OPERATION

This machine and its attachments are to be operated only by a qualified operator stationed at the operator's controls either seated or standing as conditions require.

The use of the seat belt is recommended always, even on the machines equipped with ROPS.

Before starting the machine, check, adjust and lock the operator's seat assembly for maximum comfort and control of the machine.

This machine is equipped with power steering which is effective only when the engine is running. If engine fails, stop the machine immediately.

For emergency stops, apply foot brakes as required or pull parking / emergency brake lever.

Check the torque of the wheel bolts after every 20 hours of operation until the wheel bolts stay tight, if the machine is new or if a wheel has been removed and installed. Tighten according to procedure and specifications manual instructions.

Always travel with the scarifier in the full raised position and lower to the ground when parked.

Use extra care when using down pressure on the blade when working on hills, banks and slopes.

NOTE: *When the Grader wheels have been turned to the maximum (in either direction), do not continue to turn the steering wheel in the same direction. This causes unnecessary wear on pump and valve components of steering system.*

To start machine motion, raise moldboard, release parking brake, shift into the desired range and direction and move the throttle lever to meet the operational requirements.

Select a transmission range that will maintain engine speed appropriate for the load required. Low engine speed can be corrected by downshifting or lightening the load.

Over revving the engine should be avoided.

Slow the machine by applying the brakes.

Incorrect gearshift can result in an accident for the operator as well as damages to the machine and the transmission.

Observe the following instructions:

1. Down shift only when the ground speed for the selected range has been achieved.
2. Down shift only one range at a time.

WARNING: *Do not coast the machine at any time with the transmission in neutral. Do not attempt to decelerate on grades by shifting. Decelerate the engine and apply the foot brakes. Anticipate grades before starting down.*

CAUTION: *Select the proper gear range to maintain the control. Engage transmission to start up only when the engine is at low idle. Down or up shift only one range at a time and only when the speed of the machine approximates the speed of the next range.*

The transmission range and engine speed should be set before beginning the grading operation. Never overload the moldboard, so that the rear wheels begin to slip. This not only alters the grade but causes unnecessary wear to rear tires.

Increasing the blade angle (putting one blade tip farther forward than the other tip) will reduce the load. The blade should be set to cast the dirt either inside or outside of the rear wheels, not under the wheels unless it is for compaction purposes.

The moldboard pitch can be changed to suit various operations. When the top of the moldboard is tilted forward the cutting edge will not slice the material, but push it. This is advantageous when pushing dirt from one location to another. Tilting the top of the moldboard to the rear will angle the cutting edge so that it will slice and create a bite into the material. This can be advantageous in heavy material because the material will roll against the moldboard, breaking it up and making it easier to move.

Using the moldboard to back drag material should be avoided if possible. This can cause heavy wear on the moldboard guides and possibly damage the side shift cylinder piston rod. If back dragging cannot be avoided, make certain material does not contact the positioning piston rod.

Worn or poorly adjusted moldboard guides will cause an unstable moldboard for fine grading.

When making heavy cuts or moving heavy loads that tend to side shift the Grader, lean the front wheels toward the load to counteract side shift.

PREVIEW - YOUFIXTHIS.COM

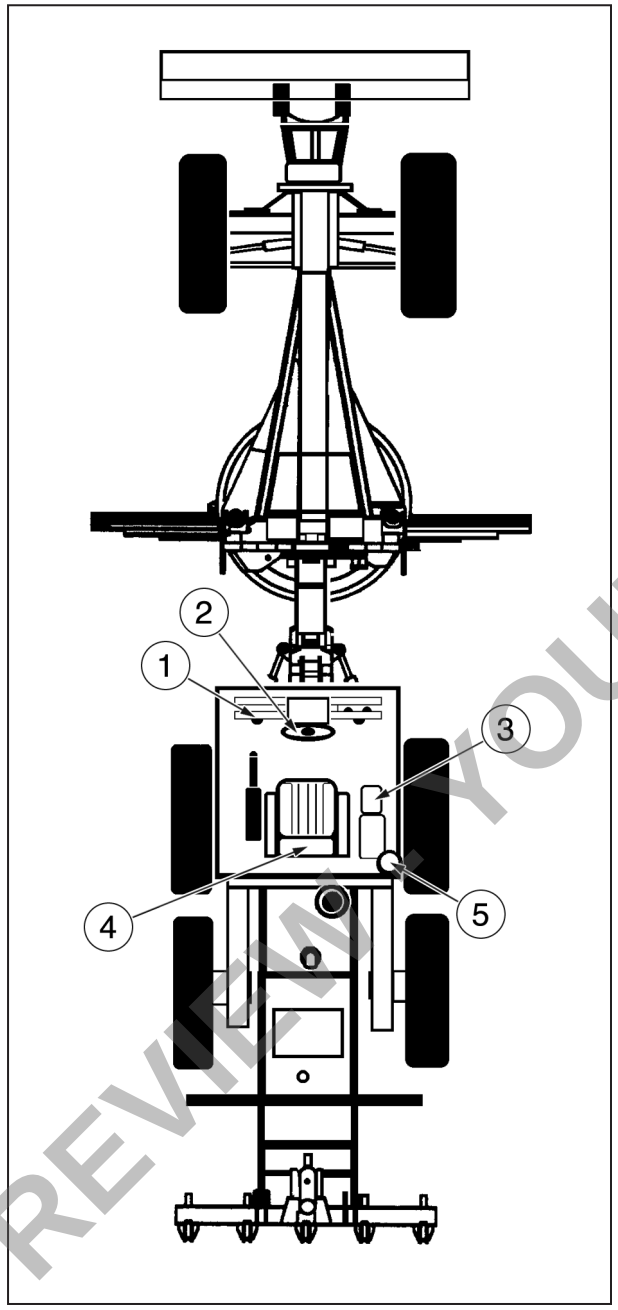
Download full manual at youfixthis.com

Chapter 3

INSTRUMENTS AND CONTROLS

OPERATOR'S COMPARTMENT

WARNING: *When the terms right and left are used in this manual, the reference point is the operator`s post (seat) in driving position, looking toward the front part of the machine.*



Some of the following descriptions and instructions refer to optional items. Consult your **CASE** dealer with respect to the optional equipment available for your machine.

To facilitate reading and learning about the instruments and controls of this machine, it has been separated in 5 groups, as shown in the figure.

GROUP 1

Implement control levers (left side).

Implement control levers (right side).

GROUP 2

Steering wheel, front console, instrument panel (digital), pedals, ignition switch and front console fuse box.

GROUP 3

Side console fuse box, control lever of manual accelerator, transmission control lever, switchboard and power takeoff (all models) and parking brake (only for 845B / 865B / 885B models with ZF transmission).

GROUP 4

Operator's seat, seat belt (all models) and parking brake (only for 845B / 865B / 885B models with FUNK transmission).

GROUP 5

Cab

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

LUBRICATION & MAINTENANCE CHART

	SERVICE POINTS	POINTS	VERIFY	REPLACE	LUBRICATE	ADJUST	CLEAN / DRAIN
As needed	Air cleaner (Note 1)	1	*				
	Hydraulic filter (Note 2)	1	*				
	Cab Air Filter (if equipped)	1	*				
	Batteries (See Electrical System)	2					*
10 hours or daily	Engine oil level (including filters)	1	10				
	Radiator (coolant level) (Note 3)	1	10				
	Transmission oil level (warm, engine running) (ZF and FUNK Transmission)	1	10				
	Differential Lock Oil Filter (if equipped)	1	10				
50 hours or weekly	Fuel Reservoir Filter (wash screen)	1					50
	Fuel Water Separator (drain water)	2					50
	Hydraulic tank (complete system)	1	50				
100 hours or each 15 days	Moldboard Lift Cylinder Pivots	4			100		
	Moldboard Lift Cylinders Balls	2			100		
	Moldboard Side Shift Cylinders Balls	2			100		
	Articulation of Tilt Cylinders	2			100		
	Moldboard Tilt Pivots	2			100		
	Articulation Cylinders Pivots	4			100		
	Articulation Bearings	2			100		
	Drawbar Ball and Socket	1			100		
250 hours or monthly	Alternator and Air Conditioner Belt	2	250				
	Universal Joints and Drive Shaft	2			250		
	Circle Turn Gearbox Oil Level	1	250				
	Differential Lock Oil Filter (if equipped)	1		250			
	Front Axle Pivot	2			250		
	Front Wheel Lean Bar Pivots	2			250		
	Front Wheel Lean Cylinder Pivots	2			250		
	Front Wheel Knuckle Lean Pivots	4			250		
	Knucle King Pin Bearings	4			250		
	Moldboard Lift Cylinder Articulation Bearings	2			250		
	Tandem Swing Bearing	2			250		
	Tires Condition and Pressure	6	250				
	Cab Air Filter (if equipped)	1					250
	Steering Bar Ball Joints	4			250		
	Moldboard Articulation Pivots	4			250		
	Moldboard Side Shift Pivots	2			250		

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Chapter 10
SPECIFICATIONS
ENGINE

845B Models Tier 3 – FPT 6.7

Model	Electronic Common Rail Fuel System, Water Cooled, 4 Cycle, Direct Injection, Open Combustion Chamber, Turbocharged and Charge Air Cooled.
Number of Cylinders	6
Displacement	6,7 liters (409 in^3)
Bore and Stroke	104,0 x 132,0 mm (4.09 x 5.17 in)
Fuel Pump	Bosch
Low Idle RPM	850±50 rpm
High Idle RPM	2420±50 rpm
Governed Speed	2200 rpm
Compression Ratio	17,5:1
Flywheel Housing	SAE 3 (DRY)
Power (SAE J1995, Gross)	
Low Curve	150 HP (112 kW) @ 2200 rpm *1
High Curve	173 HP (129 kW) @ 2200 rpm *2
Power (SAE J1349, Net at Flywheel)	
Low Curve	140 HP (104 kW) @ 2200 rpm *1
High Curve	163 HP (119 kW) @ 2200 rpm *2
Torque (SAE J1995, Maximum)	
Low Curve	486 ft.lb (659 N.m) @ 1500 rpm *1
High Curve	560 ft.lb (758 N.m) @ 1500 rpm *2
Torque (SAE J1349, Net)	
Low Curve	436 ft.lb (591 N.m) @ 1500 rpm *1
High Curve	500 ft.lb (678 N.m) @ 1500 rpm *2
Weight	550 kg (1212 lbs)
Firing Order	1-5-3-6-2-4
Water Pump Flow	52 GPM (197 LPM) @ 2200 rpm
Full Load Heat Rejection to Coolant	3805 BTU/min (66,9 kW) @ 2200 rpm
Engine Oil Pressure	
Low Idle	10 psi (69 kPa)
High Idle	55.1 psi (380 kPa)

NOTES: For models with ZF transmission

**1 Gears 1st, 2nd F and 1st, 2nd R*

**2 Gears 3rd, 4th, 5th, 6th F and 3rd R*

NOTES: For models with FUNK transmission

**1 Gears 1st, 2nd, 3rd F and 1st, 2nd R*

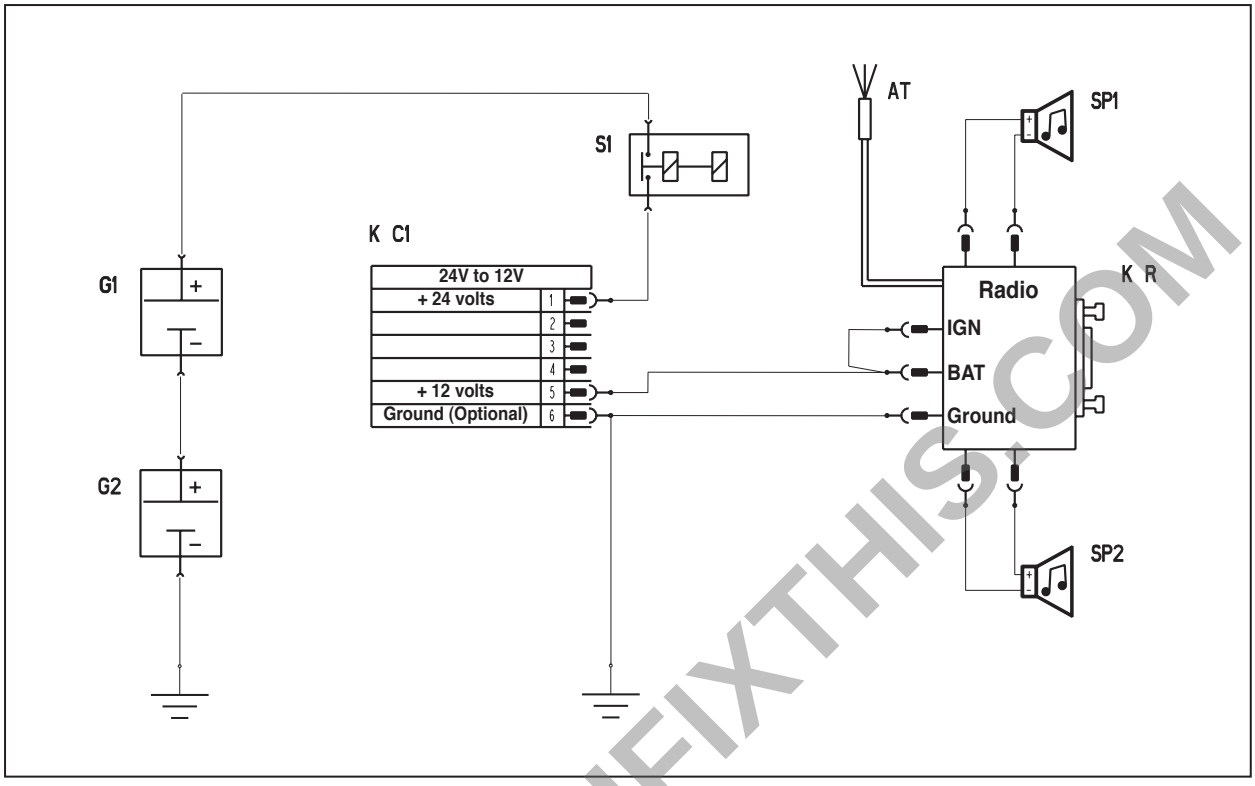
**2 Gears 4th, 5th, 6th, 7th, 8th F and 3rd, 4th R*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

RADIO

The radio supply power is 12V, obtained through a converter that transforms the 24V electric system of the machine.

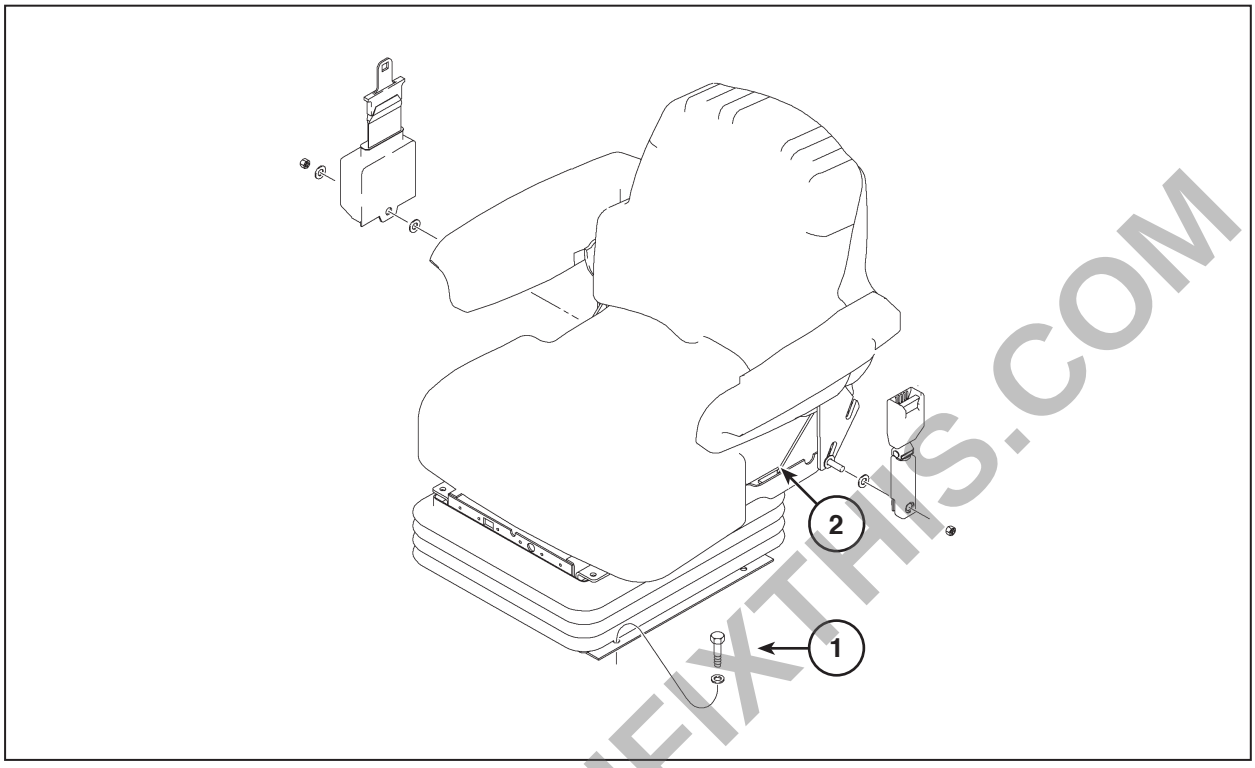


AT ANTENNA RADIO
G1 BATTERY 12V
G2 BATTERY 12V
K C1 CONVERTER VOLTAGE TO RADIO AND CIGARETTE LIGHTER 24/12 VOLTS
KR RADIO 12 VOLTS
S1 MASTER SWITCH
SP1 SPEAKER LH
SP2 SPEAKER RH

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TORQUE SPECIFICATIONS FOR SEAT AND SEAT BELTS



1. 73-87 NM (54-64 FT LB) 2. 54-61 NM (40-45 FT LB)

Operators Seat

Remove dust and dirt from the seat with a vacuum cleaner or soft brush. Clean stains with the correct use of a material cleaner.

Before removing stains, try to find what type and how old the stains are. Some stains can be removed with water or soap solution.

CLEANER FLUID – This type of cleaner can be used for grease or oil stains. Carefully remove the item that caused the stain with a scraper or a knife that is not sharp.

Use very little cleaner, no pressure, and clean cloths. Move the cloth from the outside of the stain toward the center of the stain and constantly change to a clean section of cloth.

When the stain is removed from the material, immediately use a cloth dry the area and to prevent a cleaner circle pattern. If a circle pattern occurs, clean the complete area.

NOTE: *A difficult stain may need a second application of cleaner fluid followed immediately by the use of a soft brush to completely remove the stain.*

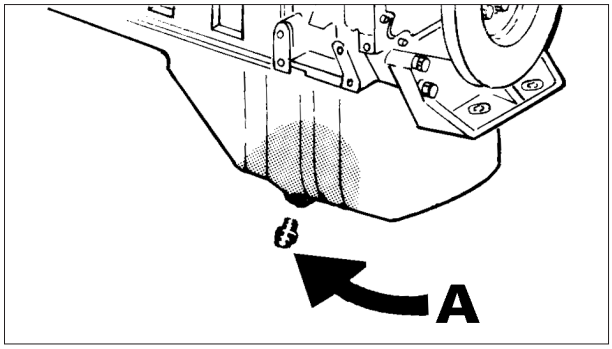
WARNING: *Never use gasoline, naphta or any other volatile material for any cleaning purposes. These materials may be toxic and / or flammable.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Engine Oil Change

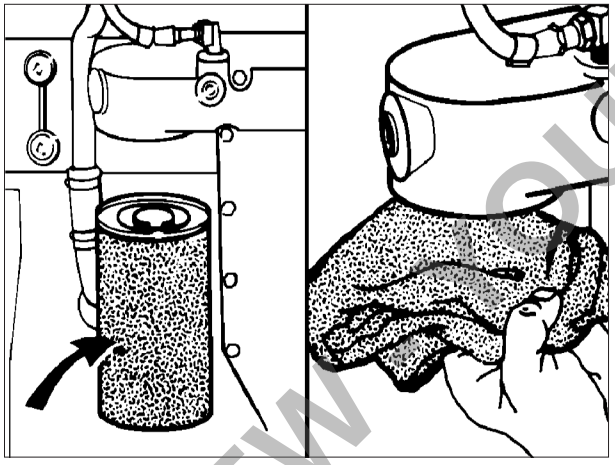
Make sure engine is at operating temperature. Shut-off the engine. Remove the drain plug (A) located on the lower right side of the engine crankcase and allow all the oil to drain. Make sure the seal is in good condition and install the drain plug.



Engine Drain Plug

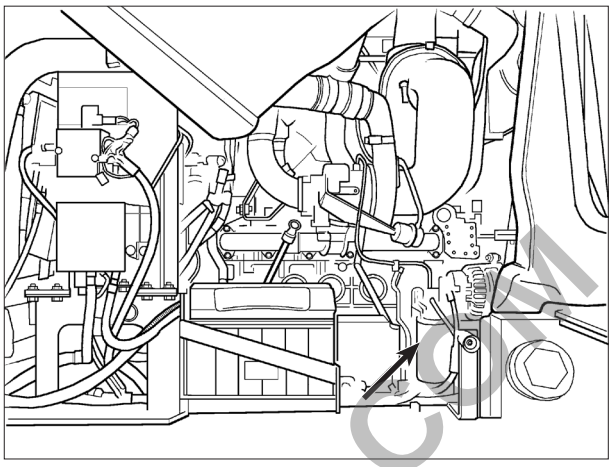
Remove the oil filter. Carefully clean the gasket seat on the filter.

NOTE: *The seal ring usually sticks on the mating surface of the filter head. Make sure to remove it.*



IMPORTANT: *Before installing, fill the oil filter with new and clean oil. Before installing the filter, apply also a light film of oil in the area of the filter gasket seal.*

IMPORTANT: *Tightening the filter with a wrench can damage it, therefore tighten it by hand. Then check if there are leaks around the base when the engine is running. Tighten it more if necessary. The proper torque is completed with 3/4" of a turn after contact by grasping the base with both hands.*



ENGINE OIL FILTER

Add specified oil, through the filler neck. Start the engine and keep it running for 15 minutes to fill the filters and lubricate the engine. Check the oil level and top off as necessary. Check if there is any leakage from the filters.

LUBRICATION ANALYSIS

The normal engine oil change interval is every 500 hours of operation or once a year whichever occurs first. Operating conditions, quality of the engine oil and sulphur content of the fuel can change this interval. It is recommended to use the Systemgard. Lubrication Analysis Program. See your dealer **CASE.**

IMPORTANT: *Never drain oil or remove oil filter while engine is running.*

> **WARNING:** *Replace all covers or guards after servicing or cleaning the machine. NEVER operate the machine with covers or guards removed.*

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

TABLE OF CONTENTS

Chapter 1

GENERAL INFORMATION

TO THE OWNER 1-1
OPERATOR MANUAL STORAGE COMPARTMENT 1-3
RIGHT, LEFT, FRONT AND REAR SIDES OF THE MACHINE 1-3
IDENTIFICATION NUMBERS 1-4
MACHINE COMPONENTS 1-7

Chapter 2

SAFETY / DECALS / HAND SIGNALS

SAFETY RULES 2-1
BEFORE OPERATION 2-2
MACHINE OPERATION 2-3
ADDITIONAL SAFETY RULES 2-5
PARKING THE MACHINE AND STOPPING THE ENGINE 2-6
BURN PREVENTION 2-6
FIRE EXTINGUISHER 2-6
FIRE OR EXPLOSION PREVENTION 2-7
MAINTENANCE 2-8
WHEEL AND TIRE MAINTENANCE 2-9
ROLL-OVER PROTECTIVE STRUCTURE (ROPS) 2-9
MAINTENANCE 2-10
READ OPERATORS MANUAL 2-13
SAFETY RULES 2-13
SYMBOLS 2-14
SAFETY DECALS 2-16
HAND SIGNALS 2-22

Chapter 3

INSTRUMENTS AND CONTROLS

OPERATOR'S COMPARTMENT 3-1
FRONT CONSOLE 3-2
GRADERS OPERATIONS WITH ZF POWER-SHIFT TRANSMISSION 3-36
GRADERS OPERATIONS WITH FUNK TRANSMISSION 3-39
PARKING BRAKE (845B / 865B / 885B MODELS WITH ZF TRANSMISSION) 3-41
AIR CONDITIONING, HEATING AND AIR CIRCULATING SYSTEM 3-42
OPERATORS SEAT 3-44
SEAT BELT 3-46
PARKING BRAKE (845B / 865B / 885B MODELS WITH FUNK TRANSMISSION) 3-46
CAB 3-47

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

ATTENTION: *THIS WARNING SYMBOL INDICATES AN IMPORTANT SAFETY MESSAGE CONTAINED IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, READ THE FOLLOWED MESSAGE CAREFULLY AND BE AWARE TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH.*

The alert symbol indicated on this machine use the words **Danger**, **Warning** or **Caution**, which are defined in the following way

- **DANGER:** indicates an immediate danger situation which, if not avoided, will cause death of severe injuries. The color associated to the Danger is RED.
- **WARNING:** indicates a potential danger situation which, if not avoided, will cause severe injuries. The color associated to Warning is ORANGE.
- **CAUTION:** indicates a potential danger situation which, if not avoided, may cause a minor or moderate injury. It can also be used to warn against unsafe practices. The color associated to Caution is YELLOW.

In case the Safety Decals of this machine are ISO two graphic panels type, the decals are defined as follows:

- The first plate indicates the nature of danger.
- The second plate indicates the proper actions to prevent the danger.
- The background color is YELLOW.
- Symbols of prohibition such as  and 

if used, are in RED.

⚠ WARNING

THE UNDUE OPERATION OF THIS MACHINE MAY CAUSE INJURY OR DEATH. BEFORE USING THIS MACHINE, MAKE SURE EACH OPERATOR:

- Has been instructed on the safety and proper use of the machine.
- Has read and understood the manual(s) which is (are) related to the machine.
- Has read and understood ALL alert symbol indicated on the machine.
- Has emptied the area.
- Learn and practice the safety information for this machine in an isolated area before operating it at a working place.

The operator is responsible for observing the corresponding laws and regulations, and following the instructions given by **CASE** on the operation and maintenance of the machine.

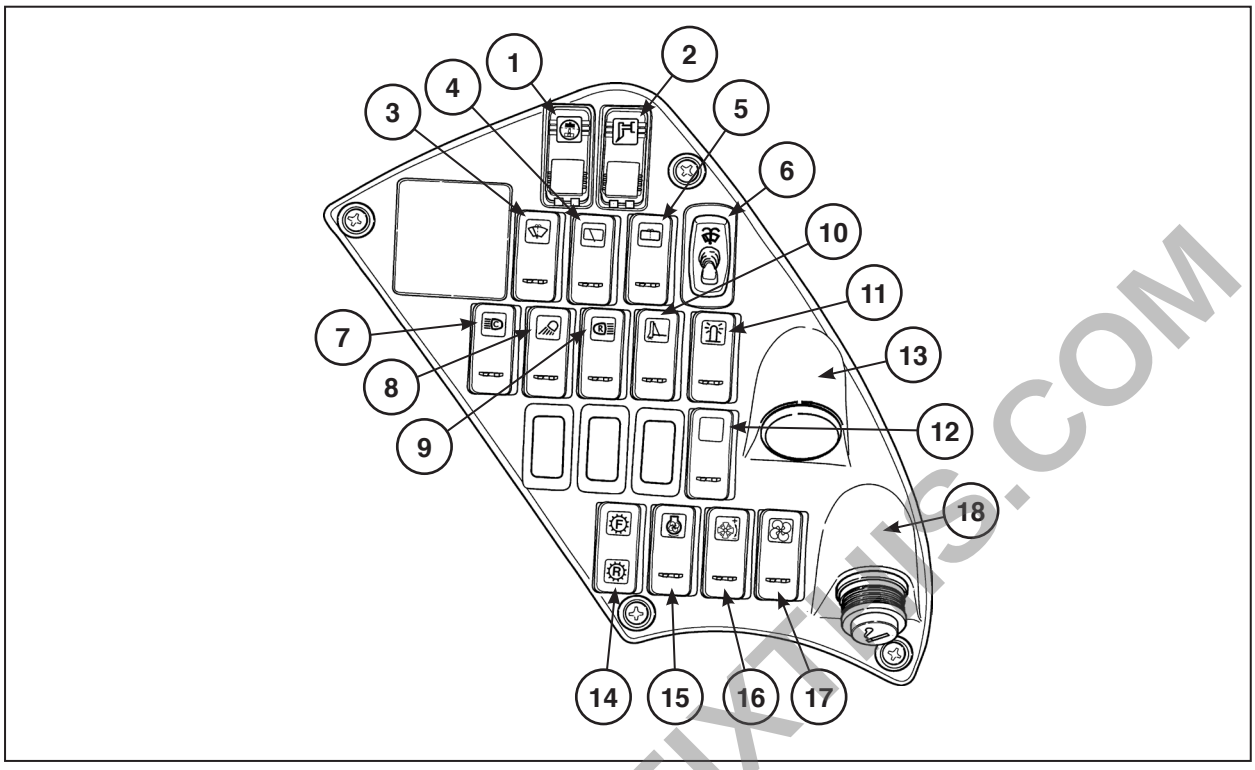
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

2B. SWITCHBOARD (845B / 865B / 885B MODELS WITH FUNK TRANSMISSION)



Side Console

The side console allows the operator to adjust the machine operations and functions. The side console contains also the air conditioning system controls.

1. SADDLE LOCK SWITCH

This switch applies and releases the saddle lock and is equipped with a safety lock. To release the saddle lock, slide the safety lock backwards and press the lower part of the switch. The saddle will be released. To lock again the saddle, press the upper part of the switch. The safety lock of the switch will be applied automatically in this position.

2. RIPPER OR SCARIFIER SWITCH (OPTIONAL)

This switch selects the use of the ripper or the scarifier and is equipped with a safety lock. This switch activates the solenoid valve that supplies hydraulic fluid to the ripper or scarifier cylinders. To activate the ripper, slide the safety lock backwards and press the lower part of the switch. To release the ripper, press the upper part of the switch. The safety lock of the switch will be applied automatically in this position.

3. LOWER FRONT WINDSHIELD WIPER / WASHER SWITCH (OPTIONAL)

Press the upper part of the switch and position it on the center position to turn-on the windshield wiper. Press one more time the upper part of the switch to activate the washer.

4. REAR WINDOW WIPER SWITCH (OPTIONAL)

Press the upper part of the switch to turn-on the wiper.

5. REAR WINDOW WASHER SWITCH (OPTIONAL)

Press the upper part of the switch to activate the washer.

6. FRONT WINDSHIELD WIPER / WASHER SWITCH WITH TIMER

OFF: The switch is on OFF position.

INTERMITTENT: Press the switch to the first position. There are six-speed positions for the intermittent windshield wiper.

LOW SPEED: Move the switch control to the front position so that the wiper runs continuously at low speed.

HIGH SPEED: Move the switch control forward to obtain high speed for the wiper.

WASH: Press the front end of the switch to activate the washer.

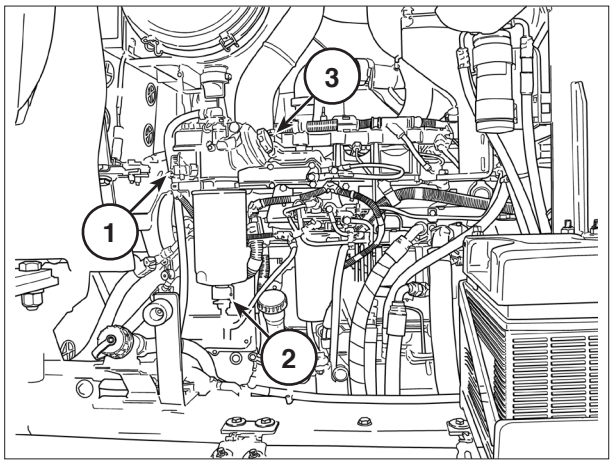
7. CAB FRONT HEADLIGHTS SWITCH

Press the upper part of the switch to turn-on the cab front headlights. Press the lower part of the switch to turn-off the cab front headlights.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Fuel System Air Bleed

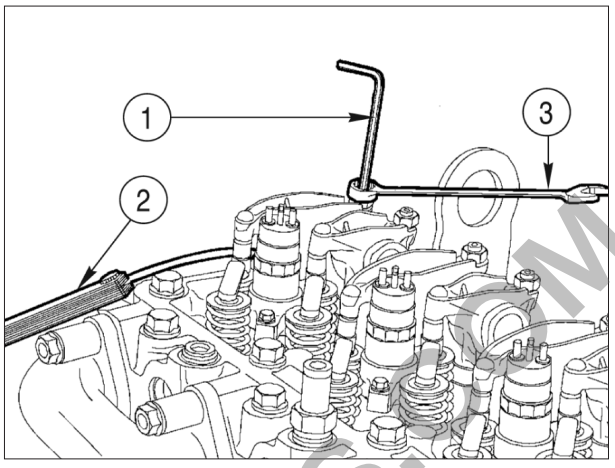


1. BLEEDER SCREW
2. DRAIN BOLT
3. PUMPING KNOB

1. Clean the area around the separator filter head to avoid contamination.
2. Completely loose the aluminum bleeder screw (1) located on the filter head.
3. Be sure that the drain bolt (2) on the lower part of the filter is completely tight.
4. Prime the knob (3) until the Diesel fuel comes out through the bleeder screw (1).
5. Tight the bleeding bolt (1).

Adjusting Engine Valves

Verify each 1000 hours



VALVE CLEARANCE

Adjust the clearance between the rockers and valves using a Allen tools kit (1), a wrench tool (3) and a feeler gauge (2).

Always adjust the valve clearance with engine cold, that is, with engine coolant temperature below 140ºF (60°C). First determine the top dead center (TDC) on engine nº 1 cylinder. To perform so, rotate the crankshaft slowly, using the adapter and gear of the manual rotating tool. Install the synchronizing pin and adjust the following valves: 1A, 1E, 2A, 3E, 4A, 5E. Remove the synchronizing pin, rotate the crankshaft 360° and install again the synchronizing pin. Perform the adjustment of the following valves: 2E, 3A, 4E, 5A, 6A, 6E. Clearance of valves must meet the specifications of table below

Valve clearance with engine cold:

Intake ..... 0.20 – 0.30 mm (0.008 – 0.012 in)

Exhaust ..... 0.46 – 0.56 mm (0.018 – 0.022 in)

NOTE: *The clearance will be correct when the feeler gauge is passed between the valve rod and the rocker, with a little resistance.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 208 pages

The full manual includes:

- All 208 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Case 845B VHP, 865B VHP, 885B VHP Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual