4 - OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

Refueling the tractor

⚠ WARNING

Fire hazard!
When handling diesel fuel, observe the following precautions:
1. Do not smoke.
2. Never fill the tank when the engine is running.
3. Wipe up spilled fuel immediately.
Failure to comply could result in death or serious injury.

W0099A

⚠ WARNING

Fire hazard!
Do not add gasoline, alcohol, or blended fuels to diesel fuel, except as recommended in this manual.
Fuel combinations may increase fire and explosion hazards.
Failure to comply could result in death or serious injury.

W0401A

NOTE: *Additionally, dieselhol is not approved due to possible inadequate lubrication of the fuel injection system.*

Maintenance requirements

The operator must maintain appropriate **DIESEL EXHAUST FLUID (DEF)/ADBLUE®** levels at all times. No additional maintenance is required.

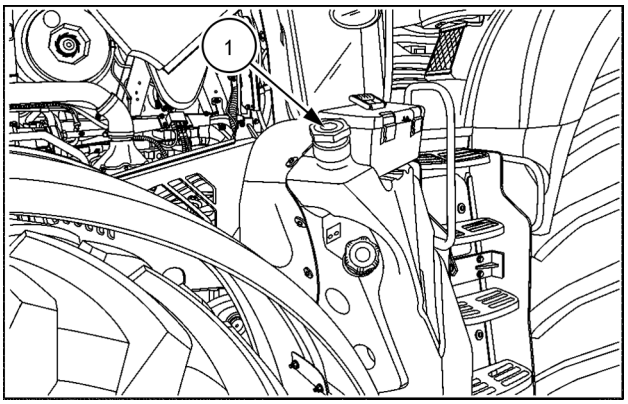
NOTE: *See your NEW HOLLAND dealer for replacement components and cleaning agents.*

See pages **7-10** and **7-11** for lubrication oil quality, maximum lubrication oil consumption ratings, and page **7-2** for fuel requirements. Your SCR system is compatible with up to **7 %** biodiesel fuel.

Diesel

When handling diesel fuel, observe the following:

- Fill the tank at the end of each day to reduce overnight condensation.
- Clean the area around the fuel cap **(1)** to prevent dirt from entering tank and contaminating the fuel.
- Never take the cap off or refuel with the engine running. Remove the cap and place in a clean area during refuelling. The cap is attached to the fuel tank by a chain to prevent loss.
- Keep control of the fuel nozzle while filling the fuel tank.
- Don't fill the tank to capacity. Allow room for expansion. If the original fuel tank cap is lost, replace it with a genuine original equipment cap and tighten securely.
- After filling the tank, replace and tighten the fuel cap.
- Wipe up spilled fuel immediately.



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7 - MAINTENANCE

GENERAL INFORMATION

Introduction

This section gives full details of the service procedures necessary to maintain your tractor at peak efficiency.

Safety precautions

⚠ WARNING

Moving parts!
Disengage the Power Take-Off (PTO), turn off the engine, and remove the key. Wait for all movement to stop before leaving the operator's position. Never adjust, lubricate, clean, or unplug machine with the engine running. Failure to comply could result in death or serious injury.

W0112A

Read and observe all safety precautions listed in 'Servicing the tractor' and 'Prevention of fire or explosion' in the General information and Safety section of this Manual.

NOTE: *Dispose of used filters and fluids properly.*

Preventing system contamination

To prevent contamination when changing oils, filters, etc., always clean the area around filler caps, level and drain plugs, dipsticks and filters prior to removal. Before connecting remote cylinders, ensure that the oil contained within them is clean, has not degenerated due to long storage and is of the correct grade.

To prevent dirt entry during greasing, wipe dirt from the grease fittings before greasing. Wipe excess grease from the fitting after greasing.

Warning symbols

A number of maintenance items are represented by symbols that may appear in the display screens. For more information on these symbols, see **3-86**.

During the first 50 hours operation

In addition to the regular maintenance operations listed, check the following items every 10 hours or daily during the first 50 hours of operation:

- Check the oil level of the transmission, rear axle and hydraulics
- Check the wheel nuts for tightness
- Check the oil level of the front axle hub

NOTICE: *Park the tractor on level ground and, where applicable, extend all cylinders before checking oil levels. With some wheel equipment fitted, it may be necessary to raise the front or rear of the tractor to ensure that the machine is level before checking the oil.*

Flexibility of maintenance intervals

The intervals listed in the maintenance chart are guidelines to be used when operating in normal working conditions.

Adjust the intervals for environmental and working conditions. Intervals should be shortened under adverse (wet, muddy, sandy, extremely dusty) working conditions.

Maintenance chart

NOTE: *For each service interval on the maintenance chart, you are also required to perform all prior service intervals that apply. For example, the 1200–hour or annual service will need the 50–hour, 100–hour, 300–hour and 600–hour individual maintenance actions, in addition to the 1200 hour actions.*

The maintenance chart **7-13** lists the intervals when routine checks, lubrication, service and/or adjustments should be performed. Use the chart as a quick reference guide when servicing the tractor. The operations follow the chart.

Fuel injector maintenance

The fuel injectors on your tractor are electronically controlled and therefore do not require periodic servicing or adjustment.

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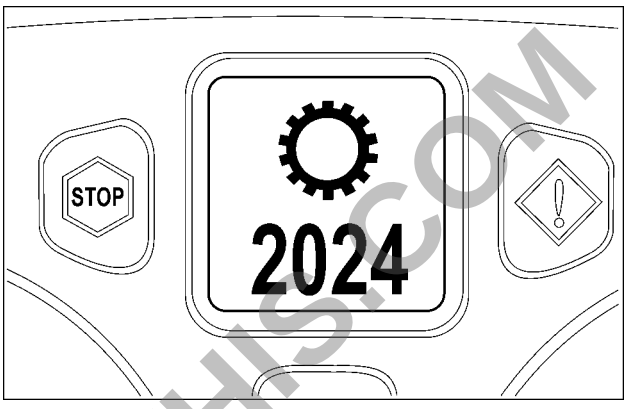
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8 - TROUBLESHOOTING

FAULT CODE RESOLUTION

Introduction

The following information is intended as a guide to assist in identifying and correcting possible tractor malfunctions and fault conditions.



SS11K038 1

Fault codes

Your tractor makes extensive use of electronics to control and monitor major components within the drive line, electrical and hydraulic systems. In the unlikely event of a fault occurring in one of these areas, the malfunction will be identified with a symbol and a four or five digit fault code in the Dot Matrix Display on the instrument panel. The first digit(s) of each number provide the general location of the fault and the subsequent numbers confirm the exact nature of the fault.

The code indicates the faulty circuit or sensor and the type of fault, e.g., open circuit, short circuit, etc. Each fault code will be supported by the relevant symbol displayed above the number.

If a fault code will be displayed in the instrument panel and you are unable to rectify the fault yourself, contact your authorized dealer and report the fault code displayed.

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2 - SAFETY INFORMATION

Safety precautions

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before driving, operating or servicing the machine. Equipment should be operated only by those who are responsible and instructed to do so.

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 which, if not avoided, will result in death or serious injury.

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

⚠ CAUTION, used with the safety alert symbol, indicates a hazardous situation which, 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 which, 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.

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Constant ambient storage temperature	Minimum shelf life
[2] Significant loss of shelf life: check every batch before use. See your NEW HOLLAND dealer for more information on testing.	

NOTE: *The main factors taken into account to define the shelf life in the table above are the ambient storage temperature and the initial alkalinity of* ***DEF/AdBlue®****. The difference in evaporation between vented and non-vented storage containers is an additional factor.*

NOTE: *The information in this table is for reference only and has been provided by the International Organization for Standardization, Document number* ***ISO 22241-3*** *Diesel engines - NO_x reduction agent AUS 32 - Part 3: Handling, transportation and storage.*

NOTE: ***DEF/AdBlue®*** *that remains in the tank of the machine after the season does not require any special precautions unless storage exceeds the shelf life table above.*

Disposal

- Dispose of **DEF/AdBlue®** and any filter accumulations in accordance with all applicable Federal, State, and local laws governing waste disposal.

Hydrocarbon management

If the engine is run at low idle speed for a prolonged period of time, hydrocarbons can accumulate in the SCR catalyst. To manage this accumulation, your machine will monitor current conditions and increase idle speed and/or activate the exhaust flap to increase the temperature inside the SCR catalyst and eliminate the hydrocarbons.

There are three messages that can be displayed to inform you that hydrocarbon management is active:

- Low Idle Increase Recommended - The engine control module desires to increase the engine speed when operating at lower temperatures or with lighter engine loads in order to elevate SCR temperatures.

  NOTE: *This automatic engine idle speed increase is inhibited if certain features are active on the machine. For example: the transmission is in gear, the PTO is engaged, or the remote hydraulics are activated.*
- Low Idle Increase Active - The engine low idle speed has been increased to elevate exhaust temperatures in the SCR catalyst.
- SCR Catalyst Full - The SCR catalyst has become clogged with hydrocarbon accumulation.

  1. Place the machine in park and apply the hand brake (if equipped).
  2. Manually increase the engine speed to **1500 RPM** and allow the machine to run until the warning light turns off. Refer to the troubleshooting chapter in this manual for full details.

     NOTE: *This procedure may take approximately* ***1 - 2 h*** *to complete depending on the ambient air temperature.*

  NOTICE: *Do not turn off the engine, drive the machine, or increase the load on the machine to avoid damage to the catalyst.*

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Intended use statement

Your machine is designed according to European directives related to health and safety risks. Though it has been designed to minimize all the potential risks it is mandatory to carefully read, understand and observe all the decals and labels of the PPP (Plant Protection Product) and to always refer to information and descriptions outlined in this manual to prevent all residual potential risks. In case you may need further assistance, please do not hesitate to contact your dealer.

Your machine is designed and made to pull, to carry and to power a variety of mounted or towed equipment, although within some physical limits. The working speed and performance may depend on a number of various parameters, such as weather and terrain conditions. Though the machine is designed to perform in combination with a variety of equipment, there may be a number of combinations of above parameters, for which there is severe degradation of performance of the machine and/or its mounted or trailed equipment. If you notice degradation of performance, contact your dealer for assistance, he may have useful information for improvements, or a kit may be available to enhance the performance.

Please carefully read and consider following precautions:

- Do not use this machine for any purpose or in any manner other than described in the manual, decals, or other product safety information provided with the machine. These materials define the machine's intended use.
- Do not use the machine beyond its limits of terrain gradient and stability. Using the machine beyond these limits may result in roll over or tip over. Observe the recommendations in this manual.
- Travel speed should be such that complete control and maintain the machine stability at all times. A wet surface or other low adherence conditions may increase the braking distance or result in vehicle instability. Always adapt your traveling speed according to the load of the vehicle and the characteristics of the road.
- Do not use the machine near or on soft verges of canals and brooks or banks and verges that are undermined by rodents. The machine may sink sideways and roll over.
- Do not use the machine on brittle bridge- heads and poor bridge floors. These constructions may collapse and cause roll over of the machine.
  Always inspect the condition and carrying capacity of bridges and ramps prior to crossing
- Do not use equipment mounted on the machine, which is not correctly matching and firmly fixed. Such equipment may increase the risk for roll over and hit the machine when coming loose. Ensure that the dimensions of the three- point linkage interface of both the machine and the equipment are matching according to the categories defined in ISO 730. Ensure that the dimensions and speed of the Power Take-Off (PTO) shaft on the machines are matching those of the equipment.
- Do not use the machine in combination with equipment, without having consulted the specific Operator's Manual provided with the equipment. The machine is a universal tool to carry, tow and drive a variety of equipment. This manual alone cannot provide you with all the information required for the safe operation of the combination.
- Do not use the machine for pulling work, in cases where you do not know whether the load will yield, for instance when pulling stumps; the machine may flip over when the stump is not yielding.
- Be cautious that the centre of gravity of the machine may increase when loads on the front- end loader or the three point linkage are raised. In these conditions, the machine may roll over earlier than expected.
- Do not step down from the machine without shutting down the PTO , shifting the transmission to park or neutral and applying the park brake, unless continued PTO operation is required for some equipment, such as pumps or wood chippers. The latter equipment may have an emergency stop device on the equipment itself, as human intervention is needed during operation. However other equipment, engaged and driven by the machine will have no means to stop the power transmission, other than the PTO clutch of the machine.
- You shall take the necessary precautions (e.g. assistance) to always be aware of the possible presence of bystanders, certainly when manoeuvring in confined areas, such as the farmyard and sheds.
  Keep people away from the machine during work. Ask bystanders to leave the field. There is not only the risk to be overrun by the machine, but objects ejected by some equipment mounted on the machine, such as a rotary mower, may cause harm. Stones may be thrown further than the mowed crop. Pay the necessary attention while operating next to public roads or footpaths. Thrown objects can get projected outside the field and hit unprotected people like bikers or pedestrians. Wait to cut the edge of the field till it is clear of bystanders.
- Do not allow riders on the machine; do not allow people standing on the access way or step to the cab when the machine is moving. Your view to the left will be obstructed and a rider risks to fall from the machine during unforeseen or abrupt movements.
- Always stay clear form implements operating area and especially do not stand between machine and trailed vehicle either three- point linkage when operating lift controls; ensure no bystanders are near to these operating areas.
- Certain functions of your machine are controlled by software and some of them are safety related. Do not attempt to modify or download software not certified and distributed by the manufacturer. Electronical

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Electronic parking brake

This tractor is equipped with an electronically parking brake (EPB).

The EPB will automatically engage at key OFF and the tractor in standstill irrespective of the shuttle lever position or if the operator leaves the seat.

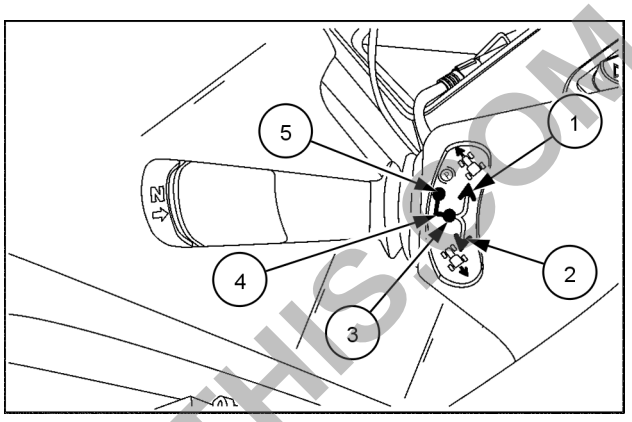
Engaging the EPB with the shuttle lever

From the rest position **(3)** move the shuttle lever downwards **(4)** against spring pressure and forward to the park brake position **(5)**.

Moving the shuttle lever to the EPB position while the tractor is in motion will not engage the EPB.

When the EPB is engaged a **(P)** symbol will appear in the transmission display to confirm engagement.

With the EPB engaged also the trailer brake is applied if an Italian hydraulic trailer brake or any version of pneumatic trailer brake is fitted.



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Disengaging the EPB with the shuttle lever

To disengage the EPB, sit in the seat, move the shuttle lever from the park brake position **(5)** to the drive position **(1)** or **(2)**. The symbol in the display will disappear, the EPB will release and drive will be engaged.

EPB can also be disengaged by moving the shuttle lever to the drive position with the clutch pedal depressed. The symbol will disappear in the display and the EPB will disengage. The tractor will drive when the clutch pedal is released.

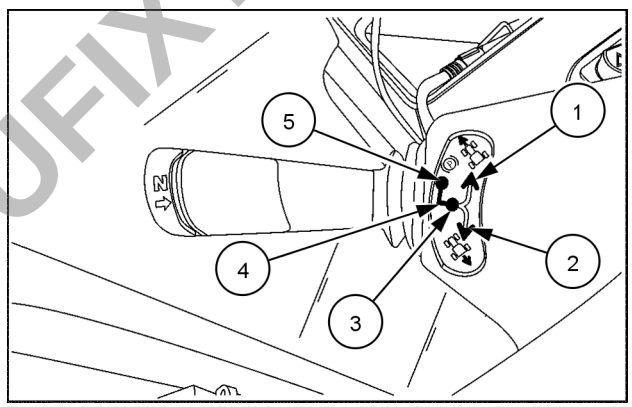
NOTE: *The tractor may inadvertently move.*

Where it is necessary to disengage the EPB without selecting drive, carry out the following procedure:

- With the engine running, move the shuttle lever to the rest position.
- Depress both brake pedals and the neutral switch.

NOTE: *EPB will not be engaged and the tractor may inadvertently move.*

At next key ON/OFF the EPB will operate normally.



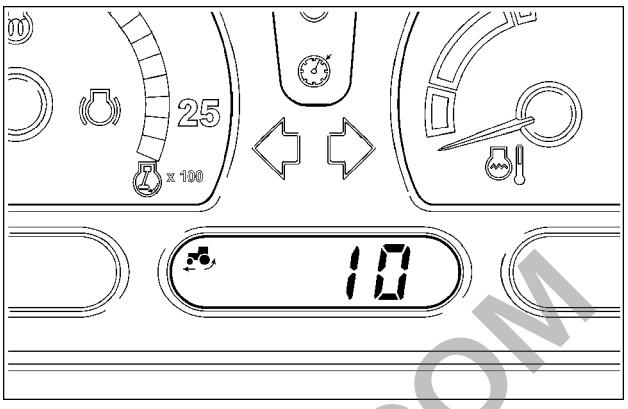
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Rear wheel slip

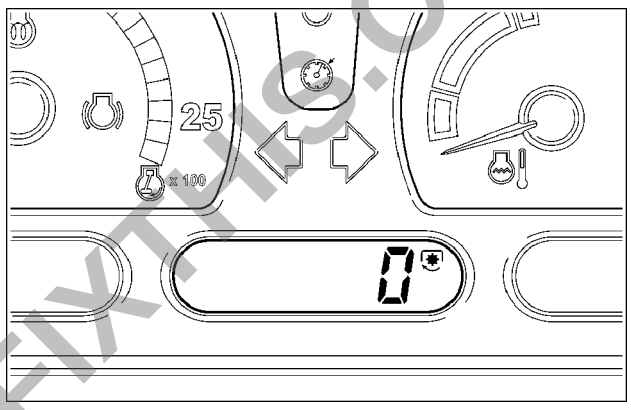
If your tractor is equipped with a ground speed radar, the percentage (%) of rear wheel slip may be displayed. The slip figure is calculated from information provided by the transmission speed sensor (theoretical ground speed) and the radar (true ground speed).



BRE1439A 5

Power Take-Off (PTO) speed

When operating the rear PTO, the display may be used to monitor the output shaft speed. Use the enhanced keypad to select either rear PTO speed or front PTO speed (where fitted).

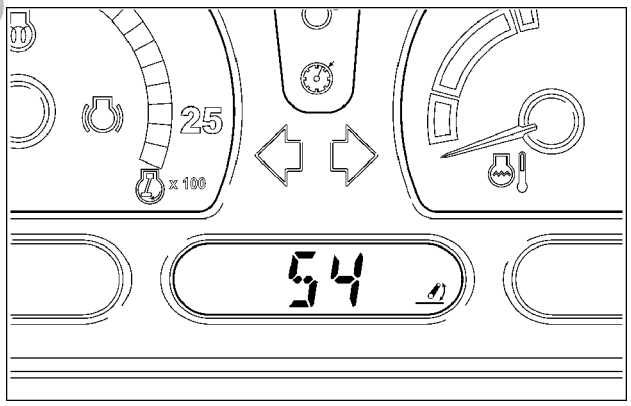


BRE1437A 6

Three-point hitch position

If your tractor is equipped with Electronic Draft Control (EDC) the display may be used to show the position of the three-point hitch (and implement) by means of numbers ranging from ’0’ (fully lowered position) to ’100’ (maximum lift height).

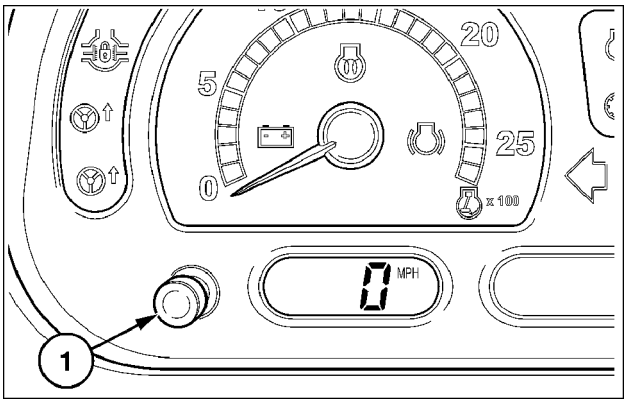
When a front hitch is installed, the display may be used to show the height of the front lift arms. ’0’ will represent the fully lowered position, ’100’ the maximum lift height.



BRE1438A 7

Dimming control

The brightness of the liquid crystal (LCD) and Dot Matrix Displays (DMD) may be varied by using the dimming control switch **(1)**. Momentarily depressing the switch will alter the backlighting in steps. Depress and hold the switch to cycle through the full range of backlighting from low to high intensity. Release the switch when the required setting is obtained.



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Validation re-starts

Validation re-starts allow operation of the machine for up to **30 min** without power loss after a poor DEF/AdBlue® quality or SCR system fault has been detected. Up to three re-starts are permitted. Re-starts are counted if either of the following conditions are met:

- Engine speed exceeds **1000 RPM**
- Engine running time exceeds **5 min**

Normal operation will resume if a reset is detected within the **30 min** window.

If a reset is not detected within **30 min**, power loss will occur as described in the flowcharts.

If all three validation re-starts have been used and the system has not been reset, the machine is limited to **50 %** torque and engine idle only. See your local authorized NEW HOLLAND dealer for repair.

Follow the sequence in figure **6** to activate validation re-starts.

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MOVING THE UNIT

Operating in cold temperatures

To start and operate your tractor during ambient temperatures of **-1 °C** (**30 °F**) and below, observe the following instructions.

- Batteries — Ensure the batteries are fully charged and the terminals are clean and tight.
- Fuel — Must be clean and free of water. Consult your fuel supplier for cold weather fuel requirements in your area.
- Engine oil — Ensure the oil is the correct viscosity for the ambient temperature range. See page **7-10**.
- Transmission/hydraulic oil — Use low ambient temperature transmission oil. See page **7-10**.

NOTE: *If continuous operation is required in temperatures below* ***-28 °C*** *(****-18 °F****), change the transmission/hydraulic oil to one of a lower temperature rating, see page* ***7-10****. This oil is more fluid at extremely cold temperatures.*

- Engine cooling system — Must have a minimum of **50 %** Organic Acid Technology (OAT) coolant for system protection.
- Tires — If the tires contain liquid ballast they must be protected against temperatures below **0 °C** (**32 °F**). Consult your dealer.
- Condensation in the fuel tank — To prevent condensation forming in the fuel tank and water entering the fuel system, fill the fuel tank at the end of each day.
- Water in the fuel system — Drain the pre-filter and water separator on a regular basis to prevent build up of water in the system.
- Transmission oil heater — Use a transmission oil heater to maintain oil temperature when the tractor is not being used.

Maintaining operating temperatures

During cold ambient temperatures, the engine may not reach or maintain the correct operating temperature. Slow engine speeds in cold temperatures can cause damage to the engine. Use the following procedure to warm the engine and transmission oils and to maintain the correct operating temperatures.

Warming the engine

Start the engine using the procedure shown in the 'Starting the Engine' section of this manual.

NOTE: *During engine warm up, an electronically controlled engine may not run smoothly until the temperature increases.*

NOTE: *At low temperatures, the tractor must be run until it warms up. Transmission response may be compromised and heavy steering may occur until the oil is warm. Always use a transmission oil heater and engine coolant heater to reduce warm up time.*

Maintaining engine temperature

When the engine is operating in cold ambient temperatures without load, maintain correct operating temperature as described below.

- Run the engine at approximately **1500 RPM**.
- Cover the front grille of the tractor to control the amount of air passing through the engine radiator.

NOTICE: *During cold ambient temperatures, never run the engine at low idle speed for long periods of time or when the coolant temperature is below normal.*

Stopping the engine when hot

- Run the engine at a slow speed for a short period of time. This will permit the engine temperature to decrease gradually before stopping the engine.

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Replaying a sequence

⚠ WARNING

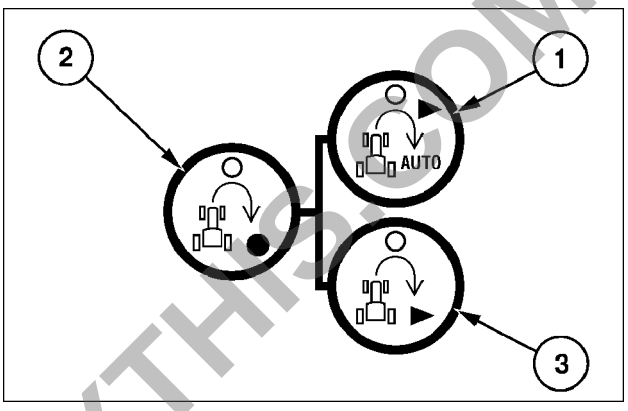
Driving hazard!
Before starting work, it is recommended that you do a "dry run" of the automated headland function programs. This ensures all program steps have been retained in the memory, and any timed Electro-Hydraulic Remote (EHR) valve sequences replay correctly.
Failure to comply could result in death or serious injury.

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To play back a recorded sequence, press the switch **(1)** for auto replay, press switch **(3)** for manual replay. Playback will be activated but will remain in standby mode and the light in the switch will flash.

If a second sequence was recorded within the same programme, the operator may now cycle between sequences A and B by pressing and holding the auto or manual playback switch. The sequence number will appear immediately below the playback symbol. Use the HTS switch to select the sequence to be played.

When the correct number appears, release the switch.

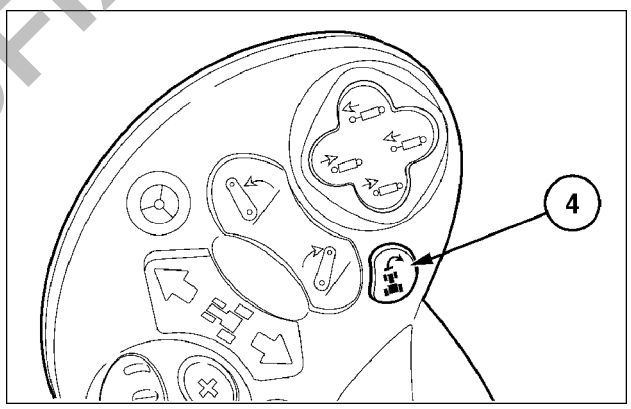


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Before reaching the point at which the sequence is to start, depress and hold the step switch **(4)** until a 'beep' is heard. When the start point is reached, release the switch. Playback will start as soon as the switch is released and the first operating symbol in the sequence will appear below the playback symbol.

When playback begins, the symbol will stop flashing.

As each function comes into play, the corresponding symbol will appear immediately below the playback symbol.



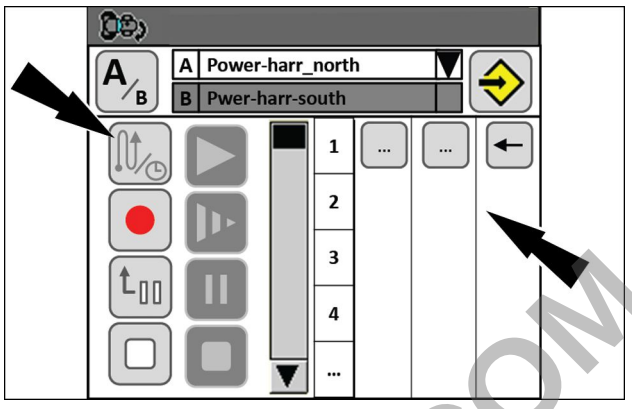
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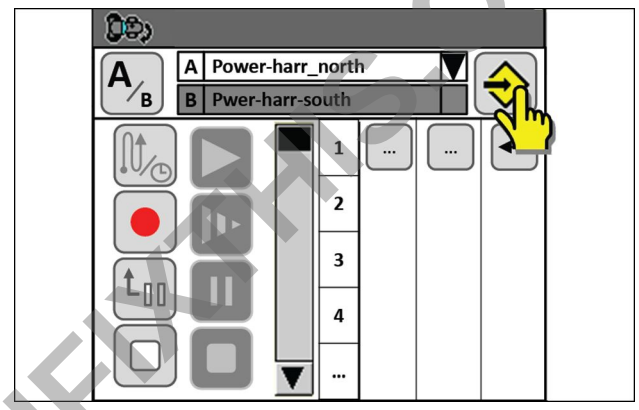
Once confirmed, the trigger icon is displayed and the steps are empty.

The sequence has been deleted and saved as empty but the name will remain so a new sequence can be recorded.



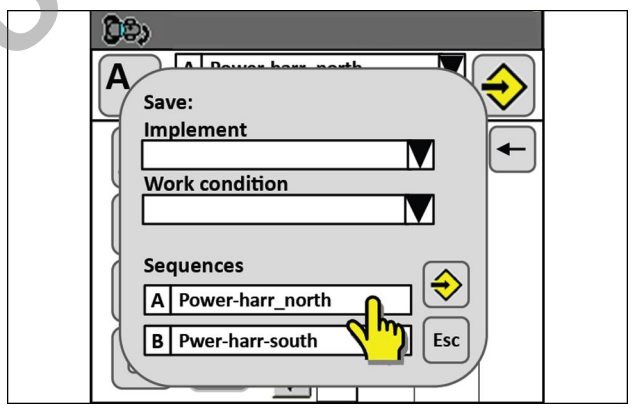
BAIL13TR02063AC 4

To delete the sequence name, touch save.



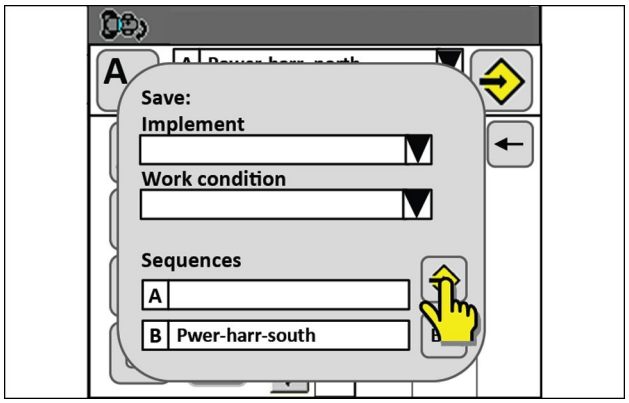
BAIL13TR02064AC 5

Select the sequence name.



BAIL13TR02066AB 6

Delete the sequence name and touch save.



BAIL13TR02068AB 7

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PTO Switch Operation-Anti Stall Feature

If, when operating with high inertia equipment, the PTO is engaged at too low engine speed, an Anti Stall symbol will appear in the lower display.

The system will be disabled until the PTO control is returned to the OFF position at which time the Anti Stall symbol will be extinguished. Reengage the PTO at a higher engine speed.

PTO Switch Operation-Time- Out

To engage the PTO, grasp the switch **(1)** lift against spring pressure and move forwards. This movement should be decisive in its application as hesitant or incorrect operation of the switch may cause the PTO system to Time- Out.

Do not:

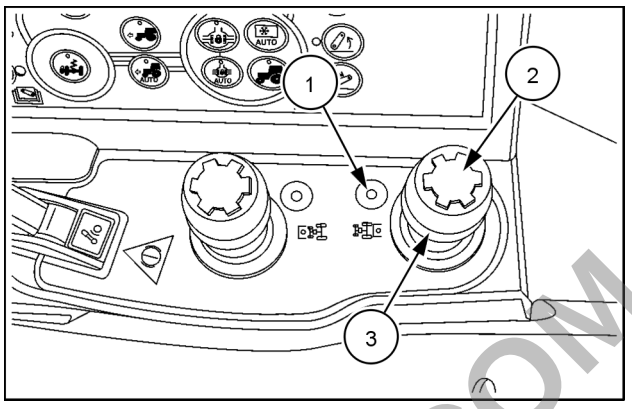
- Move the switch rearwards and hold against spring pressure for more than **10 s**.
- Operate the fender mounted and internal PTO controls simultaneously or within **2 s** of each other.
- Engage PTO drive during the PTO ratio shifting procedure.

Any or all of the above actions will cause the PTO to become inoperable (Timed-Out) for **10 s** and a Timed-Out symbol will appear in the lower display.

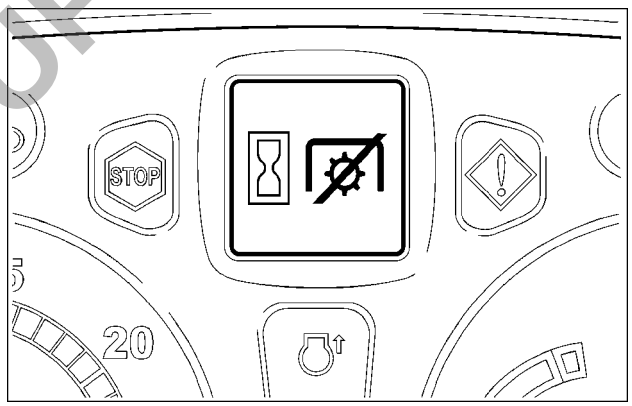
Should this occur, the noncritical alarm will sound for **4 s** and the amber warning light on the instrument cluster will flash for **10 s**.

During the **10 s** when the PTO system has Timed- Out, avoid operating any of the PTO controls as this may extend the duration of the Timed- Out period.

When the Timed- Out period is complete and the symbol disappears from the display, normal PTO operation is re-enabled.



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Rear wheel slip limit setting

Setting the slip limit with the control knob

The slip limit control knob **(1)** available only with the optional radar sensor unit, enables the operator to select a wheel slip threshold above which the implement will raise until wheel slip returns to the preset level.

Slip limit temporarily overrides the normal draft control sensing signals and reduces the working depth of the implement. As soon as the wheel slip falls below the operating limit the implement will return to it's original working depth.

Care must be taken not to select a wheel slip limit that is either too high or too low.

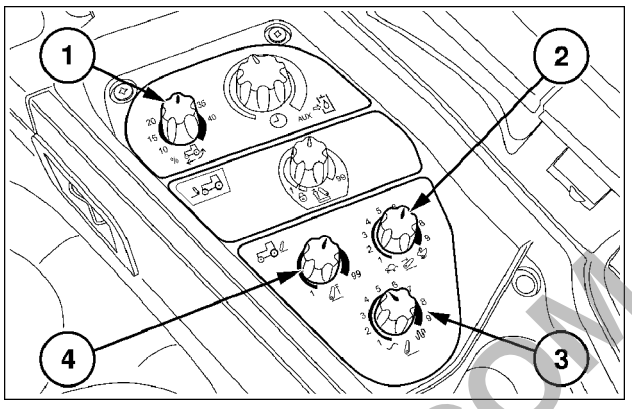
Setting the slip limit to a very low level, unobtainable in wet conditions, may have a detrimental effect on the work rate and depth.

NOTE: *The wheel slip function does not work in position control.*

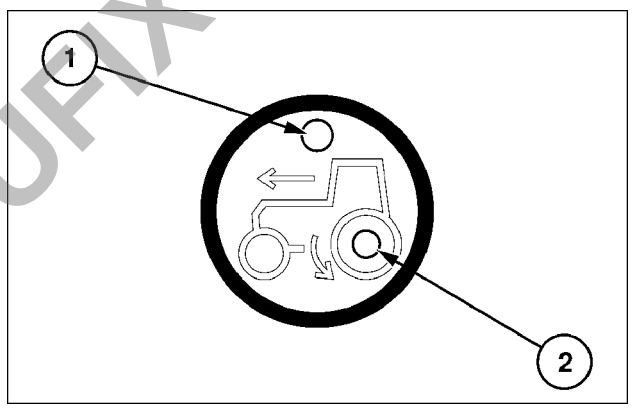
The slip limit 'on' indicator **(1)** will illuminate when the slip function is activated by depressing the switch on the armrest unit. When the slip control is in operation, the warning light **(2)** will also illuminate and the implement will raise to reduce the slip rate.

Where the amount of wheel slip approaches the preset limit, a warning will also appear in the display.

To disengage the slip function depress the switch on the arm rest unit.



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BRL6108B 11

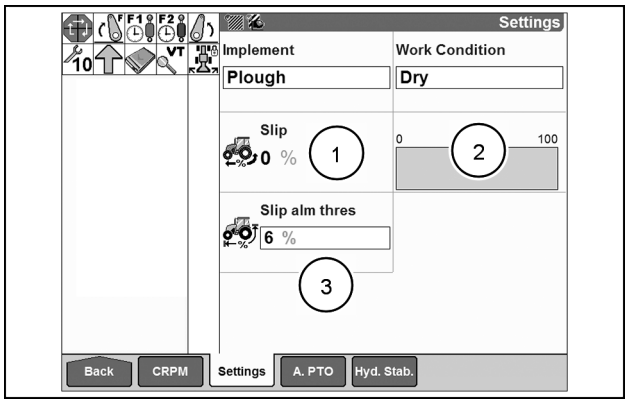
Setting the slip limit with color display

☞ Settings

☞ Implement. Use the popup screen to select, change or add a new implement category.

☞ Work condition. Use the popup screen to select, change or add a new category of work condition.

1. Percentage slip figure, this will change as wheel slip increases and decreases.
2. Same as **(1)** above but in bar graph format.
3. ☞ to access the popup for setting wheel slip alarm threshold. Set the figure using ◀ or ▶ then press Enter. The selected figure will appear in the slip alarm box.



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1. Identifies the remote valve number.
2. ☞ EHR retract box to access pop- up menu to set time duration for the cylinder retract cycle. Touch ◄ or ► to decrease or increase time duration. Touch Ok to memorise setting and return to timer screen.
   By repeatedly touching ◄ or ► the fill line can be extended the full length of the bargraph, this is the infinity setting. In this setting the oil will continue to flow from the valve until the lever is returned to the neutral position manually.
3. ☞ EHR timer button to arm or disarm the timer. Symbol will change to confirm whether timer is armed or disarmed **(X)**.
4. ☞ EHR extend box to access pop- up menu to set time duration for the cylinder extend cycle. Touch ◄ or ► to decrease or increase time duration. Touch Ok to memorise setting and return to timer screen.

For single acting services the setting procedure is the same as double acting. However, it is recommended that the unused timer period is set to zero **0 s**.

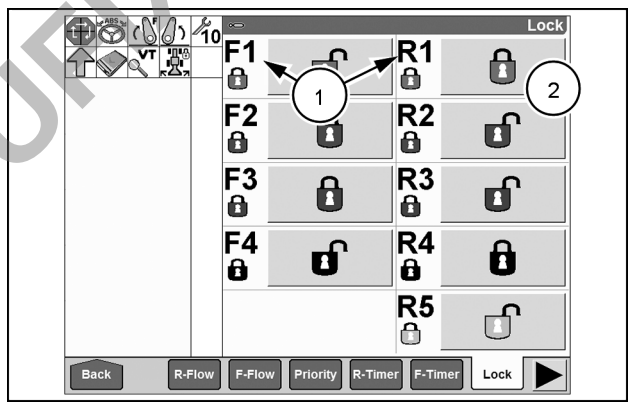
NOTE: *If both timer values are set to '0', timer mode will be cancelled.*

Engaging the EHR lock

☞ Lock to bring up EHR lock screen

1. Identifies the remote valve number. The illustration shows a tractor equipped with front and rear valves.
2. Remote valve lock symbol to lock or unlock the required valve.

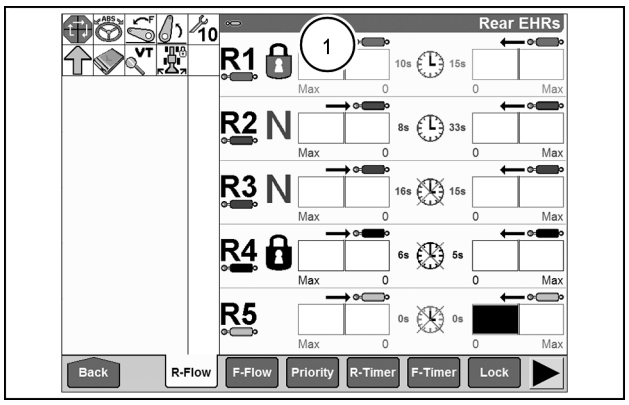
Touch ▲▼ to access other EHR setting screens, touch Back to return to main menu screen.



SVIL15TR02317AA 10

When the valve is locked, a lock symbol **(1)** will appear in the main EHR information screen to confirm valve status.

NOTE: *When locking a remote valve the power to the valve is not isolated. To isolate the power and lock all remote valves use the hydraulic masters witch on the cab 'C' pillar.*



SVIL15TR02326AA 11

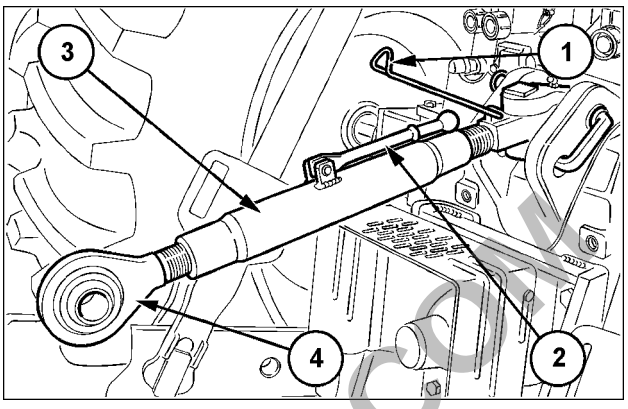
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Top link adjustment

Mechanical top link adjustment

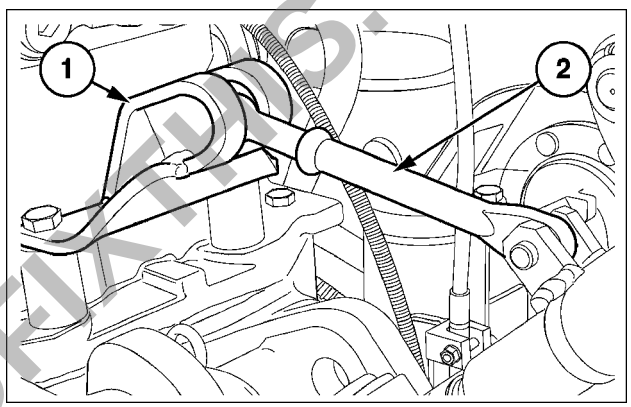
The top link has a threaded centre section **(3)** which, when rotated, will shorten or lengthen the top link, as required. Lift up the spring retainer **(1)** to allow the centre section **(3)** to rotate. To ease adjustment, lift the handle **(2)** and use it as a lever. Alternatively, rotating the link end **(4)** will permit limited adjustment of top link length.

To lock the sleeve after adjustment, push the spring retainer down so that it holds the handle flush against the sleeve.



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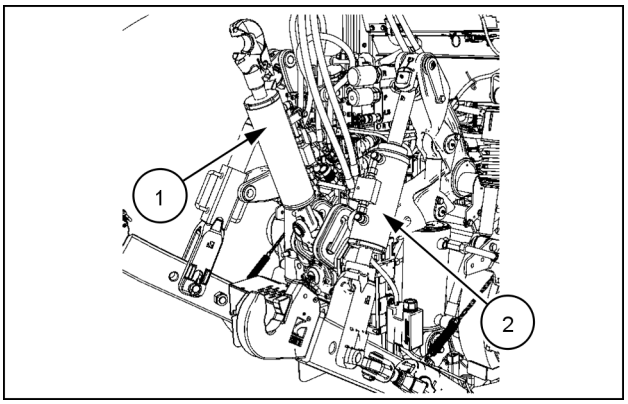
When not in use, the top link can be removed and stored or left in an upright position. Hook the ball end of the handle **(2)** into the bracket **(1)** on the rear axle housing, as shown.



BRE1720B 2

Hydraulic top link adjustment

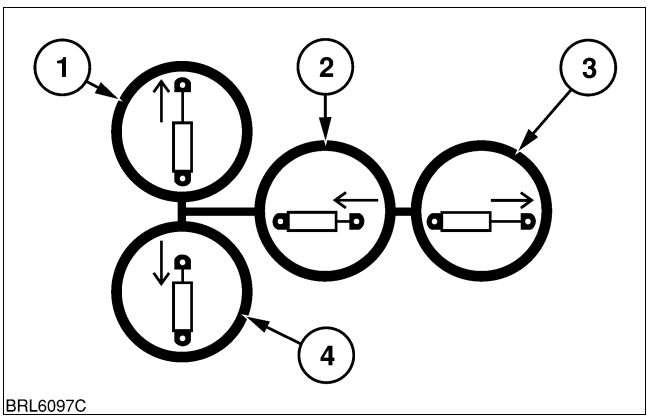
The hydraulic adjustable top link **(1)** may be fitted in conjunction with a hydraulic adjustable right-hand lift rod **(2)** as described on page **6-158**.



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Automatic check valves on the top link cylinder will prevent them from ‘creeping’.

Depress and hold switch **(1)** to extend the hydraulic cylinder and lower the link arm, depress and hold switch **(4)** to retract the cylinder and raise the link arm.



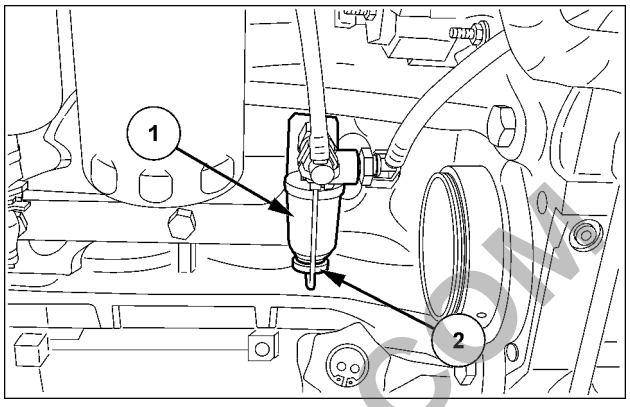
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Check first stage fuel filter and water trap

The fuel system on your tractor is protected by a prefilter and water trap. If water appears in the glass bowl of the prefilter **(1)** stop the engine and clean out the filter bowl. To remove the bowl, loosen the knurled clamp screw **(2)** and swing the retaining clip out of the way.
With the retaining clip out of the way, the glass bowl and filter can be removed by pulling downwards. Empty the contents of the bowl into a suitable container and dispose of properly.
Clean the glass bowl and wash the filter gauze in clean fuel to remove the contaminants. Check the sealing ring in the filter head for damage and replace if necessary. Refit the filter into the glass bowl and reattach the assembly to the filter head ensuring the raised boss on the filter is correctly located in the housing.
Retighten the knurled clamp screw.
The system should be bled.



SS10H009 1

Bleeding the fuel system

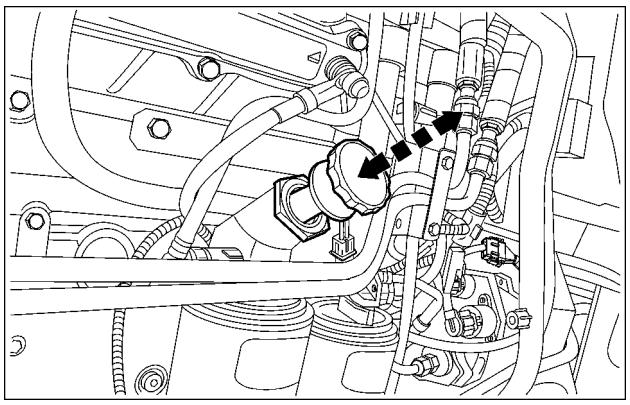
To Bleed the Fuel System

It may be necessary after carrying out maintenance work on the fuel injection system or, after running out of fuel, to purge the system of air to allow the engine to start.
If the engine fails to start after several turns, after one of the above situations has occurred, bleed the system using the following procedure:

NOTE: *If one or both of the fuel filters has been changed ensure that they have been filled with clean fuel, for further information see* ***7-38****.*

1. Ensure the tractor has adequate fuel and the battery is fully charged.
2. Loosen the low pressure pipe connection between the main filter and the fuel pump to allow trapped air to escape.
3. Unscrew the primer pump knob and proceed to pump slowly until no air bubbles appear from the open connection.
4. Tighten the low pressure pipe connection between the main filter and the fuel pump.
5. Slowly push the plunger down against the resistance until the pump knob can be screwed fully home into the filter head.

The fuel injectors and fuel injection pump are of the self bleed type and therefore any air remaining in the system will be purged as the engine is cranked to start.


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Instructor's seat

⚠ WARNING

Misuse hazard!
Only use the instructional seat for training new operators or when a technician is diagnosing a problem. The occupant must wear a seat belt. Do not allow others to ride in the seat. The ROPS may not provide enough protection for the seat occupant. See SAFETY INFORMATION, Instructional seat safety.
Failure to comply could result in death or serious injury.

W0446A

The extra seat provided in the cab of the tractor is installed in order to allow only a trainer or a trainee to be seated safely while teaching a new Operator or by dealer personnel when monitoring the function of the tractor. It is not allowed for road transportation of a passenger or for transferring passengers between fields or during operation in the field.

Instructional Seat Safety

1. Extra riders, especially children, are not allowed to ride on the tractor.
2. The instructional seat is to be used only when training a new operator or when a service technician is diagnosing a problem.
3. When required for the purposes of training or diagnostics, only one person may accompany the operator, and that person must be seated in the instructional seat.
4. When the instructional seat is occupied, the following precautions must be followed:

- Tractor should only be driven at slow speeds and over level ground.
- Avoid driving on highways or public roads.
- Avoid quick starts or stops.
- Avoid sharp turns.
- Always wear correctly adjusted seat belts.
- Keep doors closed at all times.

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Emergency brake

NOTE: *The emergency brake shall be used exclusively in the condition of fault of the service brake.*

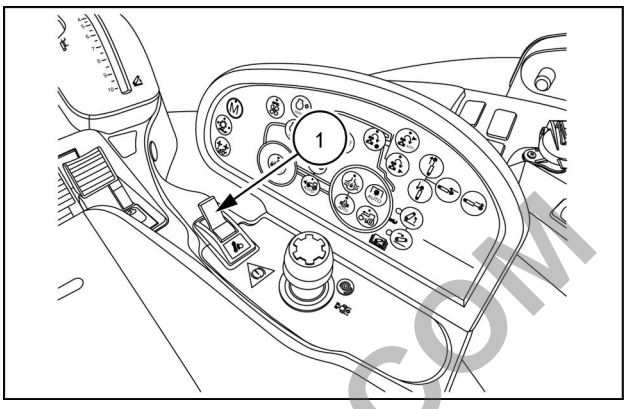
The control lever **(1)** for the emergency brake is placed on the right hand side armrest.

Move the lever backwards to request an emergency braking action. The lever is momentary and applies the emergency brake proportionally according the stroke on the lever. The lever is spring returning to the rest position which corresponds to no emergency brake request.

In case of an emergency brake action also the trailer brake is applied if an Italian hydraulic trailer brake or any version of pneumatic trailer brake is fitted.

NOTE: *The emergency brake lever must not be used as service brake.*

NOTICE: *Frequent use of the emergency brake lever is not allowed.*



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5 - TRANSPORT OPERATIONS

PREPARING FOR ROAD TRANSPORT

Carrying the tractor on a transporter

Transport the tractor with all four wheels on a flat bed trailer or truck. Securely chain the tractor to the transporter.

NOTICE: *Do not chain around the four wheel drive shaft, steering cylinders, front wheel drive axle or other components that could be damaged by contacting the chain or by heavy loading.*

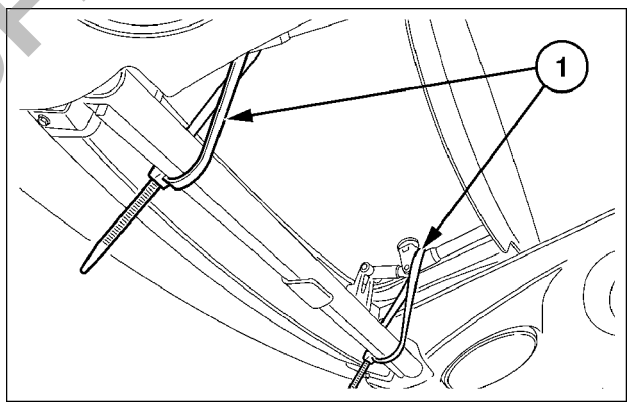
Use the drawbar or drawbar hanger for a rear tie down point.

NOTICE: *Cover the silencer outlet so that the wind does not spin the turbocharger and damage the bearings. Turbocharger turbine freewheeling (turning without engine running) must be avoided since lubrication will not be provided to the turbocharger bearings.*

Secure the high visibility roof panel

Where road speeds in excess of **50 km/h** (**31 mph**) are likely to occur when transporting the tractor, it is advisable to secure the high visibility roof panel with ties to prevent it from opening.

Secure both handles to the sun- visor support using a flexible strap such as a cable tie **(1)** as shown in the illustration. Do not use wire or metal straps as these may damage the paintwork.



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HTS Manager Screen

☞ Manager

In the manager screen, the operator can create a new implement description, recall and change existing sequence details and/ or delete sequences in the database.

Where an HTS sequence can be used for more than one implement, such as a non reversible plough and cultivator, then the same sequence can be saved under different headings i.e. 'Plough' and 'Cultivator'. This can only be applied to implements working at the same depth.

The manager screen also permits the operator to recall a sequence from the database and upload it into the controller memory for playback.

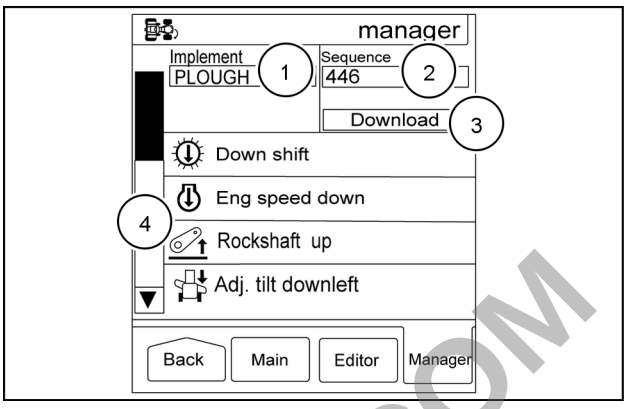
1. ☞ Implement to open the pop- up menu.
   Select. Touch to access current list of implements.
   Edit Name. Touch to display pop- up character screen. Make the necessary changes then touch Enter to save the new description.

NOTE: *Touching New will have no effect in this screen. New sequence identification is generated externally by the HTS system.*

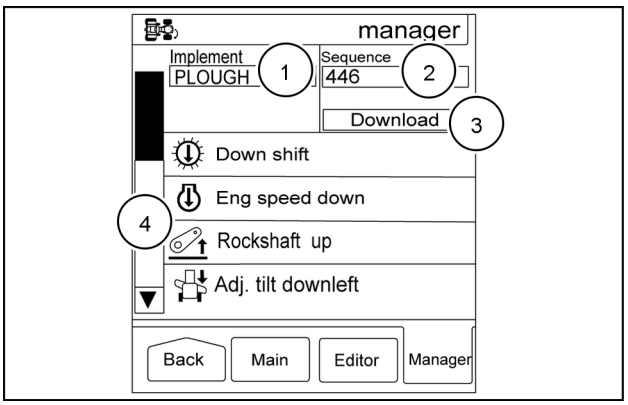
2. ☞ Sequence to recall an HTS sequence. The pop-up menu will allow you to select or edit the name of a saved sequence.
   Select. Touch to access current list of sequences.
   Edit Name. Touch to display character screen. Make the necessary changes then touch Enter to return to the editor screen.

NOTE: *Touching New will have no effect in this screen. Sequence identification is generated externally by the HTS system.*

3. ☞ Download. New sequences are initially held in the HTS controller, these are then transferred to the database when a new sequence is recorded or an existing one recalled.
   Before an existing sequence can be downloaded into the controller, it must be recalled from the database. Touch Sequence to access the database list, select the required sequence then touch Enter.
   The required number will appear in the sequence box, touch Download to transfer the sequence to the controller memory.
4. Sequences displayed in the manager screen can be viewed using the ▲▼ to scroll through the sequence step by step.



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Shuttle lever

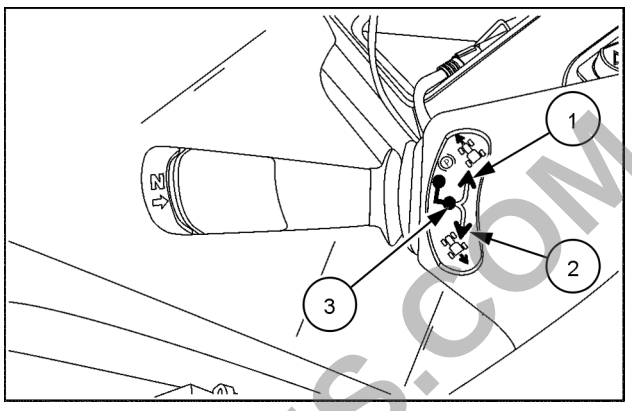
NOTE: *Initial drive direction must always be selected using the shuttle lever. Subsequent direction changes may be made using the buttons on the travel lever see page* ***6-56*** *and the following.*

To select the direction of travel, lift the shuttle lever towards the steering wheel and move it to the forward **(1)** or reverse position **(2)**. Symbols in the transmission display will confirm the direction of travel selected.

NOTICE: *When moving the shuttle lever from park to the drive position* ***(1)*** *or* ***(2)****, the transmission will be in neutral. Ensure the hand brake is applied or depress the foot brakes before moving the shuttle lever.*

NOTE: *It is not necessary to depress the clutch pedal when operating the shuttle lever*

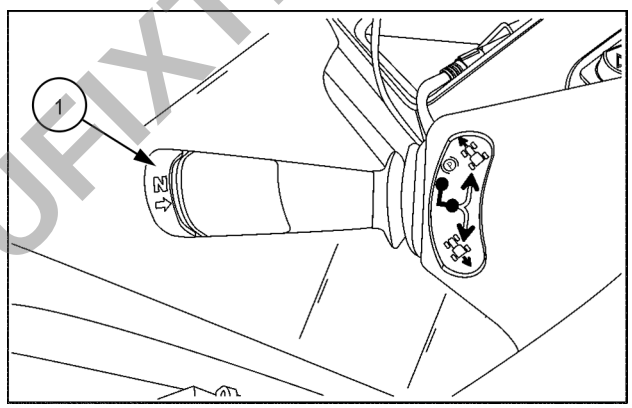
Where a change of direction has been selected with the tractor still moving, the arrow for newly selected direction will flash. When the tractor moves off in the direction selected the arrow will cease to flash and will remain displayed.



SVIL15TR00213AB 1

On releasing the shuttle lever, it will return to the rest position **(3)** Figure **1**. This is the Powered Zero position, NOT the neutral position.
To select neutral, depress the button **(1)** on the end of the lever. When neutral is selected 'N' will appear in the transmission display.

NOTICE: *In the Powered Zero position, transmission drive is still engaged. Before leaving the seat, always select park position* ***(PL)****. See page* ***3-26****.*



SVIL15TR00213AB 2

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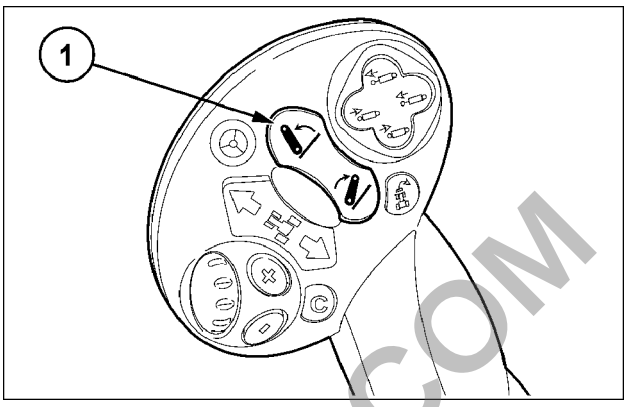
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Auto PTO operation

The auto PTO function provides automatic engagement or disengagement of the rear PTO drive when using the EDC raise/lower switch **(1)**. Operating the switch to raise the implement will automatically disengage PTO drive. Lowering the implement with the switch will reengage PTO drive.

The height at which the PTO is engaged or disengaged can be set using the following method.

NOTICE: *The tractor must be stationary and the PTO switched off before attempting this procedure.*

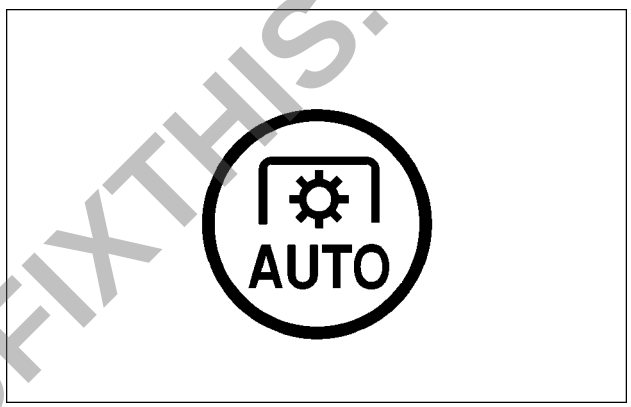


SS10K097 1

Setting with the auto switch

- With the engine running and the PTO switched off, operate the lift control to fully raise and lower the hitch. This will ensure the hitch is synchronized with the lift control.
- Depress and hold the auto PTO switch for **2 s**. The central display will show ’u’ followed by two figures, for example, ’u38’. The figure 38 representing the current height of the hitch.
- Raise the hitch to point at which the PTO is to disengage. Depress the auto PTO switch once to capture the height setting, the central display will show ’d xx’ (where ’xx’ is the current height of the hitch).
- Lower the hitch to the point where the PTO is to reengage and depress the auto PTO switch again. The central display will show ’End’ for **2 s** and then return to the option selected prior to entering setup mode.

Providing the tractor is stationary and the PTO is disengaged, this procedure can be carried out at any time. The new settings will remain in the memory until reprogrammed.



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