

Field Assembly Instruction

WHEEL LOADER

WA380-7

SERIAL NUMBERS 10001 and up

KOMATSU

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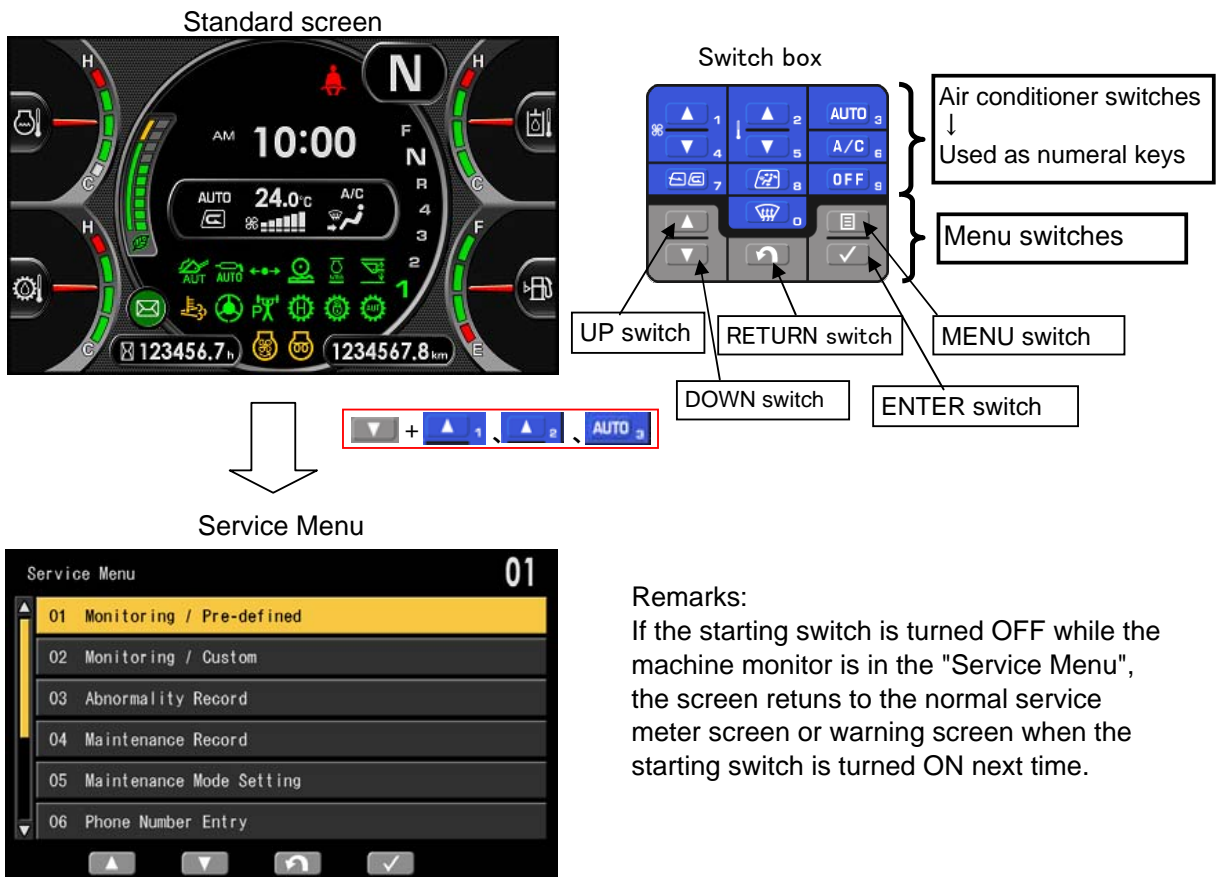
1. Operating method of machine monitor (Items common to all settings and adjustments)

When implementing the initial setting or option setting of the sensor, you must access the service mode of the machine monitor before starting the operation.

1-1. How to enter "Service Menu"

1-1-1. Operating method

Turn on the starting switch of the machine to turn on the machine monitor power. While the machine monitor's LCD unit is showing the standard service meter screen or the alarm screen, the screen moves to the service mode screen by pushing the "▲1", "▲2", and "AUTO3" numeral keys in order while holding down the DOWN (▼) switch.



Remarks:
If the starting switch is turned OFF while the machine monitor is in the "Service Menu", the screen returns to the normal service meter screen or warning screen when the starting switch is turned ON next time.

Precautions

Tools to be used

Facilities to be used

Tools to be used		Facilities to be used	
Name	Q'ty	Name	Q'ty

Others

1. Deletion of electrical system abnormality record

Delete the electrical system abnormality record according to the following procedure.

- ① While [01 Monitoring / Pre-defined] is selected in the "Service Menu", select [03 Abnormality Record] with the UP (▲) and DOWN (▼) switches.

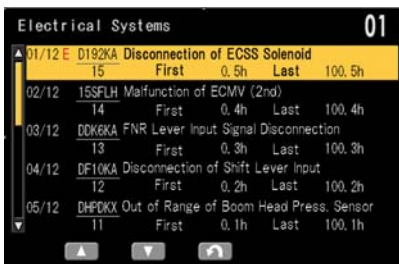
(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)



- ② Press the ENTER switch, and the screen moves to the "Abnormality Record" screen.



- ③ Select [02 Electrical Systems] with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Electrical Systems" screen.



On the "Electrical Systems" screen, the abnormality records saved currently are displayed.
(Up to 20 records are saved and deleted from the oldest one)

Precautions

Tools to be used

Facilities to be used

Name

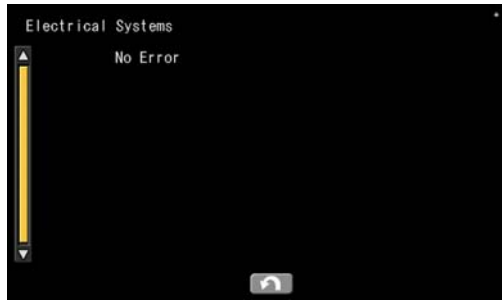
Q'ty

Name

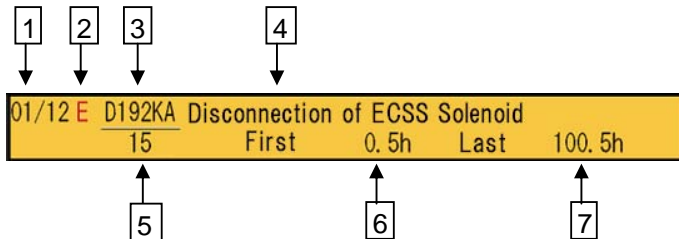
Q'ty

Others

If "No Error" is displayed on the "Electrical Systems" screen at this time, there is no electrical system abnormality record, thus the operation for deletion is not necessary.



Remarks: How to read abnormality record



- (1) Indicates the chronological order of the abnormality
- (2) Indicates if the abnormality is currently occurring
Indicates E if the abnormality is occurring currently
Indicates nothing if the abnormality is not concurrently currently
- (3) Indicates the unified failure code (6 digits)
- (4) Indicates the failure code
- (5) Indicates the number of occurrences of the abnormality
- (6) Indicates the service meter reading when the abnormality occurred for the first time
- (7) Indicates the service meter reading when the abnormality occurred last time

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

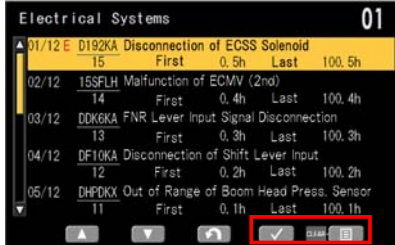
Name

Q'ty

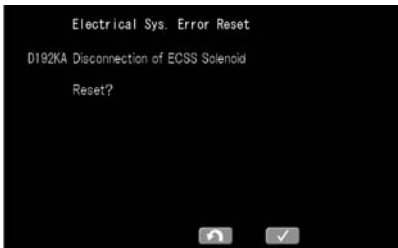
Others

1-1. Deletion of one electrical system abnormality record

① On the "Electrical Systems" screen, press the "▲1", "▲2", and "AUTO3" numeral keys in order while holding down the DOWN (▼) switch, and the ENTER switch and MENU switch are enabled and their icons are displayed at the bottom of the screen.



② Select an abnormality record that you desire to delete with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Electrical Sys. Error Reset" screen.



③ Press the ENTER switch, and the screen moves to the following screen and the record is deleted.



④ After the abnormality record is deleted, the screen moves to the "Electrical Systems" screen. Check that the selected record has been deleted.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

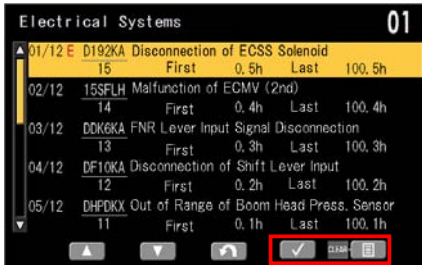
Name

Q'ty

Others

1-2. Deletion of all electrical system abnormality records

① On the "Electrical Systems" screen, press the "▲1", "▲2", and "AUTO3" numeral keys in order while holding down the DOWN (▼) switch, and the ENTER switch and MENU switch are enabled and their icons are displayed at the bottom of the screen.



② Press the menu switch, and the screen moves to the "Electrical Systems" screen.



③ Press the ENTER switch, and the screen moves to the following screen and the record is deleted.



④ After the abnormality records are deleted, the screen moves to the "Electrical Systems" screen. Check that all the records have been deleted.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Others			

1. Selection of options

Select options according to the following procedure.

- ① While [01 Monitoring / Pre-defined] is selected in the "Service Menu", select [07 Default] with the UP (▲) and DOWN (▼) switches.

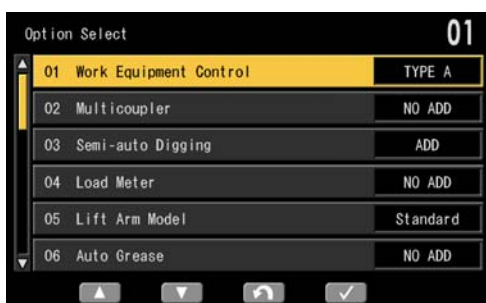
(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)



- ② Press the ENTER switch, and the screen moves to the "Default" screen.



- ③ Select [02 Option Select] with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Option Select" screen.



Precautions

Tools to be used

Name	Q'ty

Facilities to be used

Name	Q'ty

Others

1-1. Option selecting function

* An option setting is enabled when the starting switch is turned ON after changing the setting and the starting switch is turned OFF and each controller on the machine is turned off perfectly (about 15 seconds later).

On the "Option Select" screen, select an item with the UP (▲) and DOWN (▼) switches and determine it with the ENTER switch, and set each item in order.

★ Optional components installation setting table

Item name	Default	Remarks
Work Equipment Control	TYPE A	See "1-2. Change or setting of "Work Equipment Control""
Multicoupler	NO ADD	Perform following setting according to installation state of option and destination · If option is installed and destination is inside Japan, set "JAPAN SPEC" · If option is installed and destination is outside Japan, set "OTHERS" · If option is not installed, set "NO ADD"
Semi-auto Digging	ADD	Set "ADD" and do not change
Load Meter	NO ADD	If option is installed, select "ADD" (only JPN specification)
Boom specification	Standard	Perform following setting according to boom specification · If STD boom is installed, select "Standard" · If high-lift boom (optional) is installed, select "High Lift"
Auto Grease	NO ADD	If option is installed, select "ADD" (only EU specification)
Battery Electrolyte Level Sensor	NO ADD	Set "NO ADD" and do not change
Tire Size Compensation	0%	If displayed travel speed is not correct, adjust it with this function If setting is increased 1%, travel speed increases 1% from 0%.
Tire Type	A	When tire of type 23.5 is installed, select "B" (Do not select A which is for setting of tire of type 20.5)
Emergency Steering	ADD	If option is not installed, select "NO ADD"
J/S or FNR SWITCH	NON	When MF lever or right FNR (forward-reverse) switch is installed, select "OPT FNR".
Lift Up Mode	ADD	Set "ADD" and do not change
E.C.S.S.	ADD	Set "ADD" and do not change
Torque Converter Lockup	NO ADD	Set "ADD" and do not change
4th Gear Prohibition	NO ADD	Set "NO ADD" and do not change
Two Stage Low Idle	NO ADD	Perform following setting according to installation state of option and destination · If option is installed and destination is inside Japan, set "HEATER" · If option is installed and destination is outside Japan, set "KOHAG" · If option is not installed, set "NO ADD"
F1 PWR CUT	ADD	Set "ADD" and do not change
Komatsu SmartLoader Logic	ADD	Set "ADD" and do not change

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

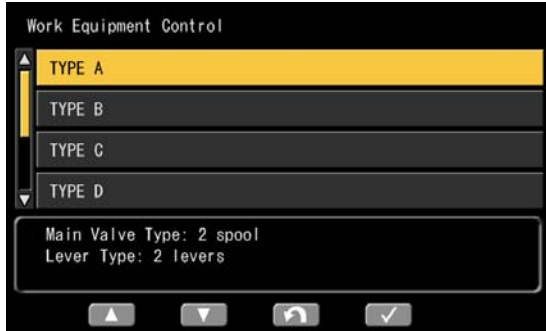
Name

Q'ty

Others

1-2. Change or setting of "Work Equipment Control"

① On the "Option Select" screen, select "01 Work Equipment Control" with the UP (▲) and DOWN (▼) switches.
Press the ENTER switch, and the screen moves to the "Work Equipment Control" setting screen.



② Select related specification from TYPES A to G with the UP (▲) and DOWN (▼) switches and enter it with the ENTER switch.

③ After setting is completed, the screen returns to the "Option Select" screen automatically.

- TYPE A
Main valve type: 2-spool valve
Lever type: 2 lever
- TYPE B
Main valve type: 2-spool valve
Lever type: MF lever
- TYPE C
Main valve type: 3-spool valve
Lever type: 3 lever
- TYPE D
Main valve type: 3-spool valve
Lever type: MF lever and PCS
- TYPE E
Main valve type: 4-spool valve
Lever type: Mono lever and 2 levers
- TYPE F
Main valve type: 4-spool valve
Lever type: Mono lever and Mono lever
- TYPE G
Main valve type: 4-spool valve
Lever type: MF lever, PCS and 1 lever

Remarks:

The following option selections cannot be set, depending on a type set with the "Work Equipment Control".

- Semi-auto Digging
- Load Meter
- Boom Model

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

1-3. Setting of "Tire Size Compensation"

- ① On the "Option Select" screen, select "08 Tire Size Compensation" with the UP (▲) and DOWN (▼) switches. Press the ENTER switch, and the screen moves to the "Tire Size Compensation" screen.



- ② The set value is increased 1% with the UP (▲) switch and decreased 1% with the DOWN (▼) switch. Enter the setting with the Enter switch
- ③ After setting is completed, the screen returns to the "Option Select" screen automatically.

1-4. Selection of setting/no-setting of options

- ① Change each item which is applicable to setting/no-setting selection in the "Optional component installation setting table" by the following setting.

* When each option is not selected, "NO ADD" is displayed. If the option is selected, "ADD" is displayed.

- ② "NO ADD" and "ADD" can be selected with the UP (▲) and DOWN (▼) switches and entered with the ENTER switch.



Precautions

Tools to be used

Name	Q'ty

Facilities to be used

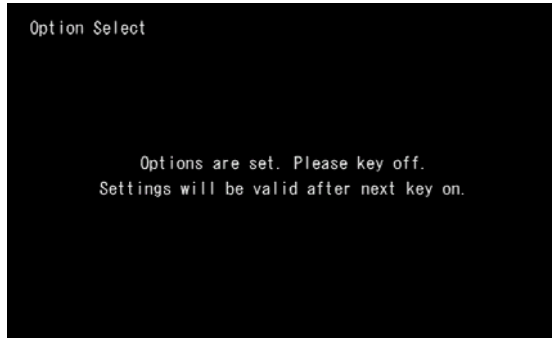
Name	Q'ty

Others

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1-5. Saving of selection of options

① After setting each item, turn OFF the option setting screen with the RETURN switch, and the following screen appears.



② Turn the starting switch to the OFF position to stop the operation of the controller completely.

*If any option was selected, be sure to turn the starting switch to the OFF position and wait for about 15 seconds, and then turn the starting switch to the ON position again.

③ When the starting switch is turned to the ON position, the set option selection is enabled.

Remarks:

After ②, if the starting switch is turned to the ON position without waiting for 15 seconds, an error warning alert is displayed.

If an error warning alert is displayed, turn the starting switch to the OFF position again, wait for at least 15 seconds, and then turn the starting switch to the ON position, and the error is turned OFF.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

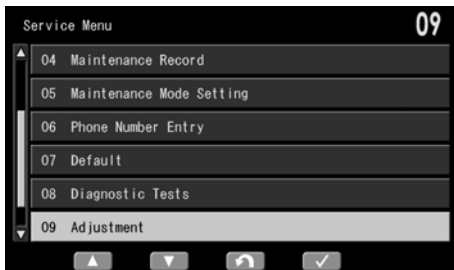
Others

1. Adjustment of boom angle

Adjust the work equipment controller boom angle according to the following procedure.

While [01 Monitoring / Pre-defined] is selected in the "Service Menu", select [09 Adjustment] with the UP (▲) and DOWN (▼) switches.

(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)

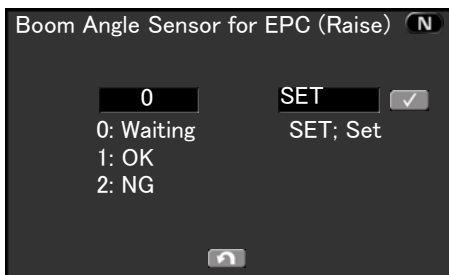


Press the ENTER switch, and the screen moves to the "Adjustment" screen.



1-1. Adjustment of Boom angle (RAISE)

① Select [06 Boom Angle Sensor for EPC (Raise)] with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Boom Angle Sensor (Raise)" adjustment screen.



Precautions

Tools to be used

Name	Q'ty

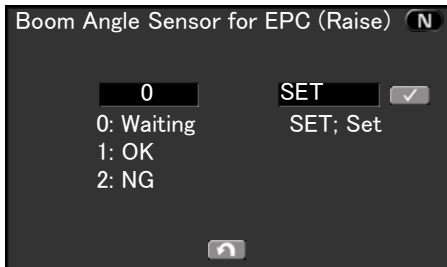
Facilities to be used

Name	Q'ty

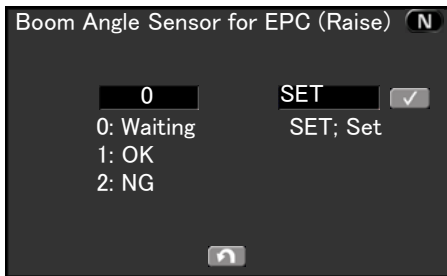
Others

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- ② Raise the boom to the upper limit (cylinder stroke end) and then press the ENTER switch.
- ③ When the display changes to "1", adjustment is completed.
- ④ Press the ENTER switch to finish the adjustment mode.
If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.



- ⑤ If the display changes to "2", the boom angle voltage is out of specification and adjustment is not performed.



- ⑥ If adjustment is not performed, check the boom angle sensor by "monitoring".
- ⑦ Adjust the boom angle sensor installation position so that the voltage displayed by monitoring is in the following range, and then adjust the angle sensor again.

Boom specification	Boom position	Voltage range
STD	Highest	3.77 ± 0.3 V
Hi Lift		3.90 ± 0.3 V

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

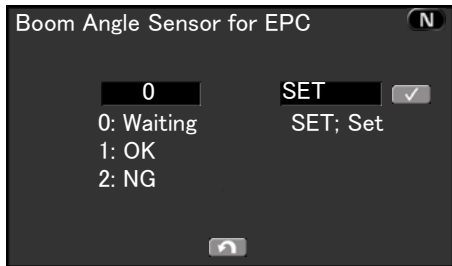
Name

Q'ty

Others

1-2. Adjustment of boom angle (LOWER)

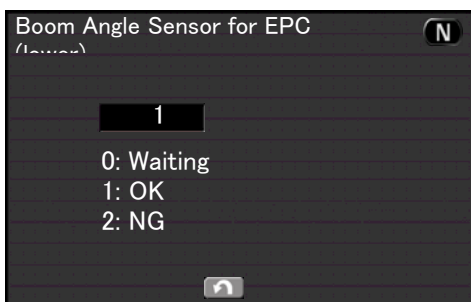
① Select [07 Boom Angle Sensor for EPC (Lower)] with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Boom Angle Sensor (Lower)" adjustment screen.



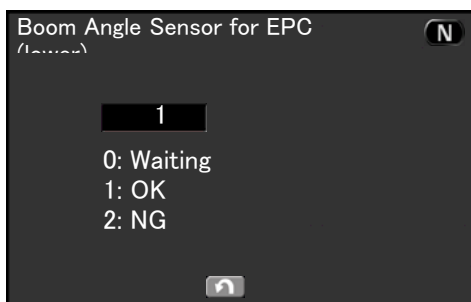
② Lower the boom to the lower limit (cylinder stroke end) and then press the ENTER switch.

③ When the display changes to "1", adjustment is completed.

④ Press the ENTER switch to finish the adjustment mode. If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.



⑤ If the display changes to "2", the boom angle voltage is out of specification and adjustment is not performed.



Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

Assembly procedur NO.0040

Adjustment of work equipment controller boom angle

- ⑥ If adjustment is not performed, check the boom angle sensor by "monitoring".
- ⑦ Adjust the boom angle sensor installation position so that the voltage displayed by monitoring is in the following range, and then adjust the angle sensor again.

Boom specification	Boom position	Voltage range
STD	Lowest	1.37 ± 0.3 V
Hi Lift		1.53 ± 0.3 V

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

1. Adjustment of work equipment (loader) pump displacement

1-1. Check of items

*Perform the following correction while the engine is running.

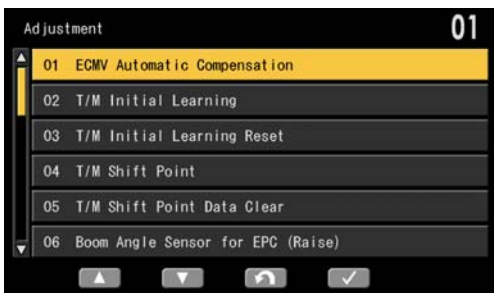
*When the following correction is performed, the hydraulic oil temperature must be within the operating range.

- ① Lower the bucket on the ground and place it horizontally. (The ground surface must be level.)
- ② While [01 Monitoring / Pre-defined] is selected in the service menu, select [09 Adjustment] with the UP (▲) and DOWN (▼) switches.

(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)



- ③ Press the ENTER switch, and the screen moves to the "Adjustment" screen.



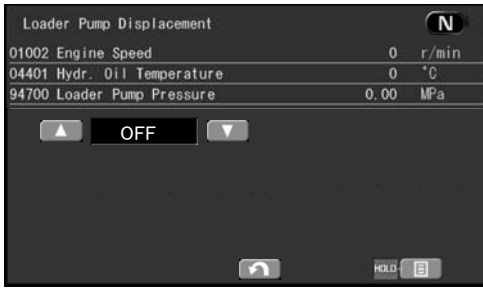
- ④ Select Adjustment item No. 16, Loader Pump Displacement with the UP (▲) and DOWN (▼) switches.



Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Stopwatch	1		
	Others			

Assembly procedur NO.0050 Adjustment of work equipment pump

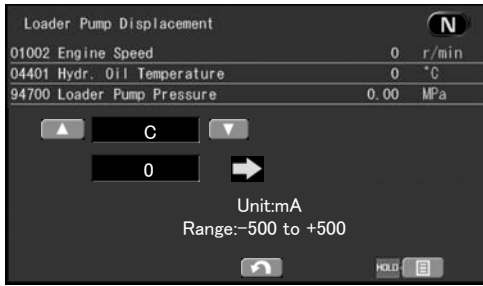
⑤ Press the ENTER switch, and the screen for adjusting the loader pump displacement appears.



⑥ Select "C" with the UP (▲) and DOWN (▼) switches.

* Do not adjust A or B.

If you input a value by mistake, return it to "0".



⑦ While this screen is displayed, run the engine at low idle, hold the boom lever just before the RAISE detent notch (do not set it in the RAISE detent), raise the boom from the ground to the maximum height, and measure the required time for this operation.

* Perform this adjustment with the boom positioner OFF.

* The work equipment speed is lower than usual during this adjustment. Take care.

⑧ Input the following correction value according to the time measured in "(7)".

(For the inputting method, see (9) and after)

- If the boom raising time is 18 to 35 seconds, no adjustment is required.
- If the boom raising time is shorter than 18 seconds, increase the current by 65 mA.
- If the boom raising time is longer than 35 seconds, decrease the current by 65 mA.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

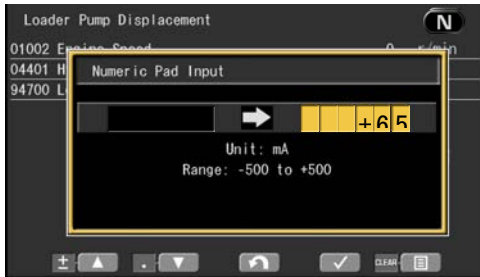
Name

Q'ty

Others

Assembly procedur NO.0050 Adjustment of work equipment pump

⑨ Press a numeral key (any of 0 to 9) to display the screen for inputting numerals.



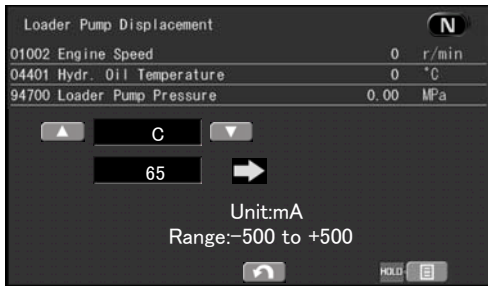
⑩ Input a value with the numeral keys and press the ENTER switch.

UP (▲) switch: Change +/-.

DOWN (▼) switch: Input a decimal point.



⑪ Press the ENTER switch again and check that the input value is displayed under the display of "C".



⑫ While this screen is displayed, run the engine at low idle and raise the boom from the ground to the maximum height again and measure the required time for this operation.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

1. Adjustment of work equipment EPC lever detent position

1-1. Check of items

*Perform the following correction with the engine stopped.

- ① While [01 Monitoring / Pre-defined] is selected in the "Service Menu", select [09 Adjustment] with the UP (▲) and DOWN (▼) switches.

(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)



- ② Press the ENTER switch, and the screen moves to the "Adjustment" screen.



- ③ Select a work equipment EPC adjustment item from adjustment items No. 08 to No. 10 with the UP (▲) and DOWN (▼) switches.

Boom RAISE :No.08
 Boom LOWER :No.09
 Bucket TILT :No.10

* Respective items must be set up independently

08 Boom Raise Adjustment	Boom RAISE
09 Boom Lower Adjustment	Boom LOWER
10 Bucket Tilt Adjustment	Bucket TILT

Precautions

Tools to be used

Name	Q'ty

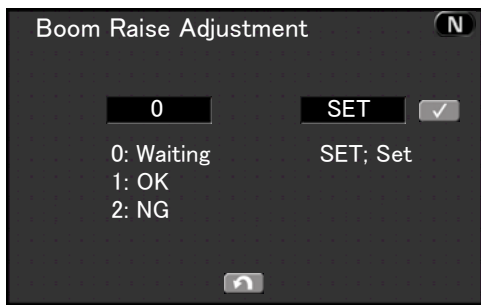
Facilities to be used

Name	Q'ty

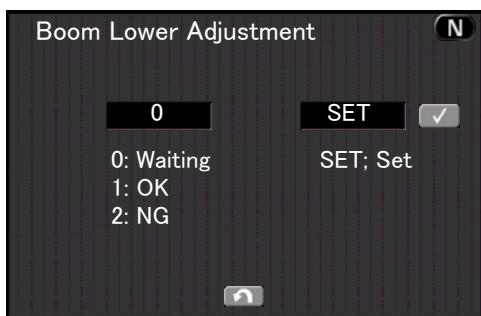
Others

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④ Press the ENTER switch, and the work equipment EPC lever detent set screen appears.



Boom RAISE



Boom LOWER



Bucket TILT

*After performing steps ① to ④ of this process, perform adjustment steps ⑤ and after in "Adjustment of each EPC lever" on the following page.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

1-2. Adjustment of each EPC lever

*After performing steps ① to ④ of No. 0060 "Adjustment of work equipment EPC lever detent position", perform the following work.

The screen displays the "Work equipment EPC lever detent set" in previous step ④.

[Adjustment of boom RAISE detent position]

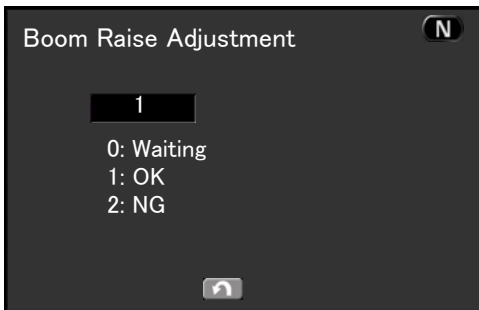
*Perform the following correction with the engine stopped.

⑤-1. Lower the boom to the ground.

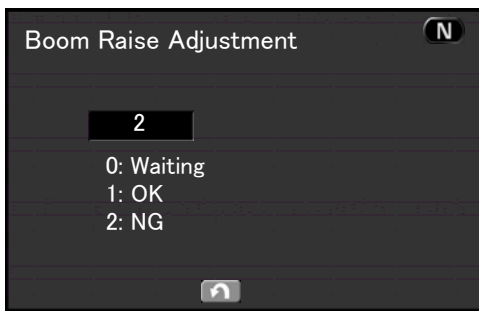
⑥-1. Stop and hold the boom lever just before the RAISE detent position.

⑦-1. Press the ENTER switch, and the lever voltage is read and the standard value is changed and saved.

⑧-1. When the display changes to "1", setting is completed.



⑨-1. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-1. Finish the adjustment mode with the RETURN switch.

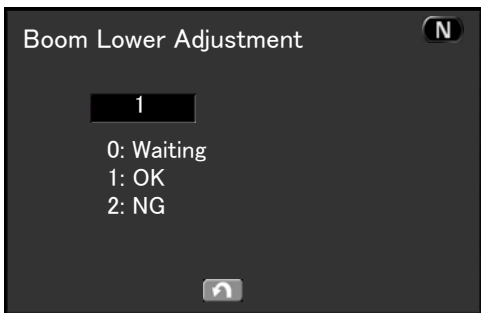
If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
Others				

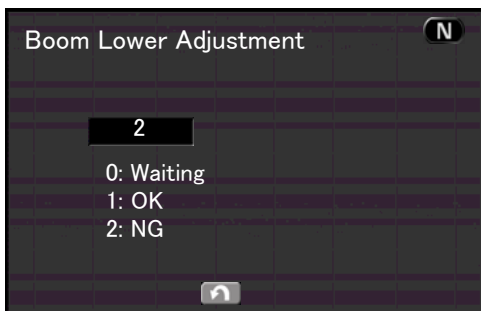
[Adjustment of boom LOWER (FLOAT) detent position]

*Perform the following correction with the engine stopped.

- ⑤-2. Lower the boom to the ground.
- ⑥-2. Stop and hold the boom lever just before the FLOAT detent position.
- ⑦-2. Press the ENTER switch, and the lever voltage is read and the standard value is changed and saved.
- ⑧-2. When the display changes to "1", setting is completed.



⑨-2. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-2. Finish the adjustment mode with the RETURN switch.

If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

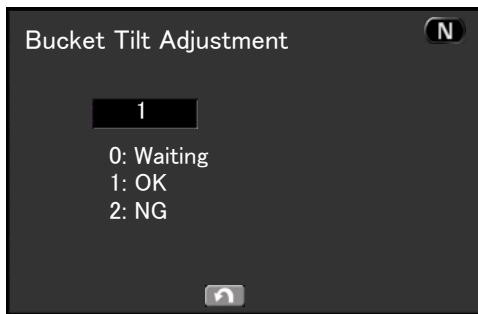
Q'ty

Others

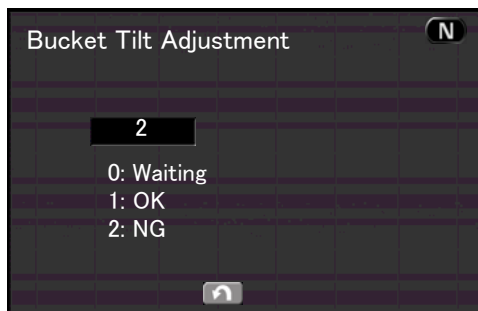
[Adjustment of bucket tilt detent position]

*Perform the following correction with the engine stopped.

- ⑤-3. Lower the boom to the ground.
- ⑥-3. Stop and hold the bucket lever just before the TILT detent position.
- ⑦-3. Press the ENTER switch, and the lever voltage is read and the standard value is changed and saved.
- ⑧-3. When the display changes to "1", setting is completed.



⑨-3. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-3. Finish the adjustment mode with the RETURN switch.

If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Others			

1. Adjustment of work equipment EPC starting current

1-1. Check of items

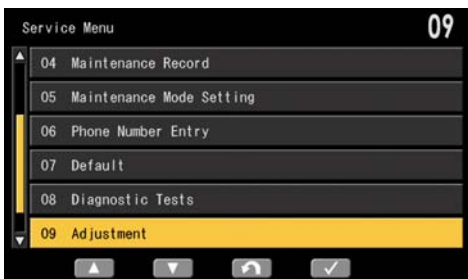
*Perform the following correction while the engine is running.

- ① While [01 Monitoring / Pre-defined] is selected in the service menu, select [09 Adjustment] with the UP (▲) and DOWN (▼) switches.

(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)



- ② Push the ENTER switch, and the screen moves to the "Adjustment" screen.



- ③ Select a work equipment EPC adjustment item from adjustment items No. 08 to No. 10 with the UP (▲) and DOWN (▼) switches.

Boom RAISE :No.08
 Boom LOWER :No.09
 Bucket TILT :No.10
 Bucket DUMP :No.11

* Respective items must be set up independently

- 08 Boom Raise Adjustment Boom RAISE
- 09 Boom Lower Adjustment Boom LOWER
- 10 Bucket Tilt Adjustment Bucket TILT
- 11 Bucket Dump Adjustment Bucket DUMP

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

④ Press the ENTER switch, and the work equipment EPC lever detent set screen appears.



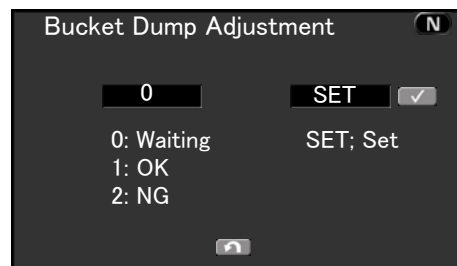
Boom RAISE



Boom LOWER



Bucket TILT



Bucket DUMP

*After performing steps ① to ④ of this process, perform adjustment steps ⑤ and after in "Adjustment of each EPC lever" on the following page.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Others			

1-2. Adjustment of each EPC lever

*After performing steps ① to ④ of No. 0070 "Adjustment of work equipment EPC starting current", perform the following work.

The screen displays the "Work equipment EPC lever detent set" in previous step ④.

[Adjustment of boom LOWER]

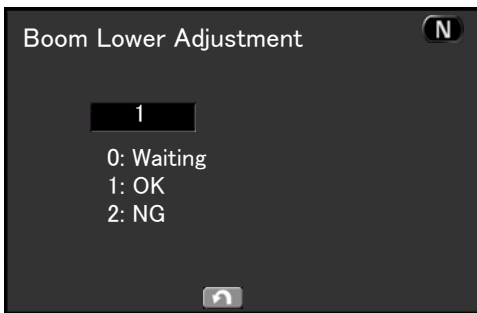
*Perform the following correction while the engine is running.

⑤-1. Set the boom almost horizontally with no-load and then lower it gradually with the engine speed at high idle.

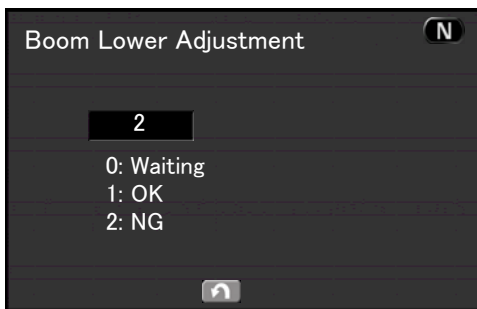
⑥-1. Slowly return the boom lever from LOWER toward NEUTRAL with fine control. When the boom stops, hold the lever at the current position.

⑦-1. Press the ENTER switch, and the EPC command value is read and the difference from the standard value is saved as an offset value.

⑧-1. When the display changes to "1", setting is completed.



⑨-1. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-1. Finish the adjustment mode with the RETURN switch.

If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

[Adjustment of bucket DUMP]

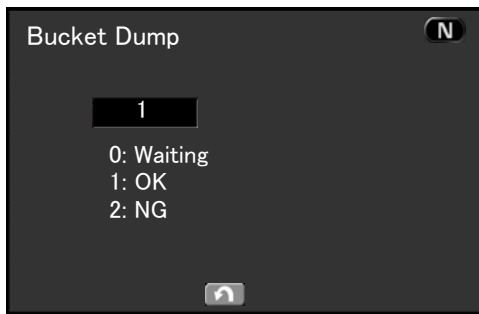
*Perform the following correction while the engine is running.

⑤-2. Set the boom almost horizontally with no-load and then dump it gradually with the engine speed at high idle.

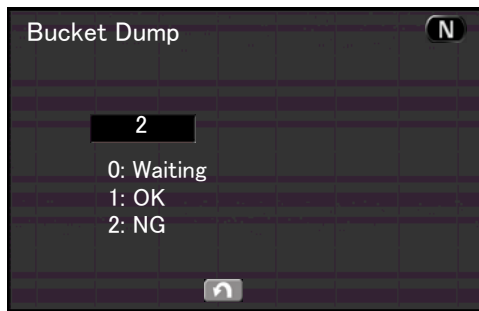
⑥-2. Slowly return the bucket lever from DUMP toward NEUTRAL with fine control. When the bucket stops, hold the lever at the current position.

⑦-2. Press the ENTER switch, and the EPC command value is read and the difference from the standard value is saved as an offset value.

⑧-2. When the display changes to "1", setting is completed.



⑨-2. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-2. Finish the adjustment mode with the RETURN switch.

If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Others			

[Adjustment of boom RAISE]

*Perform the following correction while the engine is running.

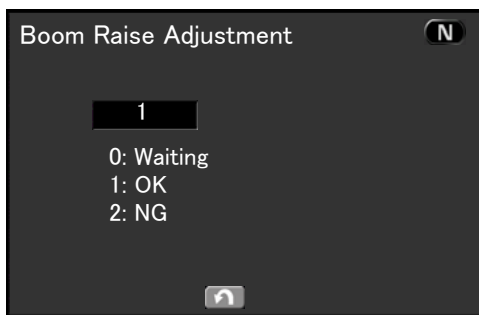
⑤-3. Dump the bucket fully with the boom in the horizontal position, and then lower the boom to raise the front tires.

While running the engine at high idle, raise the boom (lower the machine) gradually.

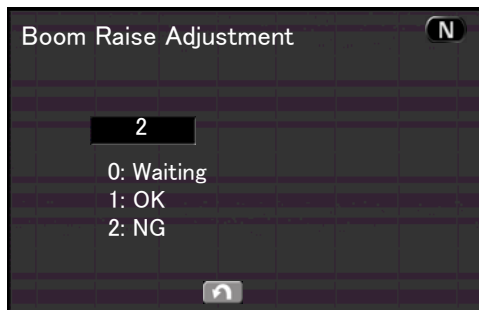
⑥-3. Slowly return the boom lever from RAISE toward NEUTRAL with fine control. When the boom stops (with the tires floated), hold the lever at the current position.

⑦-3. Press the ENTER switch, and the EPC command value is read and the difference from the standard value is saved as an offset value.

⑧-3. When the display changes to "1", setting is completed.



⑨-3. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-3. Finish the adjustment mode with the RETURN switch.

If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Others			

[Adjustment of bucket TILT]

*Perform the following correction while the engine is running.

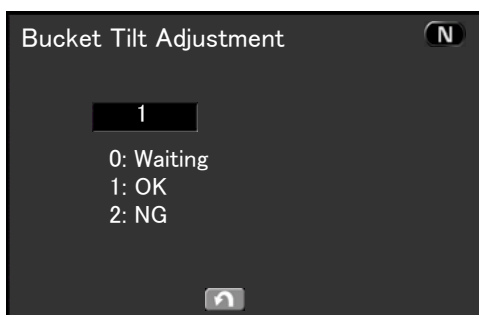
⑤-4. Dump the bucket fully with the boom in the horizontal position, and then lower the boom to raise the front tires.

While running the engine at high idle, tilt the lift arm (lower the machine) gradually.

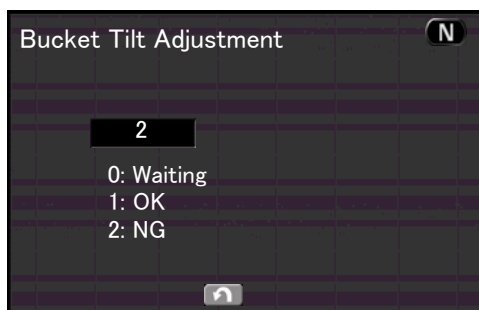
⑥-4. Slowly return the bucket lever from TILT toward NEUTRAL with fine control. When the bucket stops (with the tires floated), hold the lever at the current position.

⑦-4. Press the ENTER switch, and the EPC command value is read and the difference from the standard value is saved as an offset value.

⑧-4. When the display changes to "1", setting is completed.



⑨-4. If the ENTER switch is pressed while the lever output voltage is below the standard value (out of the design range), the display changes to "2" and adjustment is canceled.



⑩-4. Finish the adjustment mode with the RETURN switch.

If the RETURN switch is pressed during adjustment, adjustment is finished even in the calibration process.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

1. Setting of bucket positioner

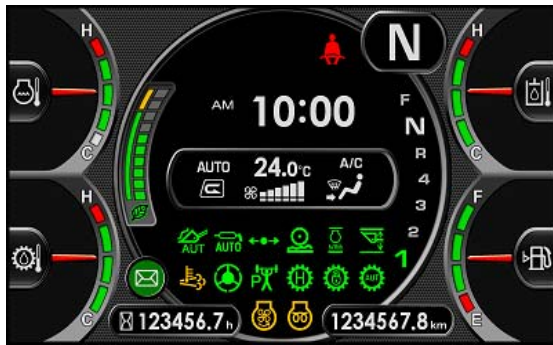
Set the bucket positioner by entering the user menu of the machine monitor.

1-1. How to enter user menu

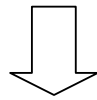
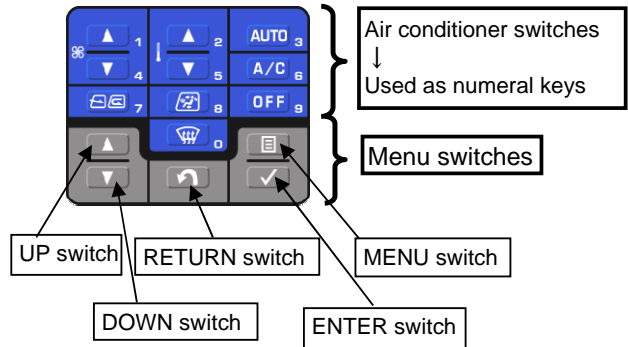
Turn the starting switch of the machine to the ON position to turn on the machine monitor power.

While the LCD unit of the machine monitor is displaying the standard service meter screen, push the menu switch, and the screen moves to the User menu screen.

Standard screen



Switch box



User menu



Remarks:

If the starting switch is turned to the OFF position in the "Service Menu", the screen returns to the standard service meter screen when the starting switch is turned to the ON position next time.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

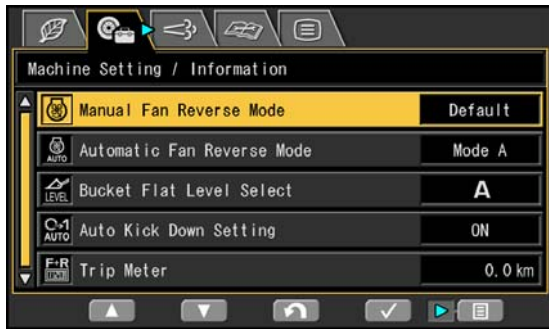
Name

Q'ty

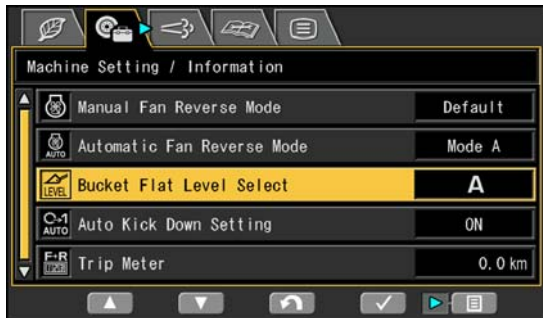
Others

1-2. Setting of bucket positioner

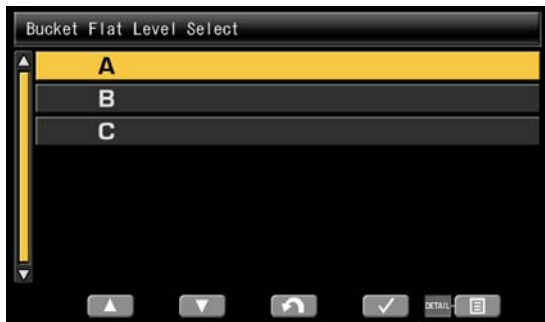
① On the "ECO Guidance" screen of the user mode, operate the menu switch to display the "Machine Setting / Information" screen.



② Select [Bucket Flat Level Select] with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Bucket Flat Level Select" screen.



ENTER switch



Remarks:
 The bucket flat level can be recorded at three places of A, B, and C.
 With the flat level of the standard bucket recorded at A, the flat level of the fork can be set at B.

Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
	Others			

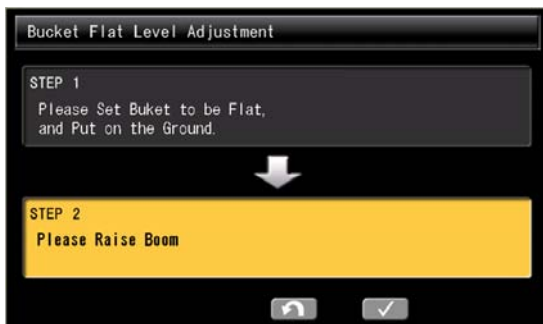
③ Select an item to record a flat level with the UP (▲) and DOWN (▼) switches and press the MENU switch, and the screen moves to the "Bucket Flat Level Adjustment" screen.



④ Press the ENTER switch while the "Bucket Flat Level Adjustment" is selected, and the following screen appears.



⑤ Set the bucket flat and lower it to the ground according to the instruction on the screen, and then press the ENTER switch, and the following screen appears.



Precautions

Tools to be used

Name	Q'ty

Facilities to be used

Name	Q'ty

Others

--

⑥ Raise the boom to the upper limit according to the instruction on the screen, and setting is completed and the following screen appears.



⑦ If the bucket lever is operated while the boom is raised, setting cannot be performed. In this case, setting is canceled and the following screen appears.



Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

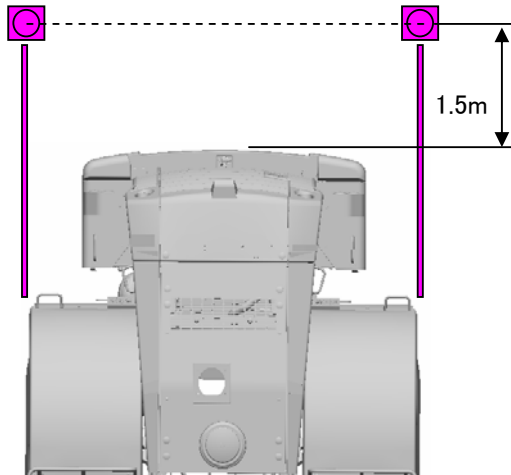
Others

1. Adjustment of rear view monitor guide line position

Adjust the rear view monitor guide line position according to the following procedure.

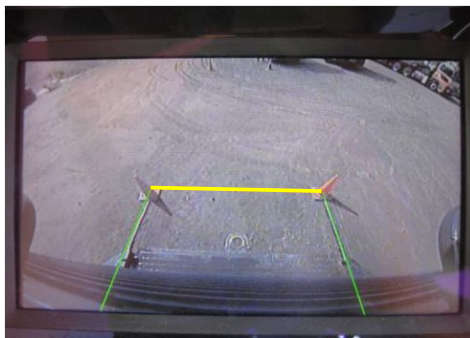
1-1. Placing marks at rear of machine

- ① Stop the machine on a level place and secure a space behind it.
- ② Place marks at 1.5 m from the rear end of the machine on the extensions of the outside lines of the machine.



*Match the rear view monitor guide lines with these marks.

Reference drawing: The scene after adjusting rear view monitor guide line



Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
Others				

1-2. Adjustment of rear view monitor guide line position

Adjust the rear view monitor guide line position according to the following procedure.

- ① While [01 Monitoring / Pre-defined] is selected in the service menu, select [07 Default] with the UP (▲) and DOWN (▼) switches.

(For how to enter the service menu, see No. 0010 "Setting of machine monitor".)



- ② Push the ENTER switch, and the screen moves to the "Default" screen.

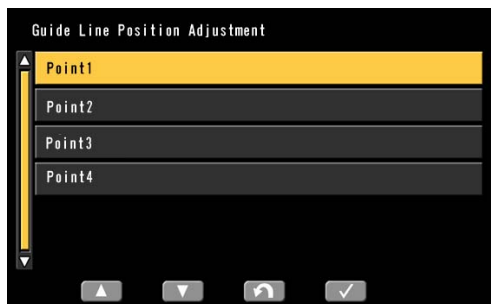


- ③ Select [04 Rear View Monitor Setting] with the UP (▲) and DOWN (▼) switches and push the ENTER switch, and the screen moves to the "Rear View Monitor Setting" screen.

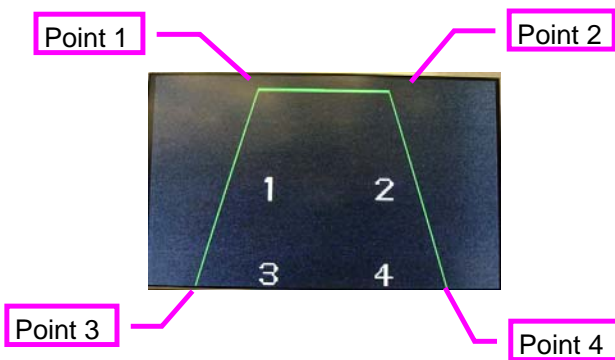


Precautions	Tools to be used		Facilities to be used	
	Name	Q'ty	Name	Q'ty
Others				

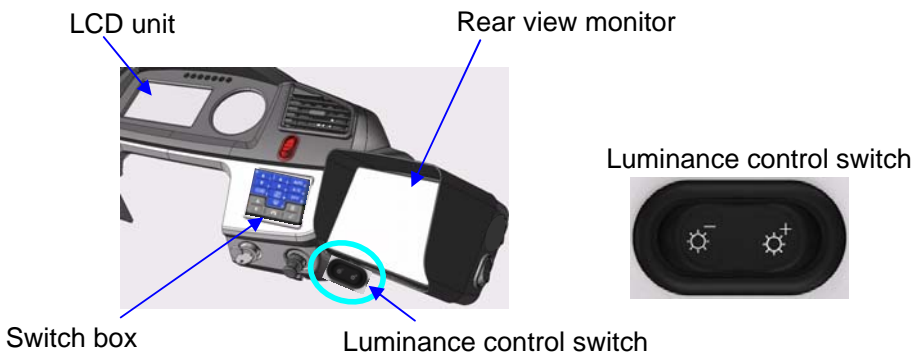
④ Select [02 Guide Line Position Adjustment] with the UP (▲) and DOWN (▼) switches and push the ENTER switch, and the screen moves to the "Guide Line Position Adjustment" screen.



*Detail of each point



*Use the Luminance control switch at the bottom of the Rear view monitor to adjust the rear view monitor guide line.



Precautions

Tools to be used

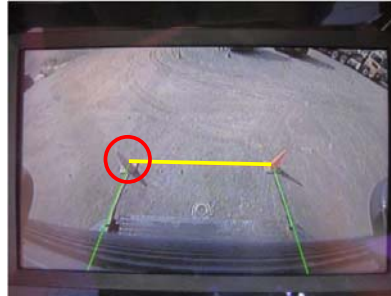
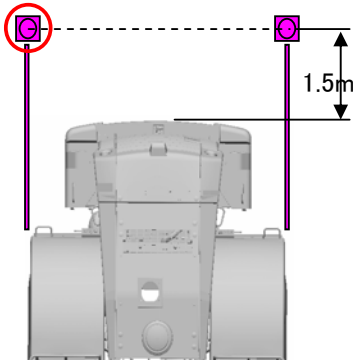
Facilities to be used

Tools to be used		Facilities to be used	
Name	Q'ty	Name	Q'ty

Others

1-2-1. Adjustment of point 1

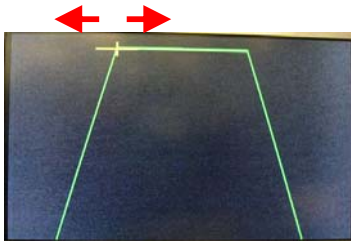
Match point 1 with the right mark at 1.5 m rear from the machine.



① Select [Point 1] with the UP (▲) and DOWN (▼) switches and push the ENTER switch, and the screen moves to the "Point 1" adjustment screen.



② While "Horizontal Adjustment" is selected, operate the Luminance control switch to adjust the X coordinate of Point 1.



* The screen of this photo is black, but the rear view is displayed during actual adjustment.

Precautions

Tools to be used

Facilities to be used

Name

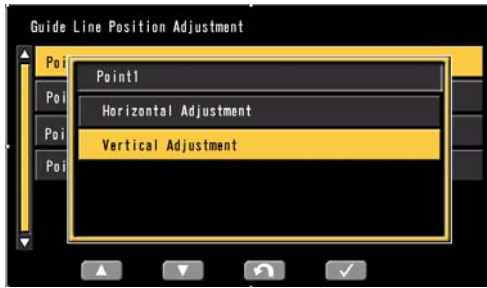
Q'ty

Name

Q'ty

Others

③ After adjusting the X-coordinate, push the ENTER switch to select "Vertical Adjustment".



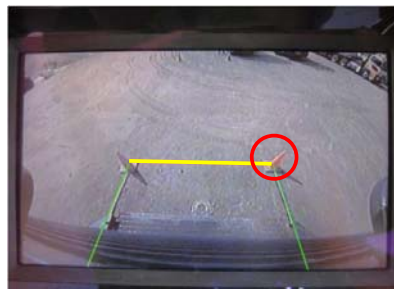
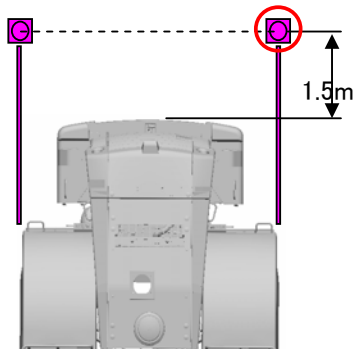
④ While "Vertical Adjustment" is selected, operate the Luminance control switch to adjust the Y coordinate of Point 1.



⑤ After adjusting the Y-coordinate, push the ENTER switch to complete adjustment of Point 1.

1-2-2. Adjustment of point 2

Match point 2 with the left mark at 1.5 m rear from the machine.



Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

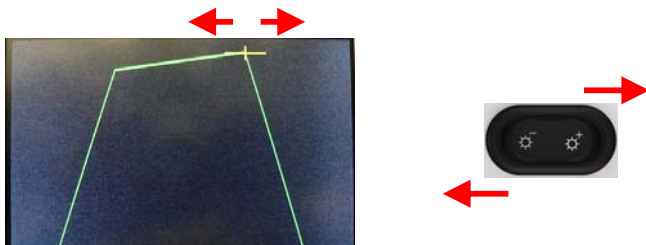
Q'ty

Others

① Select [Point 2] with the UP (▲) and DOWN (▼) switches and push the ENTER switch, and the screen moves to the "Point 2" adjustment screen.



② While "Horizontal Adjustment" is selected, operate the Luminance control switch to adjust the X coordinate of Point 2.



③ After adjusting the X-coordinate, push the ENTER switch to select "Vertical Adjustment".



Precautions

Tools to be used

Facilities to be used

Name

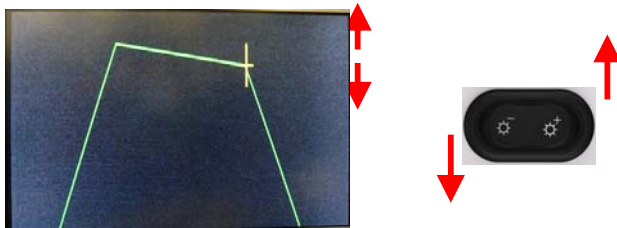
Q'ty

Name

Q'ty

Others

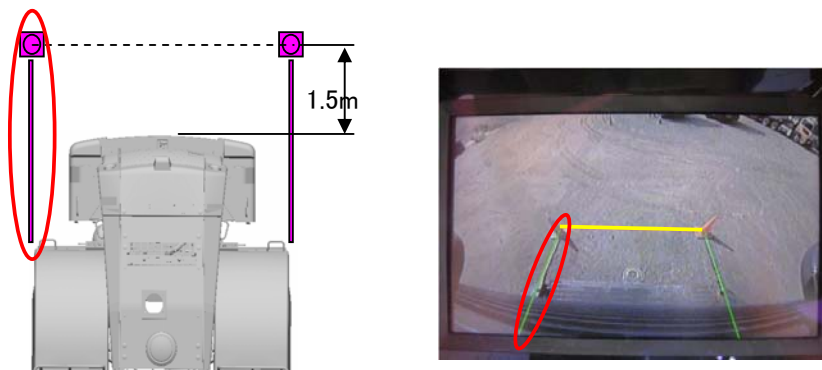
④ While "Vertical Adjustment" is selected, operate the Luminance control switch to adjust the Y coordinate of Point 2.



⑤ After adjusting the Y-coordinate, push the ENTER switch to complete adjustment of Point 2.

1-2-3. Adjustment of point 3

Match point 3 with the line on the right side of the machine.



① Select [Point 3] with the UP (▲) and DOWN (▼) switches and push the ENTER switch, and the screen moves to the "Point 3" adjustment screen.



Precautions

Tools to be used

Name	Q'ty

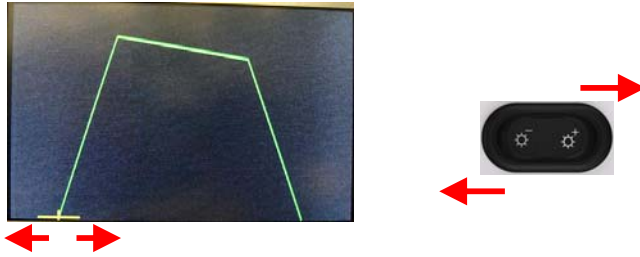
Facilities to be used

Name	Q'ty

Others

--

② While "Horizontal Adjustment" is selected, operate the Luminance control switch to adjust the X coordinate of Point 3.



③ After adjusting the X-coordinate, push the ENTER switch to select "Vertical Adjustment".

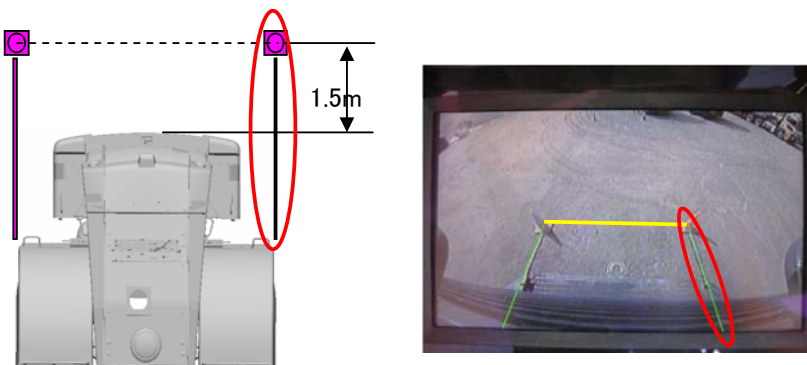


④ While "Vertical Adjustment" is selected, push the ENTER switch again to complete adjustment of point 3.

*As a rule, do not adjust the Y-coordinates of Point 3 and 4 since they do not need to be adjusted.

1-2-4. Adjustment of point 4

Match point 4 with the line on the left side of the machine.



Precautions

Tools to be used

Facilities to be used

Name

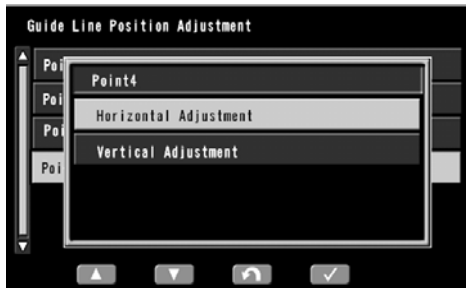
Q'ty

Name

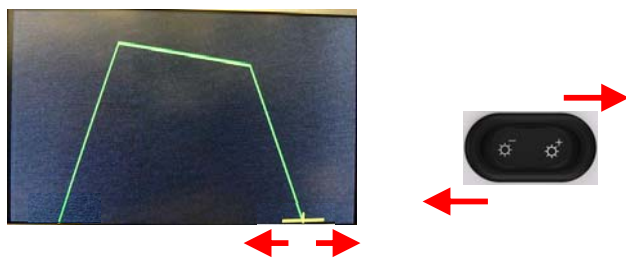
Q'ty

Others

① Select [Point 4] with the UP (▲) and DOWN (▼) switches and press the ENTER switch, and the screen moves to the "Point 4" adjustment screen.



② While "Horizontal Adjustment" is selected, operate the Luminance control switch to adjust the X coordinate of Point 4.



③ After adjusting the X-coordinate, press the ENTER switch to select "Vertical Adjustment".



④ While "Vertical Adjustment" is selected, press the ENTER switch again to complete adjustment of point 4.

*As a rule, do not adjust the Y-coordinates of Point 3 and 4 since they do not need to be adjusted.

Precautions

Tools to be used

Facilities to be used

Name

Q'ty

Name

Q'ty

Others

WA380-7 WHEEL LOADER

Form No GEN00114-00

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