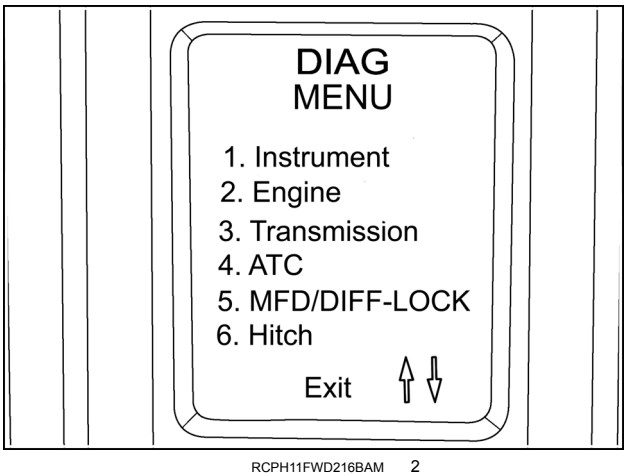
NOTE: *Controllers can be checked for fault codes at any time. Up to 10 fault codes can be stored for each function.*

1. Press and hold the Diagnostic key on the key pad, with the key switch in the On or Run position, to access fault codes for a specific controller.



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2. The "Diag Menu" screen will display.



RCPH11FWD216BAM 2

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9 - SPECIFICATIONS

Engine specifications

Diesel Engine

Tractor Model	T9.390	T9.450	T9.505	T9.560	T9.615	T9.670
Engine Make/Model	New Holland Cursor					
Type	In-line, six cylinder, four stroke cycle					
Aspiration	Variable geometry turbo charged (VGT), air to air after cooled	Wastegate turbo charged, air to air after cooled			2 Stage turbo charged, air to water intercooled, air to air after cooled	
Emission Level (tier)	4					
Firing order	1-4-2-6-3-5					
Bore	**117 mm (4.6 in)**	**135 mm (5.3 in)**				
Stroke	**135 mm (5.3 in)**	**150 mm (5.9 in)**				
Displacement	**8.7 l (530 in³)**	**12.9 l (787 in³)**				
Compression ratio	15.9:1	16.5:1			15.3:1	
Cylinder sleeves	Wet type, removable					
High idle (no load)	**2190 - 2350 RPM**	**2200 - 2350 RPM**				
Rated speed	**2000 RPM**	**2100 RPM**				
Idle speed	**850 RPM**					
Standard power rating-kW (HP)	**261 kW (350 Hp)**	**298 kW (400 Hp)**	**336 kW (450 Hp)**	**373 kW (500 Hp)**	**399 kW (535 Hp)**	**447 kW (600 Hp)**
Peak torque at 1400 RPM NM. (Lb. Ft.)	**1806 N·m (1332 lb ft)**	**1924 N·m (1419 lb ft)**	**2161 N·m (1594 lb ft)**	**2400 N·m (1770 lb ft)**	**2636 N·m (1944 lb ft)**	**2879 N·m (2123 lb ft)**
Torque rise - %	40					

Lubrication system

Oil pressure at idle speed (minimum)	
T9.390	**400 kPa (58 psi)**
T9.450, T9.505 and T9.560	**430 kPa (62 psi)**
T9.615 and T9.670	**220 kPa (31 psi)**

Oil pressure at high idle	
T9.390	**500 kPa (72 psi)**
T9.450, T9.505 and T9.560	**480 kPa (70 psi)**
T9.615 and T9.670	**460 kPa (67 psi)**
Type of system	Pressure and spray

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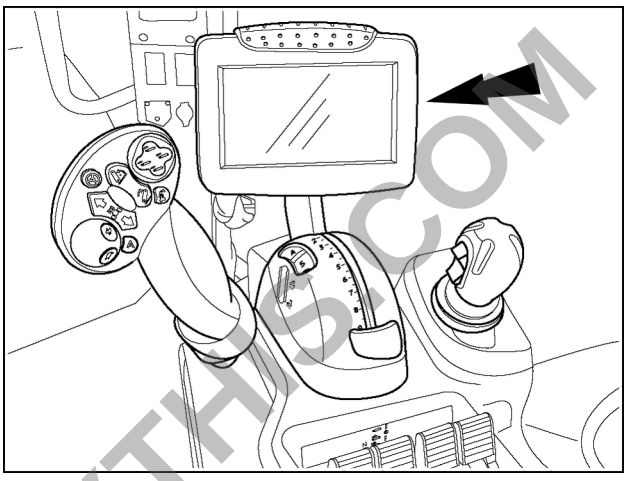
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10 - ACCESSORIES

Farming system displays

IntelliView™ III display

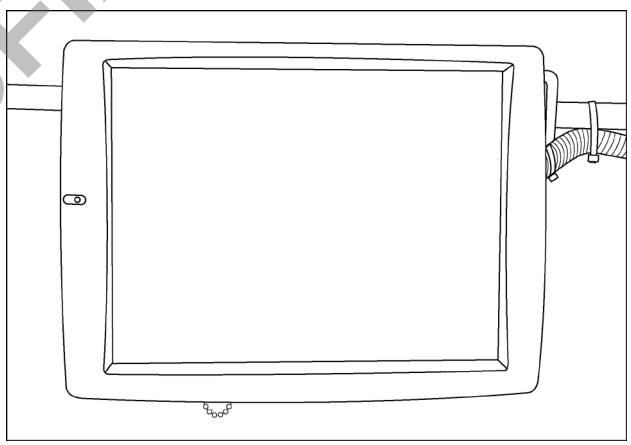
The IntelliView™ III display is available for your tractor for various applications. Refer to the display or software application manual for all operating instructions.



RCPH10FWD686BAM 1

IntelliView™ IV display

The IntelliView™ IV display is available for your tractor for various applications. Refer to the display or software application manual for all operating instructions.



RCPH10FWD976BAM 2

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2 - SAFETY INFORMATION

Safety rules

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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The clearance may be restricted by movable or detachable devices. The clearance zone on towing vehicles shall be in accordance with **ISO 6489** and **ISO 5673–2**.

L Data about maximum allowed trailed masses.

Refer to **9-15** for details.

M Area between tractor and trailed vehicle.

⚠ WARNING

Avoid injury!
Always stay clear of the implement operating area. In particular, DO NOT stand between the tractor and the trailed vehicle or either three-point linkage when operating lift controls. Make sure no by-standers are within or near these operating areas.
Failure to comply could result in death or serious injury.

W1087A

Section 4.3

► Noise declaration

The noise values at the operator's ear are measured according to Directive **2009/76/EC**. The noise of the tractor in motion is measured according to Annex VI of Directive **2009/63/EC**.Specific values for your tractor can be found in can be found on **2-14**.

Section 4.4

► Vibration declaration

The vibration value is measured according to Directive **78/764/EEC** and can be found on **2-15**.

Section 4.5.1

► Working with front-end loader (risk of falling objects)

Front end loaders are not approved for this tractor. Refer to **1-7**.

Section 4.5.2

► Working in a forestry environment (risk of falling and/or penetrating objects)

This tractor is not intended for forestry work. Refer to **1-7**.

Section 4.5.3

► Working with crop sprayers, mounted or trailed (risk of hazardous substances).

The Cab certified as category 1 does not guarantee full protection against dust, aerosols and vapors. The Cab certified as category 2 offers protection against dust, but only partially from aerosols and vapors. Please refer to the instructions provided by the supplier of the chemical agent (e.g. pesticides, fungicides, herbicides, etc.), as well as instructions provided by the sprayer manufacturer. Personal protective equipment (PPE) must be used when specified by these instructions and also when inside the cab or for tractors without a cab Although the air delivery system cannot offer full protection, partial protection can be achieved by following some basic rules.
Refer to **2-17** for further details

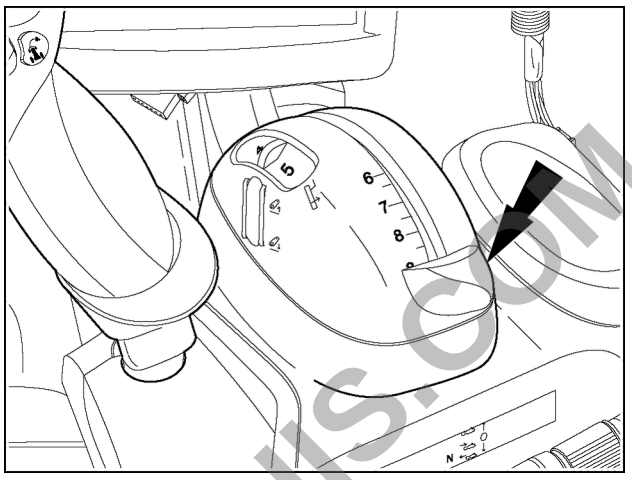
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Hitch controls

Hitch position control (if equipped)

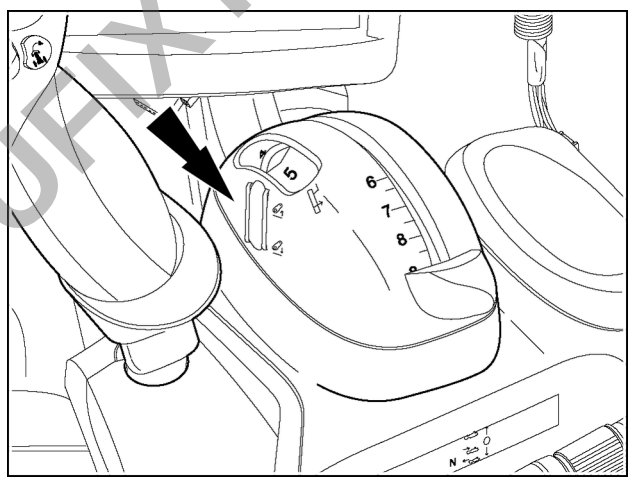
The hitch position control raises or lowers the hitch to select the working depth for an implement.
Pull the hitch position control rearward to raise the hitch or decrease down pressure.
Push the hitch position control forward to lower the hitch or increase down pressure.



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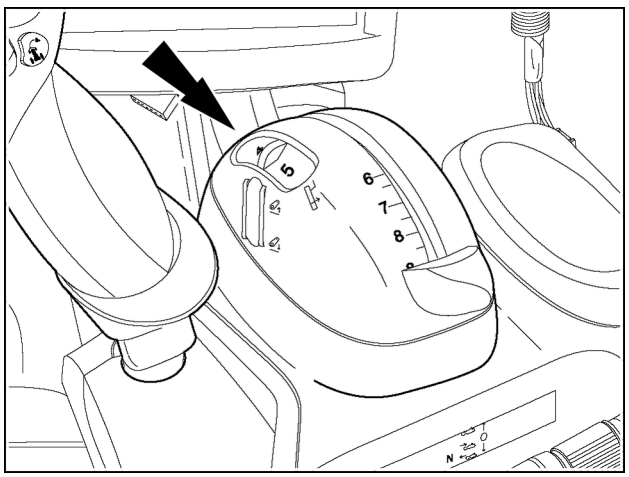
Hitch express raise/lower switch

The hitch raise and lower switch can be used to raise or lower the hitch without effecting the position control setting.
Press the top of this switch to fully raise the hitch or push the bottom of the switch to fully lower the hitch.



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Not used

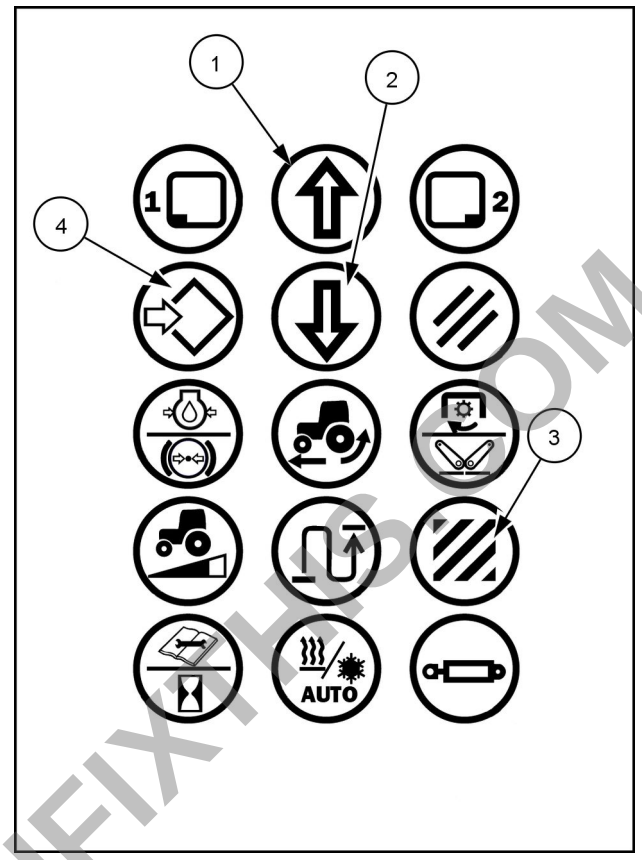


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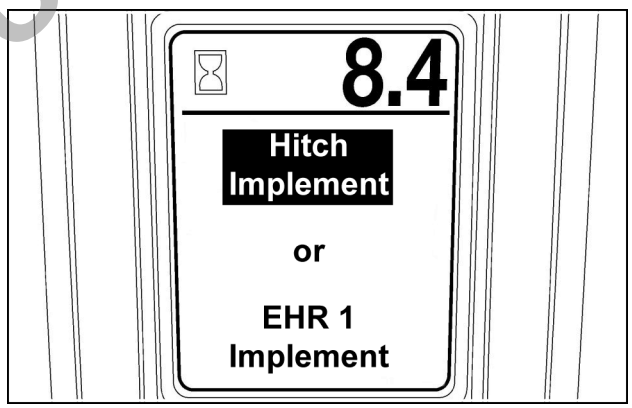
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- Use the Up arrow or Down arrow key to increase or decrease the width setting in meters or feet, depending on the units of measurement selected. Press and hold the key to make changes rapidly; press and release the key to change the value in 0.5 increments.
- Press the Program key to return to the operating screens



RCPH11FWD366BAM 8

- Press the Area key three times to access the hitch or remote valve selection screen. The selection on this screen determines how the system knows when the implement is working: the hitch is lowered or remote valve 1 is activated.
- Use the Up arrow or Down arrow key to make your selection. Press the Program key to save the selection and return to the normal operating screens.



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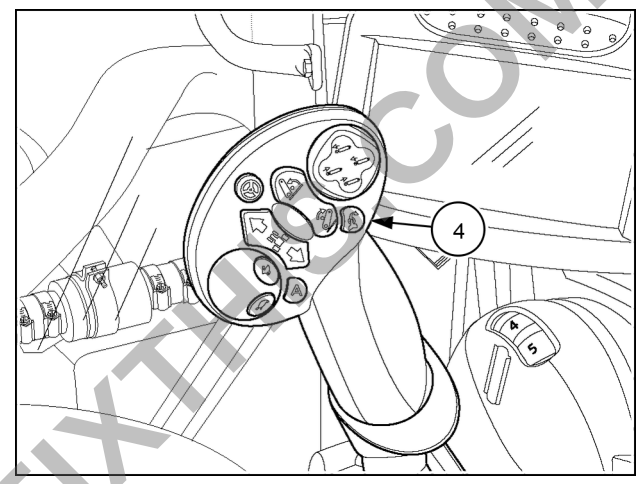
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5. When manual playback is selected, press the step button to play back only the first step in the sequence. When the first step completes, the sequence pauses until the step button is pressed again to start the next step.
   Each step plays back exactly as it was recorded in real time.

NOTE: *If necessary, the decelerator pedal may be used to decrease engine speed during end of row playback*

6. If pauses are inserted into the sequence during recording, playback automatically stops at each pause point. To resume the sequence, press and hold the step button until a “beep” sounds. The next step starts immediately when the button is released.
   Pauses in a sequence offer better control of the timing between steps.
7. A sequence can be stopped at any time by pressing the step button **(4)**. The sequence pauses and the playback symbol flashes.
8. To resume playback, press and hold the step button until a “beep” sounds and then release the switch. However, if the step button is pressed while a step is playing back, interrupting the action, the rest of the step is aborted. The interrupted step may have to be manually completed by the operator before resuming playback.



RCPH10FWD642BAM 11

During playback, any of these actions causes headland management system to exit and the sequence to be terminated:

- Tractor speed drops below **0.5 km/h** (**0.3 mph**) or the tractor is stationary for more than 10 seconds
- The operator leaves the seat for more than 2 seconds.
- The hitch or PTO controls are operated.
- The hand throttle is moved.
- Any of the headland management recordable controls are operated to override the sequence.

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TRAILER BRAKE COUPLER

Safety rules

⚠ WARNING

Driving hazard!
Be aware that extra weight and bad traction conditions such as mud or ice increase your stopping distance. Liquid in the tires, weights on the machine or wheels, tanks filled with fertilizer, herbicides, or insecticides - all these add weight and increase the distance you need to stop.
Failure to comply could result in death or serious injury.

W0338A

⚠ WARNING

Transport hazard!
For speeds up to 40 km/h (25 mph), make sure that the weight of the trailed vehicle that is not equipped with brakes DOES NOT EXCEED the weight of the tractor. Stopping distance increases with increasing speed as the weight of the towed load increases, especially on hills and slopes.
Failure to comply could result in death or serious injury.

W0915A

⚠ WARNING

Transport hazard!
For speeds up to 32 km/h (20 mph), make sure that the weight of a trailed vehicle that is not equipped with brakes DOES NOT EXCEED 1.5 times the tractor weight. Stopping distance increases with increasing speed as the weight of the towed load increases, especially on hills and slopes.
Failure to comply could result in death or serious injury.

W0960B

For trailers with hydraulic brakes, the hydraulic trailer brake connector (if equipped) is located at the rear of the tractor.

A maximum of 2.5 times the tractor weight can be towed if this hydraulic trailer brake system is used.

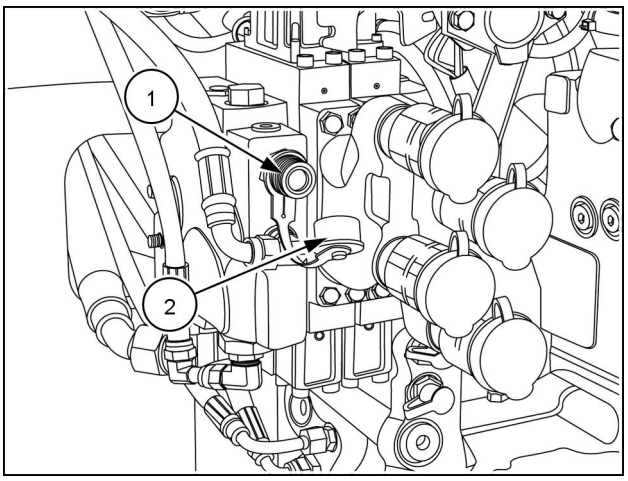
Trailer brake connections

The hydraulic trailer brakes may be connected into the hydraulic system via a quick-release coupling **(1)** at the rear of the tractor.

If the trailer brake hose is connected into the coupling, the trailer brakes are automatically applied when the brake pedal is used to stop the tractor.

NOTE: *Always keep the dust-cap* ***(2)*** *in place when the trailer brake coupling is not in use.*

NOTE: *See your dealer for trailer connector part number* ***737606R1****.*



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Tire pressure for maximum tire load at rated inflation

To reach the best tire pressure and load capacity, scale weigh the front and rear axle of the tractor.

Determine proper ballast weight split.

60 % Front/ **40 %** Rear - Tractor used with hitch mounted implements.
55 % Front/ **45 %** Rear - Tractor used with drawbar towed high draft implement.
65 % Front/ **35 %** Rear - Tractor used with high vertical drawbar loads.

See Tractor Ballast information for additional information.

Determine correct static load distribution and tire pressure from chart.

Example: Tractor used with standard drawbar implements, 480/80R42 dual tires and a full tank of fuel. Desired weight split = **55 %** Front/ **45 %** Rear.

Front Weight of Tractor = **6350 kg** (**14000 lb**)
Rear Weight of Tractor = **4260 kg** (**9392 lb**)
Total Weight of Tractor = **10610 kg** (**23392 lb**)

Determine weight distribution by dividing front and rear weight by total weight.

Tractor Weight Distribution = **59.8 %** Front Axle, **40.2 %** Rear Axle

Adjust the weight distribution by adding **907 kg** (**2000 lb**) weight to the rear wheels.

Adjusted Weight:

Front Weight = **6350 kg** (**14000 lb**)
Rear Weight = **5167 kg** (**11392 lb**)
Total Weight = **11518 kg** (**25392 lb**)
Total Weight Distribution = **55.1 %** Front Axle **44.9 %** Rear Axle

Front Static Load - Weight divided by number of tires.

6350 kg (**14000 lb**) / 4 = **1588 kg** (**3500 lb**)

From Chart: 480/80R42 Dual Tires - **1630 kg** (**3590 lb**) = **60 kPa** (**9 psi**)

Rear Static Load - Weight divided by number of tires.

5167 kg (**11392 lb**) / 4 = **1292 kg** (**2848 lb**)

From Chart = 480/80R42 Dual Tires - **1365 kg** (**3010 lb**) = **40 kPa** (**6 psi**)

NOTICE: *The following Tire pressure and load capacity charts are for general reference only. See the tire manufacturer for exact pressures and load capacity.*

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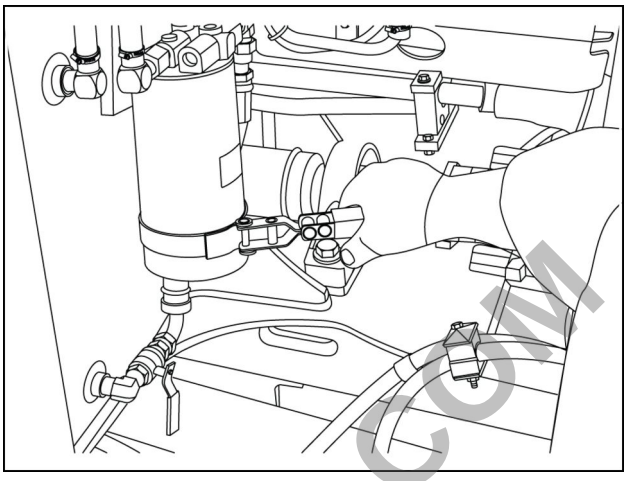
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Netherlands (0031)	0800 6411111	0202008278	TopService.Nederland@newholland.com
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Country	Toll free fax	Local number	E-mail
Portugal (00351)	800 207592	0217616019	TopService.Portugal@cnh.com
A chamada é grátis. Contudo, alguns operadores europeus podem aplicar uma taxa, se a chamada for feita de um telemóvel. Para mais informações sobre as taxas, informe-se antecipadamente, junto do seu fornecedor.			
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Poland (0048)	-	0223060103	TopService.Polska@newholland.com
-			

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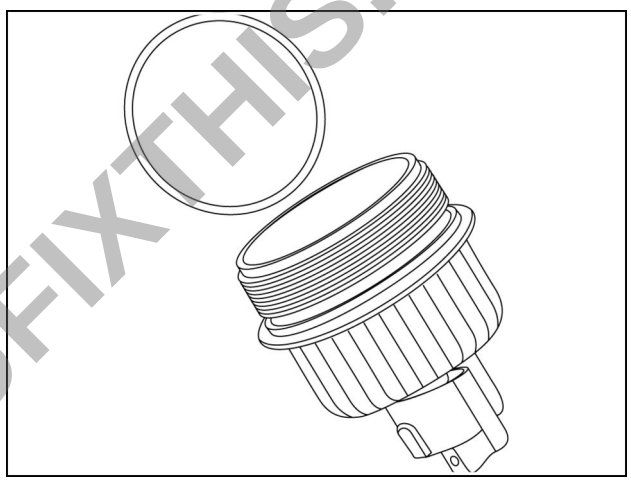
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5. Remove the metal section of the filter with a filter strap.



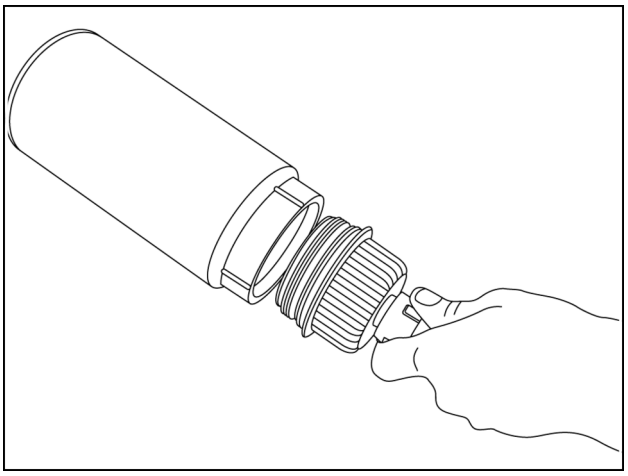
RCPH10FWD917BAM 7

6. Install filter supplied new O-ring on lower clear base.



RCPH10FWD919BAM 8

7. Install lower clear base onto new filter. Do not over tighten.

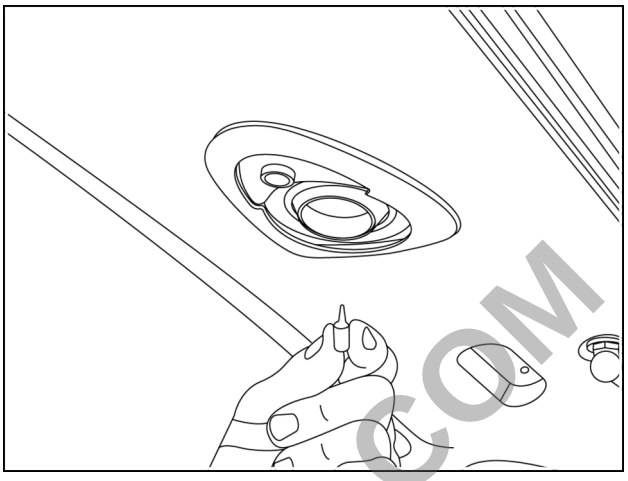


RCPH10FWD920BAM 9

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2. Pull the old bulb straight down and out of assembly. Replace with new bulb and reinstall lens cover.



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