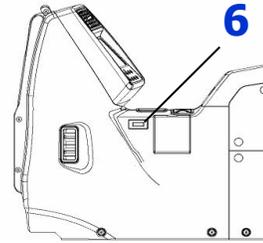
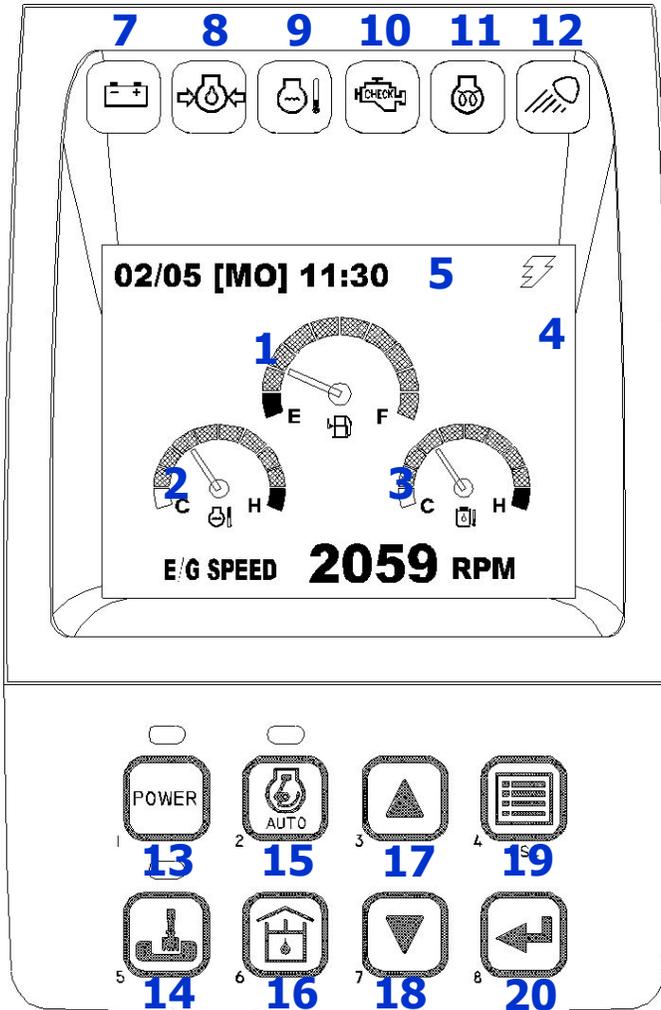


# 3. Monitor panel

- 1. Gauge panel**
- 2. Warning lamp**
- 3. Multi display LCD**
- 4. Switch panel**
- 5. Main menu**
- 6. Special menu**

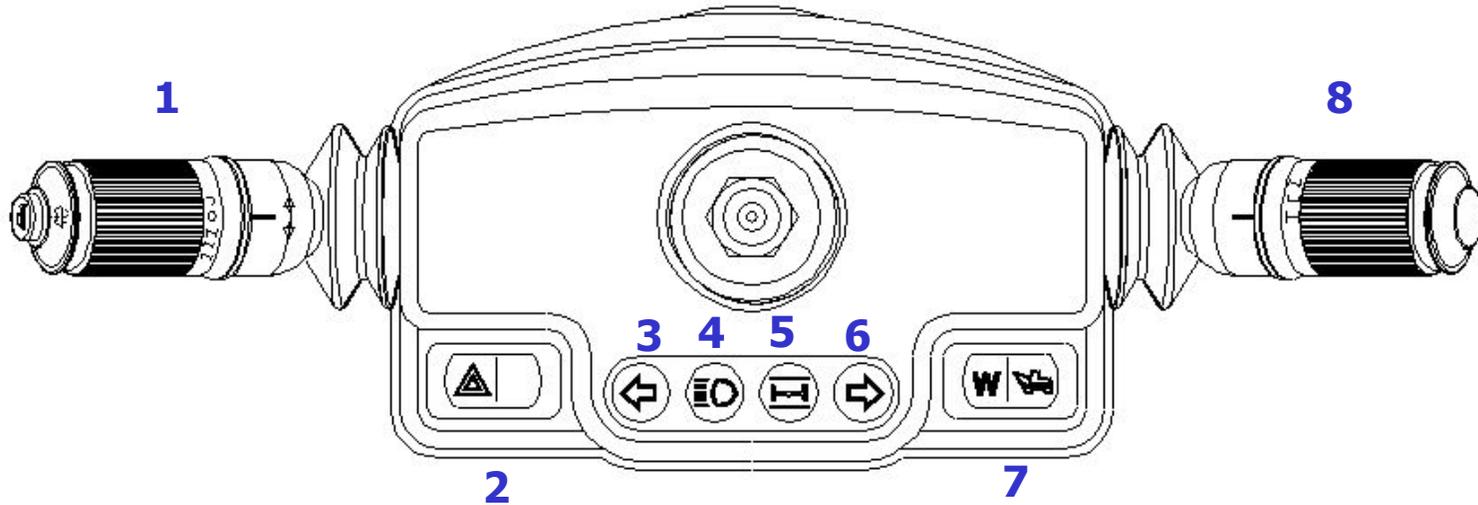
# 1) Gauge panel



No	Name	No	Name
1	Fuel level gauge	2	Coolant Temp. gauge
3	HYD Oil Temp. gauge	4	Multi display LCD
5	Digital clock	6	Hour meter
7	Battery charging lamp	8	Engine oil lamp
9	Overheating lamp	10	Check engine lamp
11	Preheating lamp	12	Working light lamp
13	Power mode S/W	14	Work mode S/W
15	Auto Idle S/W	16	Flow adjust S/W
17	Up ( Before )	18	Down ( Next )
19	Display S/W	20	Enter S/W

# 1) Gauge panel

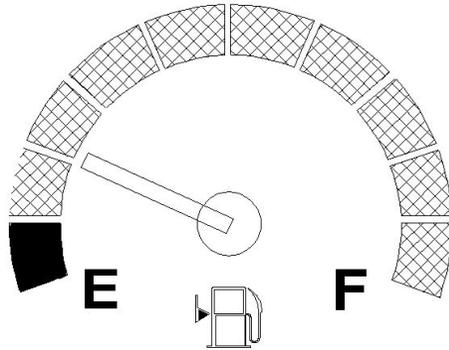
## - Steering consol (Wheel)



No	Name	No	Name	No	Name
1	Combination S/W	2	Hazard lamp S/W	3	Turn signal (Left)
4	High beam light	5	Ram lock lamp	6	Turn signal (Right)
7	Working,traveling S/W	8	Travel select S/W		

# 1) Gauge panel

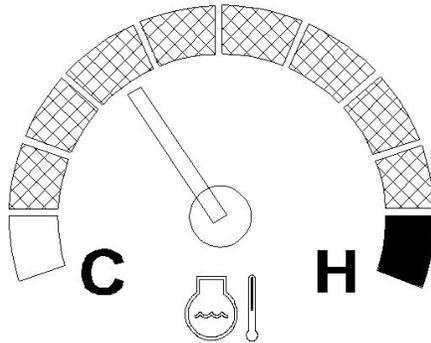
## - Fuel level gauge



Display fuel level

- 1) Green zone : Normal fuel level condition
- 2) Red zone : Need fuel

## - Coolant temperature gauge

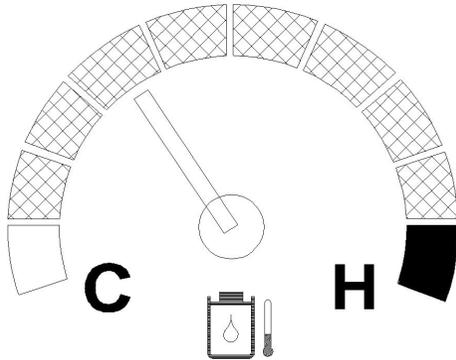


Display coolant temperature

- 1) Green zone : Normal coolant temp.
  - 2) Red zone : Overheat coolant
- \* When overheating ( $108^{\circ}\text{C}\uparrow$ ), ringing buzzer & engine R.P,M is dropped

# 1) Gauge panel

## - Hydraulic oil temperature gauge



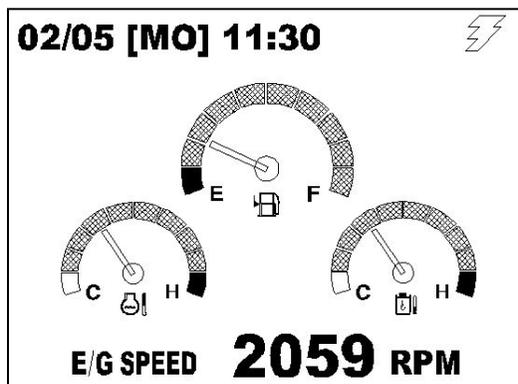
Display hydraulic oil temperature

1) Green zone : Normal HYD oil temp.

2) Red zone : Overheating HYD oil temp.

When reach red zone(96°C↑), stop working & wait for dropping HYD oil temperature (Display red sign on LDC panel, No buzzer)

## - Multi display LCD panel



Display machine condition to letter

1) Engine R.P.M

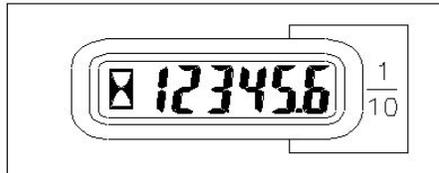
2) Battery voltage (V)

3) Front pump pressure (bar)

4) Rear pump pressure (bar)

# 1) Gauge panel

## - Hour meter



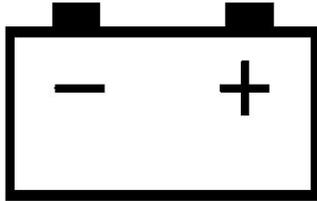
**Display total working hour**



**Blinking time is every 4 sec.**

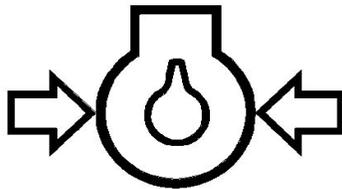
## 2) Warning lamp (1)

### - Battery charging



**Battery charging system has problem, this light is "on"  
(Below 13V, Above 32V)**

### - Engine oil pressure

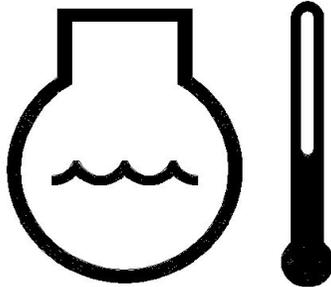


**Engine oil pressure has been dropped (below 0.7 bar), this light  
is "on" with buzzer**

**\* When ringing buzzer, stop engine and check engine oil system**

## 2) Warning lamp (2)

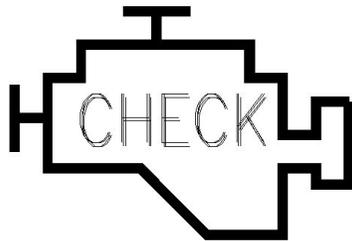
### - Coolant temperature



Overheat coolant, the light is "on" with buzzer

\* When overheating, engine R.P.M is dropped to low R.P.M.

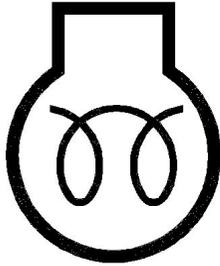
### - Check engine



Need checking engine, light is "on"

## 2) Warning lamp (3)

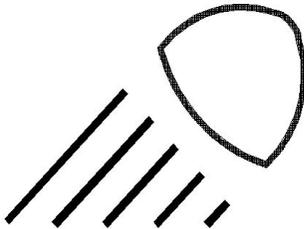
### - Preheating



Complete preheat, the light is "on"

- Preheating is Key "On" position.
- Heating time depends on coolant temp.

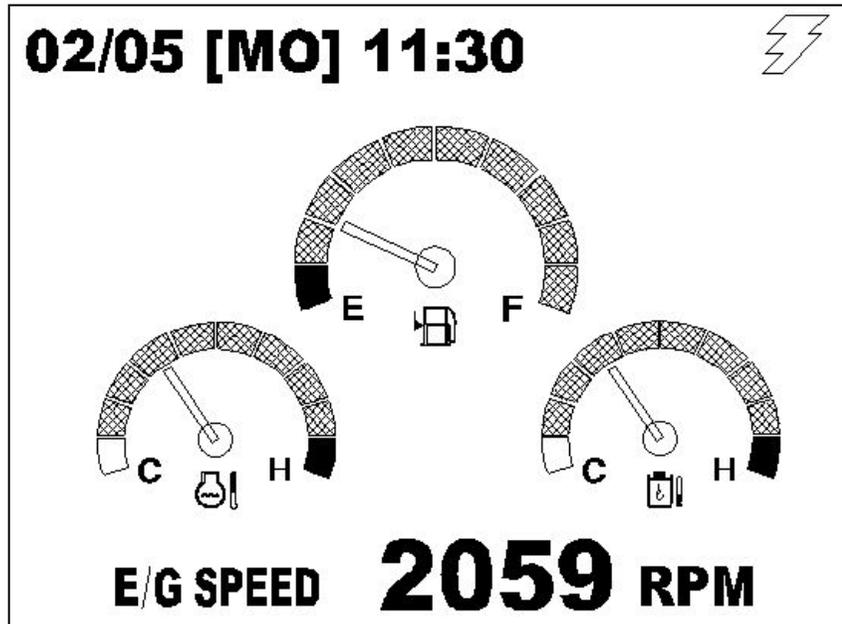
### - Working light



When working light "on", the signal light is "on"

### 3) Multi display LCD panel (1)

#### - Multi display LCD panel

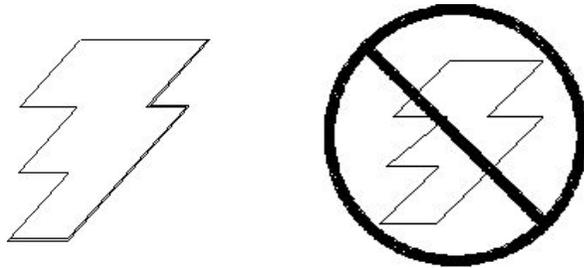


Display information as below

- 1) Engine R.P.M
- 2) Battery charge voltage
- 3) Front / Rear pump pressure
- 4) Warning information
- 5) Date & time
- 6) Communication condition
- 7) Indicate information

### 3) Multi display LCD panel (2)

#### - Display communication condition



Display communication condition with E EOPS

#### - Display machine condition

E/G SPEED 2059 RPM

BATTEY 27.5 VOLT

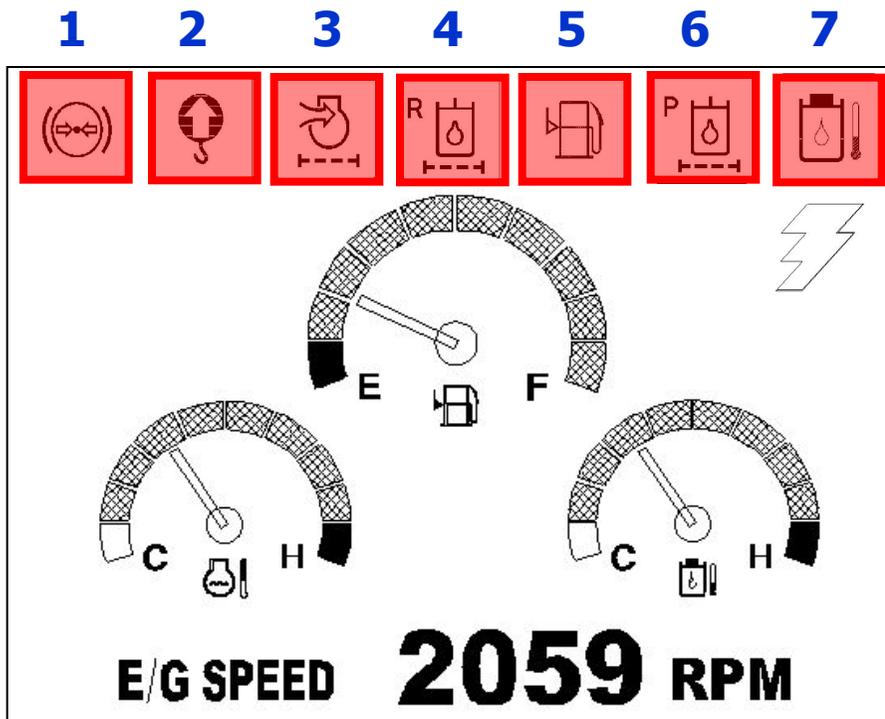
FRONT PUMP 320 BAR

REAR PUMP 313 BAR

Normal charging condition is 26~30 volt.

## 3) Multi display LCD panel (3)

### - Warning lamp

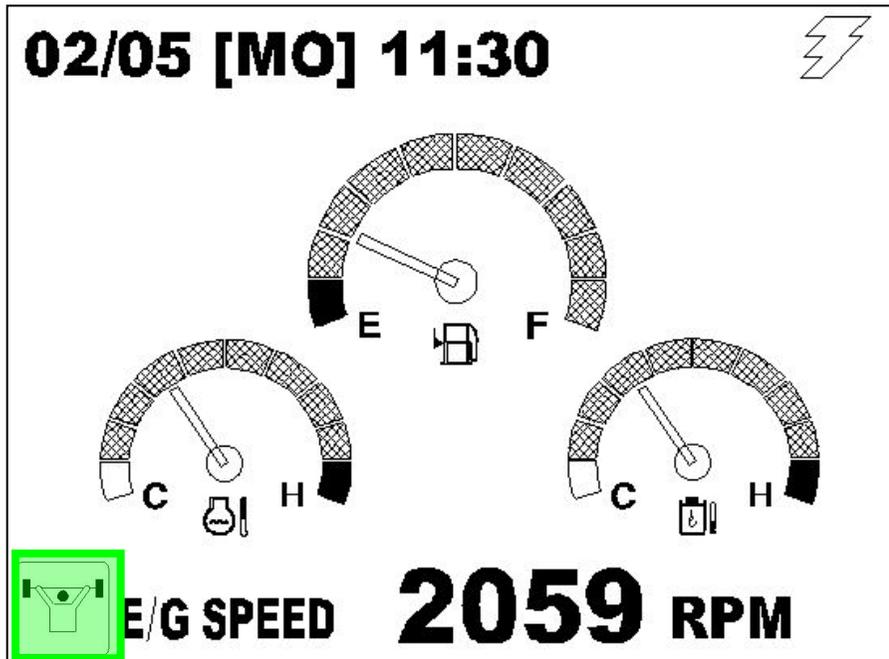


Display warning information on top of left side  
(Red sign)

- 1) Brake pressure drop (Wheel type)
- 2) Overload warning
- 3) Clogged air cleaner
- 4) Clogged return filter
- 5) Fuel empty
- 6) Clogged pilot filter
- 7) Overheat hydraulic oil (96 °C↑)

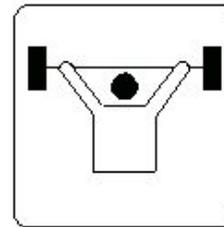
### 3) Multi display LCD panel (4)

- Indicate lamp

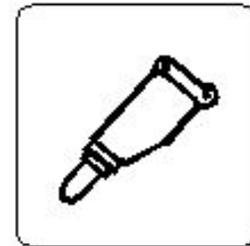


Display below switch condition (Green sign)

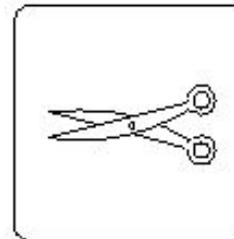
1) Pressure up



2) Breaker



3) Shear

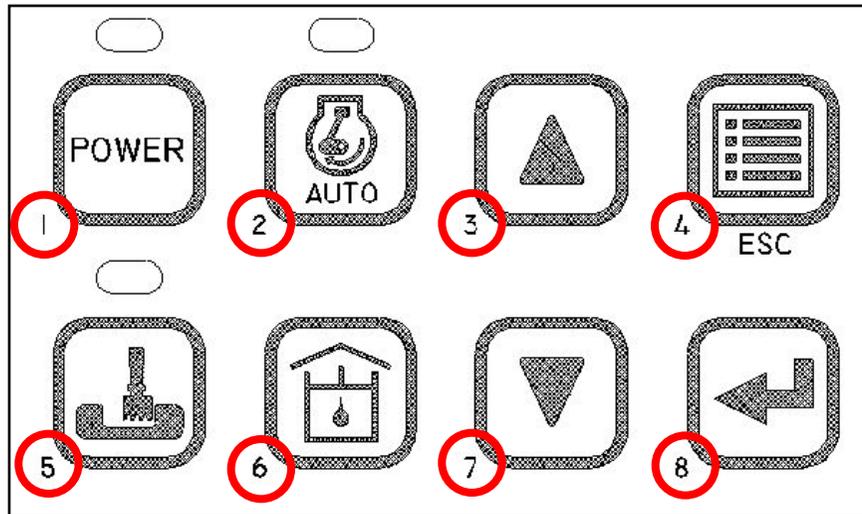


4) Travel (Wheel)



## 4) Switch panel (1)

### - Switch panel

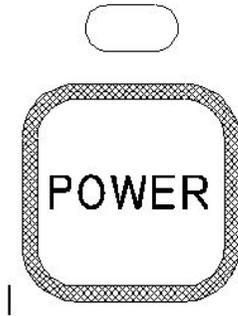


- 1) Power mode select switch
- 2) Auto Idle switch
- 3) Move to up
- 4) Display and escape switch
- 5) Trenching mode select switch
- 6) Flow control adjust switch
- 7) Move to down
- 8) Enter and re-set switch

\*Key number for password : ○

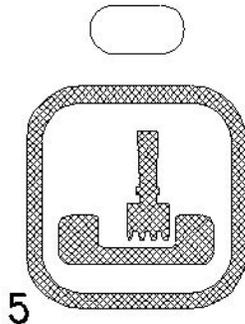
## 4) Switch panel (2)

### - Power/Work mode switch



#### Power mode

- On : Power mode
- Off : Standard mode
- \* For heavy or fastworking

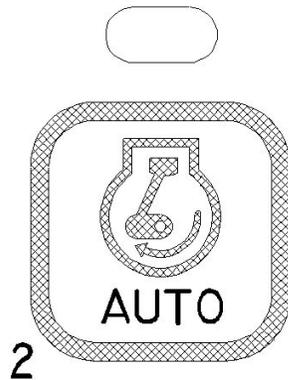


#### Trenching mode

- On : Trenching mode
- Off : Digging mode
- \* When start engine, set digging mode automatically

## 4) Switch panel (3)

### - Auto idle switch



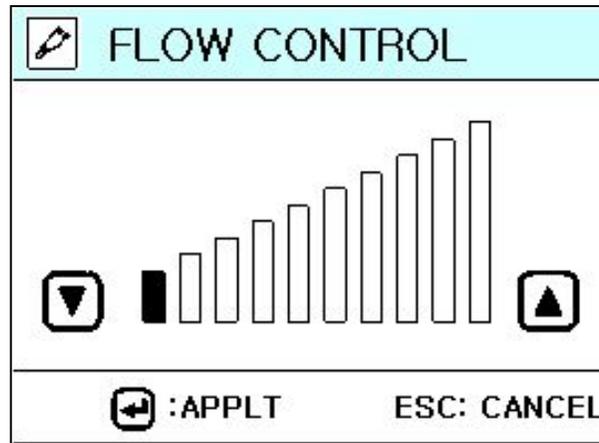
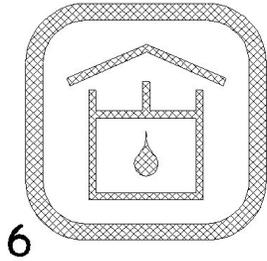
- On : Working auto idle
- Off : Not working auto idle

- \* When neutral position of joystick lever for 4 sec, E/G R.P.M is automatically dropped, and move joystick lever for working , E/G R.P.M is automatically increased to setting throttle dial R.P.M
- \* When start engine, set a auto idle position automatically

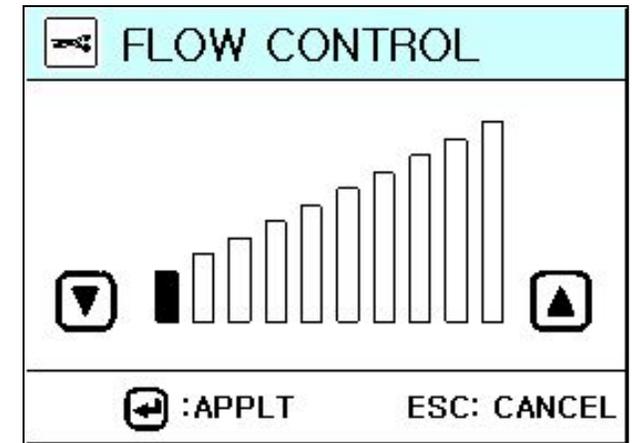
## 4) Switch panel (4)

### - Flow control switch

Adjusting flow for attachment as below



For breaker



For crusher

### \*Adjusting flow

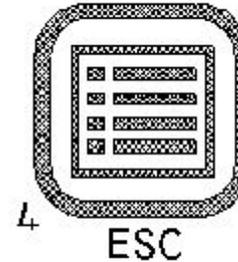
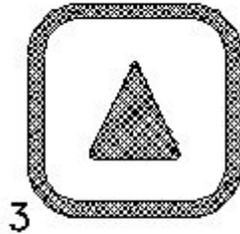
Press  , adjust flow through   and  , and  to go first screen

When use attachment, the flow is set by pervious setting flow.

## 4) Switch panel (5)

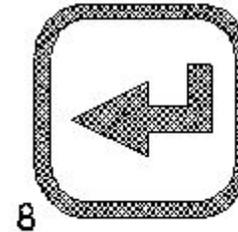
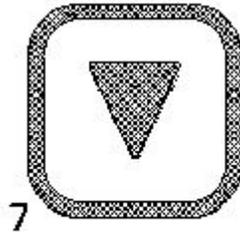
### - Main menu

- Move cursor to up  
or previous screen



- Display machine condition  
or escape main menu

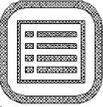
- Move cursor to down  
or next screen

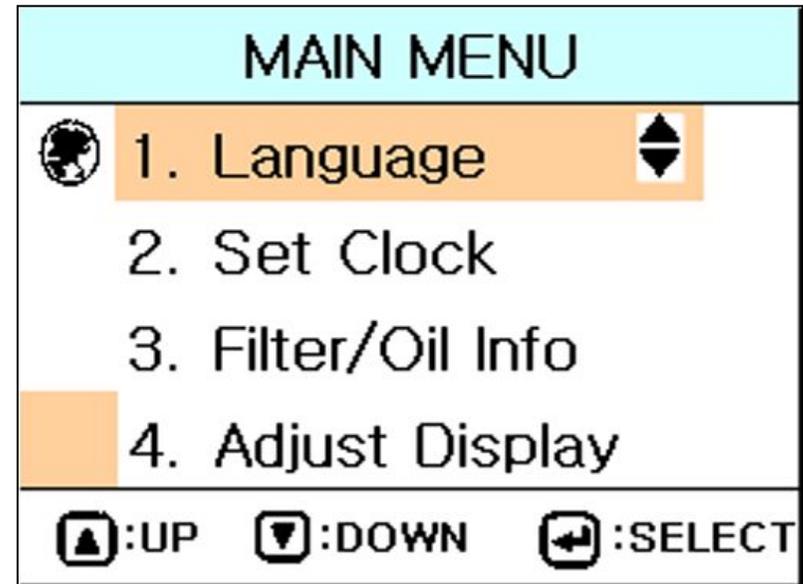
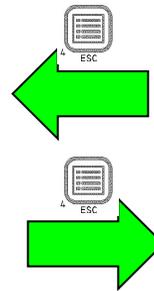
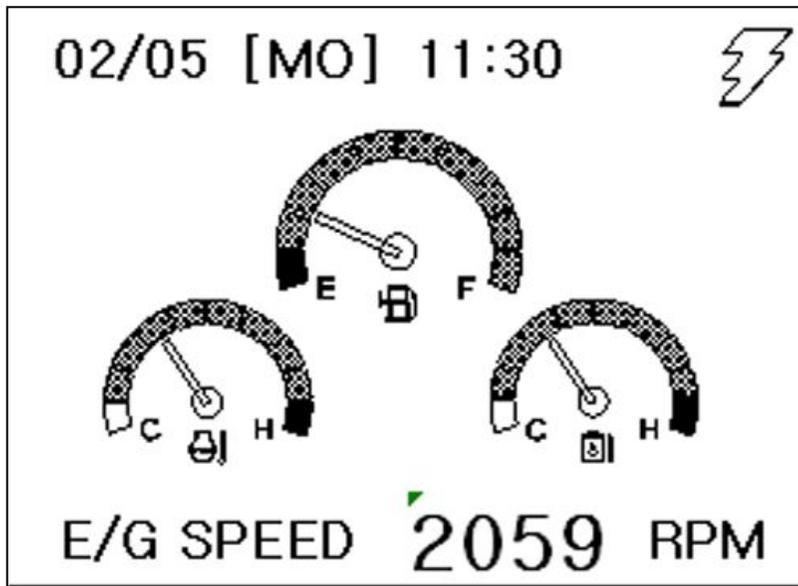


- Entering or re set  
filter/oil using time

# 5) Main menu (1)

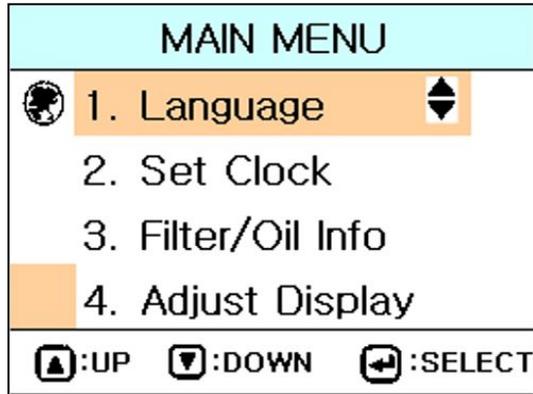
## - Main menu

Press  for 3 sec, change screen to main menu,  
 press  again, change screen to normal screen



## 5) Main menu (2)

### - Language setting

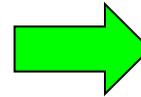
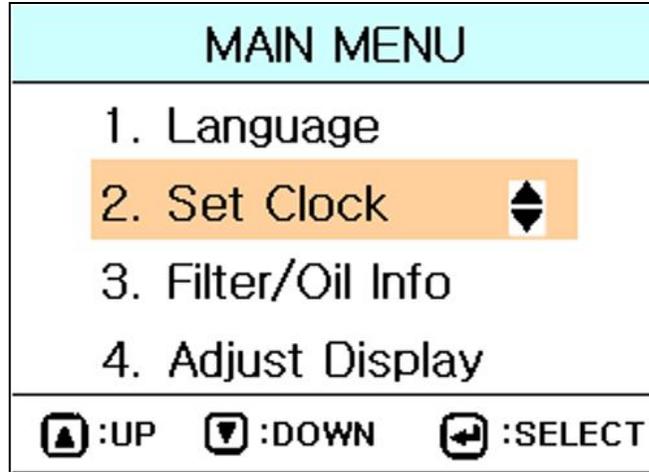


Press  , set your language through   and  .

Press  for 1 sec to escape.

## 5) Main menu (3)

### - Clock setting



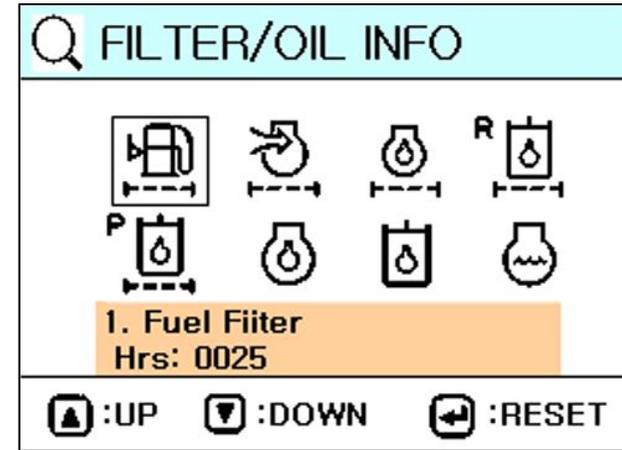
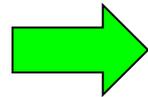
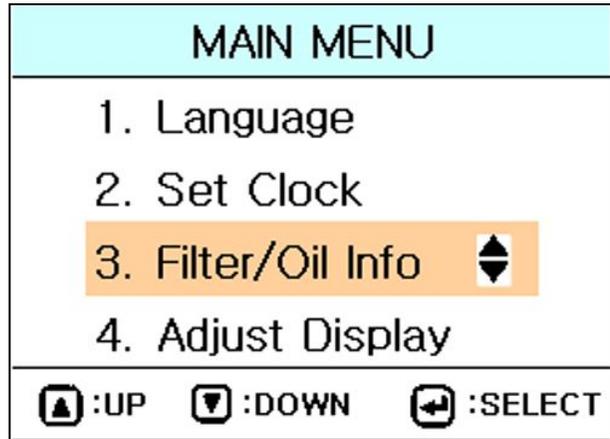
Press , set your local time through   and 

Press  for 1 sec to escape.

\* Setting "00" minutes : press  With 

## 5) Main menu (4)

### - Filter & oil information

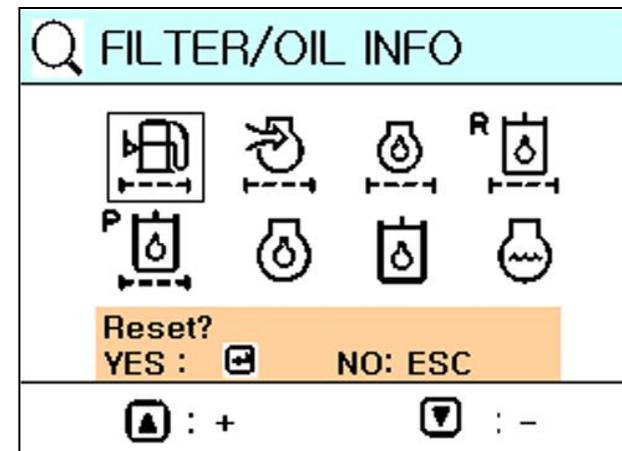


Press  , check used time through

when reset time, press  

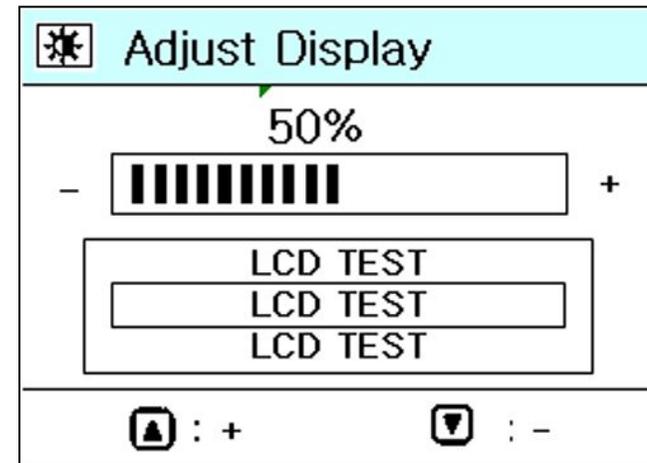
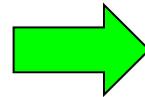
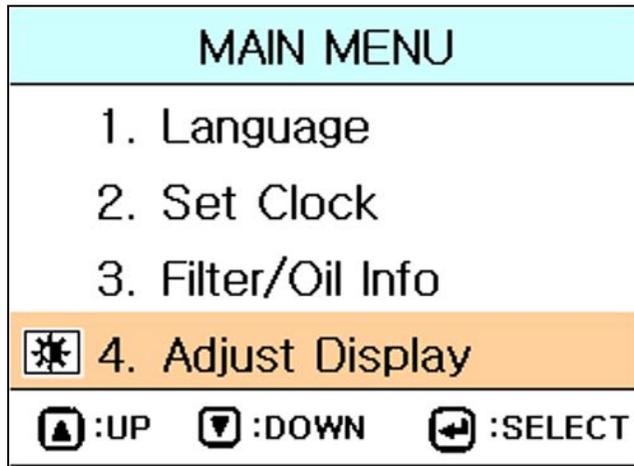
Press  for 1 sec to escape.

If filter   is changed, reset hours for next service



# 5) Main menu (5)

- Adjust display bright

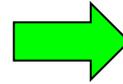


Press <sup>8</sup>, set LCD bright through <sub>3</sub>, <sub>7</sub>  
 Press <sub>4</sub> for 1 sec to escape.

## 5) Main menu (6)

### - Setting password

MAIN MENU	
5. Set Password	
⬆:UP ⬇:DOWN ⏏:SELECT	



Set Password			
Enter Password			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



**Key in four-figure number password within 10 minutes, First password is "1111"**

Set Password	
Lock	
Unlock	
Change Password	
⬆:UP ⬇:DOWN ⏏:SELECT	

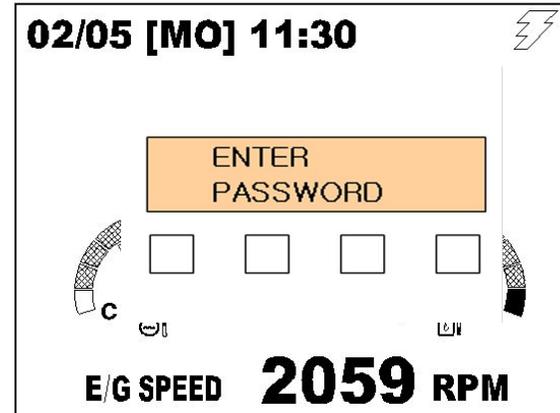
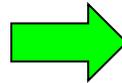
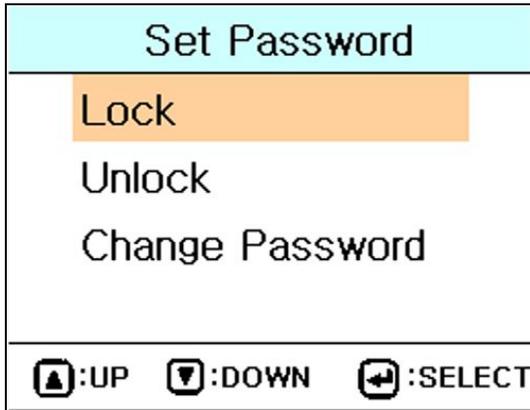
**Correct password**

Set Password			
Password Error !!!			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

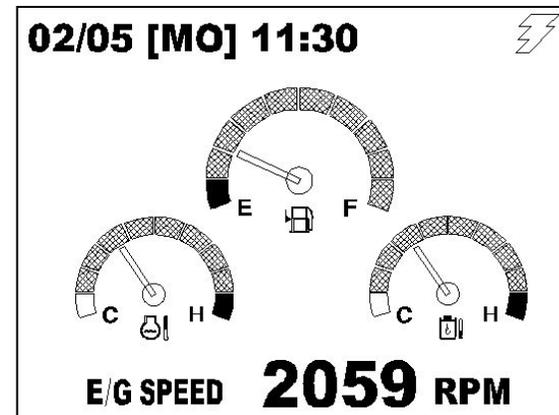
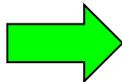
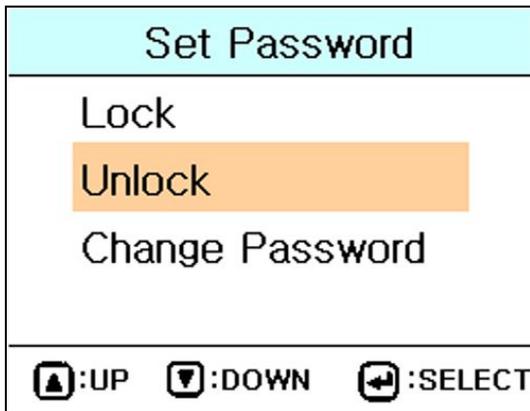
**Incorrect password**

# 5) Main menu (7)

## - Setting password (Lock & Unlock)



Set lock, Display "Enter password" every time when start engine



## 5) Main menu (8)

### - Setting password (Change password)

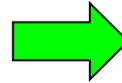
Set Password

Lock

Unlock

Change Password

▲:UP ▼:DOWN ↵:SELECT



CHANGE PASSWORD

ENTER  
PASSWORD

1

2

Key in same password two times



CHANGE PASSWORD

PASSWORD  
SET !!!

CHANGE PASSWORD

PASSWORD  
ERROR!!!

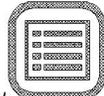
1

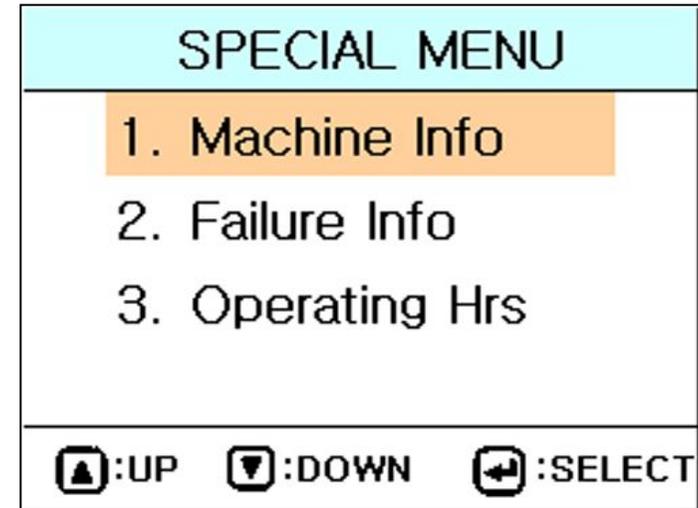
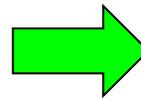
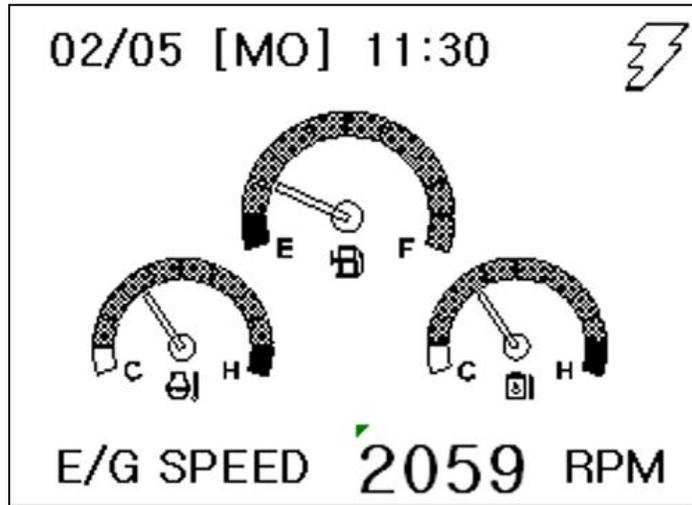
2

Incorrect password

## 6) Special menu (1)

### - Special menu

Press  and  · 3 sec, change screen to special menu,  
press  again, change screen to normal screen.

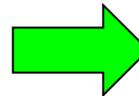


## 6) Special menu (2)

### - Machine Information

#### I) Analog Input State

MACHINE INFO	
1. Analog Input State	▲▼
2. Digital Input State	
3. Digital Output State	
▲ :UP   ▼ :DOWN   ↵ :SELECT	



ANALOG INPUT STATE	
1.Power Shift P/V	:0598mA
2.Cooling Fan Ctrl P/V	: N.A
3.Flow Control P/V	: 0000mA
4.Engine Control Dial	: 2095mV
5.TPS	: 2095mV
6.Engine Control Motor	: 2095mV
▲ :UP   ▼ :DOWN   Page:1/2	

ANALOG INPUT STATE	
7.Boom Pressure	: 205BAR
8.Pilot Gear Pump Press.:	33BAR
9.Boost Pressure P/V	: 000BAR
10.Intake Manifold Temp.	: 000℃
11.Engine Oil Pressure	: 000BAR
12.Fuel Temp.	: 000℃
▲ :UP   ▼ :DOWN   Page:1/2	

ANALOG INPUT STATE	
13.Engine Oil Temp.	: 000℃
14.Pecent Load At Cur.Spd:	00%
▲ :UP   ▼ :DOWN   Page:1/2	

**Analog Input State is Input analog value to EPOS from each sensor or proportional valve**

## 6) Special menu (3)

### 2) Machine Information

#### II) Digital Input State

DIGITAL INPUT STATE	
1.Alternator	: ●
2.Travel Select SW	: ●
3.High Speed Sel.(M)	: ○
4.High Speed Sel.(A)	: ○
5.Pressuer SW (Py)	: ●
6.Pressuer SW (Px)	: ○
 :UP  :DOWN              Page:1/4	

DIGITAL INPUT STATE	
7.Engine Oil Press.SW	: ●
8.Air Cleaner Clogged	: ○
9.Return Filter Clogged	: ○
10.Pilot Filter Clogged	: ○
11.OWD Warning SW	: ○
12.Brake Oil Press.SW	: ●
 :UP  :DOWN              Page:2/4	

DIGITAL INPUT STATE	
13.Pedal Press.SW	: ●
14.One Way Sel.	: ○
15.Two Way Sel.	: ○
16.Booster SW	: ○
17.Breaker SW	: ●
18.Preheat Select	: ○
 :UP  :DOWN              Page:3/4	

DIGITAL INPUT STATE	
19.Quick Coupler	: ○
20.F & R Lever	: ●
21.Preheat Select	: ○
22.Reverse Fan SW	: ○
23.Pilot Cutoff SW	: ○
 :UP  :DOWN              Page:4/4	

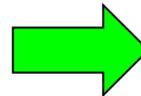
Digital Input State is Input Digital signal ( On or Off) to EPOS from each switch

## 6) Special menu (4)

### - Machine Information

#### III) Digital Output State

MACHINE INFO	
1. Analog Input State	
2. Digital Input State	
3. Digital Output State	▲▼
▲ :UP   ▼ :DOWN   ↵ :SELECT	

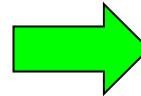
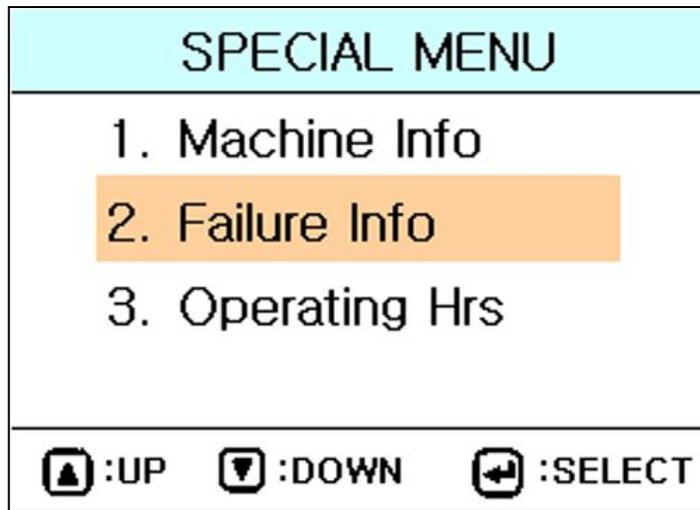


DIGITAL OUTPUT STATE	
1. Relief Press Up S/V	: ●
2. High Speed S/V	: ●
3. Swing Priority S/V	: ○
4. Reverse Fan S/V	: ○
5. Starter Relay	: ●
6. Afterheat Relay	: ○
▲ :UP   ▼ :DOWN   Page:1/1	

**Digital Output State is output Digital signal (On or Off) to each actuator from E EPOS**

## 6) Special menu (5)

### - Failure Information

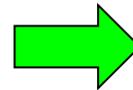


# 6) Special menu (6)

## - Failure Information

### I) Realtime Fail

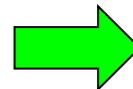
FAILURE INFO	
1. Realtime Fail	
2. Failure Log	
3. Delete Fail Log	
:UP	DOWN  : Select



REALTIME FAIL	
1/2 CODE : V204-05	
2/2 CODE : E011-04	
Relief PressureUP S/V Open	
:UP	DOWN

### II) Failure Log

FAILURE INFO	
1. Realtime Fail	
2. Failure Log	
3. Delete Fail Log	
:UP	DOWN  : Select



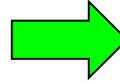
FAILURE LOG	
1/2 CODE : V204-05	
2/2 CODE : E011-04	
Time :00245Hr 29m Count : 08 Relief PressureUP S/V Open	
:UP	DOWN

# 6) Special menu (7)

## - Failure Information

### III) Delete Fail Log

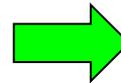
FAILURE INFO		
1. Realtime Fail		
2. Failure Log		
3. Delete Fail Log		
:UP	DOWN	: Select



DELETE FAIL LOG	
All Fail Log Will be DELETE	
:YES	SEC : NO



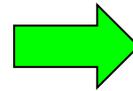
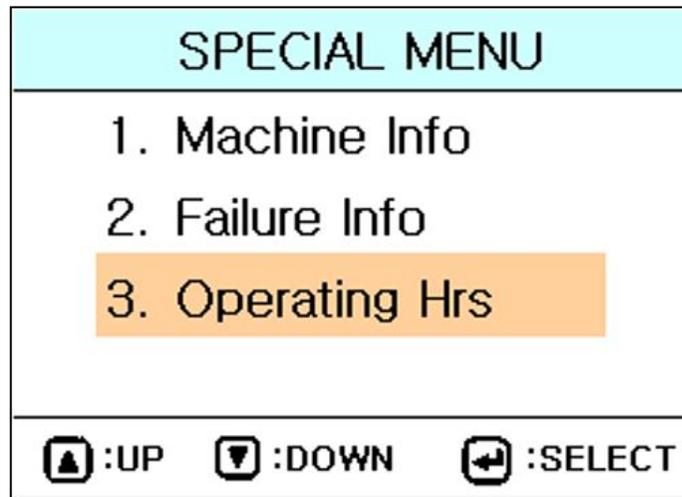
DELETE FAIL LOG	
Enter Password	
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
:YES	SEC : NO



DELETE FAIL LOG	
DELETED!!!	
:YES	SEC : NO

## 6) Special menu (8)

### - Operating Hours

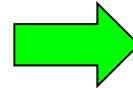


## 6) Special menu (9)

### - Operating Hours

#### I) Operating Hours

OPERATING HOURS	
Operating Hours	
Reset Hour	
:UP               :DOWN               :SELECT	



OPERATING HOURS	
1.Power	: 00042Hr
2.Trenching	: 00006Hr
3. Auto Idle	: 00159Hr
4.Travel Speed	
I Speed	: 00005Hr
II Speed	: 00001Hr
:UP               :DOWN              Page:1/3	

OPERATING HOURS	
5.Hyd.Oil Temp. [°C]	
30↓	:00140Hr
30-50	:00054Hr
51-75	:00087Hr
76-85	:00449Hr
86-95	:00001Hr
96↑	:00000Hr
:UP               :DOWN              Page:2/3	

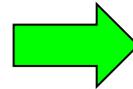
OPERATING HOURS	
6.Coolant Temp. [°C]	
40↓	:00140Hr
41-60	:00054Hr
61-85	:00087Hr
86-95	:00449Hr
96-105	:00001Hr
105↑	:00000Hr
:UP               :DOWN              Page:3/3	

## 6) Special menu (10)

### - Operating Hours

#### I) Reset Hour

OPERATING HOURS		
Operating Hours		
Reset Hour		
:UP	:DOWN	:SELECT



OPERATING HOURS	
All Operation Hours Will be DELETE	
:YES	SEC : NO

OPERATING HOURS			
ENTER PASSWD			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
:YES	SEC : NO		

OPERATING HOURS	
DELETED!!!	
:YES	SEC : NO