4372606-GB Rev A

JACOBSEN
A Textron Company

Safety, Operation & Maintenance Manual

HR800™ Rotary Mower
70543 – HR800, Kubota® V3307-CR-T-E4B

⚠ WARNING

WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine must be trained in its proper use, warned of its dangers and must read the entire manual before attempting to set up, operate, adjust or service the machine.

GB
United Kingdom

RJL 100 June 2016

Proposition 65 Warning

This product contains or release chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Litho In U.S.A. 6-2016

1.1 IMPORTANT

The HR800 with Diesel engine is a self propelled rotary mower. With hydraulic systems to power the traction drive, the cutting unit lift and lower, the cutting unit drives and the steering.

IMPORTANT: Do the maintenance indicated in this manual to make sure that the quality of cut is kept at a high level.

This Manual is part of the machine and must stay with the machine always. The suppliers of new, or used, machines need to keep this documentation and supply the owners with a copy.

You must use the machine to cut the grass only and not for any other purpose. The Compliance with these conditions of The operation, service and repair specified by the manufacturer, are understood to be part of the correct use.

ALL operators **MUST** read through this manual and understand the Safety Instructions, controls, lubrication and maintenance procedures.

Make sure that you obey all safety and road traffic regulations.

You must not make any changes to the machine that are not approved by the manufacturer. This type of change can release the manufacturer from the liability for any damage or injury.

Discard of worn parts in alignment with all local environment protection regulations. Use the local systems available in the country where the machine is used, for these recycled materials. When the machine is at its end of life, there are guidelines in this manual for the removal of the machine from use.

Use only Jacobsen Genuine spare parts to meet the machine type approval regulations specified by the European Union.

2006/42/EC

These instructions are the Original instructions confirmed by Jacobsen

1.2 PRODUCT IDENTIFICATION

Mower Serial number plate

A Gross weight (Kg)

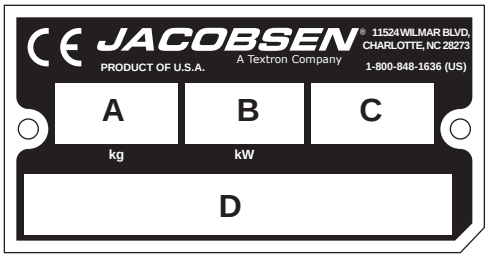
B Engine Power (Kw)

C Date code

D Product number and Serial number

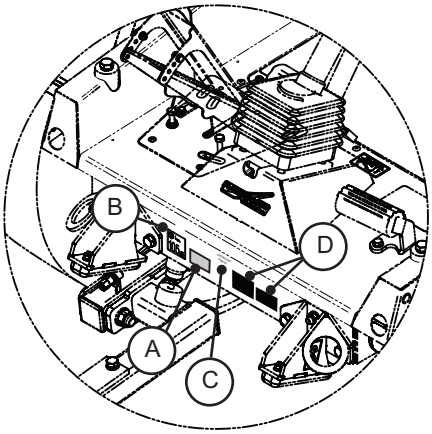
Mowers without CE Option

Mowers with CE Option



Location of Mower Serial number plate

The serial number plate (A) is found on the front of the chassis, between the front deck stops next to the environmental noise decal (B).



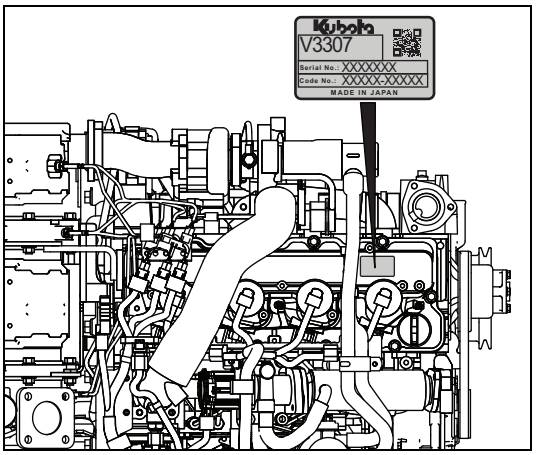
Chassis Stamp

The Serial number and date code (C) are shown on the chassis between the serial plate and engine data decals (D).

Engine Identification

The engine serial number is found on the top of the valve cover toward the rear of the mower. Label shows the engine group and serial number

The engine serial number is also found on the engine block.



ROPS Serial number plate

A Reference Mass

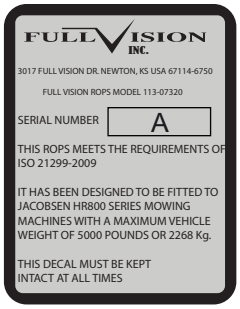
B Date Code

C Standard Used

D Part Number

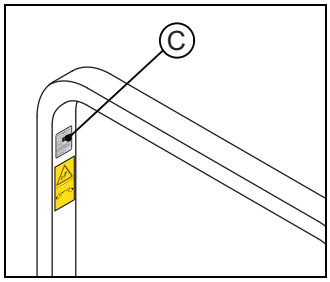
E For Product

F Serial Number

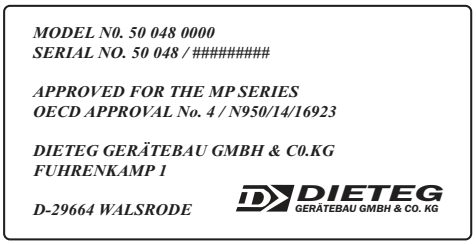


ROPS Serial number plate Location

The ROPS serial number plate (C) is found at the base of the right inside surface of the ROPS upper portion.

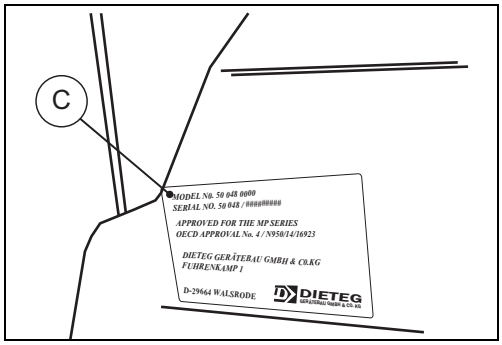


Cabin Serial number plate



Cabin Serial number plate Location

The cab serial number plate (C) is located on the front face of the control panel facing forwards.



1.3 GUIDELINES FOR THE DISPOSAL OF SCRAP PRODUCTS

1.3.1 DURING SERVICE LIFE

All the used fluids and parts must be controlled as hazardous materials material. Recommended procedures must be followed for their safe removal.

If a fluid leak occurs, contain the spill to make sure that the leak does not flow into the ground or drainage system. Follow the regulations in force to make sure that leaks are controlled.

The maintenance procedures in this manual make sure that the damage that the machine can cause in the local environment is controlled.

When the machine completes its full service life, the following actions must be taken.

1.0.1 END OF SERVICE LIFE

These guidelines must be used with applicable Health, Safety and Environmental laws. Always use the approved local waste disposal and agencies for recycled materials.

- Park the machine in an applicable area to use all of the necessary lifting equipment.
- Use correct tools and Personal Protective Equipment (PPE) and take instruction from the technical manuals applicable to the machine.
- Remove and store correctly
  1. Batteries
  2. Fuel
  3. Engine coolant
  4. Oils
- Read the Technical Manual before you begin to disassemble the machine. Plan the disassembly, give attention to parts that are in a state of mechanical pressure or contain stored energy e.g springs.
- Items that continue to have a service life must be separated and returned to the local dealer.
- Items that are worn must be separated into the material groups and removed according to the agencies for the recycled materials that are available. Common examples.
  - Steel
  - Non ferrous metals
    - Aluminum
    - Brass
    - Copper
  - Plastic materials
    - Identified
    - Can be recycled
    - Can not be recycled
    - Not identified
  - Rubber
  - Electrical and Electronic Components
- Some parts are not easily separated e.g Hydraulic hose. These materials must be added to the “General discarded materials” area.
- Do not burn discarded materials.

Change the machinery records to show that the machine is not in operation and is discarded. Supply this serial number to The Jacobsen Warranty Department to close their records.

1.4 PARTS MANUAL

To refer to the parts list for this mower you have four options:

1. Website – www.jacobsen.com. Select the “ONLINE PARTS LOOK-UP” tab. These pages will show the parts list and the line drawings you need to help with the identification of spare parts.
2. Website – www.jacobsen.com. Select the “MANUALS” tab. You have the option to view or “Download” a PDF version of the parts manual.

1.5 KEY NUMBERS

Record the key numbers

Starter Switch Key: . . . . . .

Diesel tank Filler Cap:. . .. .

Record the machine and the engine numbers.

The serial numbers are found on the serial plates and the engine serial number is on the rocker cover.

Machine Serial Number: . . . . . .

Engine Serial Number: . . . . . .

ROPS Serial Number: . . . . . .

Cab Serial Number: . . . . . .

2 SAFETY

2.1 HOW TO OPERATE SAFELY

WARNING

EQUIPMENT OPERATED INCORRECTLY OR WITHOUT TRAINING CAN BE DANGEROUS.

Know the location and correct operation of controls. Operators without experience must receive instruction from another person that knows the correct operation of the equipment before you operate the mower.

Only use parts, accessories and attachments approved by Jacobsen.

2.1.1 SAFE OPERATION

a Read the Operator's Manual and other training material. If the operator or technician can not read this manual, the owner is responsible to describe this material to the operators and technicians. Manuals in additional languages may be available on the Jacobsen or RansomesJacobsen website.

a Read all of the instructions for this mower carefully. Know the controls and the correct operation of the equipment.

b Children or persons who do not understand these instructions must not use the mower. The local regulations can limit the age of the operator.

c Never use a mower near persons, including children or animals.

d Remember that the operator or owner is responsible for accidents or hazards that occur to other persons or their property.

e Never carry passengers.

f Never allow persons to operate or service the mower or its attachments without correct instructions.

g Do not operate equipment while tired, sick or after you use alcohol or drugs.

2.1.2 PREPARATION

a When you operate the mower, wear correct clothing, slip resistant work shoes or boots, work gloves, hard hat, safety glasses and hearing protection. Long hair, loose clothing or jewelry can be caught in moving parts.

b Do not operate the equipment with the Interlock System disconnected or the system does not operate correctly. Do not disconnect or prevent the operation of any switch.

c Never operate equipment that is not in correct order or without decals, guards, shields, deflectors or other protective devices fastened. **DO NOT** operate the cutting unit without the discharge chute or mulching plate installed.

d Inspect the mower before you operate the mower. Check the tire pressure, engine oil level, the radiator coolant level and the air cleaner indicator. Fuel is flammable. Use caution when you add the fuel to the mower.

e Operate the mower in daylight or in good artificial light. Use caution when you operate the mower during bad weather. Never operate the mower with lightning in the area.

f Inspect the area to select the accessories and attachments that are needed to correctly and safely do the job. Only use parts, accessories and attachments approved by Jacobsen.

g Be careful of holes in the terrain and other hazards that are not visible.

h Inspect the area where the equipment is operated. Remove all objects you can find before you operate. Be careful of obstructions above the ground (low tree limbs, electrical wires) and also underground obstacles (sprinklers, pipes, tree roots). Enter a new area carefully. Look for possible hazards.

i Inspect the cutting system before you start the mower. Make sure the blades are free to rotate. When you rotate one blade, other blades can rotate.

2.1.3 OPERATION

a Never operate the engine without enough ventilation or in an enclosed area. The carbon monoxide in the exhaust fumes can increase to dangerous levels.

b Never carry passengers. Keep other persons or animals away from the mower.

c Disengage all drives and engage the parking brake before you start the engine. Only start the engine with the operator in the seat. Never start the engine with persons near the mower.

d Keep your legs, arms and body inside the operator compartment while the mower is in operation. Keep your hands and feet away from the cutting units.

e Do not use on the slopes greater than the safe slope limit for the equipment.

f To guard against over turning or loss of control:

– Operate the mower up and down on the face of slopes (vertically), but not across the face (horizontally).

– Do not start or stop suddenly on slopes.

– Decrease the speed when you operate on slopes or when you must turn. Use caution when you change direction. Turf condition can change the mower stability.

– Use caution when you operate the mower near drop-offs, ditches or embankments.

– Be careful of holes in the terrain and other hazards that are not visible.

g When you drive in the reverse direction, look behind you and down to make sure the path is clear. Do not operate the cutting units when you drive in the reverse direction.

h Use caution when you go near corners, trees or other objects that can prevent a clear view.

i Equipment must meet the current regulations to be driven on the public roads.

j Before you move across or operate on the paths or roads, turn off the mow switch, lift the mowers and travel at decreased speed. Look for traffic.

k Stop the blades when the mower is on any surface that is not grass.

l Do not release the cut grass in the direction of persons or allow persons near the mower while in operation.

m Do not operate the mower with damaged guards or without safety devices in position.

n Do not change the engine governor setting or over-speed the engine. Never change or tamper with adjusters that are closed with a seal for the engine speed control.

o Before you leave the operator compartment, for any reason:

– Disengage all the drives and lower attachments to the ground.

– Engage the parking brake.

– Stop the engine and remove the key.

p When you hit an object or mower starts to cause the vibration that is not normal, inspect the mower for damage and make repairs.

q Decrease the throttle setting before you stop the engine.

r Do not use this equipment for uses that the mower was not made for.

2.1.4 ROPS

a The ROPS is a safety device. Keep the ROPS in the vertical and locked position. Always use the seat belt when you operate the mower. Make sure the seat belt can be released quickly in an emergency.

b Only operate the mower with the ROPS in the folded position on flat and level surfaces when necessary. Do not operate the mower with the ROPS in the folded position on slopes, near sharp edges or near water. There is no roll over protection with the ROPS in the folded position.

c Check for clearance before you drive below objects. Do not contact tree branches, electrical wires or other objects with the ROPS.

d Do not use the seat belt with the ROPS in the folded position.

e Inspect the ROPS for damage. Keep the ROPS hardware fastened.

f Do not weld, drill, change or bend the ROPS. Replace a damaged ROPS. Do not try to correct a damaged ROPS.

g Do not remove the ROPS from the mower.

h Jacobsen must approve any changes to the ROPS.

2.1.5 SAFE HANDLING OF FUELS

a The fuel and the fuel vapors are flammable. Use caution when you add the fuel to the mower. The fuel vapors can cause an explosion.

b Never use the containers that are not approved to keep or transfer fuel.

c Never keep the mower or fuel containers near an open flame or any device that can cause the ignition of fuel or fuel vapors.

d Never fill the fuel containers inside a vehicle or on a truck or trailer with a plastic liner. Always put the fuel container on the ground away from your vehicle before you fill the container.

e Refuel the mower before you start the engine. When the engine is in operation or while the engine is hot, never remove the fuel cap or add fuel to the mower.

f Refuel outdoors only and do not smoke when you add fuel. Extinguish all types of ignition.

g The fuel nozzle must touch the rim of the fuel tank when you add fuel to the mower. Do not use a device to lock the fuel nozzle in the open position.

h Do not over fill the fuel tank. Leave at least 1 inch (2.5 cm) below the filler neck.

i Always tighten the fuel tank cap and container cap after you add fuel.

j If the fuel spills on your clothing, change your clothing immediately.

2.1.6 MAINTENANCE AND STORAGE

a Before you clean, adjust or repair this equipment, push mow switch to the OFF position, lower the cutting unit to the ground, engage the parking brake, stop the engine and remove the key.

b Make sure the mower is parked on a solid and level surface.

c Never work on a mower that is lifted only by the jack. Always use the jack stands.

d Never allow persons to service the mower or its attachments without correct instructions.

e When the mower is parked, put into storage or left without an operator, lower the cutting device unless a positive mechanical lock is used.

f When you put the mower on a trailer or put the mower in storage, close the fuel valve. Do not keep fuel near flames or drain the fuel inside a building.

g Disconnect the battery before you service the mower. Always disconnect the negative battery cable before the positive battery cable. Always connect the positive battery cable before the negative battery cable.

h Charge the battery in an area with good airflow. The battery can release hydrogen gas that is explosive. To prevent an explosion, keep any device that can cause sparks or flames away from the battery.

i Disconnect the battery charger from the power supply before you connect or disconnect the battery charger to the battery. Wear protective clothing and use insulated tools when you service the battery.

j Be careful and wear gloves when you check or service the cutting unit blades. Replace any damaged blades, do not try to correct a damaged blade.

k Keep your hands and feet away from parts that move. Do not adjust the mower with the engine in operation, unless the adjustment needs the engine in operation.

l Carefully release the pressure from components with stored energy.

m To prevent injury from the hot, high pressure oil, never use your hands to check for oil leaks. Use the paper or cardboard to find leaks.

n The hydraulic fluid pressure can have enough force to enter your skin. If hydraulic fluid has entered your skin, a doctor must remove the hydraulic fluid surgically within a few hours or gangrene can occur.

o When you service the hydraulic system, make sure the hydraulic fittings, tubes and hoses are tightened to the correct torque. Make sure the hydraulic system is in good condition before you start the engine.

p Keep the mower and the engine clean.

q Allow the engine to become cool before storage and always remove the ignition key.

r Keep all nuts, bolts and screws tight to make sure the equipment is in safe condition.

s Replace worn or damaged parts for safety. Replace damaged or worn decals. Only use parts, accessories and attachments approved by Jacobsen.

t To decrease the fire hazard, remove materials that burn from the engine, muffler, battery tray and fuel tank area.

u Disconnect the battery and controller connectors before you weld on this mower.

2.1.7 WHEN YOU PUT THE MOWER ON A TRAILER

a Be careful when you load or unload the mower on a trailer. Trailer must be wider than the mower and can carry the weight of the mower.

b Use a full-width ramp to load or unload the mower on a trailer.

c Use straps, chains, cables or ropes to fasten the mower to the trailer. Both front and rear straps must be sent down and toward sides of trailer.

d Make sure that all latches are correctly fastened.

2.1.8 IMPORTANT SAFETY NOTES

This safety alert symbol gives a warning of possible hazards.

DANGER - Indicates a dangerous condition that WILL cause death or injury unless it is prevented.

WARNING - Indicates a dangerous condition that CAN cause death or injury unless it is prevented.

CAUTION - Indicates a dangerous condition that can cause injury and property damage unless it is prevented. The label can indicate work procedures that are not safe.

NOTICE - Indicates a condition that can cause damage to the property unless it is prevented. The label can indicate work procedures that are not safe.

Some illustrations in this manual show the shields, guards or plates, removed. Do not operate this equipment without these devices correctly fastened in position.

WARNING

The Interlock System on this mower prevents the operation of the mower unless a.) The parking brake is engaged. b.) The mow switch is in the OFF position and c.) the traction pedal is in the Neutral position. The system will stop the engine if the operator leaves the seat without:
a.) The parking brake engaged and
b.) the mow switch in the OFF position.

NEVER operate the mower unless the Interlock System operates correctly.

WARNING

1. Before you leave the operator position, for any reason:
   a. Return the traction pedal to Neutral.
   b. Disengage all drives.
   c. Lower the mowers to the ground.
   d. Engage the parking brake.
   e. Stop the engine and remove the ignition key.
2. Keep your hands, feet and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the mower.
3. Keep persons and animals away from the area of operation.
4. Never carry passengers.
5. Never operate the equipment without a correctly fastened grass deflector in position.

By following all instructions in this manual, you increase the life of your machine and keep its maximum performance. Adjustments and maintenance must always be done by an approved technician.

If additional information or service is needed, contact your Authorized Jacobsen Dealer. Your Dealer knows the current methods to service this equipment.

⚠ WARNING

California Proposition 65

Engine exhaust, some of its constituents, and some vehicle components contain or release chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

⚠ WARNING

To prevent injury from the hot oil at high pressure, do not use your hands to check for oil leaks. make sure that you use paper or cardboard.

Release of hydraulic fluid at high pressure has enough force to enter through the skin. if the fluid enters through the skin, the fluid must be surgically removed within hours by a specialist doctor or gangrene may result.

⚠ WARNING

When the machine is driven off-road, a seat belt must be worn only when a ROPS frame is in position.

This warning is because a seat belt must be worn with a ROPS to follow the Machinery Directive,

2006/42/EC Sections 3.2.2, Seating & 3.4.3, Rollover. (ANSI B71.4-2012 section 20.7)

Jacobsen recommends that the owner/user of the machine completes a local risk assessment of the machine to find any conditions that do not follow this rule. e.g. when you drive the machine next to water or on the highway.

⚠ WARNING

Explosive Gases Are Released By Batteries. The Battery Contains Corrosive Acid And Supply An Electrical Current That Is High Enough To Cause Burn Injuries To The Body.

⚠ WARNING

You Must Not Use This Machine To Tow Other Vehicles.

⚠ WARNING

Ear protection must be worn when you operate machines with an operator ear noise level of more than 85 db(a) leq.

⚠ WARNING

Vibration Exposure Limits

Exposure limits are calculated as a combination of the vibration level (magnitude) of the tool and the Daily Exposure Time (Trigger Time). E.g. A product with 5m/s² vibration can be used up to 2 hours/day to reach the EAV and up to 8 hours/day to reach the ELV.

Exposure Action Value (EAV) - Daily vibration exposure A(8) = 2.5m/s²

Where daily vibration exposure A(8) is below 2.5m/s² the risk is relatively low and no action need be taken

Exposure Limit Value (ELV) - Daily Vibration Exposure A(8) = 5.0m/s²

If several tools are use the exposure values must be combined:

Total exposure is then the combined value of the activities

⚠ WARNING

Never Mow If There Is A Risk Of Lightning Or You Hear Thunder. If You Are In The Middle Of Mowing, Stop In A Safe Place, Turn Off The Engine And Go Inside a Building.

⚠ CAUTION

When you do any welding on the machine, the battery, controller and display must be disconnected before you start. You must not open the controller. if the controller is opened, this can cancel all of the warranties and can cause the failure of the machine.

⚠ CAUTION

Personal Protective Equipment (PPE), For example safety glasses, leather work shoes or boots, a hard hat, leather work gloves and ear protection must be used after the owner/user completes a local risk assessment of the mower, to prevent injury.

Training in all manual operations must be given by an approved person before the machine is used the first time.

3.1 SAFETY DECALS

A

B

C

D

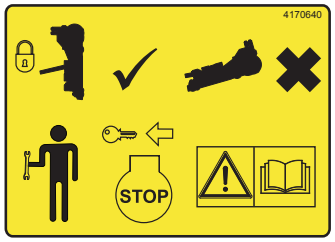
E

F

G

H

J

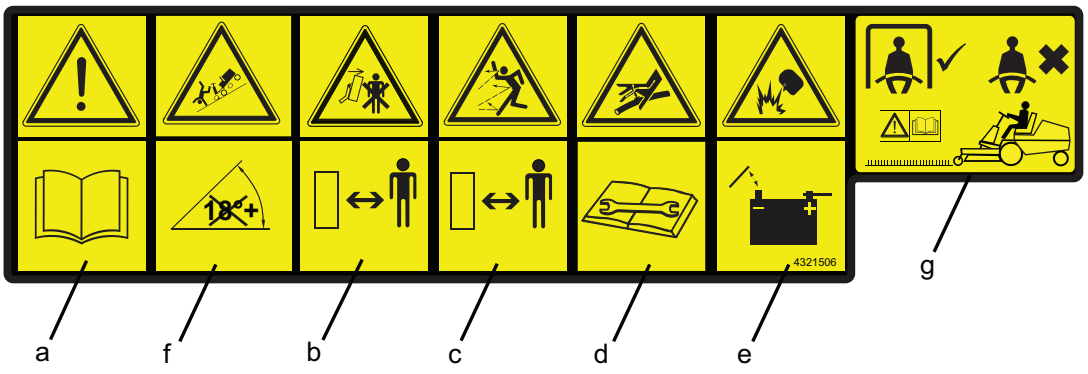


K

L

M

N



3 DECALS

A	009034920	Caution, Stay Away From Hot Surfaces.
B	009034880	Caution, fan blade, do not open or remove the safety shields while the engine is in operation.
C	009034900	Caution, drive belt, do not remove the safety shields while the engine is in operation.
D	4324674	Caution, Low Sulfur Diesel Fuel.
E	4118415	Caution, engine coolant under pressure.
F	009034890	Caution, keep a safe distance from the machine.
G	009034960	Caution, rotating blades
H	009114380	Caution, fasten seat belt
I	4153197	Caution, stop the engine and remove the starter key before you pressure wash the machine.
J	4170640	Caution, stop engine & remove the starter key, lock deck in its vertical position before carrying out maintenance under deck
K	4164860	Caution, Hydraulic Oil
L	4165644	Caution, No Step
M	4361247	Decal, Seat Plate (with Cab)
N	4361266	Decal, Seat Plate (with ROPS)

a Read the Operator Manual.

b Crush Hazard.

c Keep a safe distance from the machine.

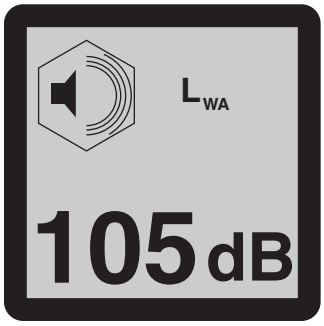
d Prevent contact with hydraulic-oil release under pressure. read operator manual for service procedures.

e Danger of explosion if the battery terminals are short circuited.

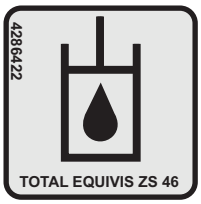
f Maximum permitted slope.

g When the machine is being used off road, whether cutting grass or not, the seat belt must only be worn when a ROPS frame is in place and deployed.

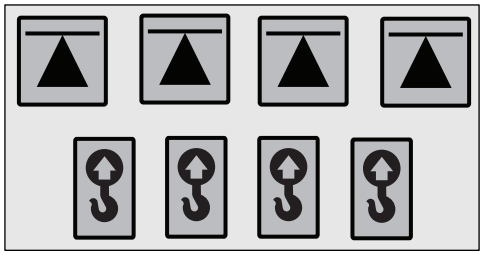
3.2 INSTRUCTION DECALS



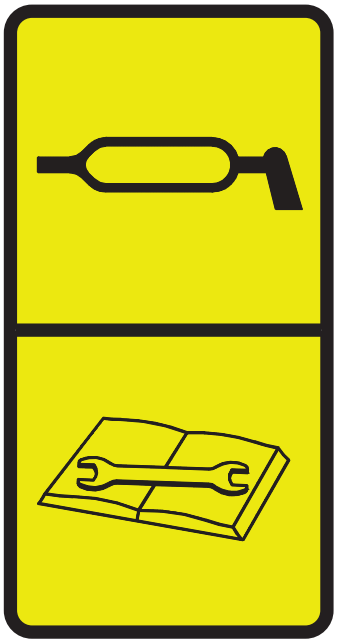
A



B



C



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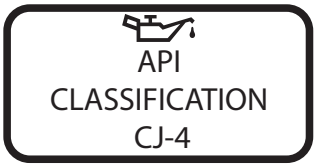
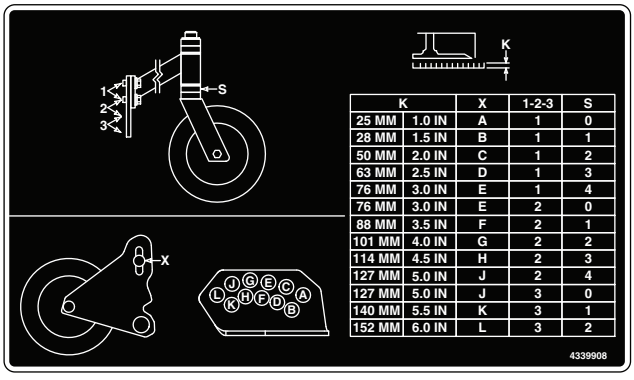
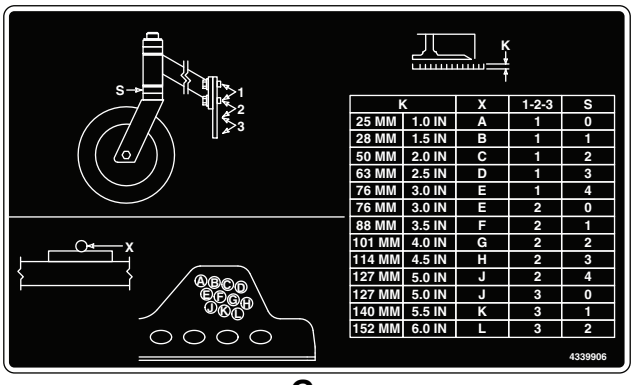


E



K		X	1-2-3	S
25 MM	1.0 IN	A	1	0
28 MM	1.5 IN	B	1	1
50 MM	2.0 IN	C	1	2
63 MM	2.5 IN	D	1	3
76 MM	3.0 IN	E	1	4
76 MM	3.0 IN	E	2	0
88 MM	3.5 IN	F	2	1
101 MM	4.0 IN	G	2	2
114 MM	4.5 IN	H	2	3
127 MM	5.0 IN	J	2	4
127 MM	5.0 IN	J	3	0
140 MM	5.5 IN	K	3	1
152 MM	6.0 IN	L	3	2

F



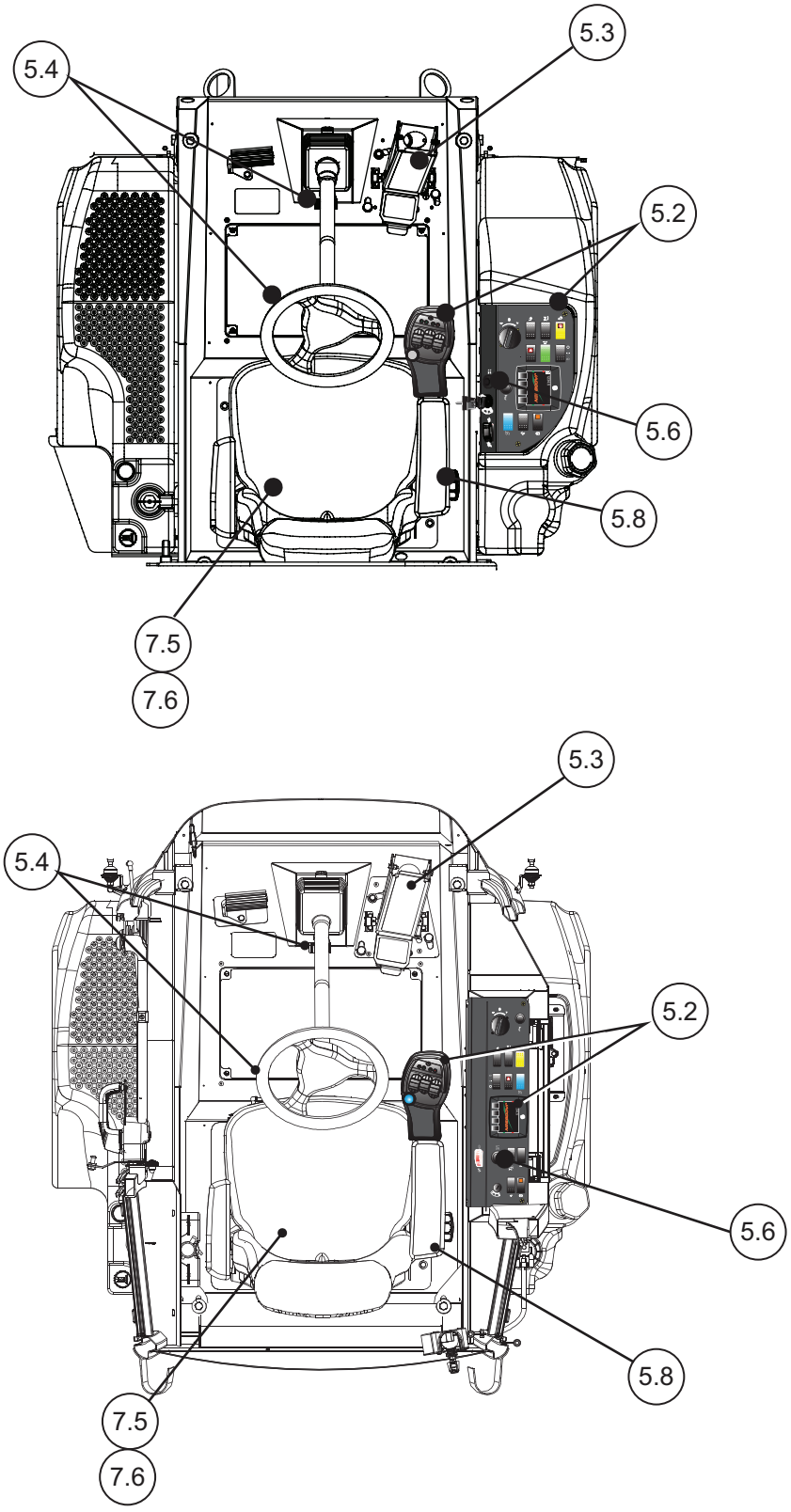
K		X	1-2-3	S
25 MM	1.0 IN	A	1	0
28 MM	1.5 IN	B	1	1
50 MM	2.0 IN	C	1	2
63 MM	2.5 IN	D	1	3
76 MM	3.0 IN	E	1	4
76 MM	3.0 IN	E	2	0
88 MM	3.5 IN	F	2	1
101 MM	4.0 IN	G	2	2
114 MM	4.5 IN	H	2	3
127 MM	5.0 IN	J	2	4
127 MM	5.0 IN	J	3	0
140 MM	5.5 IN	K	3	1
152 MM	6.0 IN	L	3	2

G

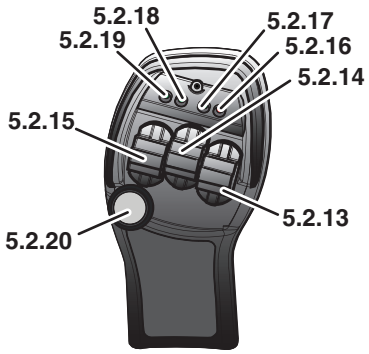
3 DECALS

		Description
A	009034770	Guaranteed Sound Power Level
B	4286422	Hydraulic Fluid
C	009039870	Jack & Hook Point
D	164580	Lubrication Point
E	4316686	Engine Oil Classification
F	4355986	Height Of Cut - Wing deck
G	4359126	Height Of Cut - Front Deck

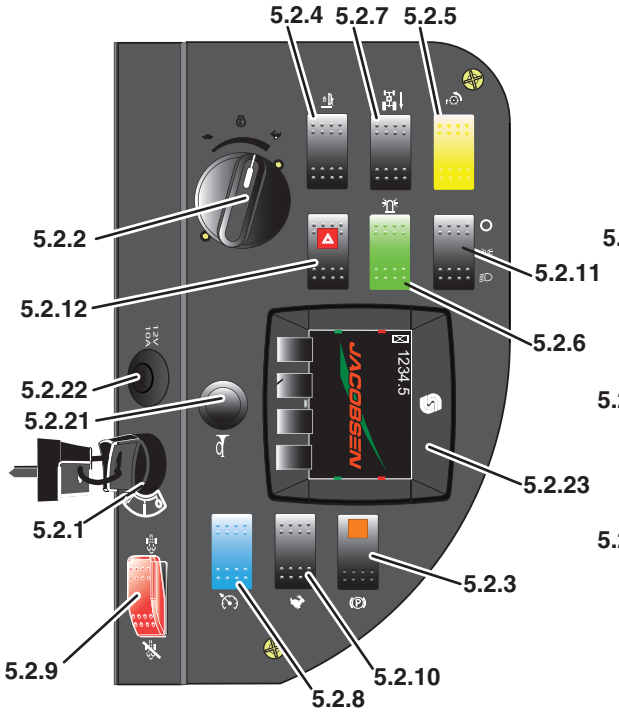
4.1 OPERATOR COMPARTMENT



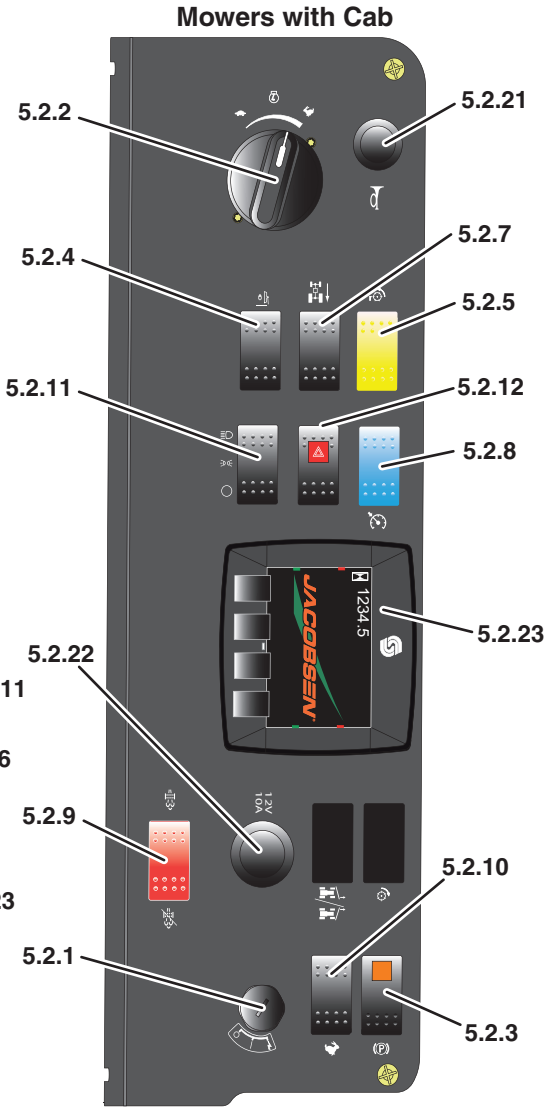
4.2 CONTROL PANEL



Mowers with 2 Post ROPS



Mowers with Cab

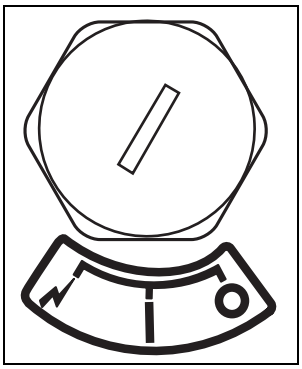


5.2.1- Starter Key Switch
5.2.2 - Throttle Control
5.2.3 - Parking Brakes
5.2.4 - Transport Lock Switch
5.2.5 - Mow Switch
5.2.6 - 4 Wheel Drive in Reverse Direction Switch
5.2.7 - Cruise Control Switch
5.2.8 - DPF Switch
5.2.9 - High Speed Switch
5.2.10 - Light Switch (Optional)
5.2.11 - Hazard Warning Switch (Optional)
5.2.12 - Rotating Beacon (Optional)
5.2.13 - Right Hand Wing Cutter Deck Lift/Lower Switch
5.2.14 - Front Cutter Deck Lift/Lower Switch
5.2.15 - Left Hand Wing Cutter Deck Lift/Lower Switch
5.2.16 - Mow Engaged LED
5.2.17 - Right Hand Wing Cutter Deck LED
5.2.18 - Center Cutter Deck LED
5.2.19 - Left Hand Wing Cutter Deck LED
5.2.20 - Weight Transfer Button
5.2.21 - Horn Switch
5.2.22 - Power Outlet
5.2.23 - Visual Display

4.2.1 STARTER KEY SWITCH

Turn the starter key to the right to the 'start' position to start the engine. When the engine starts, release the key and allow to return automatically to the 'on' position to run.

NOTE. There can be a time delay before the engine starts, it depends on the engine temperature while the glow plugs operate automatically.

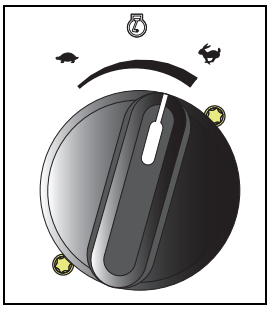


4.2.2 THROTTLE CONTROL

Rotate the control to the right to increase the engine speed and toward the left to decrease the engine speed.

NOTE: Operate the engine at full speed.

NOTE: When the controller is set to Auto Mode, the engine speed is set by the controller. The throttle control will not change the engine speed. **See Section 4.2.23.34**



4.2.3 PARKING BRAKES

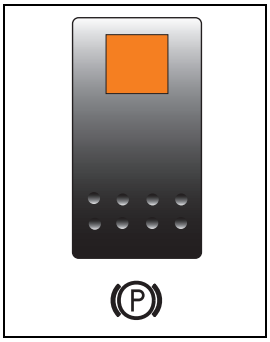
Move the orange button back and press the switch to engage the parking brake.

When the engine is stopped, the parking brake is applied.

To release the parking brake, press the opposite end of the switch.

The parking brake icon (P) is displayed on the visual display screen when engaged.

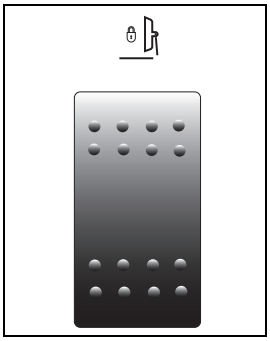
DO NOT apply the brake while the machine is in motion.



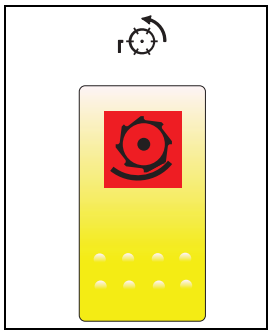
4.2.4 TRANSPORT LOCK SWITCH

Engages the wing unit locks for transport

The wing unit lock icon is displayed on the visual display screen when engaged.



4.2.5 MOW SWITCH



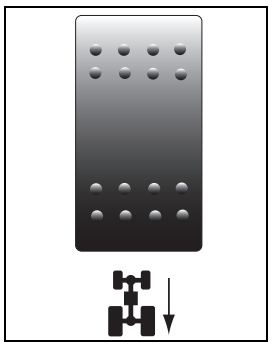
The mow switch engages mow speed and cutter rotation.

To cut grass, push the front of the switch and move the joysticks forward to lower the decks. When engaged the yellow LED on the pod is illuminated.

To stop the blade, push the rear of the rocker switch.

When lifted out of work or the operator leaves the seat, blade rotation is stopped.

4.2.6 4 WHEEL DRIVE IN REVERSE DIRECTION SWITCH

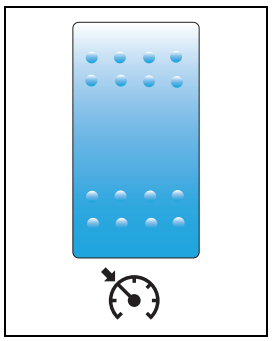


Engages 4 wheel drive while the vehicle is in reverse direction. Hold the switch to keep engaged.

Push the front of the switch to turn ON

Release the switch to turn OFF

4.2.7 CRUISE CONTROL SWITCH



Used to engage the cruise function when the cutters are engaged.

Automatic mode should be selected to enable cruise control.

To engage cruise control:

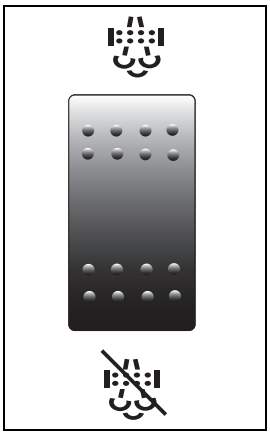
Push the rocker switch to engage the cruise function.

To disengage cruise control

Push the rocker switch to disengage the cruise function.

Note. Operation of the transmission pedal, applying the parking brake and reactivation of the cruise control switch will deactivate the cruise control.

4.2.8 DPF SWITCH



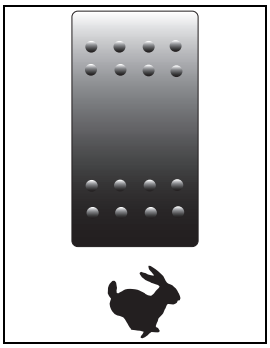
With the switch in the center position (default) it allows automatic Active Regen. Operation of the mower is not changed during Active Regen. See 8.15

When the Regen Request light flashes, press and release the front part of the switch to start the Parked Regen cycle.

To prevent damage to the turf during Parked Regen, park the mower on concrete or gravel. The engine must be warm (above 65° C / 149° F), the traction pedal in NEUTRAL position, mow switch in OFF position and the parking brake engaged and the throttle in idle position for the Parked Regen cycle to start.

Do not stop the engine, disengage the parking brake or drive the mower until the Regen cycle is completed and the Regen Request light turns off. See 8.15

4.2.9 HIGH SPEED SWITCH

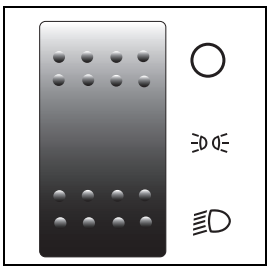


Used to switch the mower between the high and low speeds. Always mow with the switch in the SLOW speed position.

Push the front of the rocker switch to operate the mower in the high speed.

Push the rear of the rocker switch to operate the mower in the slow speed.

4.2.10 LIGHT SWITCH (OPTIONAL)



Allows manual operation of the road lights.

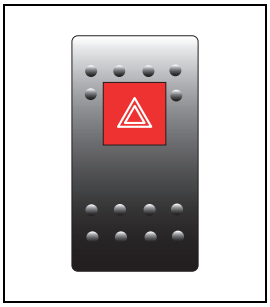
Position 1. OFF

Position 2. Side / Marker Lights

Position 3. Dipped Beam.

Note, Position 3 needs the ignition in the ON position.

4.2.11 HAZARD WARNING SWITCH (OPTIONAL)



Turns the four indicator lamps ON.

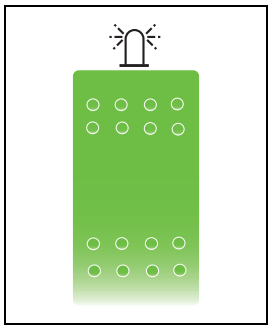
Push the front of the switch to turn ON.

Push the rear of the switch to turn OFF.

When the switch is turned on, the red lens flashes.

4.2.12 ROTATING BEACON

Operates the vehicles rotating beacon when a cab is not fitted.



4.2.13,14,15 LIFT/LOWER SWITCHES

5.2.13. Right Hand Wing Cutter Deck
5.2.14 Front Cutter Deck
5.2.15 Left Hand Wing Cutter Deck

To lower the cutting unit move the switch lever forward.

To raise the cutting unit move the switch lever rearwards

NOTE:

If the cutter switch is engaged when the unit is lowered the green lamp will illuminate when the unit is below 400mm from the ground.

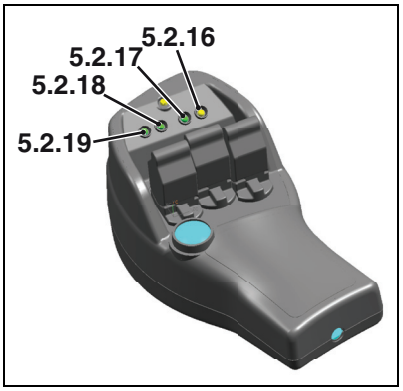
The yellow mow lamp will illuminate when the cutter switch in ON. When the blades are moving the icon on the display change to green.

If the lever is pulled momentarily rearwards the unit will raise to the cross cut position and continue to rotate for 3 seconds. Lowering the unit within 3 seconds will let the blade continue rotating without stopping.

If the lever is held and the unit lifts above the cross cut position the unit will continue to lift and the blade will stop rotating at 400mm. The lift will stop when the lever is released.

4.2.16, 17, 18, 19 INDICATOR LAMPS

5.2.16 Yellow lamp: Illuminates when the mow is engaged
5.2.17 Green lamp: Illuminates when the Right hand cutter deck is in cutting position.
5.2.18 Green lamp: Illuminates when the center cutter deck is in cutting position.
5.2.19 Green lamp: Illuminates when the Left hand cutter deck is in cutting position.



NOTE:

The green lamps 5.2.17, 5.2.18 and 5.2.19 will turn red when a deck begins to stall. See section 6.8.

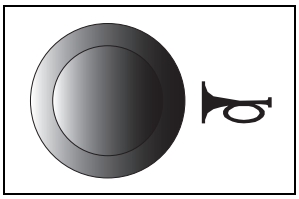
4.2.20 WEIGHT TRANSFER BUTTON

The button will transfer weight by the hydraulic system between the drive wheels and the cutter deck.

To adjust the amount of weight transfer manually on the lift valve. See section 7.2.

4.2.21 HORN

The horn button is on the control panel. If the lighting kit is fitted, the horn is also found on the end of the indicator stalk (Section 5.10).



4.2.22 POWER OUTLET

The Auxiliary Power Outlet is on the control panel next to the ignition switch. It is for use with mobile phone chargers and accessories.

Automotive 12 Volt, 10-Amp Power Outlet

4.2.23 VISUAL DISPLAY

The visual display is activated when the ignition is turned on.

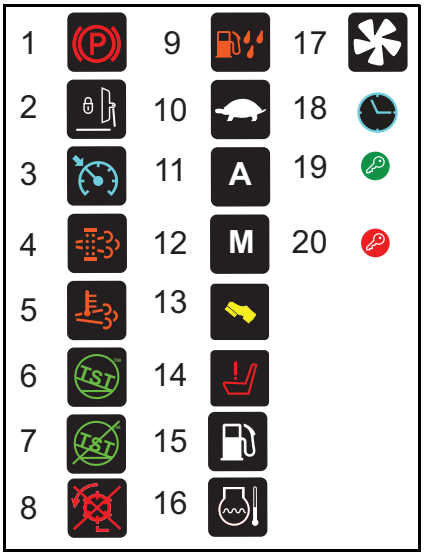
4.2.23.1 STARTUP SCREEN

When the ignition key is turned to the start position, this screen is shown.

The hour meter will show total hours of engine operation.

4.2.23.2 WARNING / SERVICE SCREEN

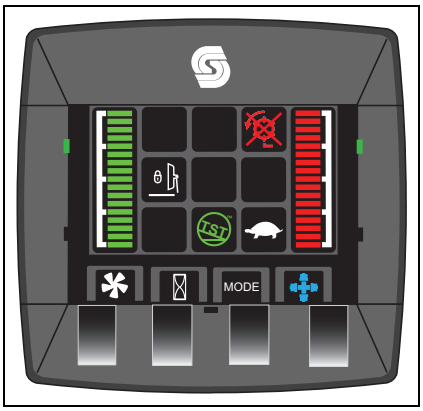
After the startup screen the warning screen is shown, the screen is visible for four seconds. If the machine is within 5 hours of the next service, a warning is shown. An operator input is needed to continue to the main screen. If there is no input needed, the main screen will become visible. If a fault condition has occurred during the previous start, a pop up screen will become visible over the top of the warning screen. The operator must confirm the fault before they can move to the main screen.



ICONS

1.	Parking Brake Engaged
2.	Deck Lock
3.	Cruise Control
4.	DPF Regeneration Request / Cancel
5.	DPF Regeneration Ongoing
6.	TST Active
7	TST Not Active
8.	Cutter Indicator (Flashes if not in off position on start up)
9.	Water In Fuel Warning
10.	Creep Mode
11.	Automatic Mode
12.	Manual Mode
13.	Foot Pedal Warning (Flashes if not in neutral position on start up)
14.	Seat Warning (Flashes if not occupied or disconnected on start up)
15.	Fuel Indicator (Below bar graph)
16.	Engine Temperature Indicator (Below bar graph)
17.	Reverse Fan Active
18.	Time
19.	Engine Able To Start
20.	Engine Unable To Start

4.2.23.3 FIRST SCREEN



This screen shows the cutter switch in the OFF position, the transport lock engaged, the TST is in operation and speed mode set to creep.

By pressing the MODE button the transmission mode can be changed between Automatic, Manual and Creep. Automatic in enabled by default

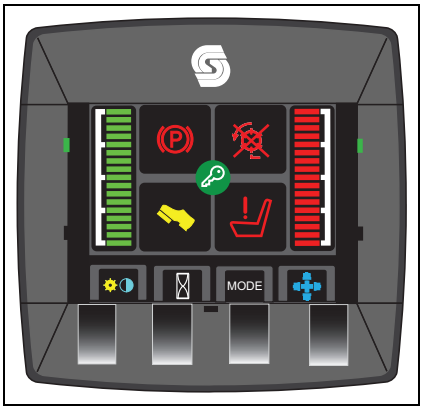
Three quick select operation modes

1. Manual Mode - Works as a conventional mechanical over hydraulic drive system
2. Auto Mode - Automatic drive features enabled
   - Climb assist - Load sensing system adjusts ground speed for efficient slope climbing
   - AdaptiCut ® - Load sensing system adjusts ground speed to maintain optimum cutting performance
   - Auto Idle -Throttle drops to idle when pedal returns to neutral during transport operations
3. Creep Mode - Cutting system disabled and max speed limited to 8kph (5mph) for safe, controlled use in workshops, storage facilities and when loading onto vehicles.

⚠ WARNING

The slope monitoring system “TST™” (tilt sensor technology) is a slope angle warning system only. It does not increase the safe working slope beyond that of the declared safe slope.

4.2.23.4 ENGINE START



When the ignition key is turned to the start position, this screen is shown.

If the parking brake is applied, the cutting unit switch is in the OFF position and the foot pedal is in the Neutral position. When the operator is in the seat, the engine will start.

This screen shows the fuel bar graph on the left side. The color changes from green to red as the fuel level decreases. The engine temperature gauge is on the right side. The color changes from green to red as the temperature increases.

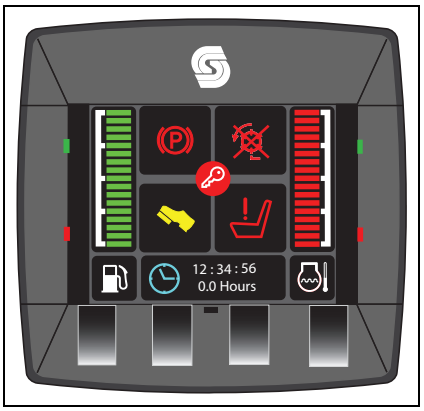
4.2.23.5 THE ENGINE WILL NOT START

When the ignition key is turned to the start position this screen is shown. If any of the following flash.

- The parking brake is not applied.
- The cutter switch is not in the OFF position.
- The foot pedal is not in the Neutral position.
- The operator is not in the seat.

Note. The red LED's either side of the display will also flash.

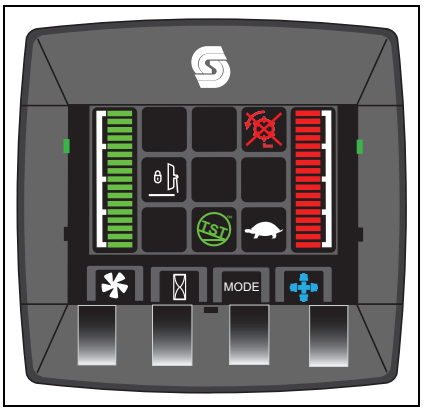
The engine will not start until all the items in the list are correct.



SET-UP

4.2.23.6 BRIGHTNESS SELECT

To start a manual reverse fan cycle, press the button below the icon.



4.2.23.7 BRIGHTNESS ADJUST

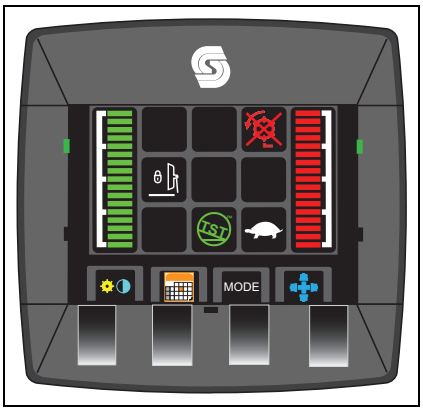
Use the buttons below the + and - icons on the screen to increase and decrease the brightness.

4.2.23.8 TIME DISPLAY OPTION

This display this displays the time and engine hours.

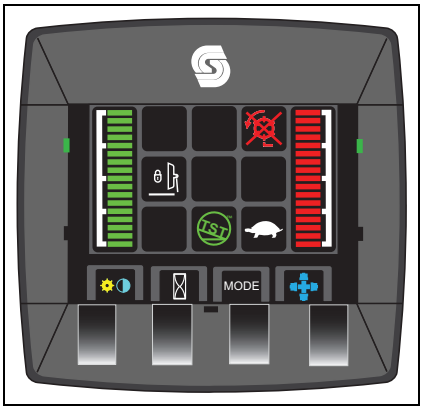
This display shows the date and engine hours.

Button 2 toggles between the two options.



4.2.23.9 MAIN MENU SELECT

Use the button below the to access the main menu.

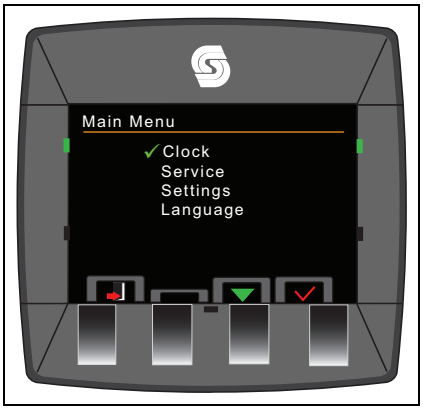


4.2.23.10 CLOCK SELECT

The button accepts the option that has the ✓.

The ✓ is moved with the up and down to select, date, service, settings or language.

Press the button to return to previous menu.



4.2.23.11 DATE SELECT

Press the button ✓ and the day is underlined.

Press the button ▲ up and down ▼ to move the count.

Press the button ✓ to accept and move to the month (underlined).

Press the button ▲ up and down ▼ to move the count.

Press the button ✓ accept and move to the year (underlined).

Press the button ✓ accept

4.2.23.12 TIME SELECT

Press the button ✓ and the hour is underlined.

Press the button ▲ up and down ▼ to move the count.

Press the button ✓ to accept and move to the minute (underlined).

Press the button ▲ up and down ▼ to move the count.

Press the button ✓ accept and move to the second (underlined).

Press the button ✓ accept

4.2.23.13 DATE FORMAT

Press the Down ▼ button to select the date format (underlined).

Press ✓ to change the option.

Press the button ▲ up and down ▼ to move between US and EU.

Press ✓ accepts the option.

Press ↵ the button to return to main menu.

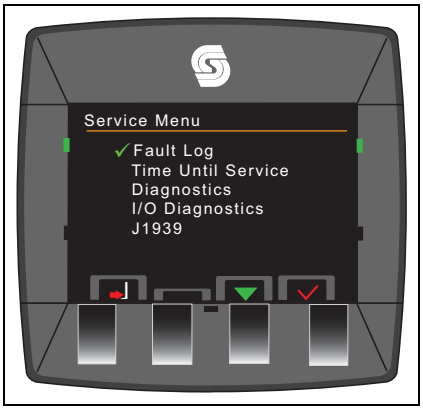
SERVICE MENU

Please note some functions require a PIN to access.

4.2.23.14 SERVICE MENU

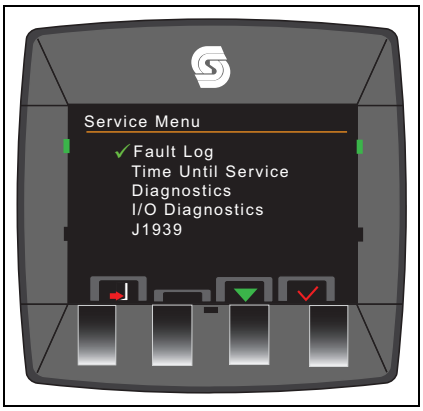
The ✓ button accepts the option that has the ✓.

The ✓ is moved with the ▲ up and down ▼ to select, fault log, time until service, diagnostics, I/O diagnostics and ECU (engine Control Unit) monitor.



4.2.23.15 FAULT LOG

Select the fault log ✓ and accept ✓.



4.2.23.16 FAULT LOG

The last 50 “Faults” that the controller finds are recorded. When 50 faults are recorded, the fault that next occurs will write over the oldest fault.

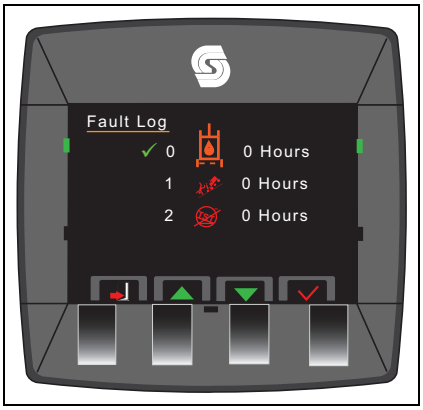
This information is got with the service tool or can be seen on the errors page of the service menu. Press the button ✓ to select, press the button ▲ up and down ▼ to move the ✓. The errors will move with the last error at the top of the screen.

The fault / data log function has three actions. Each fault / data log function can contain a maximum of 50 faults. the areas included are:

The Inclinometer, records slopes of more than 22°.

The Engine, records the engine shut downs because of overheat or loss of oil pressure.

The Service, records hydraulic by-pass fault and missed service.

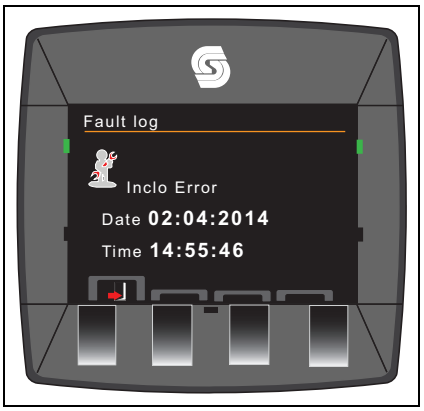


4.2.23.17 FAULT LOG DETAIL

Select the fault log to be accessed ✓ and accept ✓ to show the details.

These details show the date and time of the fault.

Press the button to return to previous menu.



4.2.23.18 SERVICE MENU - TIME UNTIL SERVICE

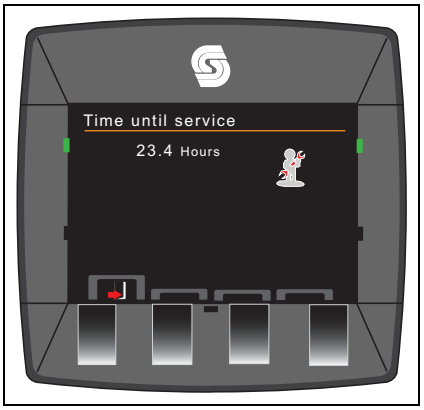
Select the time until service ✓ and accept ✓

4.2.23.19 TIME UNTIL SERVICE

This screen displays the time until the service is needed.

Press the button to return to previous menu.

To set the service hours to zero, the second, third and fourth buttons need to be pressed at the same until reset to zero.



4.2.23.20 DIAGNOSTICS

Water Temp [deg C] = 60.5

Fuel Level [pct] = 100

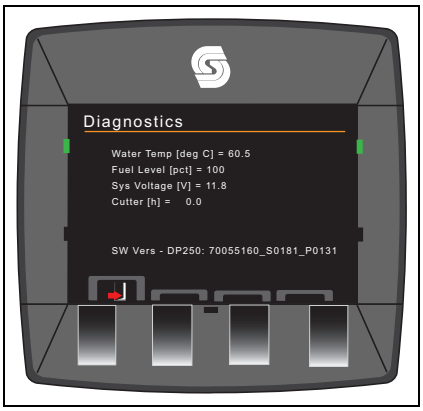
Sys Voltage [V] = 11.8

Cutter [h] = 0.0

Software version

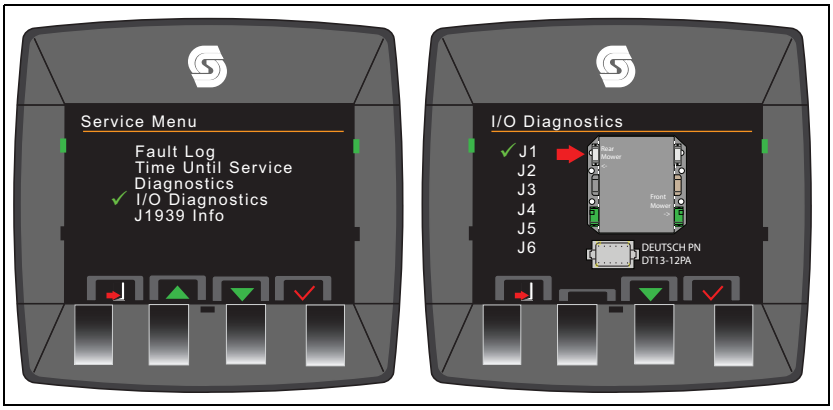
SW Vers - DP250: 70055160_S0181_P0131

Press the button to return to previous menu.



4.2.23.21 I/O DIAGNOSTICS

Select the I/O diagnostics ✓ and accept ✓.

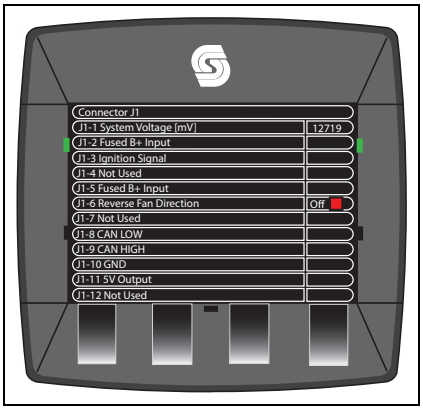


4.2.23.22 CONNECTOR J1

This screen shows the status of the J1 connectors.

Press the left side button to return to I/O diagnostics menu.

On and OFF shown for illustration purposes only.

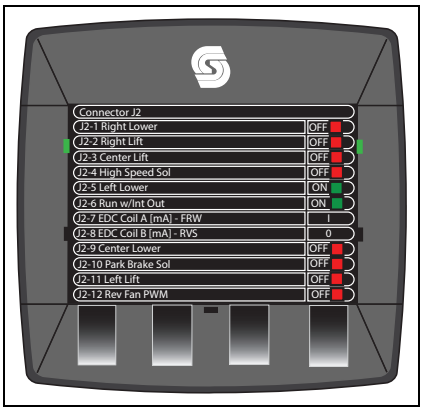


4.2.23.23 CONNECTOR J2

This screen shows the status of the J2 connectors.

Press the left side button to return to I/O diagnostics menu.

On and OFF shown for illustration purposes only.

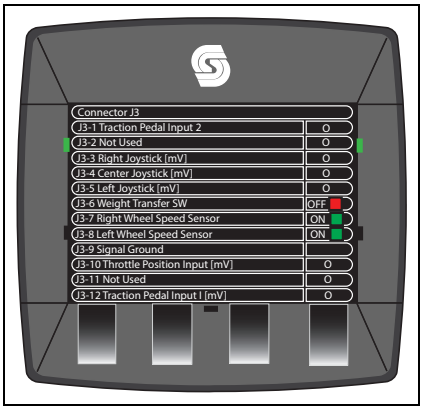


4.2.23.24 CONNECTOR J3

This screen shows the status of the J3 connectors.

Press the left side button to return to I/O diagnostics menu.

On and OFF shown for illustration purposes only.

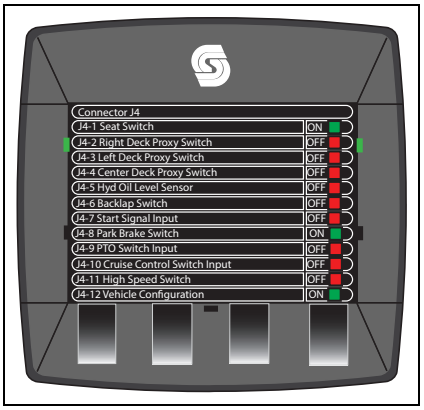


4.2.23.25 CONNECTOR J4

This screen shows the status of the J4 connectors.

Press the left side button to return to I/O diagnostics menu.

On and OFF shown for illustration purposes only.

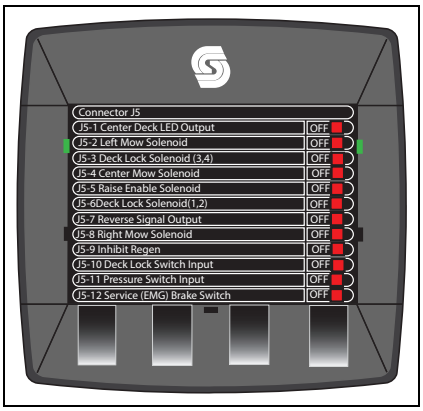


4.2.23.26 CONNECTOR J5

This screen shows the status of the J5 connectors.

Press the left side button to return to I/O diagnostics menu.

On and OFF shown for illustration purposes only.

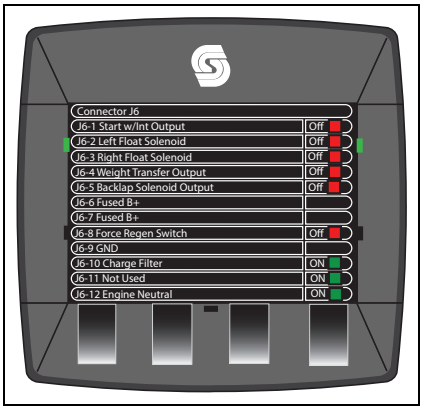


4.2.23.27 CONNECTOR J6

This screen shows the status of the J6 connectors.

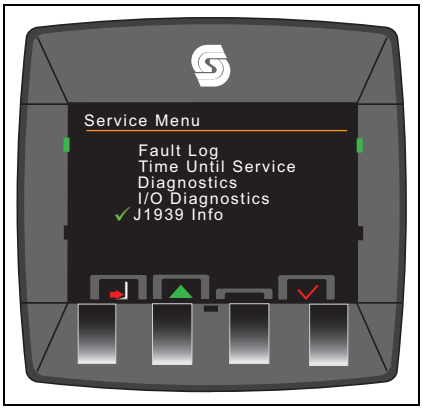
Press the left side button to return to I/O diagnostics menu.

On and OFF shown for illustration purposes only.



4.2.23.28 ECU (ENGINE CONTROL UNIT) MONITOR (J1939)

Select the ECU Monitor ✓ and accept ✓



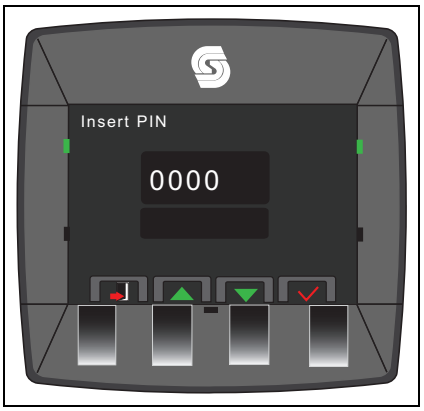
4.2.23.29 SERVICE MANAGER PIN INPUT

Press the button ▲ up and down ▼ to change the numbers.

Select ✓. to accept.

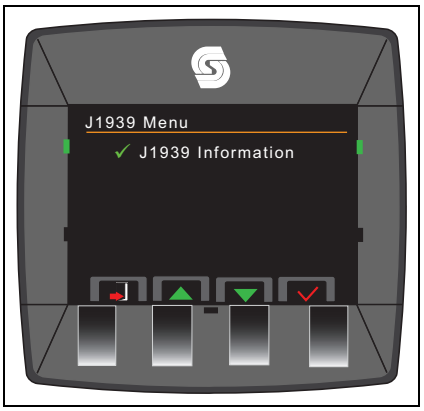
Initial PIN number is 1001

Note. Service managers are advise to change the pin to stop the machine parameters being changed to an dangerous condition.



4.2.23.30 ECU MONITOR INFORMATION (J1939)

Select the ECU monitor information ✓ and accept ✓.



4.2.23.31 INFORMATION SCREEN ONE

This screens displays, engine speed (rpm), engine throttle position (%), engine coolant temperature (°C) and battery voltage (Volt).

Press the button ▲ up and down ▼ to move between screen one and two.

4.2.23.32 INFORMATION SCREEN TWO

This screen displays, engine-total fuel used (liter) engine fuel rate (l/h).

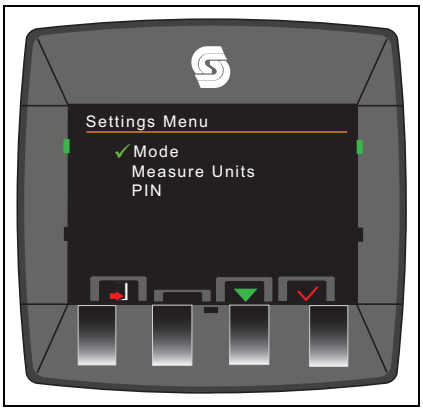
Press the button ▲ up and down ▼ to move between screen one and two.

SETTINGS MENU

Please note some functions require a PIN to access.

4.2.23.33 MODE MENU

Select the mode ✓ and accept ✓



4.2.23.34 AUTOMATIC / MANUAL / CREEP MODE SELECTION

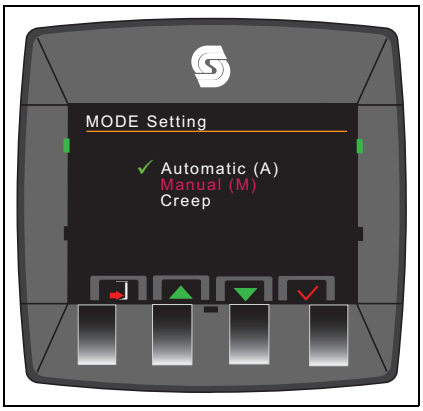
Press the button ▲ up and down ▼ to move between modes.

Automatic (A), Manual (M) and Creep.

Note. The mode selection can only be changed when the machine is stopped.

Select the required mode ✓ and accept ✓

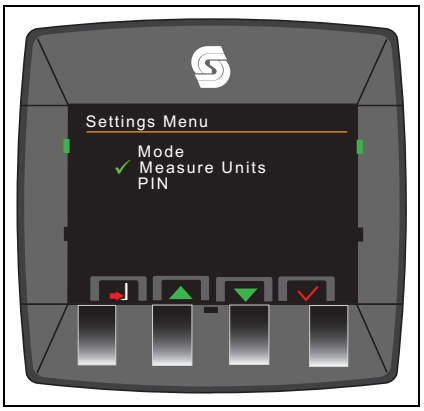
Press the button ↵ to return to previous menu.



1. Manual Mode - Works as a conventional mechanical over hydraulic drive system
2. Auto Mode - Automatic drive features enabled
   - Climb assist - Load sensing system adjusts ground speed for efficient slope climbing
   - Cut assist - Load sensing system adjusts ground speed to maintain optimum cutting performance
   - Auto Idle -Throttle drops to idle when pedal returns to neutral during transport operations
3. Creep Mode - Cutting system disabled and max speed limited to 8kph (5mph) for safe, controlled use in workshops, storage facilities and when loading onto vehicles

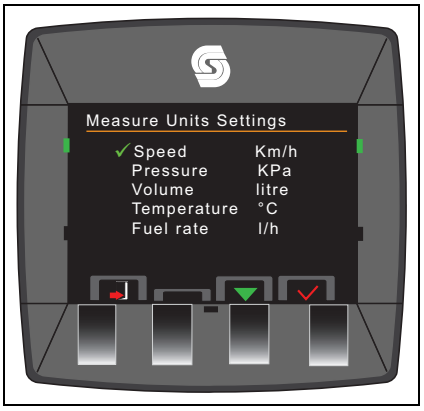
4.2.23.35 MEASURE UNITS MENU

Select the measure units ✓ and accept ✓.



4.2.23.36 MEASURE UNITS

Select the speed ✓ and accept ✓.



Press the button ▲ up and down ▼ to move between mph and kph.

Press the button ↵ to return to previous menu

Select the pressure ✓ and accept ✓.

Press the button ▲ up and down ▼ to move between psi, bar and KPa.

Press the button ↵ to return to previous menu

Select volume ✓ and accept ✓.

Press the button ▲ up and down ▼ to move between liter, gal and imperial gal.

Press the button ↵ to return to previous menu

Select the temperature ✓ and accept ✓.

Press the button ▲ up and down ▼ to move between °C and °F

Press the button ↵ to return to previous menu

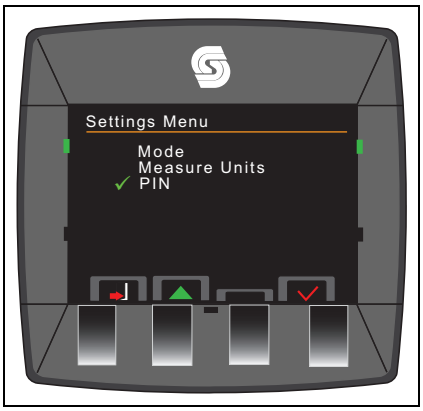
Select the fuel rate ✓ and accept ✓.

Press the button ▲ up and down ▼ to move between liters/hour, gallons/hour and imperial gallons/hour

Press the button ↵ to return to previous menu

4.2.23.37 PIN MENU

Select the PIN menu ✓ and accept ✓.



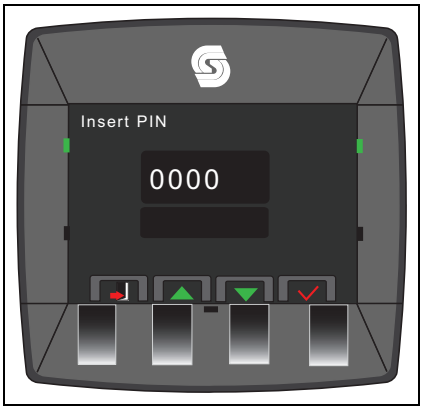
4.2.23.38 INPUT PIN

Press the button ▲ up and down ▼ to change the numbers.

Select ✓. to accept

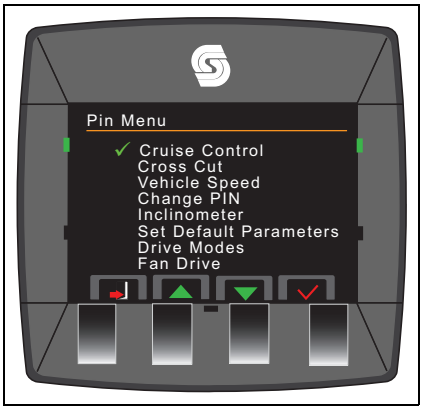
Owner PIN: 1001

Owners should change PIN to protect settings.



4.2.23.39 CRUISE CONTROL

Select cruise control ✓ and accept ✓.

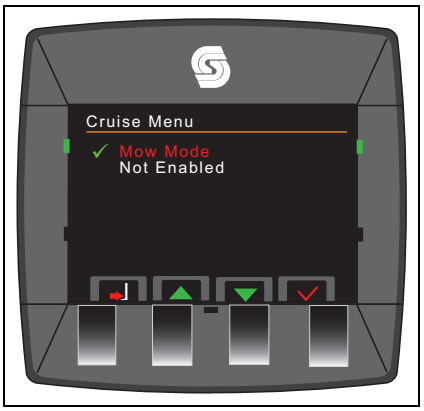


4.2.23.40 CRUISE SELECT

Select between “mow mode, not enabled”, “mow and transport mode” or “transport mode” use button ▲ up and down ▼ to move between them.

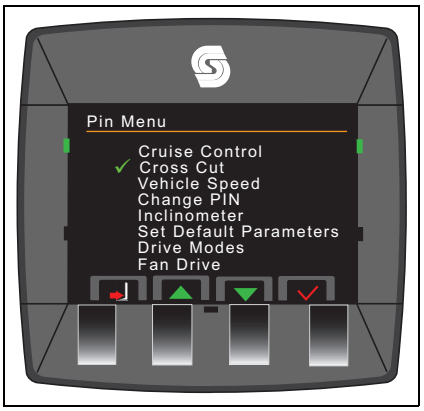
Press the button ✓.to accept

Press the button ↵ to return to previous menu.



4.2.23.41 CROSS CUT

Select the cross cut ✓ and accept ✓.

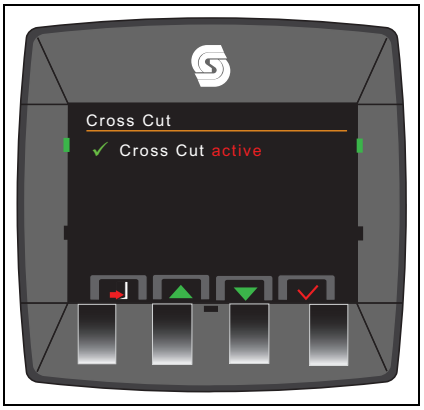


4.2.23.42 CROSS CUT ACTIVE / INACTIVE

Use the button ▲ up and down ▼ to move between cross cut active and not active.

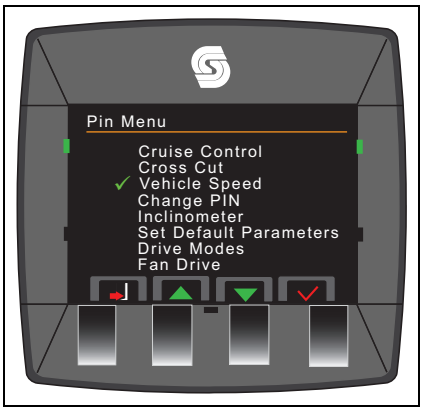
Press the button ✓.to accept.

Press the button ↵ to return to previous menu



4.2.23.43 VEHICLE SPEED

Select the vehicle speed ✓ and accept ✓.



4.2.23.44 MAXIMUM SPEED SETTINGS MENU

Use the button ▲ up and down ▼ to move between transport and mow speed and creep speed.

Press the button ✓.to accept.

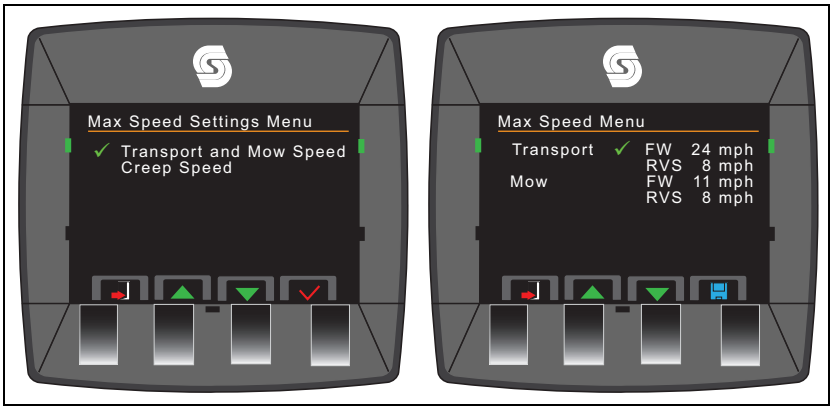
Select which transport and mow speeds are needed in forward and reverse

Use the button ▲ up and down ▼ to move to the needed speed.

Press the button 💾.Too save.

Press the button ↩ to return to previous menu

Do the procedure for creep mode.

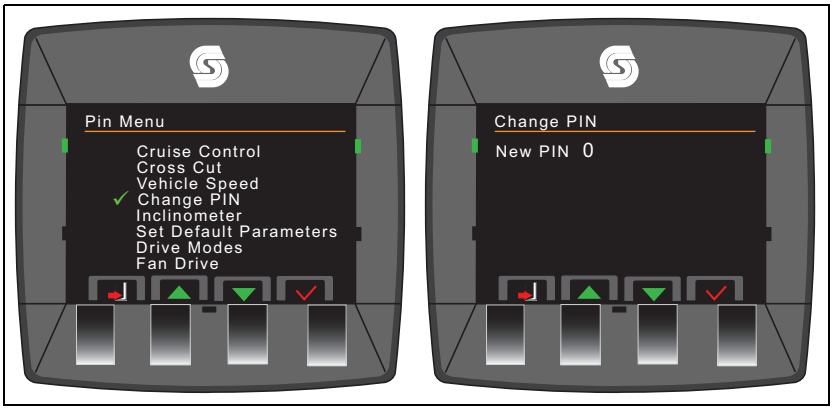


4.2.23.45 PIN CHANGE

Select the PIN change ✓ and accept ✓.

Press the button ▲ up and down ▼ to move forward the numbers.

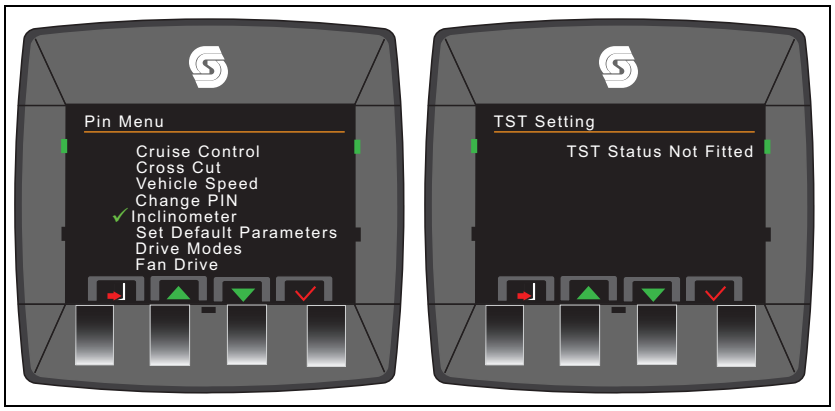
Select ✓. To accept.



4.2.23.46 INCLINOMETER

Select to shows TST status, Enabled or Disabled.

Press the button ▲ up and down ▼ to move between Enabled or Disabled Select ✓. To accept.

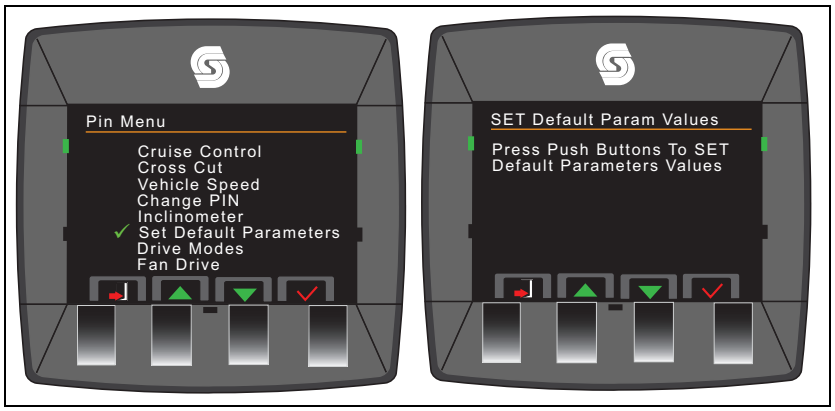


4.2.23.47 SET DEFAULT PARAMETERS

Select the Set Default Parameters ✓ and accept ✓.

Select ✓. To accept.

Press the button ▲ up and down ▼ to move between YES or NO Select ✓. To accept.

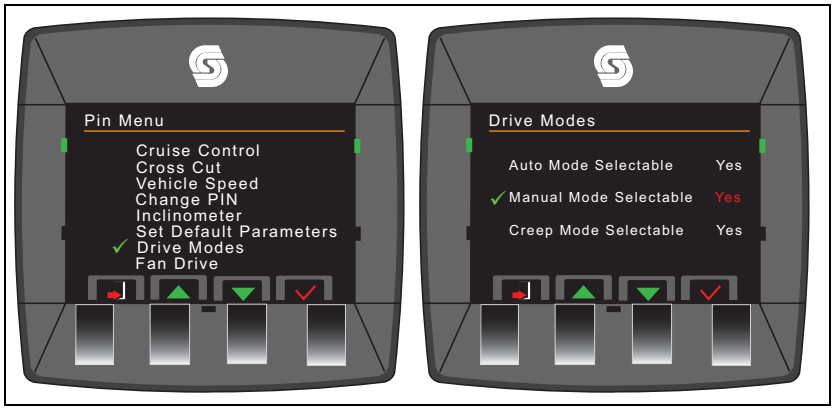


4.2.23.48 DRIVE MODES

Select the Drive Modes ✓ and accept ✓.

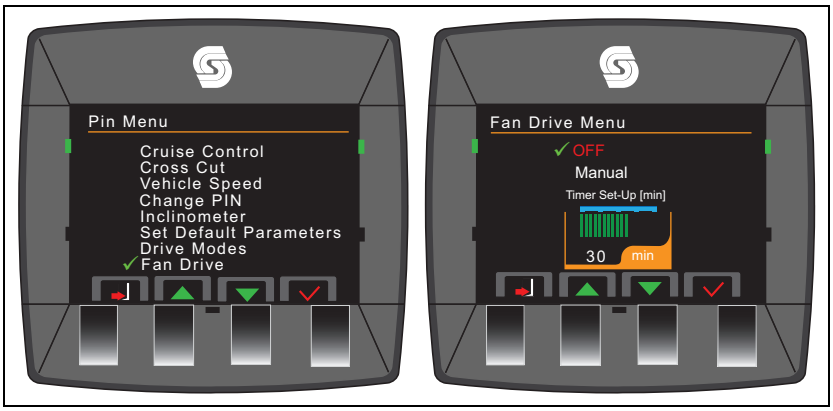
Select ✓. To accept.

Press the button ▲ up and down ▼ to move between YES or NO Select ✓. To accept.



4.2.23.49 FAN DRIVE

Select the Fan Drive ✓ and accept ✓.



The normal fan operation is based on engine temperature. Fan speed will increase as engine temperature increases.

When engine temperature exceeds a set value or timer ends, the reverse fan cycle will start. Fan will stop the forward rotation, operate in reverse rotation for 10 seconds and return to forward rotation. Timer will automatically restart after each reverse fan cycle.

To prevent reverse fan rotation select ✓ OFF and select ✓. To accept.

To use manual start the reverse fan cycle, select ✓ Manual and select ✓. To accept.

Press the button + and – to increase or decrease Timer Set-Up. Select ✓. To accept.

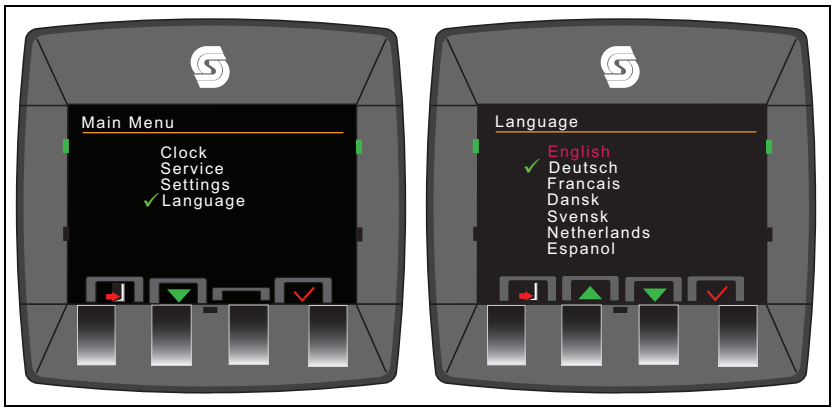
4.2.23.50 BRIGHTNESS ADJUST

Use the buttons below the + and - icons on the screen to increase and decrease the brightness.

4.2.23.51 LANGUAGE MENU

Select the language ✓ and accept ✓

On the page for the language options, Press the button ✓ to select, press the button ▲ up and down ▼ to move the ✓. When the ✓ is moved up and down the languages, it does not change until button ✓ is pressed to store the language. When the title bar, i.e. the 'Language Menu' will change to the new language.



The options will be in the correct language i.e. English, Deutsch, Francais, Dansk, Svensk, Nederlands and Español.

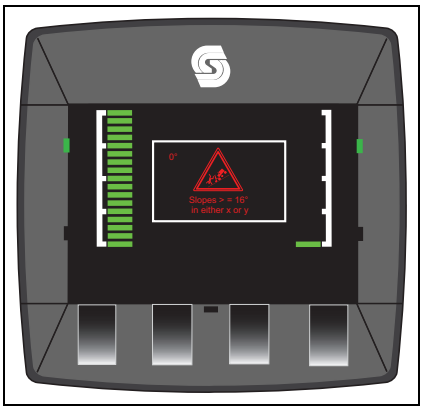
Press the button ↵ to return to previous menu.

WARNINGS

4.2.23.52 WARNING SLOPE ANGLE 16°

During work if the machine is driven on a slope of 16° the screen will display this warning. This over rides all other information, and will continue until the machine has been driven to an area with a slope of less than 16°.

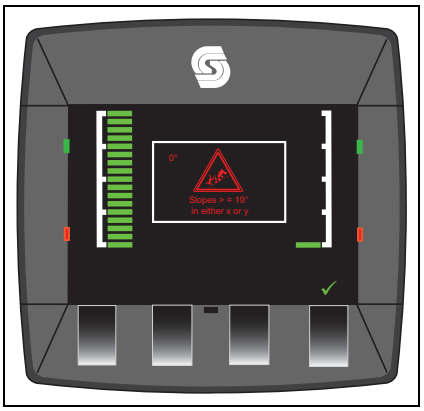
Press the button below the ✓ to confirm the fault.



4.2.23.53 WARNING SLOPE ANGLE 19°

If the slope angle reaches 19° the screen will display this warning which indicates that the cutting unit arms are locked in the current position and will continue to run but cannot be re engaged, until operating below 19°. An audible warning will be sounded, the warning will sound four times every 4 seconds and the red LED's will flash four times every 4 seconds. This will continue until the machine has been driven to an area with a slope of less than 19°.

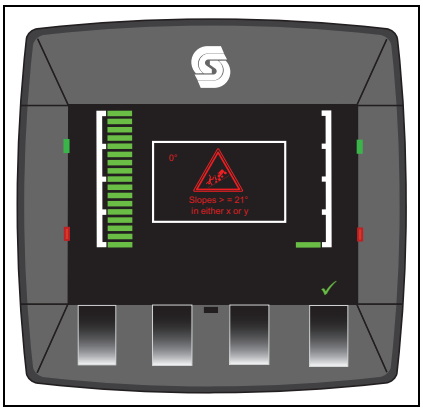
Press the button below the ✓ to confirm the fault.



4.2.23.54 WARNING SLOPE ANGLE 21°

If the slope angle reaches 21° the screen will display this warning indicating that at 21° the front cutter deck will be lifted and held above the ground to improve the stability and all cutting units will stop rotation. An audible warning will be given, the buzzer will sound four times every 4 seconds and the red LED's will flash four times every 4 seconds. This will continue until the machine has been driven to an area with a slope of less than 19°.

Press the button below the ✓ to confirm the fault.



NOTICE

The number in the top right of the screen indicates the total number of current faults recorded. If more than one fault, it will cycle all current faults.

4.2.23.55 WARNING OIL-PRESSURE FAULT

When this screen is shown, the engine oil pressure has decreased below the normal level. If this happens during operation, Stop the engine and check the oil level. Top up if necessary. If the problem persists consult your service dealer.

Press the button below the ✓ to confirm the fault.

4.2.23.56 WARNING CLEAR RADIATOR SCREENS

When this screen is shown, the engine temperature has risen above the normal levels.

Park the machine in a safe area disengage cutting units, set engine to idle to allow engine temperature to decrease prior to switching off the engine.

Clean the radiator and screens of all grass and debris.

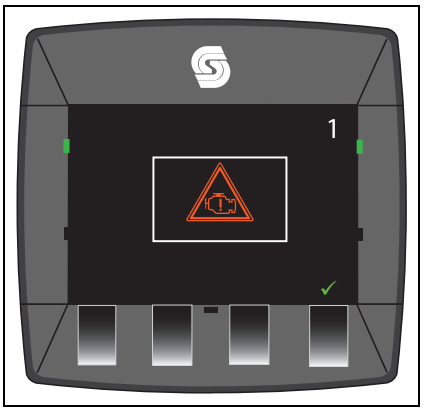
Press the button below the ✓ to confirm the fault.

4.2.23.57 WARNING ENGINE FAULT

When this screen is shown, there is an engine fault.Stop the engine as soon as possible and contact your service dealer.

When this fault occurs the machine go's into limp-home mode.

Press the button below the ✓ to confirm the fault.



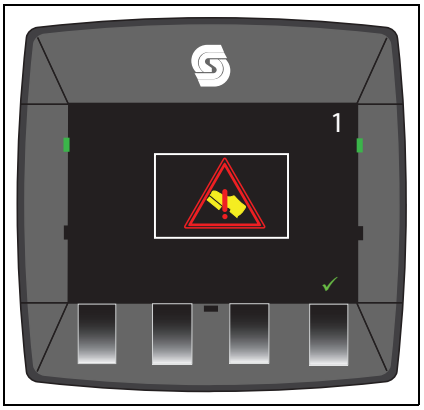
4.2.23.58 WARNING FOOT PEDAL FAULT

This screen is shown if there is a communications fault between the foot pedal and the controller.

Stop the machine as soon as possible and contact your service dealer.

When this fault occurs the machine goes into limp-home mode.

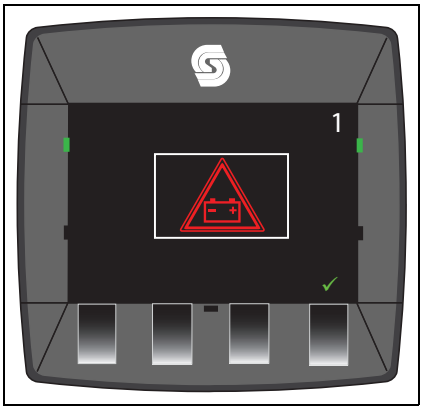
Press the button below the ✓ to confirm the fault.



4.2.23.59 WARNING BATTERY FAULT

When this screen is shown, the battery is not charging or there is a charge circuit fault.

Press the button below the ✓ to confirm the fault.

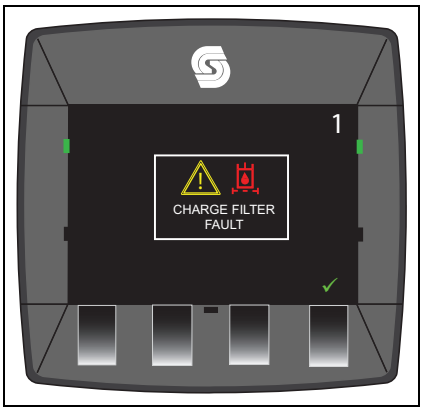


4.2.23.60 WARNING CHARGE FILTER BLOCKED

When this screen is shown, the hydraulic-charge filter is blocked and needs replacing.

Replace the filter element at the earliest opportunity to avoid possible hydraulic system damage.

Press the button below the ✓ to confirm the fault.

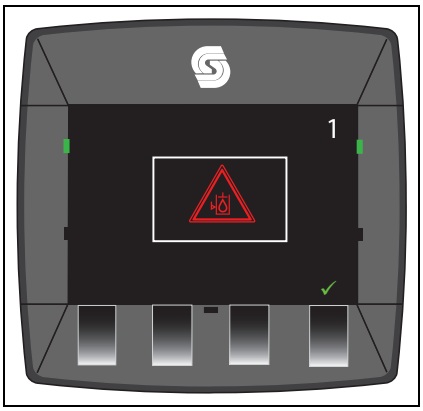


4.2.23.61 WARNING HYDRAULIC OIL-LEVEL LOW

When this screen is shown, the hydraulic oil level is low.

Fill with clean hydraulic oil at the earliest opportunity.

Press the button below the ✓ to confirm the fault.



4.2.23.62 WARNING SERVICE NEEDED

When this screen is shown, the machine has reached a service interval as shown in the maintenance chart

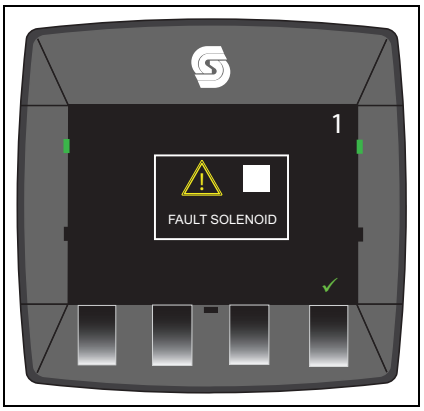
Press the button below the ✓ to confirm the fault.

4.2.23.63 WARNING SOLENOID FAULT

When this screen is shown, there is a hydraulic circuit solenoid fault.

Go to i/o diagnostics for solenoid identification.

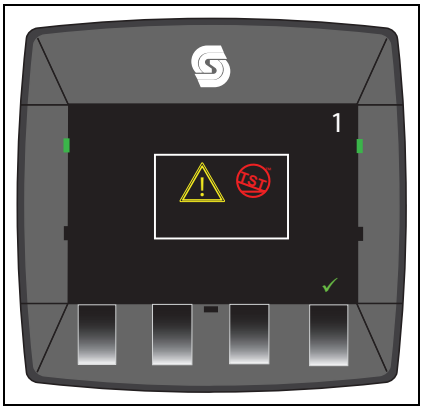
Press the button below the ✓ to confirm the fault.



4.2.23.64 WARNING (TST) TILT SENSOR TECHNOLOGY FAULT

When this screen is shown, there is a fault with the TST. Stop as soon as possible and contact your service dealer

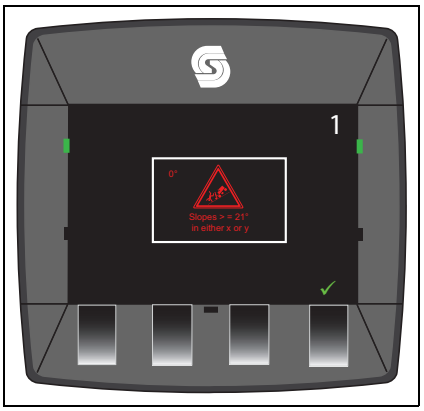
Press the button below the ✓ to confirm the fault.



4.2.23.65 WARNING MAXIMUM SLOPE ANGLE EXCEEDED

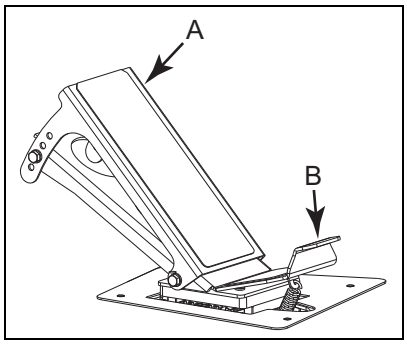
When this screen is shown, the maximum-slope angle has been exceeded.

Press the button below the ✓ to confirm the fault.



4.3 TRACTION PEDAL

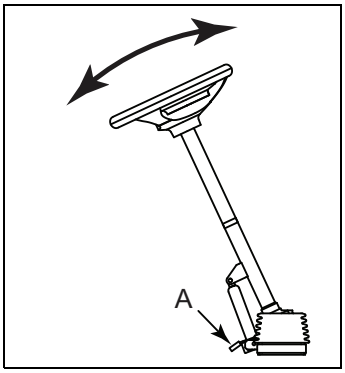
The traction pedal is found on the right side of the footplate.



- Carefully press the top (A) of the foot pedal to reach the forward speed that you need.
- To stop - Carefully return the foot pedal to the Neutral position.
- To move in the reverse direction press the bottom (B) of the foot pedal

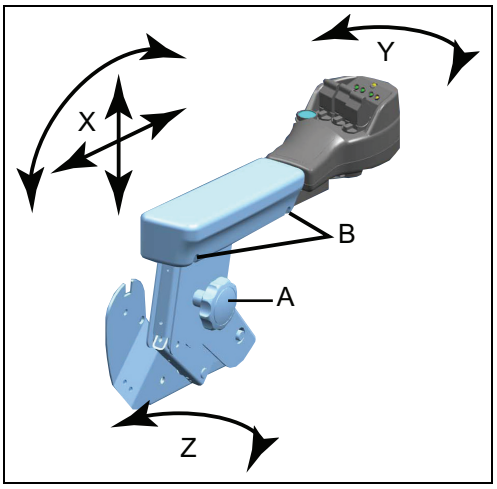
4.4 STEERING TILT CONTROL

With the operators seat is in the correct position to operate the traction pedal. While you hold the steering wheel, press the small foot pedal (A) at the base of the steering column.



Tilt the column backward or forward to the correct position. Release the small foot pedal to lock the steering column in position.

4.5 SEAT RIGHT-SIDE ARMREST AND POD



The right-side armrest of the seat carries the control pod.

The Control Pod position is adjustable, as shown, to give a good position for the operation of the controls.

a Release the hand wheel (A).

b To lift or lower the armrest, use two hands. The armrest will move in an arc (X).

c When the correct position is reached, tighten the hand wheel (A).

To rotate the pod in the horizontal plane, (Y).

d Loosen the screws that hold the pod to the armrest extension.

e Swivel pod to correct position.

f Tighten the screws.

To rotate the armrest extension in the horizontal plane, (Z).

g Remove the four screws (B) that hold the armrest cushion.

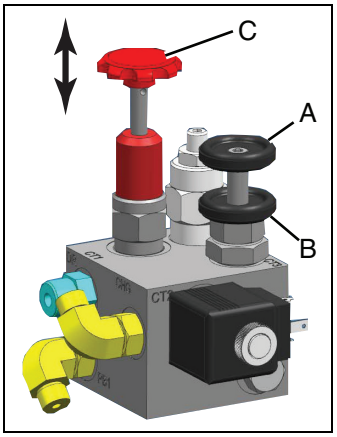
h Loosen the three locknut's fitted to studs.

i Rotate the armrest extension to the correct position.

j Tighten the three locknut's.

k Replace the armrest cushion with the four screws (B).

4.6 PARKING BRAKE RELEASE VALVE



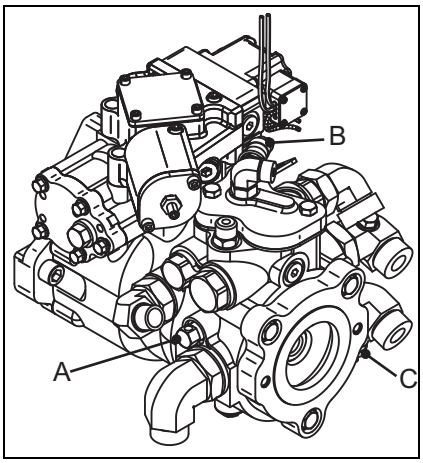
The Parking Brake Release Valve is situated under the foot plate, on the right hand side of chassis plate. The Parking Brake Release Valve is used to release the parking brake when the engine is not in operation.

The Parking brake is released with the hand wheel (A) turned completely to the right (clockwise), after you release lock wheel (B). Use the hand pump (C) to create enough pressure to release the brakes (50 to 60 strokes will give 90 seconds of brake release). When complete, rotate the hand wheel (A) to the left (counter clockwise) completely and lock with wheel (B).

This method of brake release is to recover the vehicle a short distance only and should be carried out on level ground.

4.7 TOW VALVE

The Tow valve is situated on the right hand side of the transmission pump.



1. To push the machine, disengage the parking brake, see section 5.8
2. Turn screw (A) located on the right side of the transmission pump three complete turns counterclockwise. Set the steering wheel so that the rear wheels are pointing straight ahead.
3. After pushing the machine, return the parking brake valve, see section 5.8 to its normal position and screw (A) on the pump to its operating position.

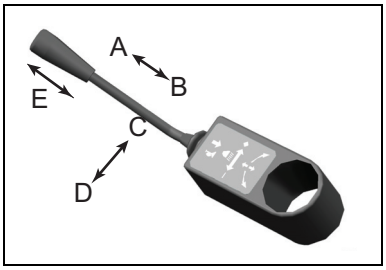
⚠ WARNING

THE FREE WHEEL FACILITY IS FOR RECOVERY PURPOSES ONLY.

Do not tow the machine for more than a few meters, or allow the machine to free wheel down slopes even when unloading down ramps.

4.8 LIGHTING KIT (OPTIONAL)

Lighting Control Stalk



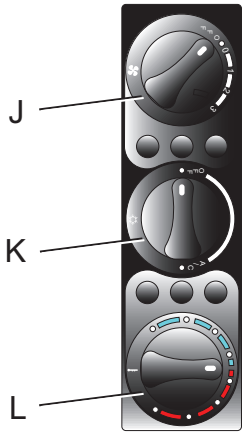
A	Push away from operator to turn the dipped beam head lights on.
B	Pull toward operator to flash the headlights.
C	Move the stalk up to indicate right turn.
D	Move the stalk down to indicate left turn.
E	Push the stalk in to sound horn.

NOTE: The Side lights will operate when the ignition is in the run position

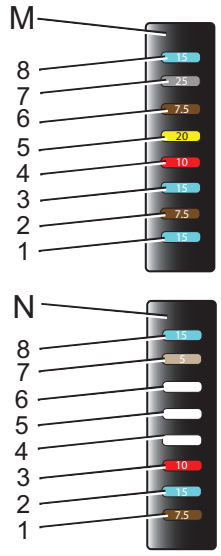
When the lighting kit is fitted, a brake light function is available. Rear view mirrors must be fitted If brake lights are used.

4.9 CAB CONTROLS

A	Left Turn Signal
B	Working Lights Switch (Optional)
C	Beacon Switch
D	Front Screen De-Frost / De-Mist Switch
E	Rear Screen Wiper Switch (Optional)
F	Front Screen Wash Switch
G	Front Screen Wiper Switch
H	Right Turn Signal
J	Fan Control
K	Air Conditioning Control
L	Temperature Control
M	Fuse Holder
N	Fuse Holder



FUSE HOLDER		
Fuse	**Rating**	**Protected Circuits**
M8	**15A**	**Wiper Front**
M7	**25A**	**Front Screen Heating**
M6	**7.5A**	**Radio (15)**
M5	**20A**	**Working Lights / Locater Lighting Left**
M4	**10A**	**Wiper Rear / Marker Lights**
M3	**15A**	**Air Condition (Fan Condenser)**
M2	**7.5A**	**Air Condition**
M1	**15A**	**Air Condition (Fan)**
N8	**15A**	**Low Beam**
N7	**5A**	**Parking Lights (15)**
N6	**-**	**-**
N5	**-**	**-**
N4	**-**	**-**
N3	**10A**	**Radio (30) / Interior Light**
N2	**15A**	**Beacon**
N1	**7.5A**	**Air Condition (Enable Signal Compressor)**



5.1 DAILY INSPECTION

⚠ CAUTION

The inspection must be done each day when the engine is turned off and all fluids are cold. Lower the cutting units to the ground, engage the parking brake, stop the engine and remove the ignition key.

Do a visual inspection of the mower. Look for indications of wear or loose hardware. Look for any components that are not included on the mower or damaged components. Check for fuel and oil leaks to make sure the connections are tight. Make sure that all hoses and tubes are in good condition.

Check the fuel supply, radiator coolant level, crankcase oil level and air cleaner indicator. When the engine is cold, all fluids must be at the full level mark.

Check the radiator and oil cooler fins for dirt or grass. Clean with compressed air as required before you operate the mower.

Make sure all cutting units are adjusted to the same cutting height.

Check all tires for the correct pressure.

Test the interlock system.

5.2 INTERLOCK SYSTEM

The Interlock System prevents the engine to start unless the operator is in the seat, the parking brake is engaged and the mow switch is in the OFF position. The system stops the engine if the operator leaves the seat with the mow switch in the ON position or the parking brake disengaged.

⚠ WARNING

Do not operate the equipment with the Interlock System disconnected or the system does not operate correctly. Do not disconnect or prevent the operation of any switch.

Do each of these tests to make sure the Interlock System operates correctly. If any of the tests fail, stop the test and have the system inspected and repaired as shown below:

- The engine does not start during test 1
- The engine does start during tests 2, 3 and 4
- The engine continues to run during tests 5 or 6

Refer to the chart below for each test and follow the check (4) marks across the chart. Turn off the engine between each test.

TEST 1: The test shows the normal engine start procedure. The operator is in the seat, parking brake is engaged and the mow switch is in the OFF position. The engine will start.

TEST 2: The engine must not start if the mow switch is in the ON position.

TEST 3: The engine must not start if the parking brake switch is in the OFF position.

TEST 4: The engine must not start if the operator is not in the seat.

TEST 5: Start the engine with the normal procedure. Turn on the mow switch and lift your weight off the seat. The engine must stop. The cutting unit blades must not rotate after seven (7) seconds.

TEST 6: Start the engine with the normal procedure. Disengage the parking brake and lift your weight off the seat. The engine must stop. The cutting unit blades must not rotate after seven (7) seconds.

Test	Operator Seated		Mow Switch OFF		Parking Brake Switch ON		Engine Starts	
	Yes	No	Yes	No	Yes	No	Yes	No
1	4		4		4		4	
2	4			4	4			4
3	4		4			4		4
4		4	4		4			4
5	4	H	4	H	4		H	
6	4	H	4		4	H	H	
H Start the engine with the normal procedure, move position of the switch and lift your weight off the seat. The engine must stop immediately and the cutting unit blades must not rotate after seven (7) seconds.								

5.3 OPERATING PROCEDURE

⚠ WARNING

This mower has a Roll Over Protection Structure (ROPS). Always wear the seat belt.

If the mower is over turning, hold the steering wheel. Do not try to move off the mower or leave the seat.

⚠ CAUTION

To prevent injury, always wear safety glasses, leather work shoes or boots, a hard hat and ear protection.

1. Always start the engine with the operator in the seat, never while next to the mower. Never start the engine with persons near the mower.
2. Never operate the engine without enough ventilation or in an enclosed area. The carbon monoxide in the exhaust fumes can increase to dangerous levels.
3. Keep your hands and feet away from moving parts and the cutting units. When possible, do not adjust the mower with the engine started.
4. Do not operate the mower with loose or damaged components. All components must be correctly fastened to the mower. Mow when the grass is dry to get the best results.
5. First cut in a test area so that you completely understand the operation of the tractor and controls.
6. Inspect the area to find the safest procedure for the mower. Check the height of the grass, the type of terrain and the conditions of the surface. Each condition needs the correct adjustments and precautions.
7. Do not release the cut grass in the direction of persons or allow persons near the mower while in operation. The owner and operator are responsible for injuries caused to persons near the mower and any damage to their property.

⚠ CAUTION

Remove all objects you can find before you operate the mower. Carefully enter a new area and always operate at speeds that allow you to control the mower safely.

8. Be careful when you operate near to gravel areas (roads, parking areas, cart paths). Stones released from the equipment can cause injuries to persons and cause damage to the equipment.
9. When you are not mowing grass, always turn off the mow switch.
10. Before you move across or operate on the paths or roads, turn off the mow switch, lift the mowers and travel at decreased speed. Look for traffic.
11. When you hit an object or mower starts to cause vibration that is not normal, inspect the mower for damage and make repairs.

⚠ WARNING

Before you clean, adjust or repair this equipment, always turn off the mow switch, lower cutting units to the ground, turn on the parking brake switch, stop the engine and remove the ignition key.

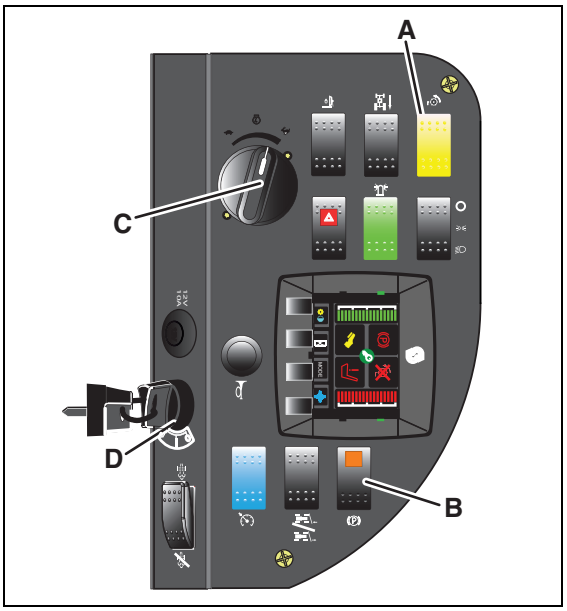
12. Travel at decreased speed and be careful when you operate on the slopes or near sharp edges.
13. When you drive in the reverse direction, look behind you and down to make sure the path is clear. Use caution when you go near corners, trees or other objects that can prevent a clear view.
14. Never use your hands to clean the cutting units. Use a brush to remove the grass clippings from the blades. The blades are sharp and can cause injuries.

5.4 STARTING THE ENGINE

Start the engine with the operator in the seat, the mow switch (A) in the OFF position and the parking brake switch (B) in the ON position. Remove your foot from the traction pedal. Always wear the seat belt.

Set the throttle control (C) to half throttle.

Turn the ignition switch (D) to the START position. Release the key when the engine starts. Allow 30 seconds between start tries to allow the starter motor to become cool.



NOTICE

Do not hold the ignition switch in the START position for more than 10 seconds.

When the engine starts, release the ignition switch (D) and move the throttle control (C) to the low idle position. Allow the engine to become warm before you operate the engine at full throttle.

5.5 TO STOP THE ENGINE

To stop and park the mower in normal conditions:

1. Turn the mow switch to the OFF position. Drive the mower to a flat and level area to park the mower.
2. Remove your foot from the traction pedal.
3. Lower the front and rear cutting units to the ground. Engage the parking brake.
4. Allow the engine to operate at low idle without load for 4 to 5 minutes.

NOTICE

When you do not operate the engine at no load before you stop the engine, permanent damage to the turbocharger can occur. Run the engine at no load and the throttle at 50% for 4 to 5 minutes to allow the turbocharger to become cool before you stop the engine.

5. Turn the ignition switch to the OFF position and remove the key before you leave the operator seat.

If an emergency occurs and you must park the mower in the area of operation, follow the guidelines set by the grounds manager. If the mower is parked on a slope, chock or block the wheels.

5.6 DRIVING

Read and follow all safety instructions contained in this manual when you drive the mower. When you operate in the reverse direction, look behind you to make sure you have a clear path.

IMPORTANT: Equipment must meet the current regulations to be driven on the public roads.

To transport the mower, move the mow switch to the OFF position, lift the cutting units to the transport position and move the transport lock switch to the ON position. To switch to high speed, push the front of the high/low speed switch.

To drive the mower in the forward direction, carefully press the top of the traction pedal.

To drive the mower in the reverse direction, carefully press the bottom of the traction pedal.

To stop the mower, return the traction pedal to the neutral position. In an emergency situation, the brake pedal can be pressed to stop the mower.

5.7 MOWING

⚠ WARNING

To prevent injuries, when the blades rotate, keep your hands, feet and clothing away from the cutting unit.

NEVER use your hands to clean the cutting units. Use a brush to remove grass from the blades. The blades can be sharp and can cause injury.

To mow:

1. To mow, the machine should be set to either manual or automatic mode.
2. Release any transport locks and lower the cutting units with the joysticks.
3. To engage the cutter decks, press the upper half of the cutting unit switch, found on the control panel.
4. Release the parking brake and drive in a forward direction.
5. Set a speed compatible with the surface and gradient you are cutting. When you operate at high speed, danger is increased and the quality of cut will be compromised.

NOTICE

Always set the throttle to the maximum engine speed. If you find wet or thick grass difficult to cut, or the indicator lamps on the control pod turn red, decrease the forward speed to increase cutting capacity to the cutter deck motors.

5.8 TO REMOVE A BLOCKAGE FROM CUTTING UNITS

1. Stop and lift the cutter decks before you move the machine to level ground.
2. Engage the transport locks.
3. Turn off the engine and remove the ignition key.
4. If the front cutter deck has become blocked, you will need to tilt front cutter deck refer to section 8.19
5. Wear the personal protective equipment that is applicable for this work, for example eye protection, gloves and correct footwear. Use Bat (4184540), to remove the blockage.
6. Check the blades for damage and replace if necessary.
7. Disengage the transport locks.
8. Put the deck into the position for operation.
9. Start the engine and run the cutter decks to check for correct operation.

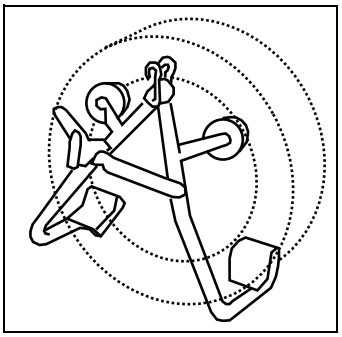
⚠ WARNING

Always use the Bat (4184540) and heavy duty leather gloves to clean under cutter deck to reduce the risk of injury and infection from foreign objects.

6.1 SLINGING AND JACKING THE MACHINE

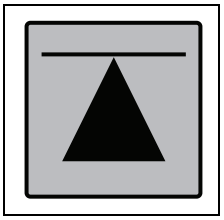
Slinging

When slinging the machine a set of four damage free wheel clamps must be used, similar to the one shown, in conjunction with a certified lifting frame.



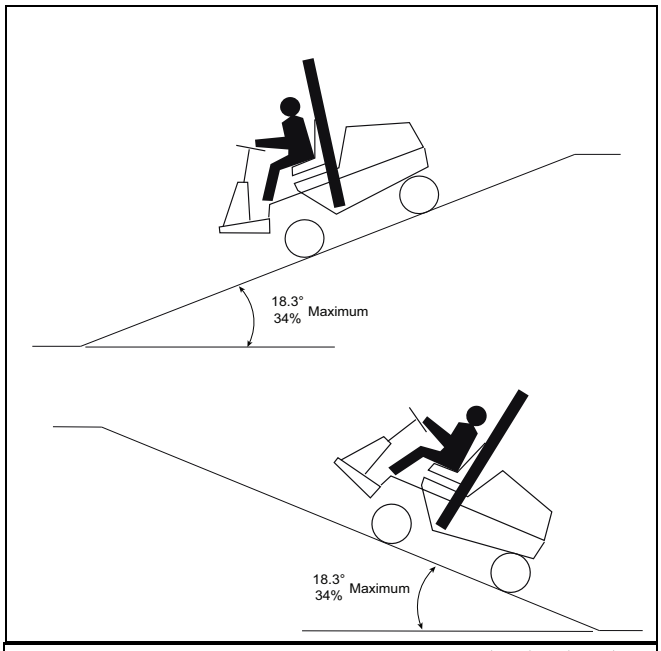
Jacking points

There are four jack points indicated on the machine, two on the rear axle and two on the front axle. This decal indicates the correct lift point.



6.9 MOWING ON SLOPES

The mower is designed for good traction and stability in normal conditions for operation. On wet grass slopes use caution, as wet grass decreases traction and steering control.



⚠ WARNING

To decrease the possible cause of overturning. The safest method for operation on slopes and terraces is.

1. To travel up and down the face of the slope (vertically) but not across the face (horizontally).

2. Do not make a turn that is not necessary.

3.Travel at decreased speeds and look for hazards.

For best stability, always cut with all three units.

⚠ CAUTION

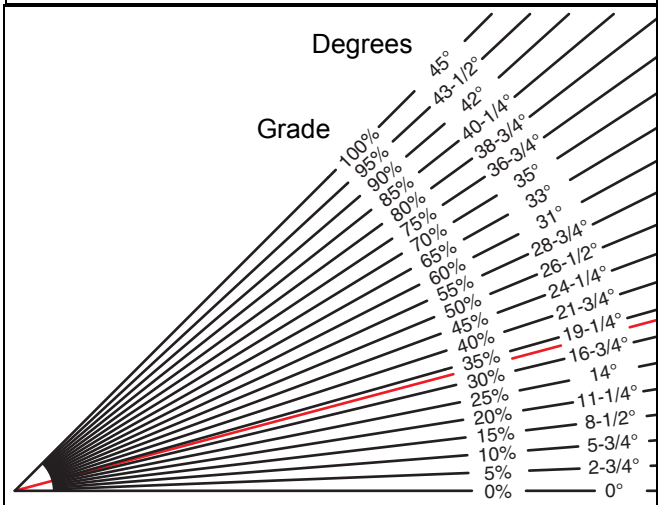
Mowers with 2 Post ROPS: Do not operate the mower on the slopes greater than 19° or a 34% slope.

Mowers with Cab: Do not operate the mower on the slopes greater than 17° or a 30% slope.

1. Always cut the grass with the engine at full throttle. Control the forward speed with the traction pedal to keep the correct cutting performance.
2. Use the weight transfer control as required to improve the weight distribution between decks and mower.
3. If the mower slides or the tires begin to mark the turf, you can angle the mower into a less steep slope until traction is regained or tire marking stops.
4. If the mower continues to slide or mark the turf, the slope is too steep for safe operation. Do not make another attempt to climb, and back down slowly.
5. When descending a steep slope, always lower implements to the ground to reduce the risk of mower overturning.
6. Correct tire pressure is necessary for maximum traction.

   Mowers with 2 Post ROPS
   Front - 16 psi (1.10 BAR)
   Rear - 30 psi (2.07 BAR)

   Mowers with Cab
   Front - 18 psi (1.24 BAR)
   Rear - 32 psi (2.21 BAR)



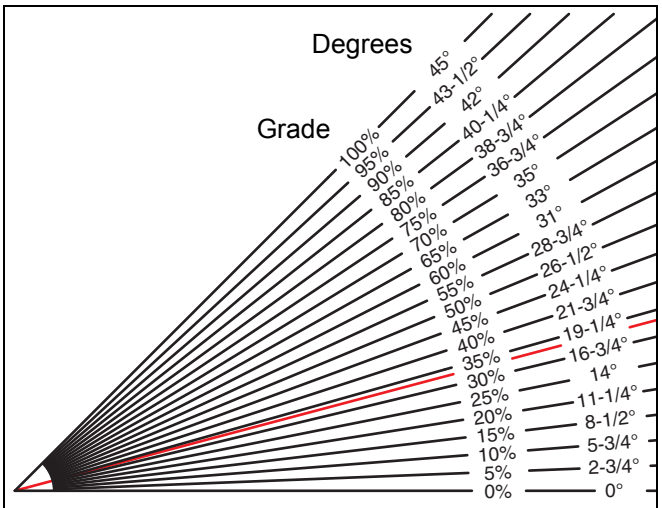
General slope of roadway embankment - 45°
Steepest Grass Area - 31°
Slope of the average roof - 19-1/4°
2nd Class highway maximum grade 4-1/2°
Toll road or freeway - 1-3/4°

⚠ WARNING

When the machine is being used, whether cutting grass or not, on slopes, the ROPS frame must be deployed and the seat belt used.

This rationale is based on the fact that a seat belt must be worn with a ROPS to comply with the Machinery Directive 2006/42/EC Sections 3.2.2, Seating & 3.4.3, Rollover

Jacobsen recommends that a local risk assessment is completed by the owner/user of the machine to determine the risks associated with working on slopes.

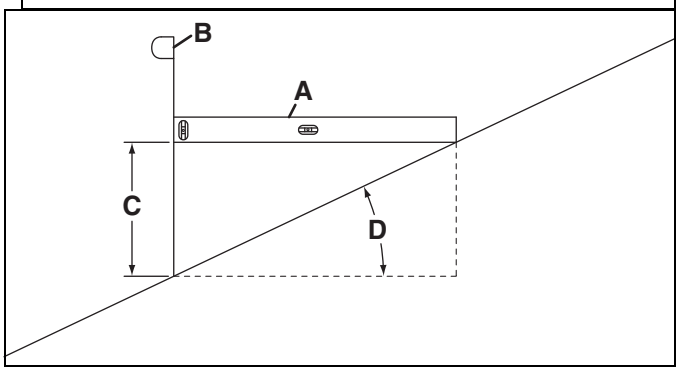


General slope of roadway embankment - 45°
Steepest Grass Area - 31°
Slope of the average roof - 19-1/4°
2nd Class highway maximum grade 4-1/2°
Toll road or freeway - 1-3/4°

How to calculate a slope:

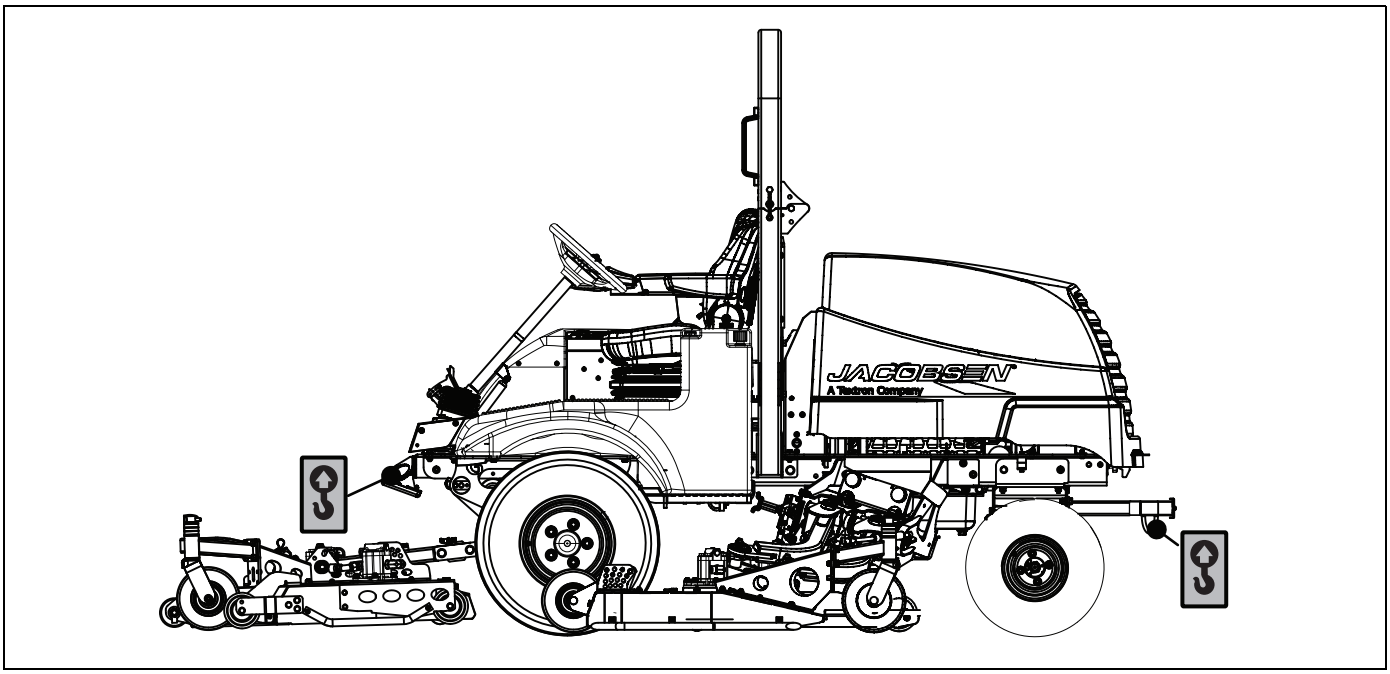
Tools Required:
Level **(A)**, either 1 yard, or 1 meter long.
Tape measure **(B)**.

Use the level **(A)** and position it horizontally to measure the distance **(C)** with tape measure **(B)**. Use the chart to calculate the slope angle or the percentage grade of the slope **(D)**.



Height (C)		Result (D)	
Inches with 1 Yard Level (A)	Millimeters with 1 Meter Level (A)	Slope in Degrees	Slope Grade %
3		4.8	8.3
	100	5.7	10.0
	150	8.5	15
6		9.5	16.7
	200	11.3	20.0
7.5		11.8	20.8
	225	12.7	22.5
9	250	14	25.0
	275	15.4	27.5
10		15.5	27.8
	300	16.7	30.0
11		17.0	30.6
	325	18.0	32.5
12		18.4	33.3
	350	19.3	35.0
13		19.9	36.1
	375	20.6	37.5
14		21.3	38.9
	400	21.8	40.0
15		22.6	41.7
	425	23.0	42.5
16		24	44.4
	475	25.4	47.5
18	500	26.6	50.0
20		29.1	55.6
	600	31.0	60.0
25		34.8	69.4
	800	38.7	80.0
30		39.8	83.3
	900	42.0	90
36	1000	45.0	100

6.10 TOWING THE MOWER



The machine is fitted with tie-down loops front and rear. Always tie down the machine securely to the trailer.

Always follow any recommendations for maximum trailer weights given in your towing vehicles handbook.

IMPORTANT

Use the chart in the specification section 12.2 to calculate the total weight of your machine configuration.

Do Not exceed the maximum gross weight shown on the trailer plate.

Always read the trailer manufactures and towing vehicle manufactures handbooks before towing.

7.1 GENERAL PRECAUTIONS

⚠ WARNING

Before you clean, adjust or repair this equipment, move the mow switch to the OFF position, lower front and rear cutting units to the ground, turn on the parking brake switch, stop the engine and remove the key.

Make sure the mower is parked on a solid and level surface. Never work on a mower that is lifted only by the jack. Always use the jack stands.

A qualified technician must always do adjustments and maintenance. If the correct adjustments can not be made, contact your Jacobsen Dealer.

Inspect the equipment according to the maintenance schedule and keep complete records.

a Keep the equipment clean.
b Keep all moving parts correctly adjusted and lubricated.
c Replace worn or damaged parts before you operate the mower.
d Keep all fluids at the correct level.
e Keep the shields in position and all hardware tight.
f Keep the tires correctly inflated.
g When you make the adjustments or repairs, do not wear jewelry or loose fitting clothing.

Refer to the illustrations in the Parts Manual for the removal and assembly of parts.

When you discard hazardous materials (batteries, lubricants, fuel, anti-freeze), follow your local, state or federal-recommended procedures.

7.2 ENGINE BELTS

Check And Adjust The Fan Belt:

The fan belt tension is adjusted to prevent the stress on the alternator bearings and to prevent movement on the alternator pulley. Use the procedure shown below to check the belt tension at the center of the belt between crank shaft and alternator pulleys.

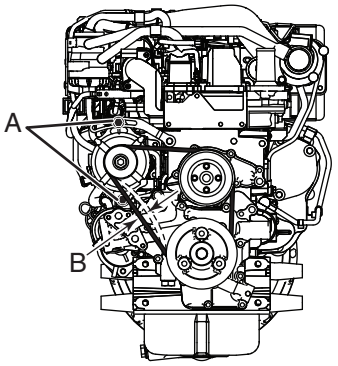
Alternator Belt

1. Loosen the alternator bolt (A) and the pivot bolt below the alternator.
2. Move the alternator to tighten or loosen the belt. A deflection of 13/32 to 15/32 in. (10 to 12 mm) is needed at the center (B) with a load of 22 lbs (10kgf/98N) for a new belt.
3. Tighten the bolts.

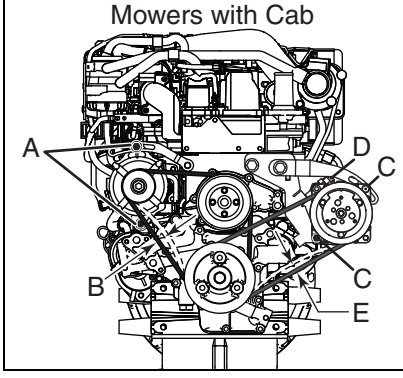
AC Compressor Belt (Mowers with Cab Only)

1. Loosen AC compressor pivot hardware (C).
2. Adjust tensioner bolt (D) as required to tighten or loosen the belt. A deflection of 3/16 in. (4.7 mm) is needed at the center (E) with a load of 4.62 lbs (2.09 kgf/20.5 N).
3. Tighten the pivot hardware (C).

Mowers with 2 Post ROPS



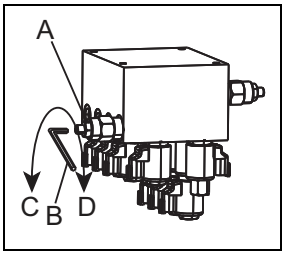
Mowers with Cab



7.3 WEIGHT TRANSFER ADJUSTMENT

The weight transfer bias can be adjusted on the lift valve. The valve is accessible by removing the access panel in the operator platform. The valve is situated on the right hand side.

To adjust:

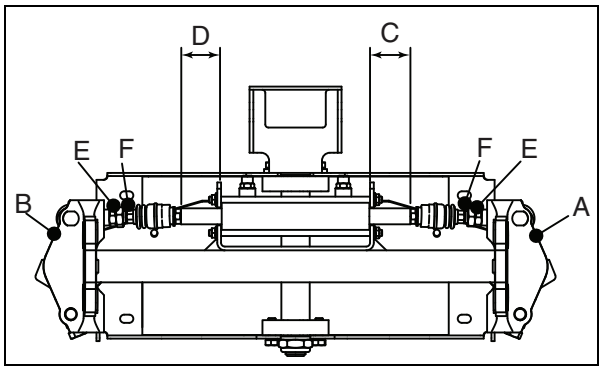


1. Loosen the locknut A whilst holding the threaded shaft still with the Allen Key B.
2. Using an Allen key B rotate the threaded shaft clockwise in direction D to increase weight onto the drive wheels when the traction control button is operated on the control pod. This improves slope climbing performance. To reduce weight on the drive wheels when the traction control button is operated on the control pod, rotate the threaded shaft counter clockwise in direction C. This increases the ground weight of the cutting unit and will reduce the possibility of cutting unit “bounce” when working at high speed on undulating ground. It is recommended that the Allen key is turned a 1/4 turn at a time and the weight transfer tested.
3. Tighten locknut A. whilst holding the threaded shaft still with the Allen Key B.

7.4 STEERING SHAFT ADJUSTMENT

The rear motor mounts (A and B) must be parallel to each other and the machine.

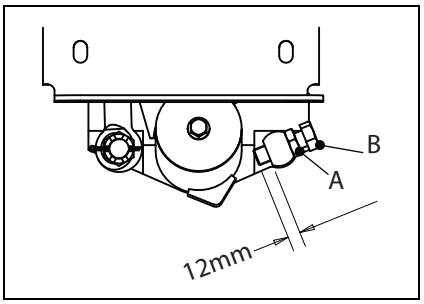
The steering ram shaft must be equal (C and D) on both sides of the steering ram.



1. Apply Loctite 243 to nut (E) and steering link (F).
2. Assemble rod end to steering link on both side of axle.
3. Check motor mounts are parallel and ram shaft is equal on both sides.
4. Torque the nuts (E) to 100Nm (74 lb-ft).

7.5 AXLE STOP ADJUSTMENT

The rear wheels axle stops are set as follows.



1. Loosen the nut (A) and adjust bolt (B) to give a dimension of 12mm.
2. Tighten nut (A) to 210Nm (155 lb-ft)
3. Repeat for opposite side of axle.
4. Check that full steering lock is obtainable.

7.6 HEIGHT OF CUT ADJUSTMENT

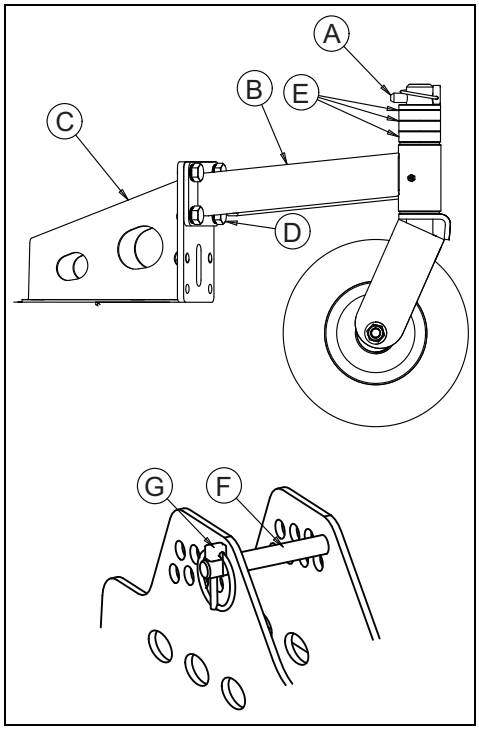
The cutting height is determined by the position of the blades in relation to the caster wheels. Changes to this height are made at all points and can be made in any order. Make adjustment selections for each deck from the height of cut chart for that deck included in this section.

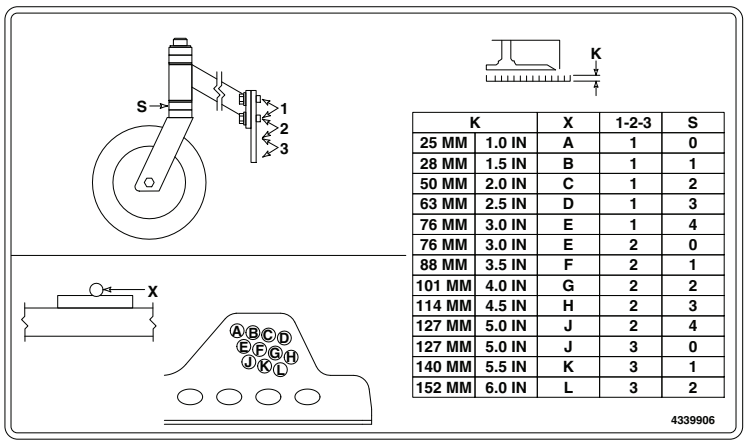
NOTES

- Cutting height must be set the same for all three cutter decks.
- The actual height may vary slightly from the chart value because of tire pressure or turf condition.

7.7 HEIGHT OF CUT ADJUSTMENT (FRONT DECK)

1. Raise the deck to mid position.
2. Remove the quick pin (A) from the top of the caster wheel pivot spindle
3. Remove the caster wheel from caster support (B).
4. Select either Position 1 or Position 2 for wheel mounting bracket (C). To change, remove (4) mounting bolts (D), move to the alternate location and bolt in place.
5. Place the selected number of spacers (E) below the caster support. Place the remaining spacers above the caster support.
6. Replace the quick pin.
7. Place pin (F) into the proper hole of bracket for the selected height of cut and fit quick pin.

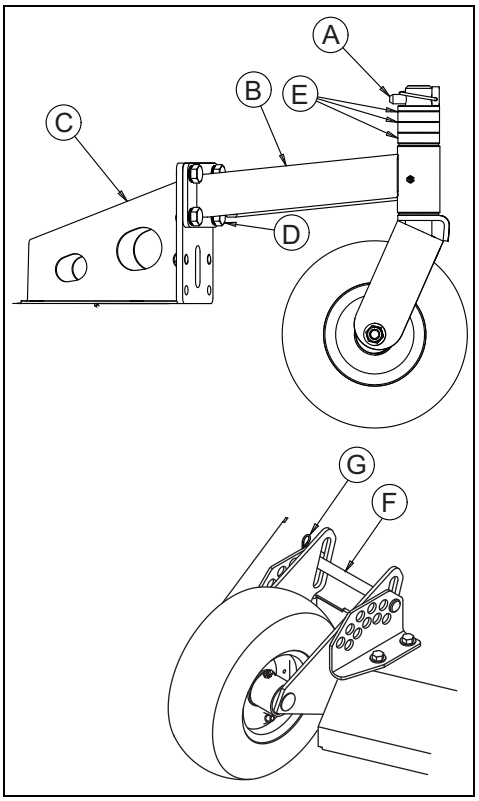


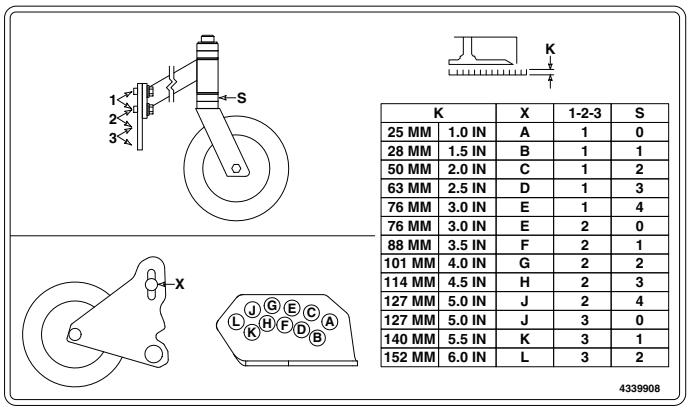


K		X	1-2-3	S
25 MM	1.0 IN	A	1	0
28 MM	1.5 IN	B	1	1
50 MM	2.0 IN	C	1	2
63 MM	2.5 IN	D	1	3
76 MM	3.0 IN	E	1	4
76 MM	3.0 IN	E	2	0
88 MM	3.5 IN	F	2	1
101 MM	4.0 IN	G	2	2
114 MM	4.5 IN	H	2	3
127 MM	5.0 IN	J	2	4
127 MM	5.0 IN	J	3	0
140 MM	5.5 IN	K	3	1
152 MM	6.0 IN	L	3	2

7.8 HEIGHT OF CUT ADJUSTMENT (WING CUTTER DECK)

1. Raise the deck to mid position.
2. Engage transport lock
3. Remove the quick pin (A) from the top of the caster wheel pivot spindle
4. Remove the caster wheel from caster support (B).
5. Select either Position 1 or Position 2 for wheel mounting bracket (C). To change, remove (4) mounting bolts (D), move to the alternate location and bolt in place.
6. Place the selected number of spacers (E) below the caster support. Place the remaining spacers above the caster support.
7. Replace the quick pin.
8. Place pin (F) into the proper hole of bracket for the selected height of cut and fit quick pin (G).





K		X	1-2-3	S
25 MM	1.0 IN	A	1	0
28 MM	1.5 IN	B	1	1
50 MM	2.0 IN	C	1	2
63 MM	2.5 IN	D	1	3
76 MM	3.0 IN	E	1	4
76 MM	3.0 IN	E	2	0
88 MM	3.5 IN	F	2	1
101 MM	4.0 IN	G	2	2
114 MM	4.5 IN	H	2	3
127 MM	5.0 IN	J	2	4
127 MM	5.0 IN	J	3	0
140 MM	5.5 IN	K	3	1
152 MM	6.0 IN	L	3	2

7.9 GENERAL INSTRUCTIONS FOR GRAMMER SEATS

All The seat adjustments are to be done while the vehicle is stopped.

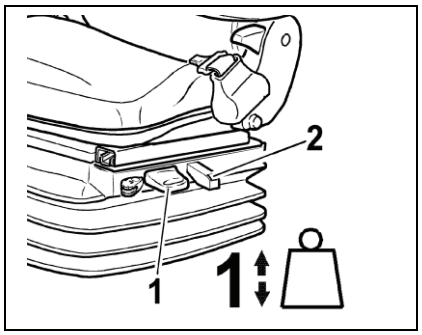
- After removal of the backrest cover, hold the backrest frame in position with a support before the backrest adjuster is operated. If you do not lock the frame in position safely, the backrest frame can move forward suddenly and can cause injury.
- Use approved GRAMMER parts.
- Only GRAMMAR approved changes are to be made to the seat. During the removal and installation of the GRAMMER driver seat, follow the instructions supplied by the vehicle manufacturer.
- When you lift the driver seat, do not hold the covers. The covers are not a load bearing component and injury can occur.
- Before you remove the driver seat, disconnect all plug-in connectors between the seat and the vehicle supply network. When you replace the plug-in connectors, make sure the connectors are tight so that dust and water does not enter.
- Fasten seat belts before operation.
- Replace the seat belt after an accident.
- After an accident with a vehicle that has seat belts installed, have the seat and seat mounting checked by the safety personnel.
- Check the seat fasteners to make sure that the seat is installed correctly.
- If the seat does not operate correctly, have the seat repaired in a GRAMMER workshop. Check the seat for damage to the seat suspension and bellows or for an incorrect curve in the lumbar support.
- If you do not correct problems that occur in the seat, the seat can damage your health and increase the risk of an accident.
- Before the vehicle is used, check the load sensor, installed in the seat, for correct operation. If the driver leaves the seat, this sensor stops the vehicle.
- If a problem is found, you must not drive the vehicle. – INCREASED RISK OF ACCIDENT –
- Do not put the loads on to seats that have a load sensor. A load on the seat can cause the vehicle to move and cause an accident. – INCREASED RISK OF ACCIDENT –
- If you drive the vehicle and remove the weight from the seat, the vehicle will stop.
- Do not load the bellows while there is a load on the driver seat. – RISK OF INJURY FROM BELLOWS –
- Make sure that dirt and liquids can not get inside the drivers seat.
- The driver seat is not waterproof.
- Any changes or adjustment to a GRAMMER driver seat must be done in authorized workshops by approved personnel. The changes must follow the operation instructions and must be in compliance with all national regulations.
- Incorrect installation and assembly hold the risk of personal injury or property damage. Your warranty will also be invalidated.

7.10 AIR SUSPENSION SEAT (GRAMMER MSG95 -721)

7.10.1 WEIGHT ADJUSTMENT

The seat should be adjusted for the driver's weight with the driver sitting on the seat. The adjustment is made by pulling out or pushing in the actuator lever (1) until the green marking is visible in the weight-and-height indicator (2).

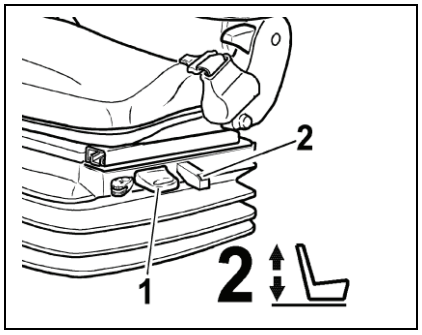
- To prevent injury to yourself, the setting for the driver's weight must be checked and adjusted as necessary before the vehicle is driven.



7.10.2 HEIGHT ADJUSTMENT

The seat height can be altered by fully pulling out or pressing in the actuator lever (1).

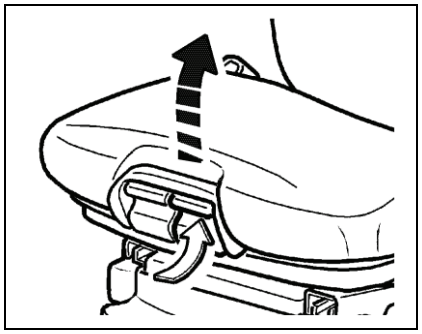
- The green marking in the weight-and-height indicator (2) should be visible.
- In order to avoid damage, do not operate compressor for more than 1 minute.



7.10.3 SEAT PAN ANGLE ADJUSTMENT (OPTION)

The angle of the seat pan can be individually adjusted.

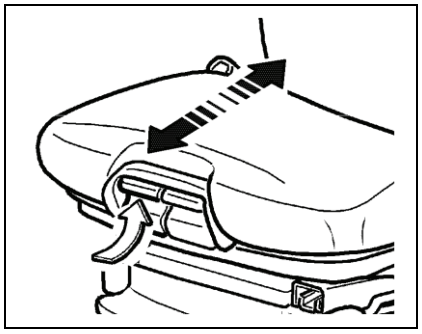
To adjust the angle of the seat pan, lift the L/H handle (see arrow). By exerting pressure on or off the seat pan it can be moved to the desired angle position.



7.10.4 SEAT DEPTH ADJUSTMENT (OPTION)

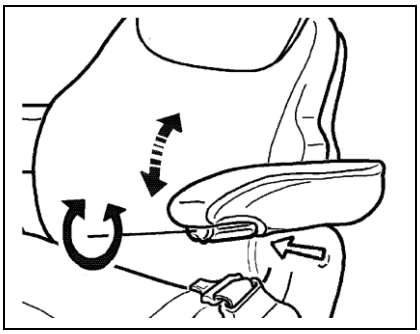
The depth of the seat pan can be individually adjusted.

To adjust the depth of the seat cushion, lift the R/H handle (see arrow). By moving the seat cushion backwards or forwards the desired seating position can be reached.



7.10.5 ARMRESTS ADJUSTMENT (OPTION)

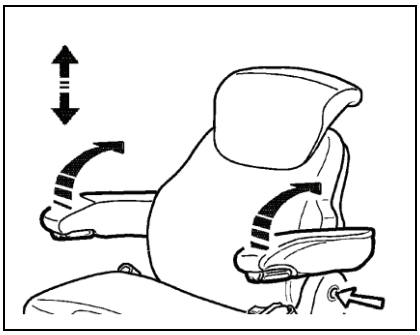
The inclination of the armrests can be modified by turning the adjustment knob (arrow).



7.10.6 ARMREST (OPTION)

The armrests can be folded up if required and the height individually adjusted.

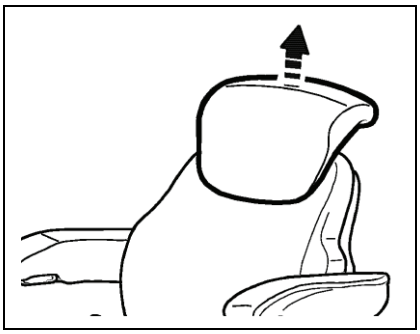
To adjust the armrests for height, separate the round cap (see arrow) from the cover, loosen the hexagon nut (size 13mm) and adjust the armrest to the desired position and tighten the nut again.



7.10.7 BACKREST ADJUSTMENT (OPTION)

The backrest extension can be individually adjusted for height by pulling it upwards over the various increments up to the end stop.

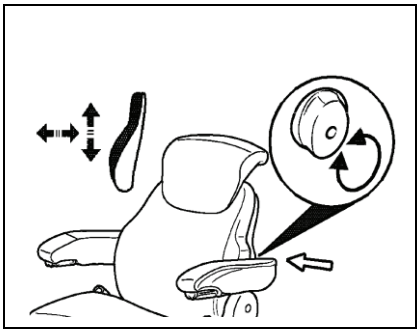
To remove the backrest extension, pull it over the end stop.



7.10.8 LUMBER SUPPORT (OPTION)

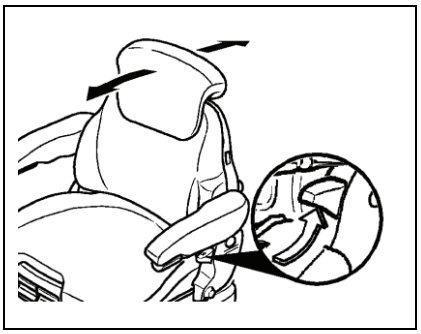
By turning the adjustment knob (arrow) to the left or right, both the height and curvature of the backrest cushion can be individually adjusted.

This increases both the seating comfort and the performance of the driver.



7.10.9 BACKREST ADJUSTMENT (OPTION)

The backrest is adjusted using the locking lever (arrow).

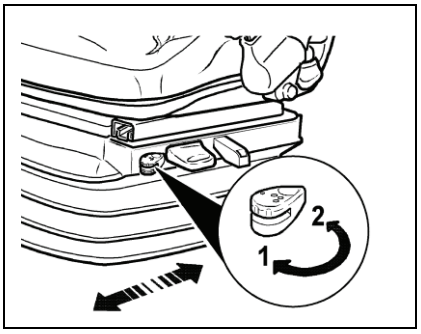


- The locking lever must latch into the desired position. It should not be possible to move the backrest into another position when it is locked.

7.10.10 FORE / AFT ISOLATOR (OPTION)

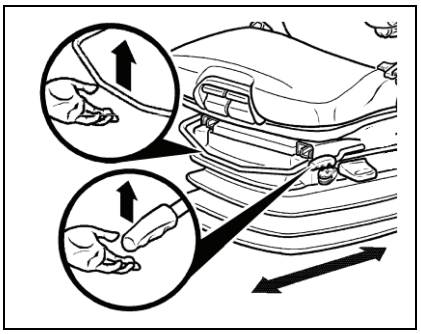
Under certain driving conditions (for example with a trailer attached), it is useful to activate the fore/aft isolator. This means that shock impacts in the driving direction can be better absorbed by the driver seat.

Position 1 = fore/aft isolator off
Position 2 = fore/aft isolator on



7.10.11 FORE / AFT ADJUSTMENT (OPTION)

The fore/aft adjustment is released by lifting the locking lever.

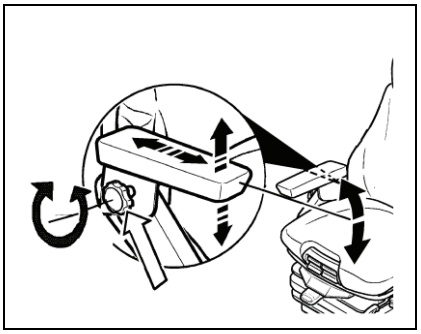


- The locking lever must latch into the desired position. It should not be possible to move the driver seat into another position when it is locked.

7.10.12 MULTIFUNCTION ARMREST (OPTION)

After releasing the hand wheel (arrow), the operator can adjust the armrest vertical and longitudinal direction; the armrest inclination can be adjusted as well.

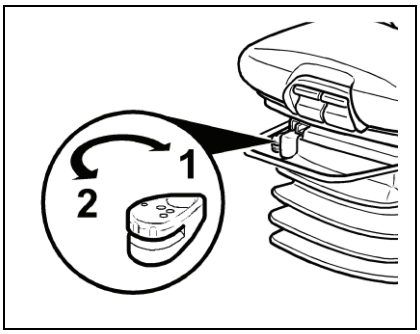
The vertical and longitudinal adjustment are effected at the same time in perceptible steps.



- After adjustment has been terminated, tighten the hand-wheel safely

7.10.13 ABSORBER (OPTION)

The absorber setting of the seat can be varied to suit the on and off-road driving conditions. The cushioning effect can be individually adjusted for this purpose.

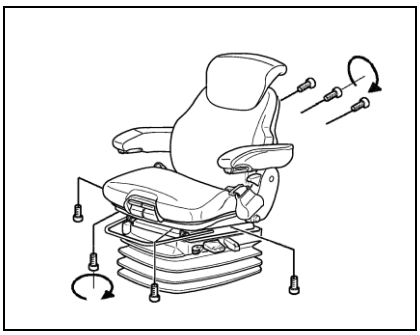


Turn the lever to the desired position and release

1. soft
2. hard

7.10.14 MAINTENANCE

Dirt can impair the function of the seat, so make sure you keep your seat clean.



Upholstery can be quickly and simply removed from the seat frame for easy cleaning, or replacement.

Caution: take care with the backrest frame - it may jerk forward and cause injury!

During cleaning the upholstery should not be soaked through.

Use a standard commercially available upholstery or plastics cleaning agent. Test first for compatibility on a small, concealed area.

7.11 TORQUE SPECIFICATION

NOTICE

The torque values included in these charts are approximate and are for reference only. Use these torque values at your risk. Jacobsen is not responsible for any loss, claim or damage caused by these charts. **Always use caution with torque values.**

Jacobsen uses Grade 5 (Inch) and Grade 8.8 (Metric) Plated bolts, unless a note is given. Always check the marks on the head of the bolts for the bolt grade. For tightening plated bolts, use the value given for lubricated.

SIZE	UNITS	 GRADE 5		 GRADE 8		SIZE	UNITS	 GRADE 5		 GRADE 8	
		Lubricated	**Dry**	**Lubricated**	**Dry**			**Lubri-cated**	**Dry**	**Lubri-cated**	**Dry**
#6-32	in-lb (Nm)	–	20 (2.3)	–	–	7/16-14	ft-lb (Nm)	37 (50.1)	50 (67.8)	53 (71.8)	70 (94.9)
#8-32	in-lb (Nm)	–	24 (2.7)	–	30 (3.4)	7/16-20	ft-lb (Nm)	42 (56.9)	55 (74.6)	59 (80.0)	78 (105)
#10-24	in-lb (Nm)	–	35 (4.0)	–	45 (5.1)	1/2-13	ft-lb (Nm)	57 (77.2)	75 (101)	80 (108)	107 (145)
#10-32	in-lb (Nm)	–	40 (4.5)	–	50 (5.7)	1/2-20	ft-lb (Nm)	64 (86.7)	85 (115)	90 (122)	120 (162)
#12-24	in-lb (Nm)	–	50 (5.7)	–	65 (7.3)	9/16-12	ft-lb (Nm)	82 (111)	109 (148)	115 (156)	154 (209)
1/4-20	in-lb (Nm)	75 (8.4)	100 (11.3)	107 (12.1)	143 (16.1)	9/16-18	ft-lb (Nm)	92 (124)	122 (165)	129 (174)	172 (233)
1/4-28	in-lb (Nm)	85 (9.6)	115 (13.0)	120 (13.5)	163 (18.4)	5/8-11	ft-lb (Nm)	113 (153)	151 (204)	159 (215)	211 (286)
5/16-18	in-lb (Nm)	157 (17.7)	210 (23.7)	220 (24.8)	305 (34.4)	5/8-18	ft-lb (Nm)	128 (173)	170 (230)	180 (244)	240 (325)
5/16-24	in-lb (Nm)	173 (19.5)	230 (26.0)	245 (27.6)	325 (36.7)	3/4-10	ft-lb (Nm)	200 (271)	266 (360)	282 (382)	376 (509)
3/8-16	ft-lb (Nm)	23 (31.1)	31 (42.0)	32 (43.3)	44 (59.6)	3/4-16	ft-lb (Nm)	223 (302)	298 404	315 (427)	420 (569)
3/8-24	ft-lb (Nm)	26 (35.2)	35 (47.4)	37 (50.1)	50 (67.8)	7/8-14	ft-lb (Nm)	355 (481)	473 (641)	500 (678)	668 (905)

SIZE	UNITS	 4.6		 8.8		 10.9		 12.9		Non Critical Fasteners into Aluminum
		Lubricated	**Dry**	**Lubricated**	**Dry**	**Lubricated**	**Dry**	**Lubricated**	**Dry**	
M4	Nm (in-lb)	–	–	–	–	–	–	3.83 (34)	5.11 (45)	2.0 (18)
M5	Nm (in-lb)	1.80 (16)	2.40 (21)	4.63 (41)	6.18 (54)	6.63 (59)	8.84 (78)	7.75 (68)	10.3 (910	4.0 (35)
M6	Nm (in-lb)	3.05 (27)	4.07 (36)	7.87 (69)	10.5 (93)	11.3 (102)	15.0 (133)	13.2 (117)	17.6 (156)	6.8 (60)
M8	Nm (in-lb)	7.41 (65)	9.98 (88)	19.1 (69)	25.5 (226)	27.3 (241)	36.5 (323)	32.0 (283)	42.6 (377)	17.0 (150)
M10	Nm (ft-lb)	14.7 (11)	19.6 (14)	37.8 (29)	50.5 (37)	54.1 (40)	72.2 (53)	63.3 (46)	84.4 (62)	33.9 (25)
M12	Nm (ft-lb)	25.6 (19)	34.1 (25)	66.0 (48)	88.0 (65)	94.5 (70)	125 (92)	110 (81)	147 (108)	61.0 (45)
M14	Nm (ft-lb)	40.8 (30)	54.3 (40)	105 (77)	140 (103)	150 (110)	200 (147)	175 (129)	234 (172)	94.9 (70)

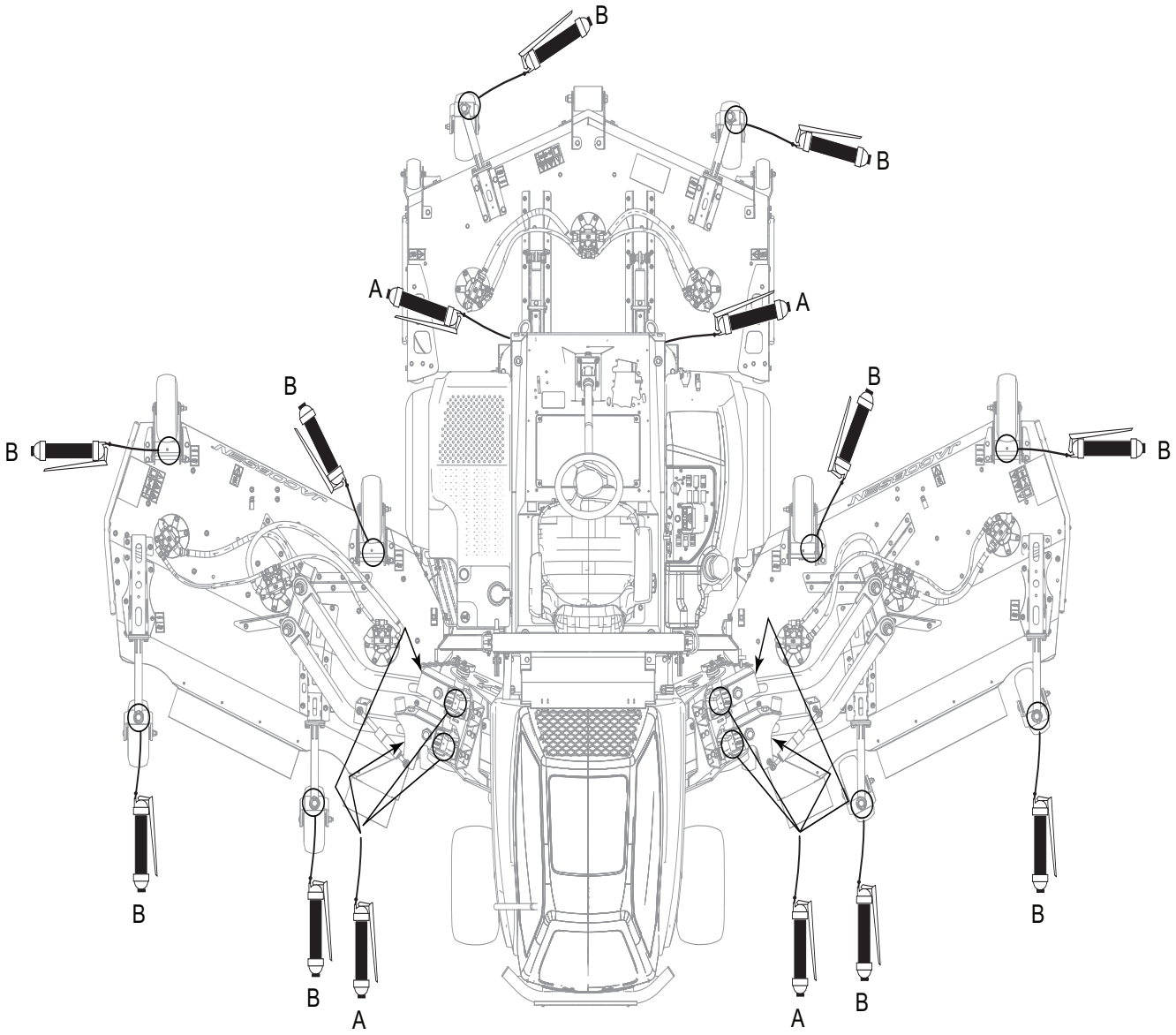
8.1 MAINTENANCE AND LUBRICATION CHARTS

Machine Service Interval Chart		
Interval	**Item**	**Section**
First 50 hours	● **Change the Hydraulic Filter Elements**	**8.7**
Each day **10 hours**	● **Check Safety Interlock System** ● **Check the Hydraulic Fluid Level** ● **Check tire Pressure** ● **Check Engine Bay for Dirt**	**6.2** **8.6** **8.17** **8.22**
Each week **Every 50 hours**	● **Check for Loose Components** ● **Check Cutter Blades** ● **Check for Hydraulic Leaks**	**8.12** **8.20** **3.1.8**
End of season **Every 1000 hours**	● **Check Battery Condition** ● **Change the Hydraulic Oil and Filters**	**8.12** **8.6**
Lubricate these fittings every week **A = All Lift Arm Pivots.** **B = All Cutter Deck Caster Wheel Pivots.**		

Fluid Requirements				
	Quantity			Type
Engine Oil (with filter)	11.2 liters	2.46 Imp gals	2.96 US gals	10-30W (see specification below)
Hydraulic Oil (with filter)	75.7 liters	16.7 Imp gals	20 US gals	Total Equivis ZS46 (ISO VG 46)
Radiator Coolant	7.6 liters	1.67 Imp gals	2.0 US gals	50% Anti-Freeze
Fuel	109.8 liters	24 Imp gals	29 US gals	#2-D (ASTM D975) Diesel

Engine oil:Must be to A.P.I. Classification CJ-4 grade.	
TEMPERATURE	VISCOSITY
Above 25°C (77°F)	SAE30 or SAE10W-30 or 15W-40
0°C to 25°C (32°F to 77°F)	SAE10W-30 or 15W-40
Below 0°C (32°F)	SAE10W-30

TIRE PRESSURE							
Product	Front Wheel			Rear Wheel			
	Tire Size	Tire Type	Tire Pressure	Tire Size	Tire Type	Tire Pressure	
HR800	26.5 x 14.00 - 12	Ultra Chevron 6pr	1.10 bar (16 psi)	20.00 x 10.00 - 8	Grassmaster 8pr	2.07 bar (30 psi)	
HR800 with Cab	26.5 x 14.00 - 12	Ultra Chevron 6pr	1.24 bar (18 psi)	20.00 x 10.00 - 8	Grassmaster 8pr	2.21 bar (32 psi)	
Caster Wheels	11 x 4 - 5	Smooth	1.38-1.72 bar (20-25 psi)				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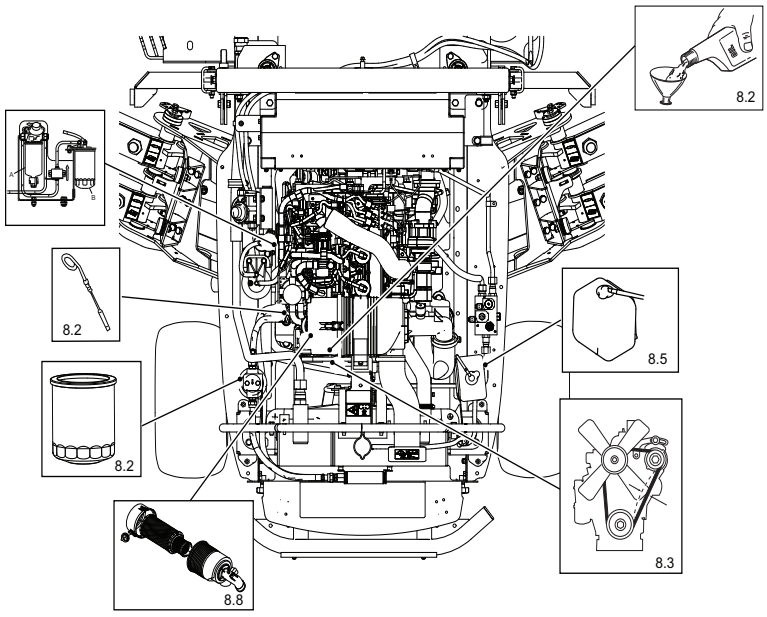
Engine Service Interval Chart				
Interval	**Item**	**Section**		
Daily **10 hours**	● **Check Engine Oil Level.** ● **Check Fuel Level.** ● **Check Coolant Level.** ● **Check Fan Belt Tension.**			
Every 50 hours	● **Check Fuel Pipes and Clamps.** ● **Drain Water Separator (A).**	**8.10**		
Every 100 hours	● **Check the Air Cleaner Service Indicator.** ● **Clean Fuel Filter.** ● **Check Fan Belt Tension** ● **Drain Water Separator (A).**	**8.10**		
Every 250 hours	● **Check Radiator Hoses and Clamps.** ● **Check Air Cleaner |Element.** ● **Adjust Fan Belt Tension.** ● **Check Air Intake Hose.**			
Every 400 hours	● **Change Engine Oil.** ● **Change Engine Oil. Filter Cartridge.**		○ ○	
Every 500 hours	● **Replace Fuel Filter Cartridge (B).** ● **Clean Water Separator (A).** ● **Remove the Sediment in Fuel Tank.** ● **Clean Water Jacket and Radiator internally** ● **Replace the Fan Belt.**	**8.10** **8.10**	***3** ***3** ***3** ***3** ***3**	
Every 1000 hours	● **Check the Valve Clearances.**		***3**	
Every 1500 hours	● **Check Fuel Injector Tip.** ● **Check EGR Cooler.** ● **Change Oil Separator Element.**		***3** ***3** ***3**	**@** **@** **@**
Every 3000 hours	● **Check Turbocharger.** ● **Clean DPF.** ● **Check EGR System.**		***3** ***3** ***3**	**@** **@** **@**
Every Year	● **Check DPF Related Piping.** ● **Check EGR Piping.** ● **Check Air Intake Hoses.** ● **Check Exhaust Manifold for Cracks or Gas Leak, looseness or Damage.**		***3** ***3** ***3** **-** **-**	

Interval	Item	Section		
Every 2 Years	● **Replace Oil Separator Related Rubber Piping.**		***3**	
	● **Replace DPF Related Rubber Piping.**		***3**	
	● **Replace Intake Air Line and Suction Air Pressure takeout Rubber Piping.**		***3**	
	● **Replace Boost Sensor Pressure Rubber Piping.**		***3**	
	● **Replace EGR Cooler Rubber Piping.**		***3**	
	● **Replace Water Rubber Piping.**		***3**	
	● **Replace Lubricant Rubber Piping.**		***3**	
	● **Change Radiator Coolant.**		**-**	
	● **Replace Radiator Hoses and Clamp Bands.**		***3**	
	● **Replace Fuel Pipes and Clamp Bands.**		***3**	
	● **Replace Intake Air Line.**		***3**	
	● **Replace Fan Belt (or Every 500 Hours)**		***3**	
● The jobs indicated by ○ must be done after the first 50 hours of operation. *3 Consult your local Kubota Dealer for this Service. ● The items listed above (@ marked) are registered as emission related critical parts by Kubota in the U.S.EPA non road emission regulation. As the engine owner you are responsible for the performance of the required maintenance on the engine according to the above instruction. Please see Warranty Statement for detail. ● The items listed above other than @ marked items are not necessary to keep the emission-related warranty valid. ● Failure to perform the maintenance will cause problems that will significantly degrade the engine performance.				
IMPORTANT **Refer to Engine Manufacturers Manual for the Complete Engine Maintenance Procedures**				



8.2 GENERAL PRECAUTIONS

⚠ WARNING

Before you clean, adjust or repair this equipment, push PTO switch to the OFF position, lower front and wing cutter Decks to the ground, turn on the parking brake switch, stop the engine and remove the key. Make sure the mower is parked on a solid and level surface. Never work on a mower that is lifted only by the jack. Always use the jack stands.

A qualified technician must always do adjustments and maintenance. If the correct adjustments can not be made, contact your Jacobsen Dealer.

Inspect the equipment according to the maintenance schedule and keep complete records.

a Keep the equipment clean.

b Keep all moving parts correctly adjusted and lubricated.

c Replace worn or damaged parts before you operate the mower.

d Keep all fluids at the correct level.

e Keep the shields in position and all hardware tight.

f Keep the tires correctly inflated.

When you make the adjustments or repairs, do not wear jewelry or loose fitting clothing.

Refer to the illustrations in the Parts Manual for the removal and assembly of parts.

When you discard hazardous materials (batteries, lubricants, fuel, anti-freeze), follow your local, state or federal-recommended procedures.

NOTICE

Only use the tool attached to the key ring to open the engine hood catches.

8.3 ENGINE

IMPORTANT - The mower includes a separate Engine Manual prepared by the engine manufacturer. Read the Engine Manual and know the operation and maintenance of the engine. When you follow the engine manufacturer instructions, you will make sure of the maximum service life of the engine. The replacement engine manuals are available from the engine manufacturer.The operation and maintenance during the first 50 hours of a new engine can make a difference to the performance and life of the engine.

During the first 50 hours of operation, Jacobsen recommends the following.

- Allow the engine to reach a temperature of at least 60° C (140° F) before operation at full load.
- Check the engine oil level two times each day. Higher than normal oil use can occur during the first 50 hours.
- Change the engine oil and oil filter after the first 50 hours of operation.
- Check the fan belt.
- Refer to the Engine manual for specified maintenance intervals.If the injection pump, injectors or the fuel system need service, contact your Jacobsen Dealer.
-

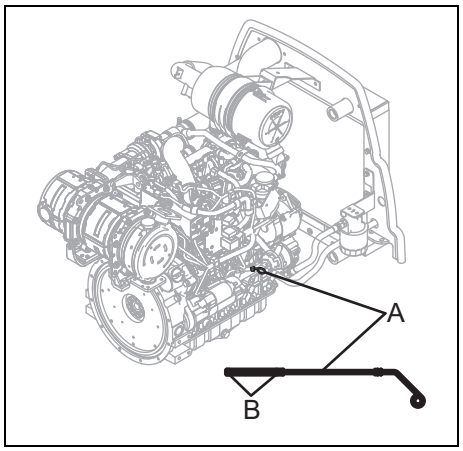
NOTICE

The mower operates and cuts correctly at the preset governor setting. Do not change the engine governor setting or over speed the engine.

8.4 ENGINE LUBRICATION

Check Engine Oil Level

Check the engine oil level before you start or at least five minutes after you stop the engine.



a Park the machine on level ground, remove the dipstick (A), clean with a cloth and replace in position.

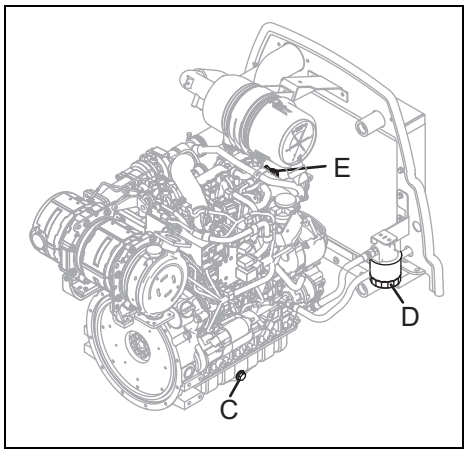
b Remove the dipstick (A) again and check the oil level. The oil must be between the two level indicators (B) on the dipstick.

Change Engine Oil

a Start the engine to increase the temperature, then turn off the engine. Remove oil drain plug (C) from the bottom of the crankcase and clean with a cloth.

b Drain engine oil into a container.

c Replace the drain plug (C) and fill the engine with the correct quantity and grade of oil through the filler (E).



Change Engine Oil Filter

a Remove the oil filter cartridge (D).

b Let the engine oil flow into a container.

c Clean area on the crankcase.

d Apply a thin layer of oil to cartridge gasket before you install the filter.

e Only use your hand to tighten the filter cartridge (D).

f Check for oil leaks around the cartridge gasket after the engine is started.

⚠ CAUTION

The engine oil can damage your skin. use gloves. If engine oil touches your skin, clean the area immediately.

⚠ CAUTION

Discard engine oil as shown in local regulations

8.5 ENGINE COOLANT

⚠ WARNING

To prevent injury from the hot-engine coolant or steam, never remove the radiator cap with the engine in operation. Stop the engine and wait until the radiator is cool. When radiator is cool, use caution to remove the radiator cap.

⚠ CAUTION

Do not put cold coolant mixture into a hot radiator. Do not operate the engine without a correct coolant mixture. Install the radiator cap correctly.

Check coolant level each day. The radiator must be full and the recovery bottle must be at the cold mark.

Drain and fill the cooling system each year. Empty and clean the recovery bottle.

Mix clean water with anti-freeze for the coldest ambient temperature. Read and follow the instructions on the anti-freeze container and the Engine manual.

Keep the radiator, engine oil cooler and hydraulic oil cooler air passages clean. Do not use compressed air to clean the fins. Only use low pressure water to clean radiator.

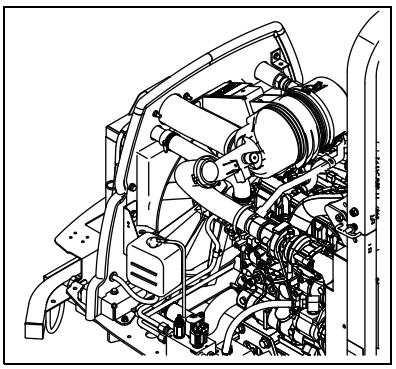
⚠ CAUTION

Stop engine & remove the starter key before pressure washing. Do not use a pressure washer near the instrument panel or engine radiator to prevent damage.

Check and tighten the engine fan belt (see maintenance chart) and replace the belt (see maintenance chart). Replace the clamps and hoses (see maintenance chart).

Have your Jacobsen Dealer check the cooling system if you need to add coolant more than one time a month or you add more than a liter of coolant at a time.

Check The Engine Coolant Level

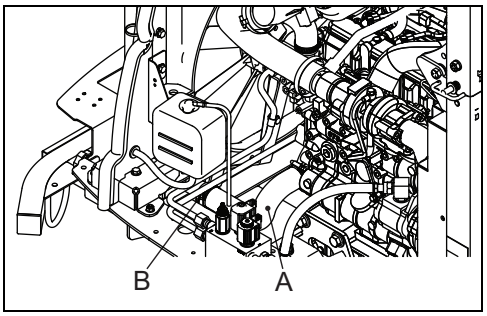


a The level of coolant in a cold expansion tank must be between the indicators.

b If you need to fill the tank, remove the plastic cap and fill with the correct anti-freeze mixture (**See Section 8.1**).

c Replace the plastic cap.

How To Change Coolant



a To drain coolant, remove the bottom hose (A) from the radiator. Drain the engine coolant into a container.

b Replace the bottom hose (A) on to the radiator. Make sure all the hose clips (B) are tight.

c Fill the cooling system with the correct anti-freeze mixture (**See Section 8.1**). Fill system through the radiator cap.

d The level of coolant in a cold expansion tank must be between the indicators.

e Run the engine for approximately 5 minutes or until the thermostat opens.

f Check the level of coolant in expansion tank. Fill the tank if more coolant is needed.

⚠ CAUTION

The Anti-freeze Can Damage Your Skin. Use Gloves When You Use Anti-freeze. If Anti-freeze Touches Your Skin, Clean The Area Immediately.

⚠ CAUTION

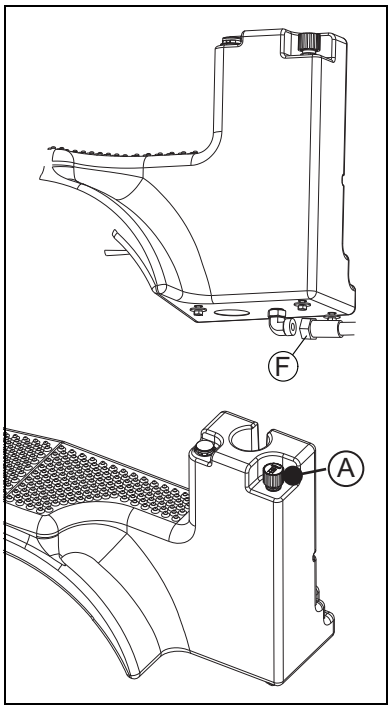
Discard Anti-freeze As Shown In Local Safety Regulations.

8.6 HYDRAULIC SYSTEM

Drain and replace the hydraulic oil if one of the following occur.

- Component failure
- Water or foam is in the hydraulic fluid
- The hydraulic fluid has a rancid odor (indication of high heat)
- When required by maintenance schedule.

Always replace the hydraulic filter when you replace the hydraulic fluid.



Change The Hydraulic Oil

a Clean the area around the oil cap to prevent dirt to enter the hydraulic system.

b Remove the hose (F) from the bottom of the tank.

c After the oil has drained, reinstall the hose and fill the tank with hydraulic fluid through filler (A).

d Start the engine and remove the air from the hydraulic system. Operate all mower functions for 5 minutes to remove the air and to balance the hydraulic fluid level.

e When all air is removed from the hydraulic-fluid, check the level, add hydraulic fluid to the tank to the recommended level.

IMPORTANT

If you open the closed hydraulic transmission circuit, you need to fill the circuit with oil before the circuit is used again. When you fill the hydraulic tank, use only clean oil. The hydraulic oil must go through a 25micron filter before the oil enters the tank.

⚠ CAUTION

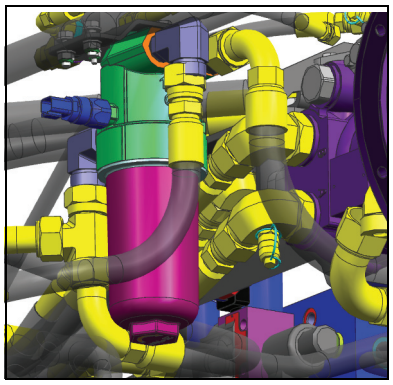
The Hydraulic Oil Can Damage Your Skin. Use Gloves When You Use Hydraulic Oil. If Hydraulic Oil Touches Your Skin, Clean The Area Immediately.

⚠ CAUTION

Discard Used Hydraulic Oil As Shown In Local Safety Regulations.

8.7 HYDRAULIC FILTER

The hydraulic system is protected by two 10 micron filters. Flow through the filter is monitored while you operate the mower. When the difference in hydraulic pressure across the filter is greater than 16 to 20 psi (1.1 to 1.4 BAR), the hydraulic oil filter warning light on the combination gauge will illuminate. To make sure continued protection of the hydraulic system, replace filter as soon as possible after light illuminates.



NOTICE

During cold weather, the oil filter warning light can illuminate until the hydraulic fluid becomes warm. Wait until the oil becomes warm and the warning light turn off before you operate the mower.

When you replace the filter, -

a Fill the new filter with hydraulic fluid and lubricate the filter O-ring with hydraulic fluid before you assemble the new filter. Tighten the filter with your hand.

b Operate the engine at idle speed for five minutes to remove the air from the hydraulic system. The oil-level light can illuminate and the horn can activate during the five minutes.

c Stop the engine and check the level of hydraulic fluid in the tank. Add the hydraulic fluid to the Full mark on the dipstick.

⚠ CAUTION

The Hydraulic Oil Can Damage Your Skin. Use Gloves When You Use Hydraulic Oil. If Hydraulic Oil Touches Your Skin, Clean The Area Immediately.

⚠ CAUTION

Discard Used Hydraulic Oil As Shown In Local Safety Regulations.

8.8 HYDRAULIC TEST PORTS

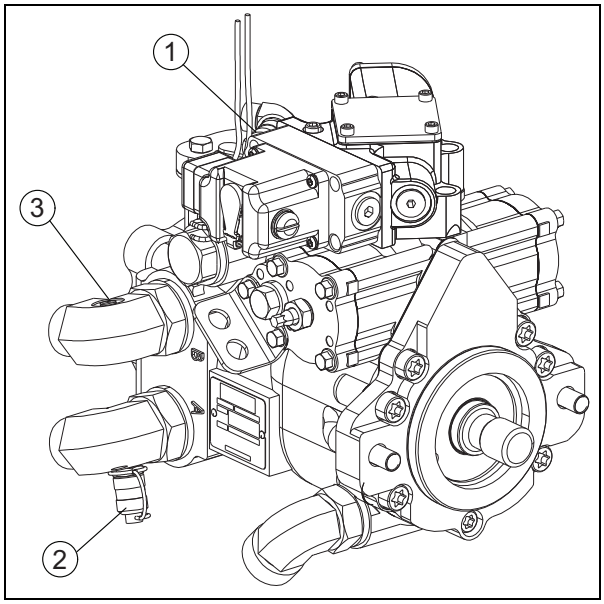
If you have any problems with the hydraulic system, check the hydraulic pressures with the service ports that are supplied.

All tests must be done with the hydraulic oil at the normal temperature of the engine, unless specified at a different temperature.

TEST PORTS:

1. Charge pressure: 20 Bar ± 2 Bar (290 psi + - 29 psi)
2. Forward traction pressure, engine running, no drive (Wheel restraints installed). Should balance charge pressure constant 250 Bar (3629 psi), Peak 280 Bar (4061 psi).
3. Reverse traction pressure (plugged port). Engine running, no drive (Wheel restraints installed), should balance charge pressure, maximum 210 Bar (3045 psi), peak 250 Bar (3629 psi).

NOTE: Only approved personnel must service the hydraulic system.



8.9 FUEL

Diesel fuel is flammable. Use caution when you add the fuel to the mower. Only use an approved container. The spout on the container must fit inside the fuel filler neck. Never use the containers that are not approved to keep or transfer fuel.

⚠ WARNING

Refuel the mower before you start the engine. When the engine is in operation or while the engine is hot, never remove the fuel cap or add fuel to the mower.

Refuel outdoors only and do not smoke when you add fuel.

If the fuel spills, do not try to start the engine, but move the mower away from the area. Until fuel vapors are removed, do not allow the sparks, open flame or other types of ignition.

Never keep fuel containers near an open flame or any device that can cause the ignition of fuel or fuel vapors.

Always tighten the fuel tank cap and container cap after you add fuel.

Fill the fuel tank to less than 25 mm (1 inch) below the filler neck.

Use clean Ultra low sulfur Diesel fuel to the recommended specification. The use of Diesel fuel additives is not recommended. If fuel additives are used, the fuel additives must be approved for use in the engine type used in your machine. Refer to the engine manual for additional information.

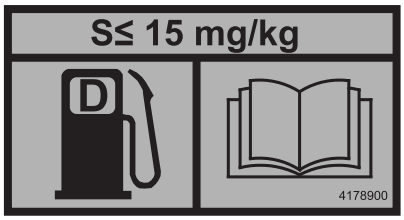
Check fuel hoses and clamps at service interval (see chart). Replace the fuel hoses and clamps at first indication of wear or damage.

Keep the fuel according to your local, state or federal regulations. Below are some items you should be aware of.

What you need to do	Reasons to do it
Inspect your Diesel fuel tank, pipes and fittings. If there is Brass, Copper, Lead or Zinc in contact with the fuel, plan to change the parts.	Low emission Diesel engines use higher pressure injection equipment. The presence of Copper, Lead and Zinc in Diesel fuel can accelerate wear in fuel pumps and injectors. Diesel fuel can absorb these metals when in prolonged contact.
Check your fuel supplier is supplying ultra low sulfur Diesel. It has to meet ASTM D975 S15 or EN590:2009 or equivalent fuel with a sulfur content of less than 15 ppm (parts per million)	Low emission Diesel engines, use Particle Filters (DPF). The use of high sulfur fuel will block the DPF and damage the engine. Any engine damage caused by high sulfur fuel is not covered by warranty.
Ask your fuel supplier if there are records showing the amount of water mixed in with the Diesel fuel supplied.	Water in the fuel is harmful to the high-pressure injection equipment. Kubota recommends that water content must not be more than 0.05%
Ensure that Bio content to your Diesel fuel does not exceed 5% as described in ASTM D6751 or EN 14214	Higher Bio Diesel content has been proven to absorb more moisture from the atmosphere. The moisture and Bio content can result in the development of molds and bacteria. These accelerate the blocking of fuel filters.
Ask your fuel supplier to verify that fuel being delivered meets the lubricity level required set in ASTM D6079	Low emission Diesel engines use higher pressure injection equipment. The tolerances in the injection equipment require the fuel to provide lubrication.
Ask your fuel supplier to verify that fuel being delivered has less than 1milligram of solid contaminant per liter of fuel.	Any particles in the fuel can damage parts within the fuel injection system, reducing performance. The vehicle fuel system will provide protection, but the cleaner the fuel into the vehicle, the lower the chance of a particle by passing the filtration system.

8.10 FUEL SYSTEM

Use Diesel to B.S. EN590 or ASTM D975 (Ultra Low Sulfur)



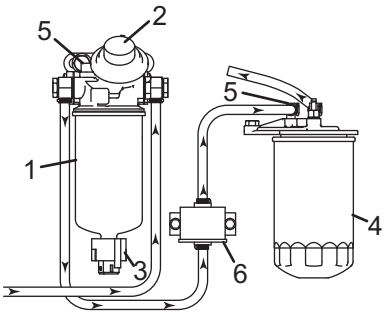
Water Separator

If the water is not removed from the fuel, damage to the fuel-injection system can occur. When the fuel filter light on the filter light module is illuminated or at service interval, drain the water from the water separator.

a Stop the engine. Open the air vent at the top of water separator.

b Open the drain valve at the bottom of the water separator and drain the water. Water will drain before the fuel. When fuel drains from the valve, close the valve.

c Close the vent at the top of the water separator.



1. Water Separator
2. Hand Pump
3. Drain Valve
4. Fuel Filter
5. Air Vent (2)
6. Fuel Pump

Fuel Filter
Replace the fuel filter

a Stop the engine.

b Open the air valve at the top of the filter to release system pressure.

c Remove fuel filter cartridge. Clean any fuel that spills.

d Assemble new filter cartridge to the filter base. Tighten the cartridge with your hand.

e Bleed air from the fuel system.

How To Bleed The Air From The Fuel System

After water is drained from the fuel system, fuel filter cartridge is replaced or the fuel hoses are replaced, bleed the air from the fuel system.

a Open the air vent at the top of the water separator.

b Press and release the hand pump until air bubbles at separator air vent stop and fuel starts to spill. Close the vent. Clean any fuel that spills.

c Open the air vent on the fuel filter. Turn the ignition switch to the RUN position, but do not start the engine. Operate the fuel pump until air bubbles at filter vent stop and fuel starts to spill. Close the air vent. Clean any fuel that spills.

d Start the engine. The engine will remove any air remaining in the fuel hoses.

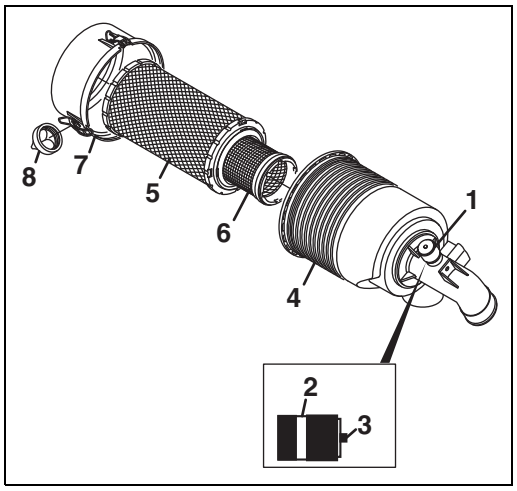
⚠ CAUTION

The Diesel Fuel Can Damage Your Skin. Use Gloves When You Use Diesel Fuel. If Diesel Fuel Touches Your Skin, Clean The Area Immediately.

⚠ CAUTION

Discard Diesel Fuel As Shown In Local Safety Regulations

8.11 AIR CLEANER



Check the service indicator (1) each day. If the red band become visible in the window (2), replace the filter elements.

Do not remove the elements to inspect or clean. Removal of the filter that is not necessary increases the risk of dust and other particles to enter the engine.

When service is needed, first clean the outside of the filter housing (4), then remove the primary (5) and secondary (6) filter elements carefully.

Clean the inside of the filter housing. Make sure dust and other particles do not get into the engine inlet hose.

Inspect the new elements. Do not use a damaged element and never use an incorrect element.

Assemble the secondary (6) and primary (5) filter elements. Make sure the elements seat correctly. Press the button (3) to set the service indicator.

Assemble the cap (7) to the filter housing (4). Make sure the cap seals around the filter housing. The dust valve (8) on the cap must be at the bottom of the filter. Fasten the cap with the two clips.

Check the air filter hoses for wear or damage. Make sure the hose clamps are tight and hold the hoses in position.

8.12 BATTERY

Before you service the battery, make sure the ignition switch is in the OFF position and the key is removed.

⚠ CAUTION

When you service the battery, always use the tools with insulation, wear protective glasses and protective clothing.

Discard used batteries as shown in your local regulations.

⚠ WARNING

The battery contains corrosive acid. Prevent contact with the battery acid.

Always wash your hands after you service a battery.

⚠ WARNING

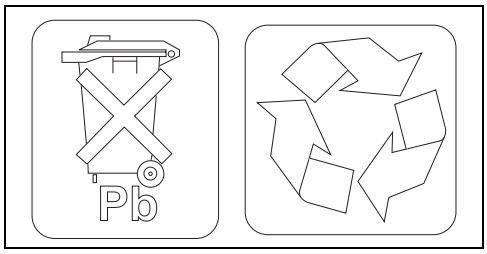
The battery posts, battery terminals and related accessories contain lead and lead compounds, chemicals know to the State of California to cause cancer and other reproductive harm.

Tighten the battery cables on the battery terminals, To prevent corrosion, apply a layer of silicone dielectric grease to battery terminals and ends of cables. Keep the vent caps and battery terminal covers in position.

Before you do any welding operation on the mower, always disconnect the battery cables from the battery and the connectors from the controllers.

Confirm the battery polarity before you connect or you disconnect the battery cables.

When you install the battery, always connect the positive (RED) battery cable before the negative (BLACK) battery cable.



When you remove the battery, always disconnect the negative (BLACK) battery cable before the positive (RED) battery cable.

Jump-Starting the Mower

a Before you try to jump-start the mower, check the condition of the drained battery.

b Connect the positive (+) battery terminal of the charged battery to positive battery terminal of the drained battery.

c Connect the negative (–) battery terminal of the charged battery to frame of vehicle with the drained battery.

⚠ WARNING

The battery can release hydrogen gas that is explosive. To decrease the risk of an explosion, prevent sparks near the battery. Always connect the negative jumper cable to the frame of the mower with the drained battery.

d When the cables are connected, start the engine on the vehicle with the good battery, then start the mower.

8.13 CHARGE THE BATTERY

WARNING

Charge the battery in an area with good airflow. The battery can release hydrogen gas that is explosive. To prevent an explosion, keep any device that can cause sparks or flames away from the battery.

When the battery charger is turned on, to prevent injury, stay away from the battery. A battery that is damaged can cause an explosion.

Read the battery charger manual for specified instructions on the operation of the charger.

When possible, remove the battery from the mower before you charge the battery. If the battery is not sealed, check and make sure the level of the electrolyte is above the plates in all of the cells.

Make sure the battery charger is turned OFF, then connect the battery charger to the battery terminals as specified in the battery charger manual.

Always turn OFF the battery charger before you disconnect the battery charger from the battery terminals.

8.14 ENGINE EXHAUST

WARNING

The exhaust fumes contain carbon monoxide. The carbon monoxide in the exhaust fumes can increase to dangerous levels. To protect you from carbon monoxide poisoning, inspect the complete exhaust system every month and replace damaged components immediately.

NEVER operate the engine without enough ventilation.

The temperature of the exhaust components can be greater than 300° F (149° C). To prevent the burns, do not touch a hot exhaust system.

If you sense a change in the color or sound of the exhaust, stop the engine immediately. Identify the problem and have the system repaired.

Torque all exhaust manifold hardware equally. Tighten or replace the exhaust clamps.

8.15 DIESEL PARTICULATE FILTER

During the operation of the mower, the level of particle material will increase in the Diesel Particulate Filter (DPF) system. The periodic Regen of the DPF system is needed to remove particle material. During an Active or Parked Regen, the engine will use more fuel. The DPF system operates in one of four states

⚠ WARNING

During active or parked regeneration, the temperature of the exhaust components can be more than 1150° F (625° C). To prevent burns, do not touch a hot exhaust system and do not stand or reach into exhaust gas area from exhaust pipe outlet. To prevent fires, make sure the engine area is kept clean and the grass clippings are not near exhaust components. During parked regeneration turn rear wheels fully to the right.

Make sure the exhaust gas from the exhaust pipe is not blocked and there is enough space between the exhaust pipe and objects. Park the mower on concrete or gravel during parked regeneration. During Active or parked regeneration exhaust gas from the exhaust pipe can cause turf damage or fire.

Passive Regen State - The engine operates in the Passive Regen state during normal engine operation. The exhaust temperature can be more than 572° F (300° C).

Inhibit Regen State - When the front of the Regen Inhibit switch is momentarily pressed, the engine can not enter the Active or Parked Regen states. Inhibit Regen does not prevent the Passive Regen. If the fuel tank is near empty, press the Regen Inhibit switch to the INHIBIT until the fuel tank is filled.

Active Regen State - When the level of particle material reach a certain point, the engine will enter Active Regen state. Operation of the mower is not changed. The exhaust temperature can be more than 1150° F (625° C) during Active Regen. The high exhaust temperatures during Active Regen will illuminate the High Exhaust Temperature light.

Parked Regen State - When a Parked Regen is needed, the Regen Request on the display will be illuminated. Park the mower on concrete or gravel to prevent damage to the turf. Engage the parking brake, but do not stop the engine. Press and release the front part of the Inhibit Regen switch to start the Parked Regen. During the Parked Regen, the Regen Request display will illuminate. The high exhaust temperatures during Parked Regen will illuminate the High-Exhaust Temperature light. Do not disengage the parking brake, stop the engine or move the mower during the Parked Regen.

A Regen cycle that is not completed will move the engine through six different levels of control.

Level 0 - Normal operation of mower with Passive Regen. When particles reach the Active Regen level, the engine controller will change to Level 1. When the engine controller is at Level 0, the Active and Parked Regen is disabled.

Level 1 - Engine will enter Active Regen state unless Inhibit Regen switch is in the INHIBIT position. Normal Active Regen is completed in approximately 20 minutes. If the particle material level does not decrease to the Passive Regen level in 30 minutes (1800 seconds), the engine controller will change to Level 2. When the engine controller is at Level 1, the Parked Regen is disabled

Level 2 - Regen Request display will illuminate. Engine will enter Active Regen state unless the Inhibit Regen switch has been pressed. When the mower is parked and the parking brake is engaged, the Parked Regen state is available. If the engine is operated at Level 2 without a Regen for approximately 1 to 1-1/2 hours, the engine controller will change to Level 3.

Level 3 - Regen Request will illuminate. The engine power output is decreased and Active Regen is disabled. When the mower is parked and the parking brake is engaged, the Parked Regen state is available. If the engine is operated at Level 3 without a Regen for approximately 1 to 1-1/2 hours, the engine controller will change to Level 4.

Level 4 - High Exhaust Temperature display will illuminate. The engine power output is decreased significantly. Active and Parked Regen is disabled. The Kubota Diagmaster tool is needed to start a Regen. If the engine is operated at level 4 without a Regen for approximately 1 to 1-1/2 hours, the engine controller will change to Level 5.

Level 5 - High Exhaust Temperature display will flash quickly. The engine power output is decreased significantly. An authorized Kubota Engine Service Center must clean the DPF before the mower is used.

8.16 HYDRAULIC HOSES

⚠ WARNING

To prevent injury from the hot, high pressure oil, never use your hands to check for oil leaks. Use the paper or cardboard to find leaks.

The hydraulic fluid pressure can have enough force to enter your skin. If hydraulic fluid has entered your skin, a doctor must remove the hydraulic fluid surgically within a few hours or gangrene can occur.

Always lower the cutting units to the ground, disengage all drives, engage parking brake, stop the engine and remove the key before you inspect or disconnect hydraulic lines or hoses.

Check visible hoses and tubes each day. Look for wet hoses or oil marks. Replace worn or damaged hoses and tubes before you operate the mower.

The replacement tube or hoses must follow the same path as the original hose. Do not move the clamps, brackets and cable-ties to a new location.

Completely inspect all tubes, hoses and connections in accordance with the maintenance chart.

IMPORTANT: If the hydraulic fluid becomes dirty, damage to the hydraulic system can occur. Before you disconnect any hydraulic component, clean the area around the fittings and the ends of the hoses to stop the entry of dirt into the system.

Before you disconnect any hydraulic component, tag or mark the location of each hose then clean the area around the fittings.

To stop the entry of dirt into the system when you disconnect the component, be prepared to assemble plugs or caps to the ends of hoses and open ports. Clean any hydraulic fluid that spills.

Make sure “O” rings are clean and hose fittings are correctly installed before you tighten.

Prevent the hose twist. The twisted hoses can cause the hose connections to loosen as the hose moves while you operate the mower and can cause oil leaks.

The hydraulic hoses that are twisted or have sharp bends can decrease the oil flow and cause damage to the hoses. The decreased oil flow can cause system problems and increase the temperature of the hydraulic fluid.

8.17 TIRES

Keep the tires correctly inflated to increase tire life. Inspect the tread wear.

Check the tire pressure each day, while the tires are cool. Use an accurate low-pressure tire gauge.

Keep tires inflated at the correct pressure (**See Section 8.1**)

⚠ CAUTION

DO NOT try to put a tire on a rim unless you have the correct training, tools and experience. Incorrect mounting can cause an explosion which can cause injury.

8.18 WHEEL MOUNTING PROCEDURE

⚠ WARNING

Make sure the mower is parked on a solid and level surface. Never work on a mower that is supported only by the jack. Always use jack stands.

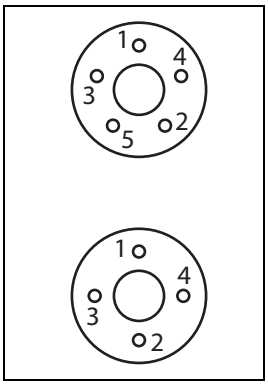
If only the front or rear of the mower is lifted, put the chocks in front of and behind the wheels that are not lifted.

Remove dirt, grease and oil from the stud threads. Do not lubricate threads.

Put the wheel on the hub. Inspect the wheel to make sure of full contact between surface of wheel and hub.

Tighten all hardware with your fingers, then torque hardware in the order shown. When possible, tighten nuts in the top position.

Check and torque hardware each day until torque is kept at 85-95 ft.lb. (115-128Nm).



8.19 BLADE CHANGE

Front Cutter Deck

1. Raise the deck to the cross cut position. This will allow the setting pin D to lift clear of the arm and be easier to remove.
2. Remove the pins at position D on both sides of the machine which lock the deck in its working position.
3. Lift the cutter deck to its full height.
4. Rotate cutter deck to the vertical position.
5. Insert one of the height of cut pins at position (E) to lock deck in its vertical position.

All Cutter Decks

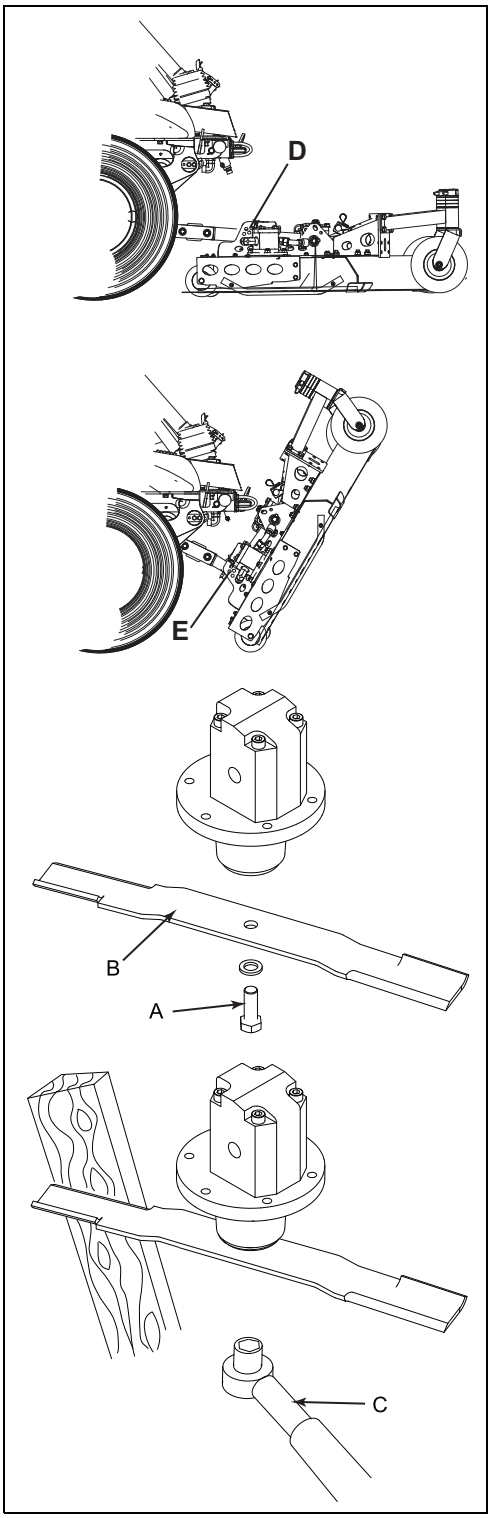
6. Remove blade bolt (A).
7. Remove blade (B) from deck.
8. Fit new blade.
9. Replace blade bolt A to hydraulic motor spindle.
10. Tighten blade bolt with torque wrench (C) set to 95N-m (70 ft.-lb.) torque.

Front Cutter Deck

11. Remove the pin which holds the cutter deck in the vertical position and return deck to its working position.
12. Refit the locking pins to position (D).

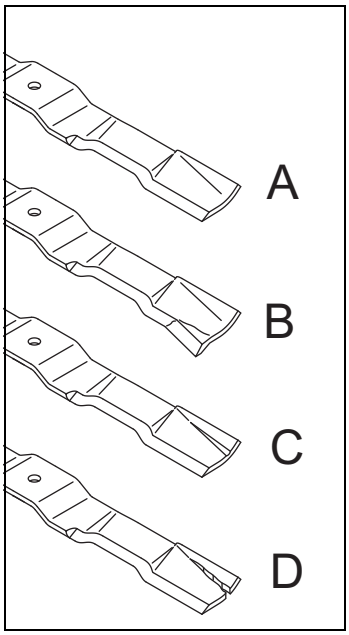
⚠ WARNING

Blades Are Extremely Sharp And Can Cause Severe Cuts. For Your Protection, Hold Blades With Thick Leather Work Gloves Only.



8.20 INSPECTING BLADES

Inspected the blade in accordance with the maintenance chart or when the cutting unit is removed from the mower, carefully inspect the blades to make sure the blades are in good condition (A). Replace any blade that has bends (B), grooves (C) or cracks (D).



⚠ CAUTION

Be careful when you check blades to prevent pinching hands and fingers between ends of the blades.

⚠ WARNING

Never try to correct or repair a damaged blade. Always replaced a damaged blade.

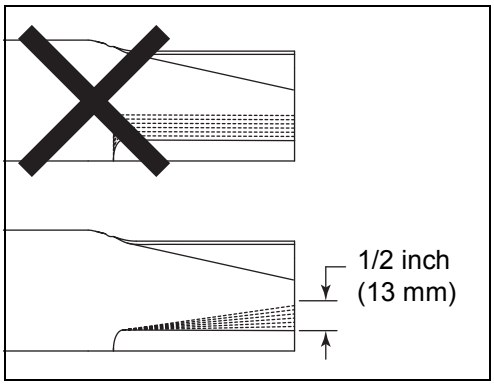
The bends, grooves or cracks can cause a piece of the blade to become loose and be discharged from the mower. The broken blade pieces can cause injury to persons or property damage.

A bent blade can have a small crack that can increase and cause a piece of the blade to break. The bent blades can cause vibration and other stress on the mower.

The dust or sand particles can wear a dangerous groove in the blade between the air vanes and the flat part of the blade. The groove can quickly increase in size and allow a piece of the blade to break.

8.21 SHARPENING BLADES

Put a wooden block between the blade and cutting unit housing to prevent the blade to rotate.



⚠ WARNING

The cutting unit blades can have sharp edges. To prevent injury, use caution when you service or hold the blade.

When you remove more than one half inch of material, the blade tip can break and be discharged from the mower. The broken blade pieces can cause injury to persons or property damage.

When you prepare or sharpen the blade, do not follow the original grind pattern. Grind new cutting edges at an angle. If the maximum of 1/2 inch (13 mm) blade loss has occurred, do not sharpen more, replace the blade.

To stop blade balance problems, make sure an equal amount of material is removed from both ends of the blades. A blade that is not balanced will cause vibration and can damage the mower. Use a blade balancer to check the blade after you sharpen.

Torque center blade bolt to 75 to 90 ft.Lb. (100 to 120 Nm).

8.22 FOLDING ROPS

A folding Roll Over Protective Structure (ROPS) is included with this mower. Inspect the ROPS weekly for loose hardware or damage.

⚠ CAUTION

Keep the ROPS hardware correctly fastened. Do not do any welding operations, Do not drill, change or bend the ROPS. Replace damaged ROPS. Do not try to correct a damaged ROPS.

Inspect the seat, seat belt, ROPS mounting hardware and ROPS frame for damage in accordance with maintenance chart. Replace all damaged parts immediately. All replacement parts for the ROPS must be as specified in the Parts Manual.

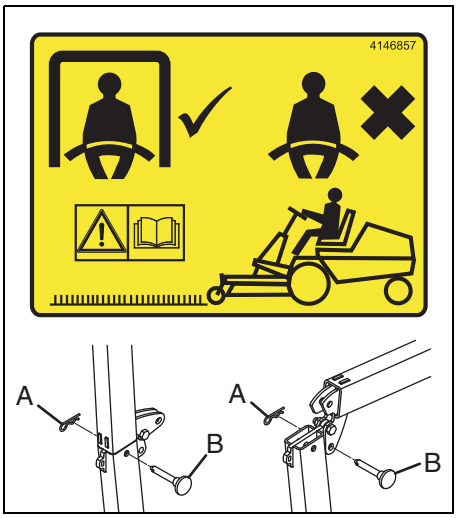
Check and torque all ROPS hardware in accordance with maintenance chart.

Do not operate the mower with the ROPS in the folded position.

There is no roll over protection with the ROPS in the folded position.

Folding the ROPS.

a Remove the R clip (A) and ROPS pin (B) from both sides of the ROPS.
b Fold the ROPS toward the mower hood.
c Assemble the ROPS pin and R clip to lock the ROPS in the folded position. **Never** wear the seat belt with the ROPS in the folded position.



⚠ DANGER

In off road or transport mode, the seat belt must always be worn. The ROPS frame must be in the position for operation. This instruction is given to meet:

The machinery directive, 2006/42/EC Sections 3.2.2, Seating & 3.4.3, Rollover.

Jacobsen. recommend that the owner operator of the machine complete a local risk assessment on the machine to find any conditions that do not follow this rule.

⚠ WARNING

To prevent injury when you fold the ROPS, use caution to prevent your fingers being crushed between moving and rigid parts of the ROPS.

Always wear the set belt with the ROPS frame in the vertical and locked position.

Never wear the seat belt with the ROPS in the folded position.

NOTICE

To prevent damage to the ROPS or the mower hood, do not operate the mower without the ROPS frame locked in the vertical or folded position.

8.23 CARE AND CLEANING

Clean the mower and cutting units after each use. To prevent damage to the engine, do not wash the mower with the engine in operation. When possible, clean the mower with compressed air.

NOTICE

Do not wash any part of the mower that is hot. Use cold water and automotive cleaners.

⚠ CAUTION

It is important not to use high pressure water or air to clean radiator fins. Do not pressure wash engine.

Use clean water to wash your equipment.

NOTICE

To use salt water or drain water is known to cause rust and corrosion of metal parts and can cause damage or failure. This damage is not included by the factory warranty.

Do not spray water at the instrument panel, ignition switch, controller or other electrical components or at bearing housings and seals.

Clean all plastic or rubber parts with a weak soap solution or use commercially available rubber cleaners.

To keep the original high polish of the plastic parts, wax with a good grade of one-step cleaner wax.

Repair damaged metal surfaces and use Jacobsen touch-up paint. Apply wax to the equipment for maximum paint protection.

⚠ CAUTION

To prevent fire, clean grass clippings and dirt from the cutting units, drives, engine and exhaust components.

⚠ WARNING

Never use your hands to clean cutting units. Use a brush to remove grass clippings from the blades. The blades are sharp and can cause injuries.

8.24 MOWER STORAGE

General

- Clean the mower and lubricate. Repair and paint damaged or open metal.
- Inspect the mower, tighten all hardware, replace worn or damaged components.
- Drain and fill the radiator.
- Clean the tires
- When the vehicle is not being used for an extended period, the tire pressures must be increased. Inflate to the maximum rating on the tire wall to make sure that flat spots do not occur. Decreased the tire pressure before the vehicle is put into operation.
- Keep the mower and all accessories clean, dry and protected from the elements. Never keep the mower near an open flame or spark which can cause ignition of the fuel or fuel vapors.
- When a label is damaged or removed from the machine, make sure that the label is replaced. See the Decals section of this manual or the Parts Manual.

Battery

- Remove, clean and keep the battery in the upright position on a surface that is not metal in a cool dry location. To prevent increased battery discharge, do not keep the battery on a metal surface.
- Check and charge the battery every 60 to 90 days.
- Keep the battery in a cool dry location. To decrease the self discharge rate, the temperature must not be more than 80° F (27° C) or less than 20° F (-7° C).

Engine

- While the engine is warm, remove the drain plug, drain the oil from the crankcase and change the oil filter. Install the drain plug torque the drain plugs to 22 ft. Lb. (30 Nm) and fill the engine with oil
- Clean the outside surface of the engine. Paint bare metal or apply a thin layer of rust preventative oil.

Cutting Units

- Completely clean the cutting units. Repair and paint any damaged or bare metal surfaces.
- Lubricate all grease fittings and friction points.
- Apply a thin layer of rust preventative oil to the sharpened edges of the blades.

⚠ CAUTION

The cutting unit blades can have sharp edges. To prevent injury, use caution when you service or hold the blade.

After Storage

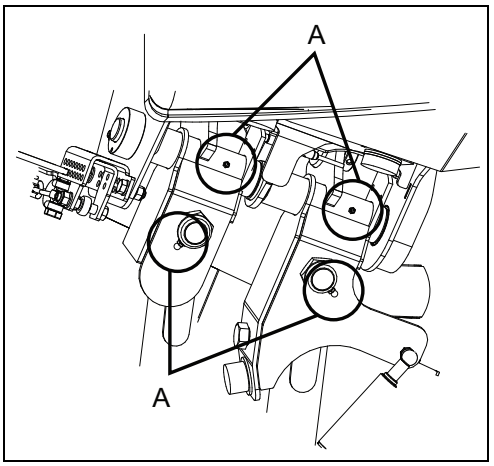
- Check and install the battery. If necessary, charge the battery.
- Check or service the fuel filter and air cleaner
- Check the radiator coolant level.
- Check the level of engine oil and hydraulic fluid.
- Fill the fuel tank with fuel. Bleed the fuel system.
- Make sure the tires are correctly inflated.
- Remove all oil from the blades. Adjust the cutting height.
- Start the engine at 1/2 throttle. Allow the engine to become warm and lubricated.

⚠ WARNING

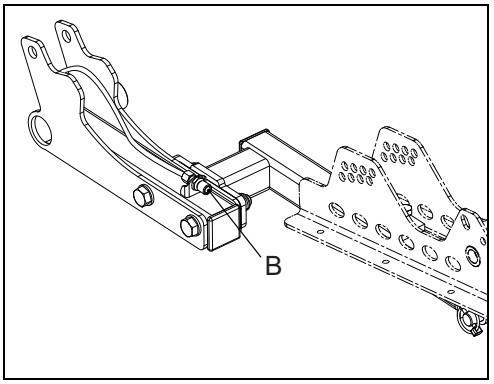
Never operate the engine without enough ventilation or in an enclosed area. The carbon monoxide in the exhaust fumes can increase to dangerous levels.

8.25 LUBRICATION OF CUTTING UNIT

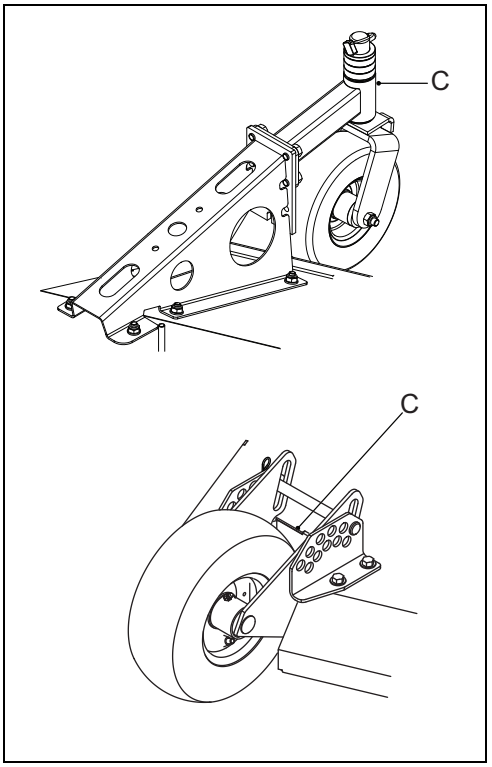
Wing Pivot Arm (A)



Front Pivot Arm (B)



Caster Wheel Mounting Pivot (C)



9 PROBLEM SOLVING

9.1 ENGINE PROBLEM SOLVING

The Engine is difficult to start	
Cause	**Action**
The fuel is thick and does not flow.	Check the fuel tank and fuel filter.
	Remove any contamination from the fuel system.
	Clean the fuel filter with kerosene.
Air or water mixed in fuel	The fuel system is a pressure type. Air in the system will cause a problem. Bleed the Fuel System.
	To get correct fuel injection pressure, check carefully for loose fuel line couplings and loose cap nut.
	Loosen the joint bolt stop, fuel filter and air vent screws of fuel injection pump to remove all the air in the fuel system.
The Engine oil becomes thick in cold weather and engine cranks slowly.	Change the grade of oil according to the average temperature.)
The Battery is discharged and the engine will not crank	Charge the battery.
	In The winter, always remove the battery from the machine. Keep the battery charged and store in a dry, safe environment.

Loss of Power	
Cause	**Action**
No fuel.	Check the fuel system.
Moving parts at more than operating temperature.	Check lubricating oil system.
	Make sure that the lubricating oil filter flow is not decreased.
	A dirty filter element can cause loss of lubrication. Change the filter element.
The air cleaner is dirty	Clean the filter element every 100 hours of operation.
Injection pump wear	Use the correct grade of fuel. Low grade fuel will cause the fuel pump to wear. Only use the specified Diesel fuel.

The Engine stops	
Cause	**Action**
There is no Fuel	Check the fuel tank and fill with fuel.
	Check the fuel system for air leaks.
Bad Nozzle	If necessary, replace the nozzle.
Moving parts at more than operating temperature. Not enough lubrication.	Check amount of engine oil with oil level gauge.
	Check lubricating oil system.
	The oil filter cartridge must be replaced at every second oil change.

Dirty Smoke or carbon increase on the Exhaust	
Cause	**Action**
Wrong fuel	Only use Diesel fuel specified in specification section.
Bad Nozzle	If necessary, replace the nozzle.

Engine must be stopped immediately	
Cause	**Action**
The color of The exhaust turns dark.	Check the fuel system and the fuel injection nozzle.
The bearings are at more than operating temperature.	Check the lubricating system.
The oil-temperature light is illuminated.	Check the lubricating system
	Check the function of the relief valve in the lubricating system.
	Check the pressure switch.
	Check the fuel filter base gasket.

Engine Temperature above Safe Maximum.	
Cause	**Action**
Engine oil low.	Check oil level. Fill to specified level.
The fan belt is broken or has defects.	Change the belt or adjust the belt tension.
Coolant low.	Fill to the specified level.
The Anti-freeze solution is too strong.	Add clean water only or change to coolant of the correct ratio.
The radiator screen or radiator fins are dirty.	Clean screen or fin carefully.
The radiator or coolant lines are dirty	Clean or replace the radiator and parts.
The fan, radiator or radiator cap has defects.	Replace the parts.
The Thermostat has defects.	Check the thermostat and replace if necessary.
The Temperature gauge or sensor has defects.	Check the temperature with thermometer and replace if necessary.
Engine is operated at more than maximum load.	Decrease the load.
Head gasket has defects or water leakage.	Replace the parts.
Incorrect fuel used	Use specified fuel.

10 QUALITY OF CUT

10.1 QUALITY OF CUT PROBLEM SOLVING

Make a “test cut” to check the performance of the mower before you start the repairs.

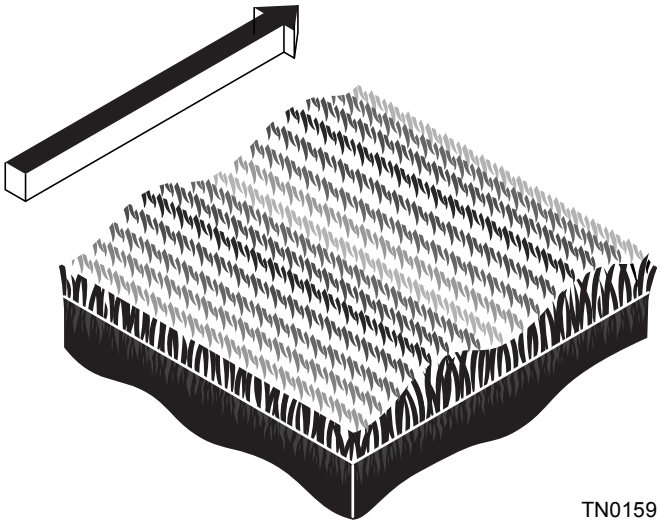
This area must have turf conditions that are known and do not change across the area. This type of area allows an accurate inspection of the performance of the mower to be made.

Another “test cut” must be done after the repairs or adjustments to confirm the mower’s performance.

Before you do a “test cut” to show the appearance and performance of the mower, the following items must be confirmed. These items make sure that the “test cut” is accurate.

1. Cut (Ground) Speed
2. Blade Sharpness
3. Height-of-Cut (HOC)
4. Caster Wheel Bearing Condition
5. Blade Speed

10.2 WASHBOARDING



NOTE: Arrow indicates direction of travel.

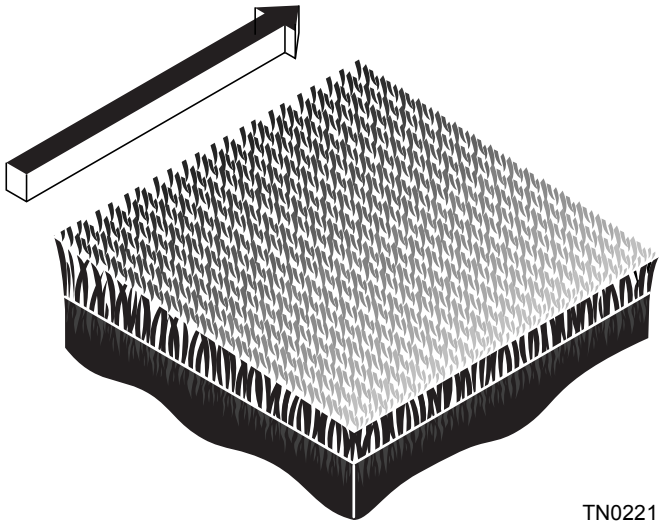
Washboarding is a repeated pattern of different cutting heights, that causes an appearance that is like a wave. In most cases, the wave tip-to-tip distance is approximately 6—8 in. (15—20 cm). A change in the color (from light-to-dark) is also seen.

This cause of this condition can be a movement from side -to-side in the cutting units (s). This condition is found on mowers with cutting units held under the mower, but other cause can give the same result.

Another cause of Washboarding is differences in the type of turf.

Probable Cause	Remedy
The cut (ground) speed is higher than normal.	Reduce the cut (ground) speed.
Cut in the same direction.	Change the direction of cut more frequently.
Cutting units have too much or too little weight on them.	Adjust the weight transfer valve to increase weight on the cutting units.
Not enough engine speed, engine speed is not set to specification.	Check/adjust the engine speed.
Hydraulic system and deck drive motor performance is decreased.	Check the hydraulic system performance (pump output, motor operation, valve operation and relief valve settings).

10.3 STEP CUTTING



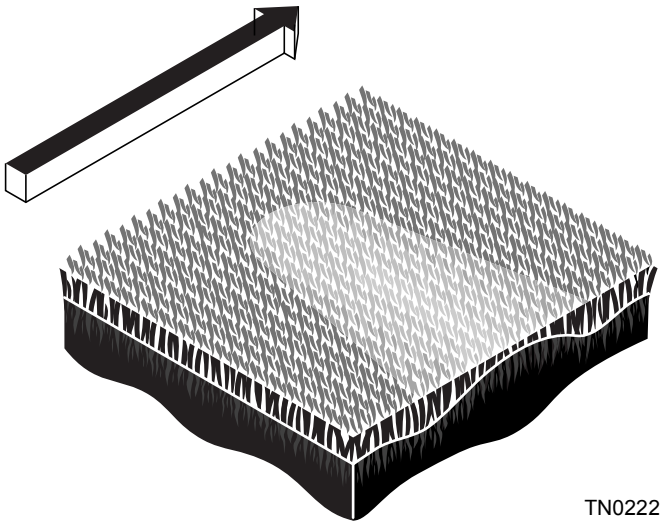
NOTE: Arrow indicates direction of travel.

Step cutting occurs when grass is cut higher on one side of a cutting unit than the other side. Step cutting can occur when one cutting unit is higher than another cutting unit.

The wear of mechanical parts or an incorrect roller adjustment can cause step cutting.

Probable Cause	Remedy
HOC (height-of-cut) settings are different from one side of a cutting unit to the other side or from one cutting unit to another unit.	Check HOC adjustment of cutting units. **See Section 7.6**
Worn deck caster wheel bearings.	Check and replace the bearings in the roller and the deck caster wheels.
The cutting unit movement is prevented.	Check and remove the cutting unit movement obstruction.
Differences in turf density	Change the direction of cut.
Mower ride height is uneven side to side.	Check and adjust tire inflation pressure.
Cutting unit height is uneven side to side.	Check and adjust for even mower weight distribution.

10.4 SCALPING

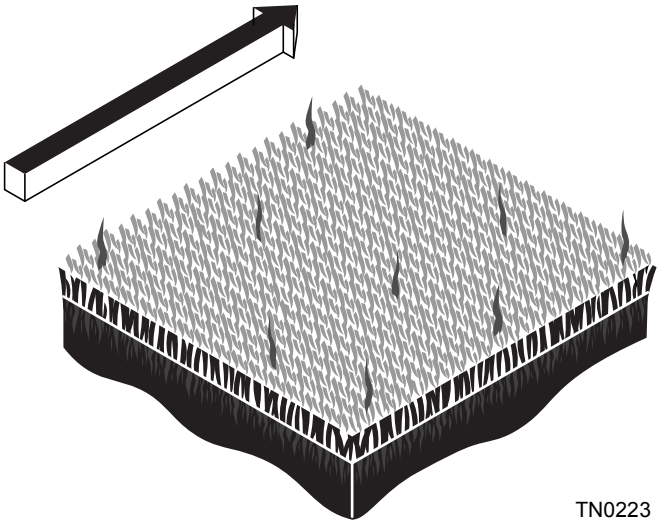


NOTE: Arrow indicates direction of travel.

Scalping is a condition in which areas of grass are cut shorter than the adjacent areas. The area can be light green or brown. A low HOC setting or turf that is not level can cause scalping.

Probable Cause	Remedy
HOC (height-of-cut) settings are lower than normal.	Check and adjust the HOC settings. **See Section 7.6**
Turf is not level and the mower can not follow the turf.	Change the direction of cut.
Grass is higher than the cutting unit capacity.	Cut the grass more frequently.
Cut (ground) speed is higher than the mower can cut.	Reduce the cut (ground) speed.

10.5 STRAGGLERS

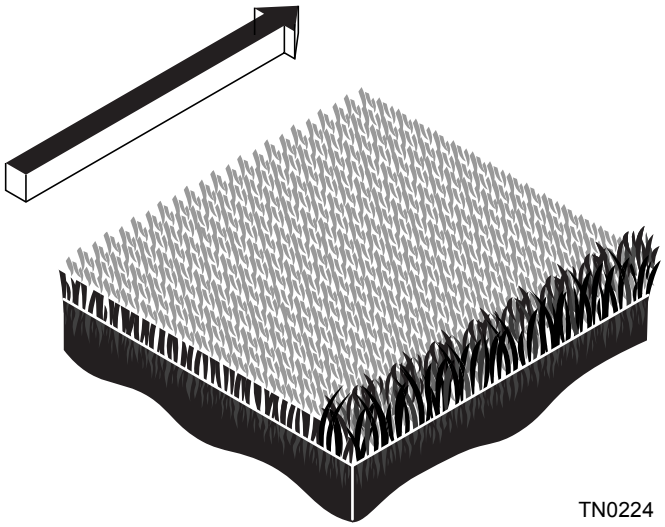


Stragglers are separated blades of grass the are not cut, or are cut incorrectly.

NOTE: Arrow indicates direction of travel.

Probable Cause	Remedy
Edge of the cutting blade(s) are not sharp.	Sharpen the blade(s). **See Section 8.21**
Cut (ground) speed is higher than normal	Reduce the cut (ground) speed.
The grass is higher than the level at which the mower can cut correctly.	Cut the grass more frequently.
Cut in the same direction.	Change the direction of cut more frequently.
The blade speed is too slow	Operate the mower with the engine at full throttle. Inspect and repair the hydraulic system.

10.6 STREAKS

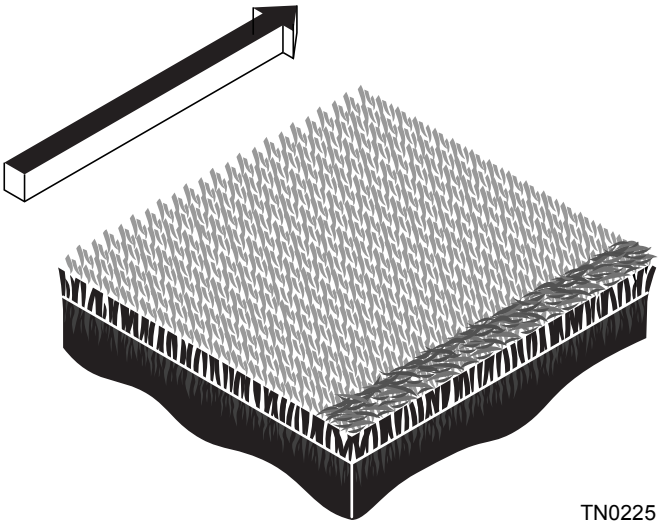


NOTE: Arrow indicates direction of travel.

A streak is a line of grass that is not cut. The cause of a streak can be a damaged blade.

Probable Cause	Remedy
Damaged blade(s).	Replace the blade(s). **See Section 8.19**
The mower turns at a rate that is faster than the mower can turn and cut correctly. The cutting units do not overlap around turns or on side hills.	Turn at a speed that will allow the cutting units to overlap. Change the direction of cut or pattern on the side hills.
The tires compresses the grass before the grass is cut.	Check and adjust the tire inflation pressure.
The blades are not installed correctly.	Check to make sure the correct blade is installed on each motor.
The mower compresses the wet grass before the grass is cut.	Cut the grass when grass is dry.

10.7 WINDROWING

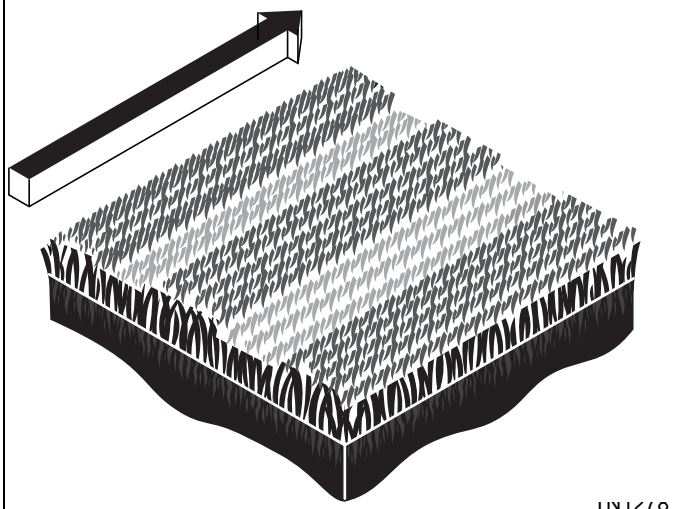


Windrowing is the deposit of clippings increased at one end of cutting unit(s) or between cutting units. Windrowing can make a line in the direction of travel.

NOTE: Arrow indicates direction of travel.

Probable Cause	Remedy
The grass is higher than the level at which the mower can cut correctly.	Cut the grass more frequently.
Mowing the grass while grass is wet.	Cut when grass is dry.
Grass collecting on mower or cutting unit frame.	Clean the cutting unit(s) grass deflector.

10.8 MISMATCHED CUTTING UNITS



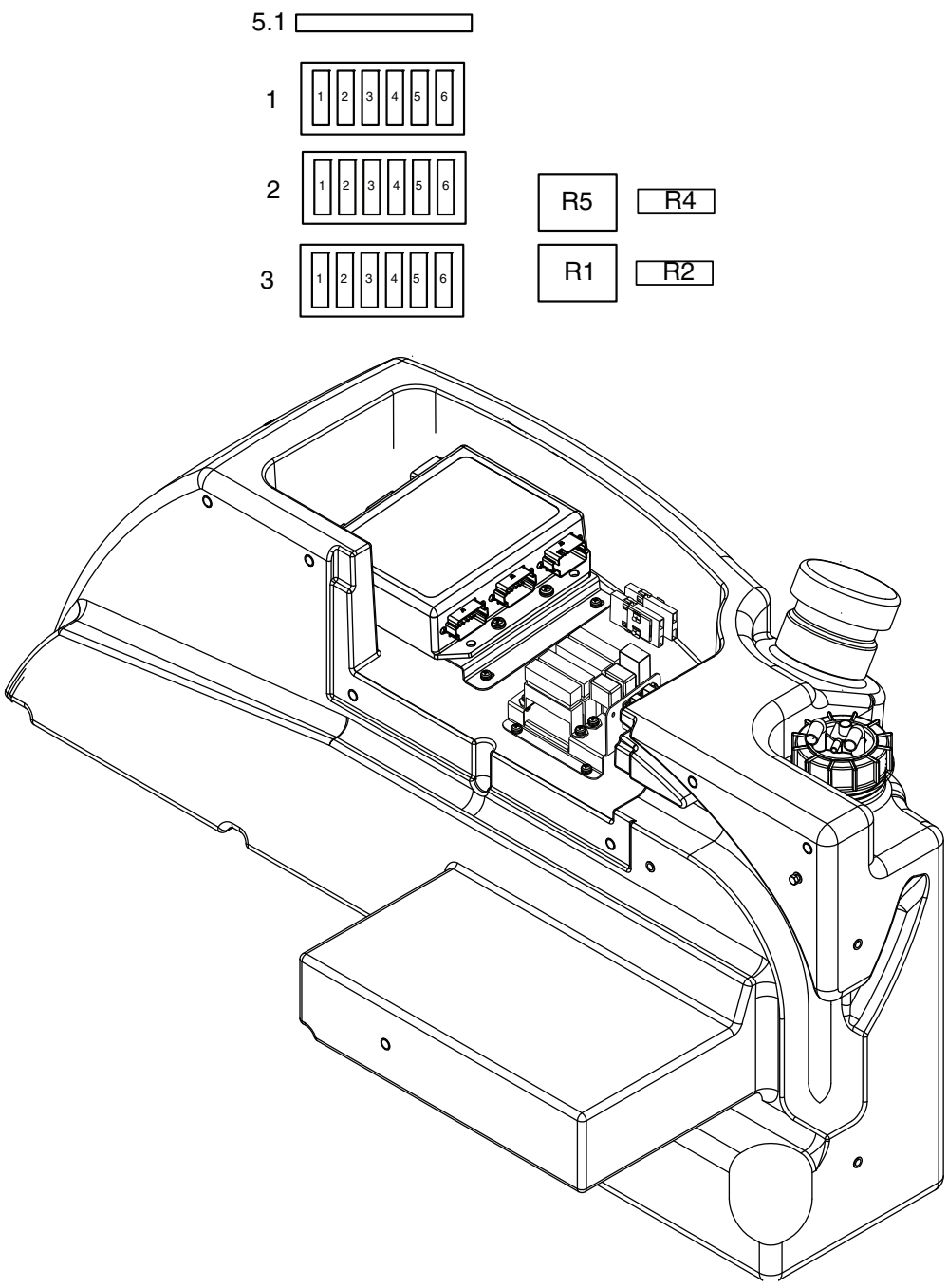
TN1278

Mismatched cutting units is a pattern of different cutting heights, that gives the grass a stepped cut appearance. This appearance is normally because of a mismatched HOC (height-of-cut) adjustment from one cutting unit to another unit.

NOTE: Arrow indicates direction of travel.

Probable Cause	Remedy
HOC is different from one cutting unit to another unit.	Check and adjust the HOC on cutting units to same height. **See Section 7.6**
Difference in cutting unit motor speeds.	Check the operation of cutting unit motor(s). Repair or replace as necessary.
Difference in mower ride height side to side.	Check and adjust the tire inflation pressure.
	Check and adjust for even mower weight distribution.

11.1 FUSE AND RELAY/COMPONENT IDENTIFICATION



11 FUSES RELAYS AND CONTROLLER

FUSES

FUSE HOLDER 1		
Fuse	Rating	Protected Circuits
1	10A	Key Switch to Beacon And Horn
2	10A	Key Switch to Proximity Switches and Pressure Switches
3	10A	Key Switch to Accessory Sockets
4	20A	Key Switch to Machine Control Unit
5	10A	Key Switch to Air Seat
6	5A	Key Switch to Mow Switch

FUSE HOLDER 2		
Fuse	Rating	Protected Circuits
1	5A	Key Switch to Visual Display
2	5A	Key Switch to Transport Lock Switch
3	15A	Key Switch to Hazard Switch
4	15A	Not Used
5	7.5A	Key Switch to Indicators
6		

FUSE HOLDER 3		
Fuse	Rating	Protected Circuits
1	5A	Battery Positive Distribution Box to Alternator
2	10A	Key Switch to Indicators
3	20A	Battery Positive Distribution Box to Machine Control Unit
4	20A	Battery Positive Distribution Box to Machine Control Unit
5	25A	Battery Positive Distribution Box to Engine Master Relay
6	5A	Start Signal

MAXI FUSE 4		
Fuse	Rating	Protected Circuits
1	40A	Battery Positive Distribution Box to Glow Plug Relay

Relays

Relay	Rating	Circuits
R1	40A	Engine Master Relay
R2	Micro	Start Relay
R3	40A	Glow Plug Relay (Located Near ECU)
R4	Micro	Ignition Relay
R5	40A	Indicator Relay

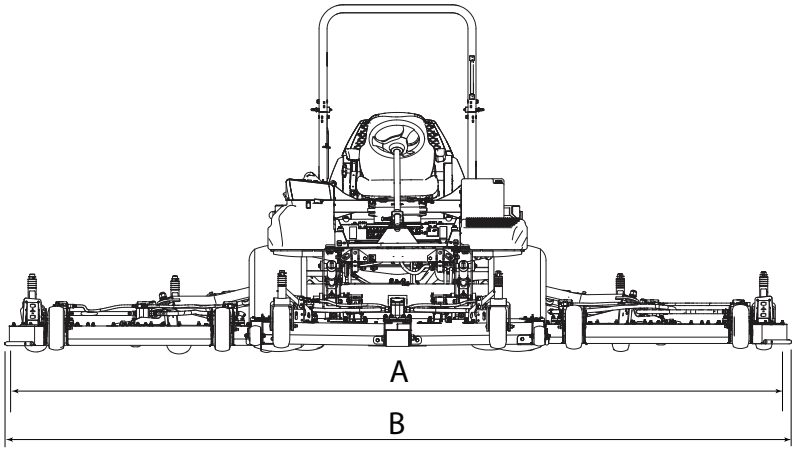
12.1 ENGINE SPECIFICATION

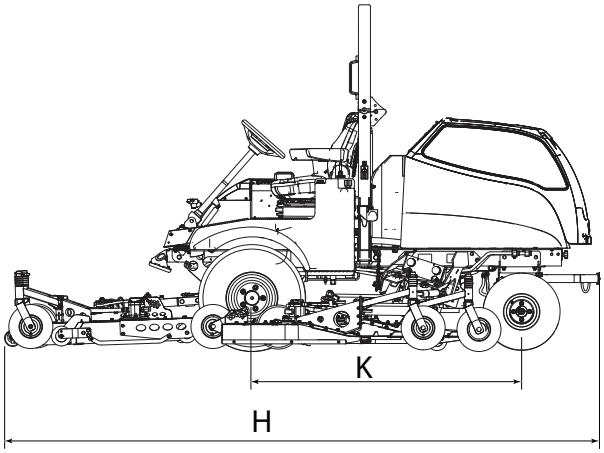
Model:	V3307-CR-TE4
Type:	Vertical, water-cooled, 4-cycle diesel engine
Number of Cylinders	4
Bore and Stroke	94mm x 120mm (3.70 in. x 4.72 in.)
Total Displacement	3.331 liters (148.53 cu.in.)
Combustion Type	Direct Injection
SAE Net Intermittent kW / rpm H.P. (SAEJ1349) (HP / rpm)	55.4 kW @ 2600 rpm (74.3 HP @ 2700 rpm)
Maximum Torque / Rotating Speed	265 N-m / min (1500 rpm) 196 ft-lb / min (1500 rpm)
Maximum Bare Speed:	2820 rpm (No load)
Idle Speed:	775 to 825 rpm
Firing order	1-3-4-2
Direction of Rotation	Counter-clockwise (viewed from flywheel side)
Compression Ratio	20:1
Fuel:	Diesel to BS EN590 or ASTM D975 (Ultra Low Sulfur)
Lubrication (API Class)	Above CJ4
Dimensions (length x width x height)	900mm x 592mm x 753mm (35.4 in. x 23.3 in. x 29.6 in.)
Dry Weight (BB Spec.)	305kg (672 lbs)
Starter	Cell starter
Starter motor	12V, 3.0kW
Generator	12V, 1080w

12 SPECIFICATIONS

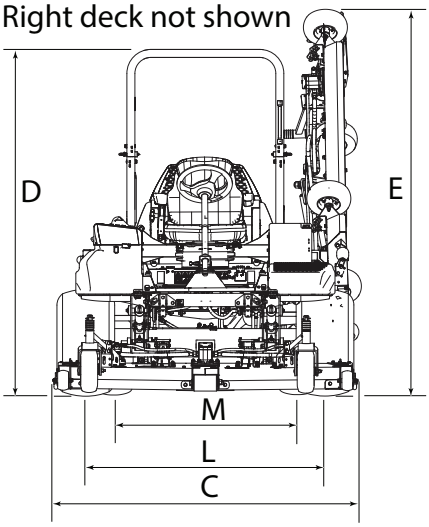
12.2 DIMENSIONS & WEIGHTS

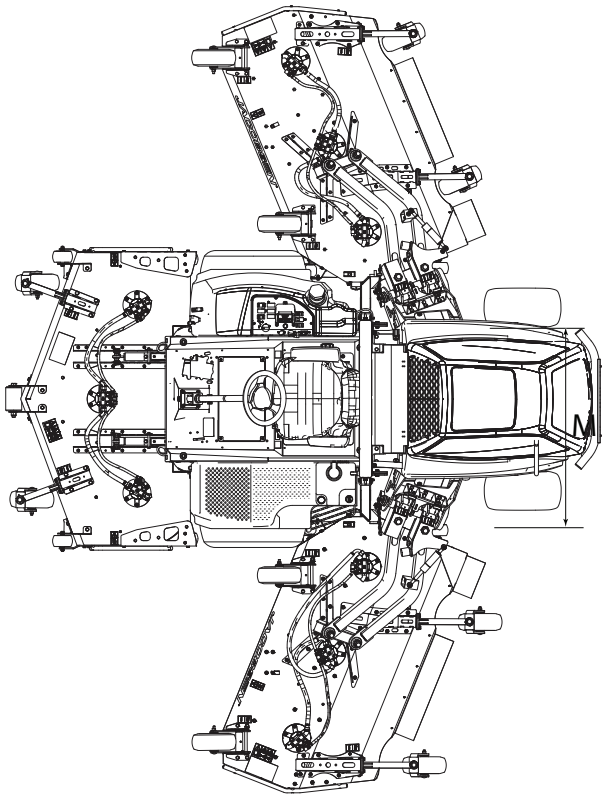
A	Width Of Cut With 167.6 cm (66 inch) Wing Cutter Decks	488 cm	192 in.
B	Overall Width With 167.6 cm (66 inch) Wing Cutter Decks	500 cm	196.7 in.
C	Maximum Width Transport With Wing Decks in Transport Position	197 cm	77.7 in.
D	Maximum Height With ROPS Frame Up And Wing Decks Down	221 cm	86.9 in.
D	Maximum Height With Cab And Wing Decks Down	223 cm	87.9 in.
E	Maximum Height With ROPS Frame Down And 167.6 cm (66 inch) Wing Cutter Decks Up In Transport Position	243 cm	95.8 in.
H	Total Length Working:	389 cm	153.1 in.
J	Total Length For Storage (Front Deck in Service Position)	373 cm	146.7 in.
K	Wheel Base	171 cm	67.4 in.
L	Wheel Track Front	152 cm	59.8 in.
M	Wheel Track Rear	116 cm	45.7 in.
	Ground Clearance	18.7 cm	7.375 in.
	Turning Circle, Curb to Curb (outside tire to outside tire) in Transport Left Turn	560	220.5 in.
	Turning Circle, Curb to Curb (outside tire to outside tire) in Transport Right Turn	549	216
	Uncut Turning Circle With 167.6 cm (66 inch) Wing Cutter Decks	0 cm	0 in.
	Weight Of HR800 Machine With ROPS, No Decks And Fuel Tank Empty	1686 kg	3716 lb.
	Weight Of HR800 Machine With Cab, Air Conditioning, No Decks And Fuel Tank Empty	1885 kg	4155 lb.
	Maximum Front Axle Loading	TBD kg	TBD lb.
	Maximum Rear Axle Loading	TBD kg	TBD lb.
	Weight Of Front Deck	163 kg	360 lb.
	Weight Of Wing Deck 167.6 cm (66 inch)	165	363 lb.
	Weight Of Light and Mirror Kit LMAC556	22 kg	48.5 lb.
	Weight Of Beacon Kit LMAC531	3.5 kg	7.7 lb.
	Weight Of Number Plate (When Light Kit Not Fitted)	2.5 kg	5.5 lb.
	Weight Of 109.8 Liters (29 US Gallons) Of Diesel Fuel	94 Kg.	207 lb.



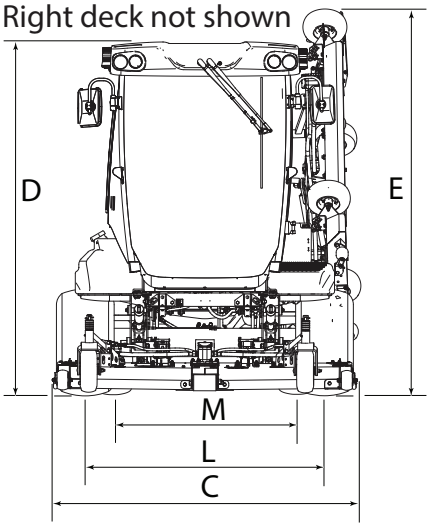


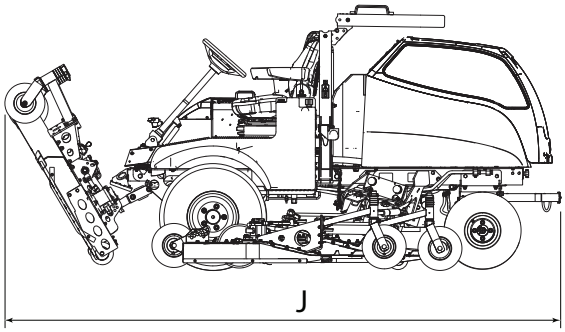
HR800 with ROPS
Right deck not shown





HR800 with Cab
Right deck not shown





12 SPECIFICATIONS

12.3 MACHINE SPECIFICATION

Frame construction: Heavy duty steel chassis with formed steel frame rails.

Cutter Deck Drive: HR800, Nine individual hydraulic motors with self lubricating integral bearings.

Transmission: Hydrostatic closed loop parallel cross series SureTrac system. Variable displacement piston pump. Front high torque fixed displacement piston wheel motors. Full time auto 4WD forward, on demand 4 WD in reverse.,

Speeds:

Cutting: 0 - 12 km/h (0 - 7.5 mph) Forward
0 - 6.4 km/h (0 - 4 mph) Reverse

Transport: 0 - 25 km/h (0 - 15.5 mph) Forward
0 - 6.4 km/h (0 - 4 mph) Reverse

Creep: 0 - 8 km/h (0 - 5 mph) Forward
0 - 5 km/h (0 - 3.1 mph) Reverse

Steering: Q-AMP® variable rate hydrostatic powered equal displacement cylinder to rear wheels.

Ground pressure: Depends on the tire pressures and the accessories installed.

Brakes: Hydrostatic braking with wet disc parking brakes on the front wheels.

Battery: BBMS 678 80-capacity 20 Amp Hours 540A

Cab Climate Control:

Technical data	
Air conditioning system	
Heating Performance	6.0 kW
Cooling performance	4.5 kW
Refrigerant	R 134A
Recommended refrigerant level	800 g
Operating voltage	12 V
Power consumption, clutch	max.49W
Refrigerant Oil	135 cc
Refrigerant Oil - in the compressor	50 cc

12.4 VIBRATION

The machine was tested for hand and arm vibration levels. The operator was in the normal position to drive the vehicle, with two hands on the steering mechanism. The engine was in operation and the cutting device was in rotation. No drive was engaged.

The Machinery Safety Directive 2006/42/EC
By compliance to:
The Lawnmower Standard BS EN ISO5395-3:2013
Referenced to Hand/Arm: BS EN ISO20643:2008

Information Supplied for Physical Agents Directive 2002/44/EC
By reference to:
Hand/Arm Standards: BS EN ISO 5349-1 (2001)
BS EN ISO 5349-2 (2002)

HR800 Hand / Arm Acceleration Level	70543 with ROPS	HR800 Hand / Arm Acceleration Level	70543 with Cab
	Maximum Accelerations m/s²		Maximum Accelerations m/s²
	0.552 ± 1.4		0.343 ± 1.4

Whole-body vibration measurement was carried out with the machine traveling in a straight line at a speed close to 6 km/h on a flat horizontal level surface. The height of cut was set at the lowest position and the cutting means engaged.

Each reading shall be obtained from a signal time suitable
The Machinery Safety Directive 2006/42/EC
By compliance to:
Whole Body EN1032:2003

Information Supplied for Physical Agents Directive 2002/44/EC
By reference to:
Whole Body Standards BS EN ISO 2631-1 (1997)

HR800 Whole Body Acceleration Level	70543 with ROPS	HR800 Whole Body Acceleration Level	70543 with Cab
	Maximum.Acceleration m/s²		Maximum Acceleration m/s²
	0.247 ± 0.1		0.257 ± 0.1

12 SPECIFICATIONS

12.5 NOISE

When the machine was tested for sound pressure (Operator Ear).

The Machinery Safety Directive 2006/42/EC
And
Exposure Of Workers To The Risks Arising From Physical Agents (Noise) Directive 2003/10/EC
By compliance to:
The Lawnmower Standard BS EN ISO 5395:2013
And Sound Pressure Standard EN ISO 3746: 2010

ROPS machine: Measured Sound Pressure 85 dB(A) ± 0.71 LWA
Cab machine: Measured Sound Pressure 80 dB(A) ± 0.71 LWA (Best case, windows closed)
Cab machine: Measured Sound Pressure 86 dB(A) ± 0.71 LWA (Worst case, windows open)

When the machine was tested for sound power (Noise in the Environment).

The Machinery Safety Directive 2006/42/EC
And
Noise Emission In The Environment By Equipment For Use Outdoors
Directive 2000/14/EC
By compliance to:
Sound Power Standard EN ISO 3744:2010

Measured Sound Power 104 dB(A) ± 0.71 LWA

12.6 SLOPES

DO NOT USE ON SLOPES GREATER THAN 19° when ROPS is fitted and 17° when cab is fitted. The slope was calculated using static stability measurements according to the requirements of BS EN ISO 5395:2013

12.7 CUTTING PERFORMANCE

4.87m (16ft) width of cut:

5.36 hectares/hr. At 12 kph.

13.23 acres / at 7.5mph

(10% allowance is included for normal overlaps and turning at the end of each cut).

12.8 CUTTER DECK SPECIFICATION

Product	HR800 Front Deck
Deck Width	183 cm (72 inch) Deck (Front)
Construction	Bull nose profile, steel construction. Solid bumper rails, bolted assembly of all impact and wearing parts.
Blade Length	635 mm (25 inch)
Number of Blades	3
Blade Tip Speed	4942 m/minute (16214 feet/minute)
Height of Cut	25 mm - 152 mm (1 inch - 6 inch) 12.7 mm (1/2 in) increments. Tools-less adjustment.
Height of Cut Adjustment Front	Two castor wheels, with spacers. tires 11 X 4.00 - 5 smooth, pneumatic, taper roller bearings.
Height of Cut Adjustment Rear	Front deck pin and slot. Wing deck chain and Pin
“Anti Scalp” Roll	Three anti scalp rollers on the front of deck and three anti scalp rollers on the rear.
Transmission	By Hydraulic motor to each cutter blade.

Product	HR800 Wing Deck
Deck Width	167 cm (66 inch) Deck (Wing)
Construction	Bull nose profile, steel construction. Solid bumper rails, bolted assembly of all impact and wearing parts.
Blade Length	584.2 mm (23 inch)
Number of Blades	3
Blade Tip Speed	4955 m/minute (16257 feet/minute)
Height of Cut	25 mm - 152 mm (1 inch - 6 inch) 12.7 mm (1/2 in) increments. Tools-less adjustment.
Height of Cut Adjustment Front	Two castor wheels,. tires 11 X 4.00 - 5 smooth, pneumatic, taper roller bearings.
Height of Cut Adjustment Rear	Two castor wheels, with spacers. tires 11 X 4.00 - 5 smooth, pneumatic, taper roller bearings. Wing deck chain and Pin
“Anti Scalp” Roll	One anti scalp rollers 3 in. on the front of deck and one anti scalp roller 5 x 2-3/4 in. on the rear.
Transmission	By Hydraulic motor to each cutter blade.

12 SPECIFICATIONS

12.9 RECOMMENDED LUBRICANTS

Grease:

For rear axle: K NATE (RJL No. 4213860), or equivalent to MIL-G-23549C, MIL-G-2345C, DIN 51 825, DIN 51 818

All other applications: Shell Darina R2 lithium based grease or equivalent.

12.10 ACCESSORIES

Air Suspension Seat (MSG75) Kit
Kit number LMAC560

Lights and mirror Kit
Kit number LMAC556

Beacon Kit
Kit number LMAC531

Armaturf Tire Kit
Kit number WL065

Bat (for clearing blockages) 4184540

Rotary Blade Balancer 4254850

12.11 DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY ▪ ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ ▪ PROHLÁŠENÍ O SHODĚ ▪ OVERENSSTEMMELSESERKLÆRING ▪ CONFORMITEITSVERKLARING ▪ VASTAVUSDEKLARATSIOON ▪ VAATIMUSTENMUKAISUUSVAKUUTUS ▪ DECLARATION DE CONFORMITE ▪ KONFORMITÄTSERKLÄRUNG ▪ ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ▪ MEGFELELŐSÉGI NYILATKOZAT ▪ DICHIARAZIONE DI CONFORMITÀ ▪ ATBILSTĪBAS DEKLARĀCIJA ▪ ATITIKTIES DEKLARACIJA ▪ DIKJARAZZJONI TAL-KONFORMITÀ ▪ DEKLARACJA ZGODNOŚCI ▪ DECLARAÇÃO DE CONFORMIDADE ▪ DECLARAŢIE DE CONFORMITATE ▪ VYHLÁSENIE O ZHODE ▪ IZJAVA O SKLADNOSTI ▪ DECLARACIÓN DE CONFORMIDAD ▪ DEKLARATION OM ÖVERENSSTÄMMELSE ▪ SAMRÆMISYFIRLÝSING ▪ KONFORMITETSERKLÆRING ▪ 符合性声明 ▪ SAMRÆMISYFIRLÝSING ▪ 適合宣言 ▪ 적합성 선언서 ▪ UYGUNLUK BEYANI ▪ ДЕКЛАРАЦІЯ ПРО ВІДПОВІДНІСТЬ

Business name and full address of the manufacturer ▪ Търговско име и пълен адрес на производителя ▪ Obchodní jméno a plná adresa výrobce ▪ Producentens firmanavn og fulde adresse ▪ Bedrijfsnaam en volledig adres van de fabrikant ▪ Tootja ärinimi ja täielik aadress ▪ Valmistajan toiminimi ja täydellinen osoite ▪ Nom commercial et adresse complète du fabricant ▪ Firmenname und vollständige Adresse des Herstellers ▪ Επωνυμία και ταχυδρομική διεύθυνση κατασκευαστή ▪ A gyártó üzleti neve és teljes címe ▪ Ragione sociale e indirizzo completo del fabbricante ▪ Uzņēmuma nosaukums un pilna ražotāja adrese ▪ Verslo pavadinimas ir pilnas gamintojo adresas ▪ Isem kummerċjali u indirizz sħiħ tal-fabbrikant ▪ Nazwa firmy i pełny adres producenta ▪ Nome da empresa e endereço completo do fabricante ▪ Denumirea comercială şi adresa completă a producătorului ▪ Obchodný názov a úplná adresa výrobcu ▪ Naziv podjetja in polni naslov proizvajalca ▪ Nombre de la empresa y dirección completa del fabricante ▪ Tillverkarens företagsnamn och kompletta adress ▪ Fyrirtækisheiti og fullt heimilisfang framleiðanda ▪ Firmanavn og full adresse for produsenten ▪ 制造商的商业名称和完整地址 ▪ Nafn fyrirtækis og fullt heimilisfang framleiðanda ▪ 商号およびメーカーの正式住所 ▪ 제조자의 상호명 및 주소 ▪ İmalatçının ticari ünvanı ve açık adresi ▪ Фірмове найменування і повна адреса виробника	Jacobsen, A Textron Company 11524 Wilmar Blvd. Charlotte, NC 28273, USA
Product Code ▪ Код на продукта ▪ Kód výrobku ▪ Produktkode ▪ Productcode ▪ Toote kood ▪ Tuotekoodi ▪ Code produit ▪ Produktcode ▪ Κωδικός προϊόντος ▪ Termékkód ▪ Codice prodotto ▪ Produkta kods ▪ Produkto kodas ▪ Kodiċi tal-Prodott ▪ Kod produktu ▪ Código do Produto ▪ Cod produs ▪ Kód výrobku ▪ Oznaka proizvoda ▪ Código de producto ▪ Produktkod ▪ Vörunúmer ▪ Produktkode ▪ 产品代码 ▪ Framleiðslunúmer ▪ 製品コード ▪ 제품 코드 ▪ Ürün Kodu ▪ Код виробу	70543
Machine Name ▪ Наименование на машината ▪ Název stroje ▪ Maskinnavn ▪ Machinenaam ▪ Masina nimi ▪ Laitteen nimi ▪ Nom de la machine ▪ Maschinenbezeichnung ▪ Ονομασία μηχανήματος ▪ Gépnév ▪ Denominazione della macchina ▪ Iekārtas nosaukums ▪ Mašinos pavadinimas ▪ Isem tal-Magna ▪ Nazwa urządzenia ▪ Nome da Máquina ▪ Numele echipamentului ▪ Názov stroja ▪ Naziv stroja ▪ Nombre de la máquina ▪ Maskinens namn ▪ Heiti tækis ▪ Maskinnavn ▪ 机器名称 ▪ Nafn vélar ▪ 機械名 ▪ 기기 명칭 ▪ Makine Adı ▪ Назва машини	HR800 with 2 Post ROPS Option
Designation ▪ Предназначение ▪ Označení ▪ Betegnelse ▪ Benaming ▪ Nimetus ▪ Tyyppimerkintä ▪ Pažymėjimas ▪ Bezeichnung ▪ Χαρακτηρισμός ▪ Megnevezés ▪ Funzione ▪ Apzīmējums ▪ Lithuanian ▪ Denominazzjoni ▪ Oznaczenie ▪ Designação ▪ Specificaţie ▪ Označenie ▪ Namen stroja ▪ Descripción ▪ Beteckning ▪ Merking ▪ Konstruksjon ▪名称 ▪ Útnefning ▪ 用途 ▪ 지정 ▪ Tanımı ▪ Позначення	Lawnmower, Article 12, Item 32
Serial Number ▪ Сериен номер ▪ Sériové číslo ▪ Serienummer ▪ Serienummer ▪ Seerianumber ▪ Valmistusnumero ▪ Numéro de série ▪ Seriennummer ▪ Σειριακός αριθμός ▪ Sorozatszám ▪ Numero di serie ▪ Sērijas numurs ▪ Serijos numeris ▪ Numru Serjali ▪ Numer seryjny ▪ Número de Série ▪ Numär de serie ▪ Sériové číslo ▪ Serijska številka ▪ Número de serie ▪ Serienummer ▪ Raðnúmer ▪ Serienummer ▪序列号 ▪ Raðnúmer ▪ シリアル番号 ▪ 일련 번호 ▪ Seri Numarası ▪ Серійний номер	7054301651-7054303000
Engine ▪ Двигател ▪ Motor ▪ Motor ▪ Motor ▪ Mootor ▪ Moottori ▪ Moteur ▪ Motor ▪ Μηχανή ▪ Modulnév ▪ Motore ▪ Dzinējs ▪ Variklis ▪ Saħħa Netta Installata ▪ Silnik ▪ Motor ▪ Motor ▪ Motor ▪ Motor ▪ Motor ▪ Motor ▪ Vél ▪ Motor ▪ 发动机 ▪ Aflvél ▪ エンジン ▪ 엔진 ▪ Motor ▪ Двигун	Kubota V3307-CR-E4B Diesel
Net Installed Power ▪ Нетна инсталирана мощност ▪ Čistý instalovaný výkon ▪ Installeret nettoeffekt ▪ Netto geïnstalleerd vermogen ▪ Installeeritud netovõimsus ▪ Asennettu nettoteho ▪ Puissance nominale nette ▪ Installierte Nettoleistung ▪ Καθαρή εγκατεστημένη ισχύς ▪ Nettó beépített teljesítmény ▪ Potenza netta installata ▪ Paredzētā tīkla jauda ▪ Grynoji galia ▪ Wisa' tal-Qtugħ ▪ Moc zainstalowana netto ▪ Potência instalada ▪ Puterea instalată netă ▪ Čistý inštalovaný výkon ▪ Neto vgrajena moč ▪ Potencia instalada neta ▪ Nettoeffekt ▪ Nettóafl vélar ▪ Netto installert kraft ▪ 装机净功率 ▪ Netuppsetningarorka ▪ 搭載する正味出力 ▪ 정미 출력 ▪ Net Kurulu Güç ▪ Корисна встановлена потужність	55.4 kW @ 2600 RPM
Cutting Width ▪ Широчина на рязане ▪ Šířka řezu ▪ Skærebredde ▪ Maaibreedte ▪ Lõikelaius ▪ Leikkuuleveys ▪ Largeur de coupe ▪ Schnittbreite ▪ Μήκος μισινέζας ▪ Vágási szélesség ▪ Larghezza di taglio ▪ Griešanas platums ▪ Pjovimo plotis ▪ Tikkonforma mad-Direttivi ▪ Szerokość cięcia ▪ Largura de Corte ▪ Lăţimea de tăiere ▪ Šírka záberu ▪ Širina reza ▪ Anchura de corte ▪ Klippbredd ▪ Skurðbreidd ▪ Klippebredde ▪ 剪草宽度 ▪ Breidd sláttar ▪ 刈り取り幅 ▪ 절단 폭 ▪ Kesme Genişliği ▪ Ширина різання	488 cm
Conforms to Directives ▪ В съответствие с директивите ▪ Splňuje podmínky směrnic ▪ Er i overensstemmelse med direktiver ▪ Voldoet aan de richtlijnen ▪ Vastab direktiividele ▪ Direktiivien mukainen ▪ Conforme aux directives ▪ Entspricht Richtlinien ▪ Ακολουθήστε πιστά τις Οδηγίες ▪ Megfelel az irányelveknek ▪ Conforme alle Direttive ▪ Atbilst direktīvām ▪ Atitinka direktyvų reikalavimus ▪ Valutazzjoni tal-Konformità ▪ Dyrektywy związane ▪ Cumpre as Directivas ▪ Respectă Directivele ▪ Je v súlade so smernicami ▪ Skladnost z direktivami ▪ Cumple con las Directivas ▪ Uppfyller direktiv ▪ Samræmist tilskipunum ▪ I samsvar med direktiv ▪ 符合指令 ▪ Í samræmi við reglugerðir ▪ 適合指令 ▪ 규정 준수 ▪ Şu Yönergelere Uymaktadır ▪ Відповідає директиві	2014/30/EU 2006/42/EC 2000/14/EC, 2005/88/EC 2006/66/EC
Conformity Assessment ▪ Оценка за съответствие ▪ Hodnocení plnění podmínek ▪ Overensstemmelsesvurdering ▪ Conformiteitsbeoordeling ▪ Vastavushindamine ▪ Vaatimustenmukaisuuden arviointi ▪ Evaluation de conformité ▪ Konformitätsbeurteilung ▪ Διαπίστωση Συμμόρφωσης ▪ Megfelelőség-értékelés ▪ Valutazione della conformità ▪ Atbilstības novērtējums ▪ Atitikties įvertinimas ▪ Livell tal-Qawwa tal-Ħoss Imkejjel ▪ Ocena zgodności ▪ Avaliação de Conformidade ▪ Evaluarea conformităţii ▪ Vyhodnotenie zhodnosti ▪ Ocena skladnosti ▪ Evaluación de conformidad ▪ Bedömning av överensstämmelse ▪ Samræmismat ▪ Konformitetsvurdering ▪ 符合性评估 ▪ Samræmismat ▪ 適合性評価 ▪ 적합성 평가 ▪ Uygunluk Değerlendirmesi ▪ Оцінка відповідності	2006/42/EC Annex VIII
Measured Sound Power Level ▪ Измерено ниво на звукова мощност ▪ Naměřený akustický výkon ▪ Målte lydstyrkeniveau ▪ Gemeten geluidsniveau ▪ Mõõdetud helivõimsuse tase ▪ Mitattu äänitehotaso ▪ Niveau de puissance sonore mesuré ▪ Gemessener Schalldruckpegel ▪ Σταθμισμένο επίπεδο ηχητικής ισχύος ▪ Mért hangteljesítményszint ▪ Livello di potenza sonora misurato ▪ Izmērītais skaņas jaudas līmenis ▪ Išmatuotas garso stiprumo lygis ▪ Livell tal-Qawwa tal-Ħoss Iggarantit ▪ Moc akustyczna mierzona ▪ Nível sonoro medido ▪ Nivelul măsurat al puterii acustice ▪ Nameraná hladina akustického výkonu ▪ Izmerjena raven zvočne moči ▪ Nivel de potencia sonora medido ▪ Uppmätt ljudeffektsnivå ▪ Mælt hljóðaflsstig ▪ Målt lydeffektnivå ▪ 测得声功率级 ▪ Mældur hljóðstyrkur ▪ 音出力レベル測定値 ▪ 측정된 음향 파워 레벨 ▪ Ölçülen Ses Gücü Düzeyi ▪ Виміряний рівень звукової потужності	104 dB(A) ± 0.71 LWA
Guaranteed Sound Power Level ▪ Гарантирано ниво на звукова мощност ▪ Garantovaný akustický výkon ▪ Garanteret lydstyrkeniveau ▪ Gegarandeerd geluidsniveau ▪ Garanteeritud helivõimsuse tase ▪ Taattu äänitehotaso ▪ Niveau de puissance sonore garanti ▪ Garantierter Schalldruckpegel ▪ Εγγυημένο επίπεδο ηχητικής ισχύος ▪ Szavatolt hangteljesítményszint ▪ Livello di potenza sonora garantito ▪ Garantētais skaņas jaudas līmenis ▪ Garantuotas garso stiprumo lygis ▪ Livell tal-Qawwa tal-Ħoss Iggarantit ▪ Moc akustyczna gwarantowana ▪ Nível sonoro farantido ▪ Nivelul garantat al puterii acustice ▪ Garantovaná hladina akustického výkonu ▪ Zajamčena raven zvočne moči ▪ Nivel de potencia sonora garantizado ▪ Garanterad ljudeffektsnivå ▪ Hljóðaflsstig sem ábyrgð er tekin á ▪ Garanter lydeffektnivå ▪ 保证声功率级 ▪ Tryggður hljóðstyrkur ▪ 音出力保証レベル ▪ 보장된 음향 파워 레벨 ▪ Garantili Ses Gücü Düzeyi ▪ Гарантований рівень звукової потужності	105 dB(A) LWA

12 SPECIFICATIONS

Conformity Assessment Procedure (Noise) • Оценка за съответствие на процедурата (Шум) • Postup hodnocení plnění podmínek (hluk) • Procedure for overensstemmelsesvurdering (Støj) • Procedure van de conformiteitsbeoordeling (geluid) • Vastavushindamismenetlus (müra) • Vaatimustenmukaisuuden arviointimenettely (Melu) • Procédure d'évaluation de conformité (bruit) • Konformitätsbeurteilungsverfahren (Geräusch) • Διαδικασία Αξιολόγησης Συμμόρφωσης (Θόρυβος) • Megfelelőség-értékelési eljárás (Zaj) • Procedura di valutazione della conformità (rumore) • Atbilstības novērtējuma procedūra (troksnis) • Atitikties įvertinimo procedūra (garsas) • Proċedura tal-Valutazzjoni tal-Konformità (Ħoss) • Procedura oceny zgodności (poziom hałasu) • Processo de avaliação de conformidade (nível sonoro) Procedura de evaluare a conformității (zgomot) • Postup vyhodnocovania zhodnosti (hluk) • Postopek za ugotavljanje skladnosti (hrup) • Procedimiento de evaluación de conformidad (ruido) • Procedur för bedömning av överensstämmelse (buller) • Samræmismatsaðferð (hávaði) • Prosedyre for konformitetsvurdering (støy) • 符合性评估程序（噪声）• Aðgerð fyrir samræmismat (Hávaði) • 適合性評価の手順（騒音）• 적합성 평가 절차 (소음) • Uygunluk Değerlendirme Prosedürü (Gürültü) • Регламент оцінки відповідності (шум)	2000/14/EC Annex VI, Part 1
UK Notified Body for 2000/14/EC • Нотифициран орган в Обединеното кралство за 2000/14/ЕО • Úřad certifikovaný podle směrnice č. 2000/14/EC • Det britiske bemyndigede organ for 2001/14/EF • Engels adviesorgaan voor 2000/14/EG • Ühendkuningriigi teavitatud asutus direktiivi 2000/14/EÜ mõistes • Direktiivin 2000/14/EY mukainen ilmoitettu tarkastuslaitos Isossa-Britanniassa • Organisme notifié concernant la directive 2000/14/CE • Britische benannte Stelle für 2000/14/EG • Κοινοποιημένος Οργανισμός Ηνωμένου Βασιλείου για 2000/14/ΕΚ • 2000/14/EK – egyesült királyságbeli bejelentett szervezet • Organismo Notificato in GB per 2000/14/CE • 2000/14/EK AK reġistrētā organizācija • JK notifikuotosios įstaigos 2000/14/EC • Korp Notifikat tar-Renju Unit għal 2000/14/KE • Dopuszczona jednostka badawcza w Wielkiej Brytanii wg 2000/14/WE • Entidade notificada no Reino Unido para 2000/14/CE • Organism notificat în Marea Britanie pentru 2000/14/CE • Notifikovaný orgán Spojeného kráľovstva pre smernicu 2000/14/ES • Britanski priglašeni organ za 2000/14/ES • Cuerpo notificado en el Reino Unido para 2000/14/CE • Anmält organ för 2000/14/EG i Storbritannien • Tilkynntur aðili í Bretlandi fyrir 2000/14/EC • Britisk teknisk for 2000/14/EF • 英国 2000/14/EC 认证机构 • Bretland Upplýsingar fyrir 2000/14/EB • UK (英国) 公認機関、2000/14/EC • 2000/14/EC 에 대한 영국 인증 기관 • 2000/14/EC için BK Onaylı Kuruluş • Британський уповноважений орган для 2000/14/EC	Number: 1088 Sound Research Laboratories Limited Holbrook House, Little Waldingfield Sudbury, Suffolk CO10 0TH
Operator Ear Noise Level • Оператор на нивото на доловим от ухото шум • Hladina hluku v oblasti uší operátora • Støjniveau i førers ørehøjde • Geluidsniveau oor bestuurder • Müratase operaatori kõrvas • Melutaso käyttäjän korvan kohdalla • Niveau de bruit à hauteur des oreilles de l'opérateur • Schallpegel am Bedienerohr • Επίπεδο θορύβου σε λειτουργία • A kezelő fülénél mért zajszint • Livello di potenza sonora all'orecchio dell'operatore • Trokšņa līmenis pie operatora auss • Dirbančiojo su mašina patiriamo triukšmo lygis • Livell tal-Ħoss fil-Widna tal-Operatur • Dopuszczalny poziom hałasu dla operatora • Nível sonoro nos ouvidos do operador • Nivelul zgomotului la urechea operatorului • Hladina hluku pôsobiaca na sluch operátora • Raven hrupa pri ušesu upravljavca • Nivel sonoro en el oído del operador • Ljudnivå vid förarens öra • Hávaðastig fyrir stjórnanda • Støynivå ved operatørens øre • 操作员耳旁噪声级 • Hljóðstyrkur fyrir stjórnanda • オペレータが感じる騒音レベル • 사용자 청각 소음 레벨 • Operatör Kulak Gürültü Düzeyi • Рівень шуму, що впливає на оператора	84 dB(a) ± 0.71 Leq (2006/42/EC)
Harmonised standards used • Използвани хармонизирани стандарти • Použité harmonizované normy • Brugte harmoniserede standarder • Gebruikte geharmoniseerde standaards • Kasutatud ühtlustatud standardid • Käytetyt yhdenmukaistetut standardit • Normes harmonisées utilisées • Angewandte harmonisierte Normen • Εναρμονισμένα πρότυπα που χρησιμοποιήθηκαν • Harmonizált szabványok • Standard armonizzati applicati • Izmantotie saskaņotie standarti • Panaudoti suderinti standartai • Standards armonizzati użati • Normy spójne powiązane • Normas harmonizadas usadas • Standardele armonizate utilizate • Použité harmonizované normy • Uporabljeni usklajeni standardi • Estándares armonizados utilizados • Harmoniserade standarder som används • 所采用的协调标准 • Samstilltir staðlar notaðir • 整合規格 • 적용되는 조화 표준 • Kullanılan uyumlu standartlar • Використані гармонізовані стандарти	BS EN ISO 20643 BS EN ISO 5349-1 BS EN ISO 5349-2 BS EN ISO 5395-3
Technical standards and specifications used • Използвани технически стандарти и спецификации • Použité technické normy a specifikace • Brugte tekniske standarder og specifikationer • Gebruikte technische standaards en specificaties • Kasutatud tehnilised standardid ja spetsifikatsioonid • Käytetyt tekniset standardit ja eritelmät • Spécifications et normes techniques utilisées • Angewandte technische Normen und Spezifikationen • Τεχνικά πρότυπα και προδιαγραφές που χρησιμοποιήθηκαν • Műszaki szabványok és specifikációk • Standard tecnici e specifiche applicati • Izmantotie tehniskie standarti un specifikācijas • Panaudoti techniniai standartai ir techninė informacija • Standards u speċifikazzjonijiet tekniċi użati • Normy i specyfikacje techniczne powiązane • Normas técnicas e especificações usadas • Standardele tehnice şi specificaţiile utilizate • Použité technické normy a špecifikácie • Uporabljeni tehnični standardi in specifikacije • Estándares y especificaciones técnicas utilizadas • Tekniska standarder och specifikationer som används • Samræmdir staðlar sem notaðir eru • Benyttede • harmoniserte standarder • 所采用的技术标准和规范 • Tæknistaðlar og -kröfur notaðar • 技術規格および仕様書 • 적용되는 기술 표준 및 규격 • Kullanılan teknik standartlar ve şartnameler • Використані технічні стандарти і умови	B71.4 ISO 2631-1 ISO 21299
The place and date of the declaration • Място и дата на декларацията • Místo a datum prohlášení • Sted og dato for erklæringen • Plaats en datum van de verklaring • Deklaratsiooni väljastamise koht ja kuupäev • Vakuutuksen paikka ja päivämäärä • Lieu et date de la déclaration • Ort und Datum der Erklärung • Τόπος και ημερομηνία δήλωσης • A nyilatkozat kelte (hely és idő) • Luogo e data della dichiarazione • Deklarācijas vieta un datums • Deklaracijos vieta ir data • Il-post u d-data tad-dikjarazzjoni • Miejsce i data wystawienia deklaracji • Local e data da declaração • Locul şi data declaraţiei • Miesto a dátum vyhlásenia • Kraj in datum izjave • Lugar y fecha de la declaración • Plats och datum för deklarationen • Tæknistaðlar og tæknilýsingar sem notaðar eru • Benyttede tekniske standarder og spesifikasjoner • Staður og dagsetning yfirlýsingar • Sted og dato for erklæringen • 声明的地点与日期 • Staður og dagsetning yfirlýsingarinnar • 宣言場所および日付 • 선언 장소 및 일자 • Beyan yeri ve tarihi • Місце і дата укладення декларації	Jacobsen, A Textron Company 11524 Wilmar Blvd. Charlotte, NC 28273, USA June 24th, 2016

Signature of the person empowered to draw up the declaration on behalf of the manufacturer, holds the technical documentation and is authorised to compile the technical file, and who is established in the Community. Подпис на човека, упълномощен да състави декларацията от името на производителя, който поддържащ техническата документация и е оторизиран да изготви техническия файл и е регистриран в общността. Podpis osoby oprávněné sestavit prohlášení jménem výrobce, držet technickou dokumentaci a osoby oprávněné sestavit technické soubory a založené v rámci Evropského společenství. Underskrift af personen, der har fuldmagt til at udarbejde erklæringen på vegne af producenten, der er indehaver af dokumentationen og er bemyndiget til at udarbejde den tekniske journal, og som er baseret i nærområdet. Handtekening van de persoon die bevoegd is de verklaring namens de fabrikant te tekenen, de technische documentatie bewaart en bevoegd is om het technische bestand samen te stellen, en die is gevestigd in het Woongebied. Ühenduse registrisse kantud isiku allkiri, kes on volitatud tootja nimel deklaratsiooni koostama, kes omab tehnilist dokumentatsiooni ja kellel on õigus koostada tehniline toimik. Sen henkilön allekirjoitus, jolla on valmistajan valtuutus vakuutuksen laadintaan, jolla on hallussaan tekniset asiakirjat, joka on valtuutettu laatimaan tekniset asiakirjat ja joka on sijoittautunut yhteisöön. Signature de la personne habilitée à rédiger la déclaration au nom du fabricant, à détenir la documentation technique, à compiler les fichiers techniques et qui est implantée dans la Communauté. Unterschrift der Person, die berechtigt ist, die Erklärung im Namen des Herstellers abzugeben, die die technischen Unterlagen aufbewahrt und berechtigt ist, die technischen Unterlagen zusammenzustellen, und die in der Gemeinschaft niedergelassen ist. Υπογραφή ατόμου εξουσιοδοτημένου για την σύνταξη της δήλωσης εκ μέρους του κατασκευαστή, ο οποίος κατέχει την τεχνική έκθεση και έχει την εξουσιοδότηση να ταξινομήσει τον τεχνικό φάκελο και ο οποίος είναι διορισμένος στην Κοινότητα. A gyártó nevében meghatalmazott személy, akinek jogában áll módosítania a nyilatkozatot, a műszaki dokumentációt őrzi, engedéllyel rendelkezik a műszaki fájl összeállításához, és aki a közösségben letelepedett személy. Firma della persona autorizzata a redigere la dichiarazione a nome del fabbricante, in possesso Della documentazione tecnica ed autorizzata a costituire il fascicolo tecnico, che deve essere stabilita nella Comunità. Tās personas paraksts, kura ir pilnvarota deklarācijas sastādīšanai ražotāja vārdā, kurai ir tehniskā dokumentācija, kura ir pilnvarota sagatavot tehnisko reģistru un kura ir apstiprināta Kopienā. Asmuo, kuris yra gana žinomas, kuriam gamintojas suteikė įgaliojimus sudaryti šią deklaraciją, ir kuris ją pasirašė, turi visą techninę informaciją ir yra įgaliotas sudaryti techninės informacijos dokumentą. Il-firma tal-persuna awtorizzata li tfassal id-dikjarazzjoni f'isem il-fabbrikant, għandha d-dokumentazzjoni teknika u hija awtorizzata li tikkompila l-fajl tekniku u li hija stabbilita fil-Komunità. Podpis osoby upoważnionej do sporządzenia deklaracji w imieniu producenta, przechowującej dokumentację techniczną, upoważnioną do stworzenia dokumentacji technicznej oraz wyznaczonej ds. wspólnotowych. Assinatura da pessoa com poderes para emitir a declaração em nome do fabricante, que possui a documentação técnica, que está autorizada a compilar o processo técnico e que está estabelecida na Comunidade. Semnătura persoanei împuternicite să elaboreze declarația în numele producătorului, care deține documentația tehnică, este autorizată să compileze dosarul tehnic și este stabilită în Comunitate. Podpis osoby poverenej vystavením vyhlásenia v mene výrobcu, ktorá má technickú dokumentáciu a je oprávnená spracovať technické podklady a ktorá je umiestnená v Spoločenstve. Podpis osebe, pooblaščene za izdelavo izjave v imenu proizvajalca, ki ima tehnično dokumentacijo in lahko sestavlja spis tehnične dokumentacije, ter ima sedež v Skupnosti. Firma de la persona responsable de la declaración en nombre del fabricante, que posee la documentación técnica y está autorizada para recopilar el archivo técnico y que está establecido en la Comunidad. Undertecknas av den som bemyndigad att upprätta deklarationen å tillverkarens vägnar, innehar den tekniska dokumentationen och är bemyndigad att sammanställa den tekniska informationen och som är etablerad i gemenskapen. Undirskrift aðilans sem hefur umboð til að gera yfirlýsinguna fyrir hönd framleiðandans, hefur undir höndum tæknigögnin og hefur leyfi til að taka saman tækniskýrsluna, og er viðurkenndur innan evrópska efnahagssvæðisins. Signaturen til personen som har fullmakt til å utferdige erklæringen på vegne av produsenten, er i besittelse av den tekniske dokumentasjonen, har autorisasjon til å utarbeide den tekniske filen og som har tilhold i EU. 获得授权代表制造商起草声明者的签名，此人保留技术文档并获授权编译技术文件，且是社区中获得认可者。 Undirskrift starfsmanns sem hefur heimild til að rita yfirlýsinguna fyrir hendi framleiðandans, hefur umsjón með tæknigögnum og hefur heimild til að setja saman tæknilega skýrslu og sem er tengdur inn í samfélagið. メーカーを代表して宣言書を起草し、技術文書を保有し技術ファイルを編集する権限を有し、地域において確固たる地位を築いている人物の署名。 제조자를 대신하여 선언서를 작성하도록 위임받은 서명자는 기술 문서를 보유하고 기술 자료 수집의 허가를 받았으며 지역 공동체 내에 속해 있습니다 İmalatçı adına beyanı hazırlama yetkisi olan, teknik dokümantasyonu elinde bulunduran ve teknik dosyayı derleme yetkisine sahip, Topluluk içinde yerleşik kişinin imzası. Підпис особи, що уповноважена укласти декларацію від імені виробника, має технічну документацію, уповноважена укласти технічний паспорт і має добру репутацію в суспільстві.	2006/42/EC Annex II 1.A.2 Christian D. Clifford Director of Engineering Ransomes Jacobsen Limited West Road, Ransomes Europark, Ipswich, IP3 9TT, England 2006/42/EC Annex II 1.A.10 Adam Blackford Vice President of Engineering Jacobsen, A Textron Company 11524 Wilmar Blvd, Charlotte, NC 28273, USA
Certificate Number • Номер на сертификат • Číslo osvědčení • Certifikatnummer • Certificaatnummer • Sertifikaadi number • Hyväksyntänumero • Numéro de certificat • Bescheinigungsnummer • Αριθμός Πιστοποιητικού • Hitelesítési szám • Numero del certificato • Sertifikāta numurs • Sertifikato numeris • Numru taċ-Ċertifikat • Numer certyfikatu • Número do Certificado • Număr certificat • Číslo osvedčenia • Številka certifikata • Número de certificado • Certifikatsnummer • Númer skírteinis • Sertifikatnummer • 证书编号 • Skírteinisnúmer • 認証番号 • 인증 번호 • Sertifika Numarası • Номер сертифіката	4372606 Rev A

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JP Japan · KR Korea · LI Liechenstein · LT Lithuania · LV Latvia · MT Malta · NL Netherlands · NO Norway · PL Poland · PT Portugal · RO Romania · RU Russia · SE Sweden · SI Slovenia · SK Slovakia · TR Turkey · UA Ukrain

13 NOTES

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