

# PARTS & SERVICE NEWS

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DATE	July 9, 2004

(C)

**SUBJECT:** REPLACEMENT PROCEDURE FOR MONITOR PANEL

**PURPOSE:** To inform Field Personnel

**APPLICATION:** HD465-7 Truck, S/N 7001 thru 7196, 7198 and up  
 HD605-7 Truck, S/N 7001 and up  
 HM300-1 Truck, S/N 1001 and up  
 HM350-1 Truck, S/N 1001 and up  
 HM400-1 Truck, S/N 1001 and up

**FAILURE CODE:** DPA0MC

**DESCRIPTION:**

1. Introduction:

When the pointer of the tachometer or the speedometer on the monitor panel and the transparent cover interferes to stop movement of the pointer or hinder its movement, replace the monitor panel with the improved one as directed in this **PARTS & SERVICE NEWS**.

2. List of Parts:

Part No.	Part Name	Purpose of Part	Qty	Remarks
HM300-1, HM350-1 and HM400-1				
7831-46-1004 (7831-46-1003)	Monitor (Monitor)	Replacement	1 (1)	km/h
7831-46-2004 (7831-46-2003)	Monitor (Monitor)		1 (1)	MPH
HD465-7 and HD605-7				
7831-46-5004 (7831-46-5003)	Monitor (Monitor)	Replacement	1 (1)	km/h
7831-46-6004 (7831-46-6003)	Monitor (Monitor)		1 (1)	MPH

## 1. Precautions when replacing the monitor panel

When replacing the monitor panel, it becomes necessary to make re-setting of the current setting contents (data) to the replacing new monitor panel.

**For proper re-setting, check the current setting contents and record them on the attached form (copy the form when necessary).**

\*1 For details, refer to:

"Setting items when replacing the monitor panel",  
"Maintenance item read out form" and  
"Failure history readout form".

\*2 Concerning some of these setting items, check them after removing the monitor panel. Corresponding items to the above are Item No. 7 thru No. 9 in the "Setting items when replacing the monitor panel".

## 2. Replacement procedure

### (1) Replacement processes

<1> Remove a cover from the dashboard.

-> Screw (01245-00616 hexagon socket head cap screw) x 3 pcs.

Screw (01245-00612 hexagon socket head cap screw) x 2 pcs.

Part No. of the cover: 56B-54-15932

<2> Remove the mounting bracket for the monitor panel.

-> Screw (01435-00612, 6 mm x 12) x 4 pcs.

Part No. of the bracket: 56B-54-15560

<3> Remove the monitor panel from the mounting bracket.

-> Screw (01023-20616, 6 mm x 13) x 8 pcs.

### (2) Checking the setting of the removed monitor panel

Check and record the settings of Item No. 7 thru No. 9 in the "Setting items when replacing the monitor panel".

### (3) Checking the setting of the replacing new monitor panel before installing it

Make the settings of the Item No. 7 thru No. 9 in the "Setting items when replacing the monitor panel" to the replacing new monitor panel.

## (4) Installation

Install the new monitor panel in the reversed procedure to the removal procedure of the Section (1).

## (5) Checks to make after finishing the replacement work

- First, make sure that there is no malfunction.
  - \* When the option settings (switch settings and connector settings) are not correct, error code "DAFOKM" will be indicated. In this case, check the setting once again.
- When the error code is not indicated (when service meter \* odometer are indicated), carry out the following checks.

[Checking the indications of the speedometer and tachometer]

When the "monitor panel checking switch" located on the LH side of the dashboard is pushed, each pointer of the meter and gauge sections will make a return trip of:

"Starting from the current position -> Max. position -> Min. position -> Starting position".

At this time, make sure each pointer of the speedometer, tachometer and four gauges will **not stop its movement midway nor be hindered to move.**

\* By operations of the inspection switches, other indication sections on the monitor panel will make the following indications.

<1> LED: All the LED's will turn on. (While the switch is being pressed)

<2> Segment LCD (9 segment x 2 lines): All the segments will turn on.

<3> Character display: Machine mode will be indicated on the upper line and the program number will be indicated on the lower line.

## (6) Setting of the items for which re-setting becomes necessary

Make the settings of the Item No. 1 thru No. 6 in the "Setting items when replacing the monitor panel".

Note) It is not necessary to make the above re-setting when the settings have not been changed since the shipment of the vehicle.

**[Setting items when replacing the monitor panel]**

- \* For the following items, it is necessary to readout the contents of the settings of the current monitor panel with the starting switch being turned "ON" (a portion of them can be checked even after removing the monitor) and to carry out re-setting of the new monitor panel after replacement.
- \* However, it is not necessary to make the above re-setting when the settings have not been changed since the shipment of the vehicle.

No.	Item	Indication (checking)	Setting made when the vehicle was shipped out	Current state recording column	Checking the replacing new monitor																																
1	Service meter indication	· Normal display after turning on the starting switch	0.0 h		Input the value on the LH column in the Service Mode 2 [Refer to Fig. 3.] and check that the input value will be indicated on the ordinary display.																																
2	Odometer indication	· Normal display after turning on the starting switch	0.0 km (mile)		Input the value on the LH column in the Service Mode 2 and check that the input value will be indicated on the ordinary display.																																
3	Reversing odometer indication	· Operator's mode after turning on the starting switch [Refer to Fig. 3.]	0.0 km (mile)		Input the value on the LH column in the Service Mode 2 and check that the input value will be indicated in the operator's mode.																																
4	Maintenance or changing time (Interval time)	· Operator's mode after turning on the starting switch [Refer to Fig. 3.]	It differs depending on the items. Refer to the separate table for details.	* Enter to the separate "Maintenance item read out form".	Input the "interval time" only among the values on the LH column in the Service Mode 1 and check that the input values will be indicated in the above mode. (Refer to Note)																																
5	Language setting	· Operator's mode after turning on the starting switch	"ENGLISH"		Input the value on the LH column in the operator's mode and check that the input value will be indicated in the above mode.																																
6	Telephone number	· Operator's mode after turning on the starting switch	"None" (****...)		Input the value on the LH column in the operator's mode and check that the input value will be indicated in the above mode.																																
7	Option setting	· After removing the current monitor panel, check the setting conditions of the dip switches (SW5-2 thru 4 and SW6-1 thru 4) and rotary switches (SW2 and SW3). [-> Refer to Fig. 1.] · Before removing the current monitor panel, check the setting conditions (connected/not connected) of the option setting connectors (OP1 thru OP6). [-> Refer to Fig. 2.]	<1> Dip switches: All "OFF" <2> Rotary SW (SW2 and SW3): '0' <3> OP1 thru OP6: "Not connected"	<table border="1"> <tr><td>OP1</td><td></td><td>SW5-2</td><td></td></tr> <tr><td>OP2</td><td></td><td>SW5-3</td><td></td></tr> <tr><td>OP3</td><td></td><td>SW5-4</td><td></td></tr> <tr><td>OP4</td><td></td><td>SW6-1</td><td></td></tr> <tr><td>OP5</td><td></td><td>SW6-2</td><td></td></tr> <tr><td>OP6</td><td></td><td>SW6-3</td><td></td></tr> <tr><td>SW2</td><td></td><td>SW6-4</td><td></td></tr> <tr><td>SW3</td><td></td><td></td><td></td></tr> </table>	OP1		SW5-2		OP2		SW5-3		OP3		SW5-4		OP4		SW6-1		OP5		SW6-2		OP6		SW6-3		SW2		SW6-4		SW3				· The dip switches on the rear surface of the monitor: SW5-2 thru 4, SW6-1 thru 4 and rotary switches: SW2, SW3 and option setting connectors OP1 thru 6 should be the same as the setting on the LH column. · Failure code "DAFOKM" (option setting error) should not be indicated when the starting switch is turned "ON".
OP1		SW5-2																																			
OP2		SW5-3																																			
OP3		SW5-4																																			
OP4		SW6-1																																			
OP5		SW6-2																																			
OP6		SW6-3																																			
SW2		SW6-4																																			
SW3																																					
8	Odometer indication unit setting	· After removing the current monitor panel, check the setting conditions of the dip switch on the rear surface of the monitor: SW5-1	· 831-6-1001 thru 1003 -> "OFF" · 7831-46-5000 thru 5003 -> "OFF" · 7831-46-2001 thru 2003 -> "ON" · 7831-46-6000 thru 6003 -> "ON"	SW5-1	· The dip switch on the rear surface of the monitor: SW5-1 should be the same as the LH side setting. · When the starting switch is turned "ON", the indication units of the odometer in the ordinary display should be the same as the above setting.																																
9	Travel speed calculation correction (-7% thru +7%)	· After removing the current monitor panel, check the setting status of the rotary switch on the rear surface of the monitor: SW1	'7' (0% = No correction)		· The rotary switch on the rear surface of the monitor: SW1																																

Note) Other than the above, items which are being memorized by the monitor are as follows. However, re-setting of these items are not possible. Therefore, readout and record the contents of the following items to make use of them for the servicing purpose. (Recording paper is available.)

No.	Item	Indication	Setting made when the vehicle was shipped out
1	Failure history	· Service Mode 1 after turning "ON" the starting switch	"No failure history"
2	Maintenance or changing time (remaining time) and number of times of resetting	· Operator's mode after turning "ON" the starting switch	· Remaining time: Same value as the interval time · Number of times of resetting: '0'

## [Maintenance item read out form]

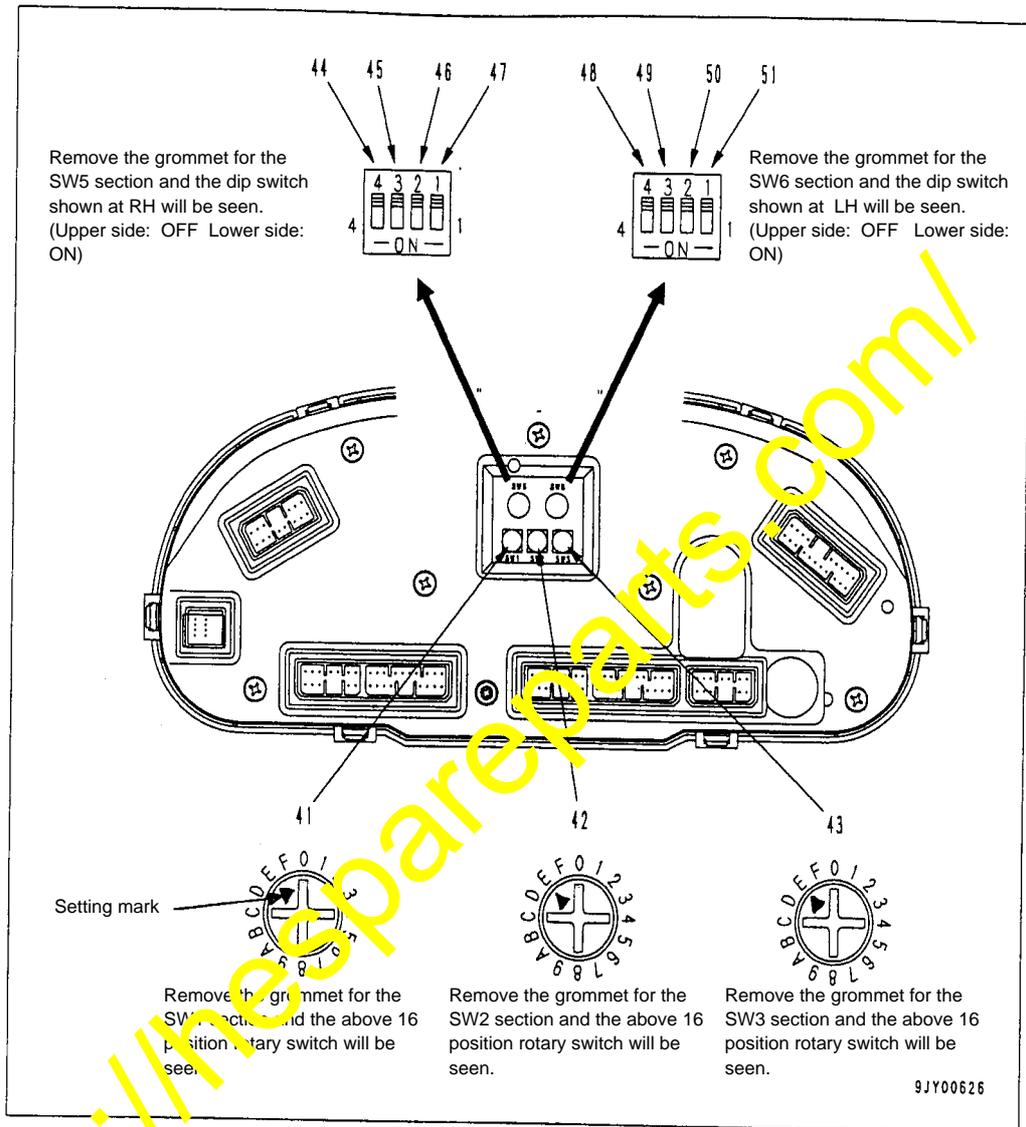
**1. For the HM300-1, HM350-1 & HM400-1**

No.	Item	ID code	English indication	Setting made before shipment	Recording column		
					Interval time	Remaining time	Number of times of resetting
1	Fuel filter	03	FUEL FILT	500			
2	Engine oil filter	02	ENG FILT	500			
3	Engine oil	01	ENG OIL	500			
4	Corrosion resistor	06	CORR RES	1000			
5	Transmission oil	12	TM OIL	1000			
6	Transmission oil filter	13	TM FILT	1000			
7	Brake oil	17	BK OIL	1000			
8	Brake oil filter	14	BK OIL FILT	1000			
9	Brake cooling oil filter	16	BK C FILT	1000			
10	Hydraulic oil filter	04	HYD FILT	2000			
11	Dif. case oil	11	DIFF OIL	2000			
12	Final drive oil	08	FNL OIL	2000			
13	Hydraulic oil	10	HYD OIL	2000			

**2. For the HD465-7 and HD605-7**

No.	Item	ID code	English indication	Setting made before shipment	Recording column		
					Interval time	Remaining time	Number of times of resetting
1	Fuel filter	03	FUEL FILT	500			
2	Engine oil filter	02	ENG FILT	500			
3	Engine oil	01	ENG OIL	500			
4	Transmission oil filter	13	TM FILT	500			
5	Corrosion resistor	06	CORR RES	1000			
6	Convert/Trans/Brake oil	04	TC/TM/BKOIL	1000			
7	Brake oil	14	BK OIL FILT	1000			
8	Brake cooling oil filter	16	BK C FILT	1000			
9	Hydraulic oil filter	04	HYD FILT	2000			
10	Dif. case oil	11	DIFF OIL	2000			
11	Final drive oil	08	FNL OIL	2000			
12	Hydraulic oil	10	HYD OIL	4000			

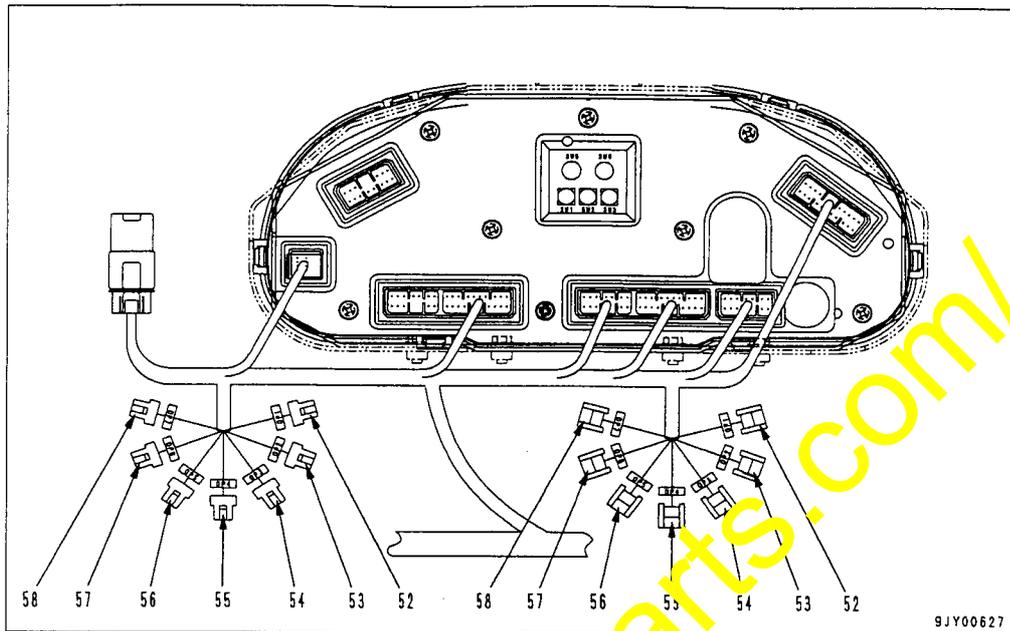




In case of the HM300-1, HM350-1 and HM400-1
41. Speed correction switch [SW1]
42. Max. speed range setting switch [SW2]
43. Rotary switch [SW3]
44. LH and RH dif. lock setting switch [SW5-4]
45. Dip switch [SW5-3]
46. Exhaust brake setting switch [SW5-2]
47. Odometer unit setting switch [SW5-2]
48. Dip switch [SW6-4]
49. Dip switch [SW6-3]
50. Caution setting switch when the body is raised [SW6-2]
51. Maintenance sensor setting switch [SW6-1]

In case of the HD465-7 and HD605-7
41. Speed correction switch [SW1]
42. Max. speed range setting switch [SW2]
43. ABS, ARSC, ASR, A-SUS setting switch [SW3]
44. LH and RH dif. lock setting switch [SW5-4]
45. Dip switch [SW5-3]
46. Exhaust brake setting switch [SW5-2]
47. Odometer unit setting switch [SW5-2]
48. Dip switch [SW6-4]
49. Dip switch [SW6-3]
50. Caution setting switch when the body is raised [SW6-2]
51. Maintenance sensor setting switch [SW6-1]

Fig. 1 Rear view of the monitor panel



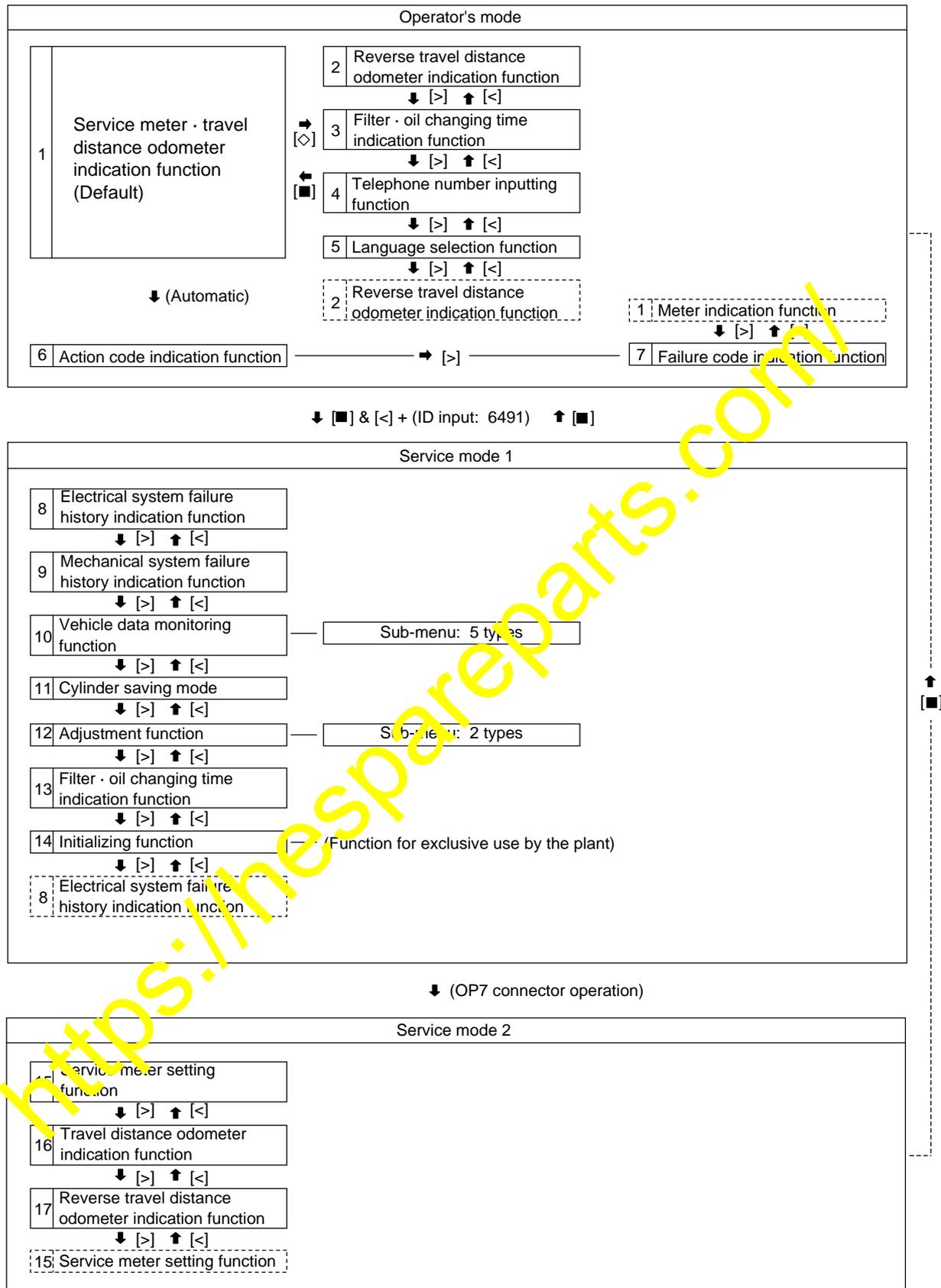
- 52. Option setting connector [OP1]
- 53. Option setting connector [OP2]
- 54. Option setting connector [OP3]
- 55. Option setting connector [OP4]
- 56. Option setting connector [OP5]
- 57. Option setting connector [OP6]
- 58. Setting connector [OP7]

#### Adjustment of the machine monitor

1. Refer to the Section "Adjustment of machine monitor" in the Chapter "Checking and Adjusting" in the Shop Manual on the settings of the rotary switches, dip switches and option setting connectors on the rear surface of the machine monitor.
2. Caution
  - 1) Make the setting following the instructions in the Section "Adjustment of machine monitor" in the chapter "Checking and Adjusting" in the Shop Manual and do not change it later.
  - 2) When moving the switches, use a precision screwdriver, etc. and move them slowly.
  - 3) Inside the grommet, be careful not to touch other parts than the switches.
  - 4) Be careful not to let dust and dirt enter the inside.
  - 5) After finishing the setting work, be sure to restore the grommet.

Fig. 2 Option setting connector diagram

Each mode and the flow of the functions



\* Refer to the Section "Special functions of machine monitor" in the Chapter "Testing and Adjusting" in the Shop Manual for the details of each mode.

Fig. 3 Flow of the service mode functions