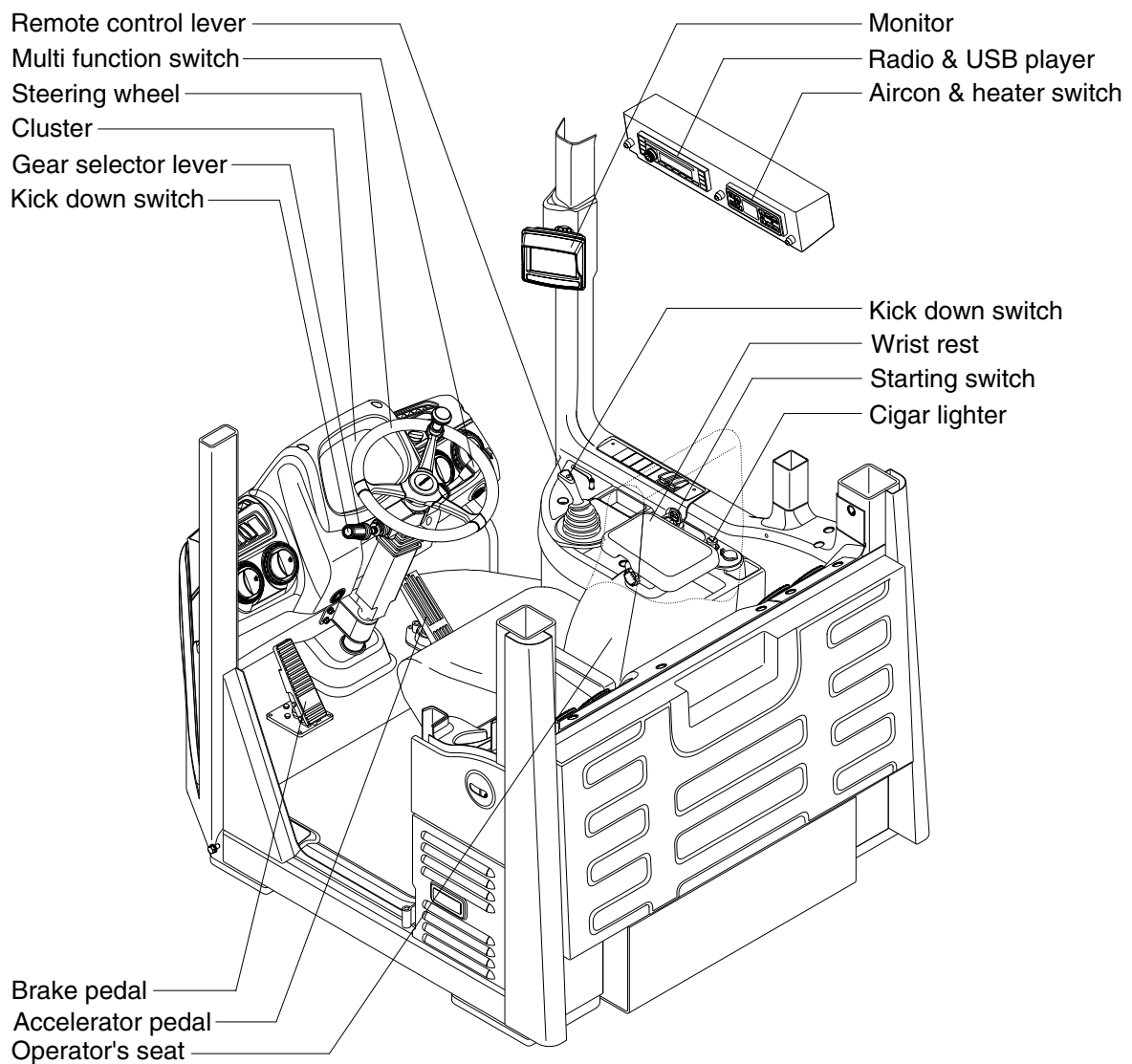## 1. CAB DEVICES

1) The ergonomically designed console box and suspension type seat provide the operator with comfort.

2) ELECTRONIC MONITOR SYSTEM

(1) The centralized electronic monitor system allows the status and conditions of the machine to be monitored at a glance.

(2) It is equipped with a safety warning system for early detection of machine malfunction.

Remote control lever
Multi function switch
Steering wheel
Cluster
Gear selector lever
Kick down switch

Monitor
Radio & USB player
Aircon & heater switch

Kick down switch
Wrist rest
Starting switch
Cigar lighter

Brake pedal
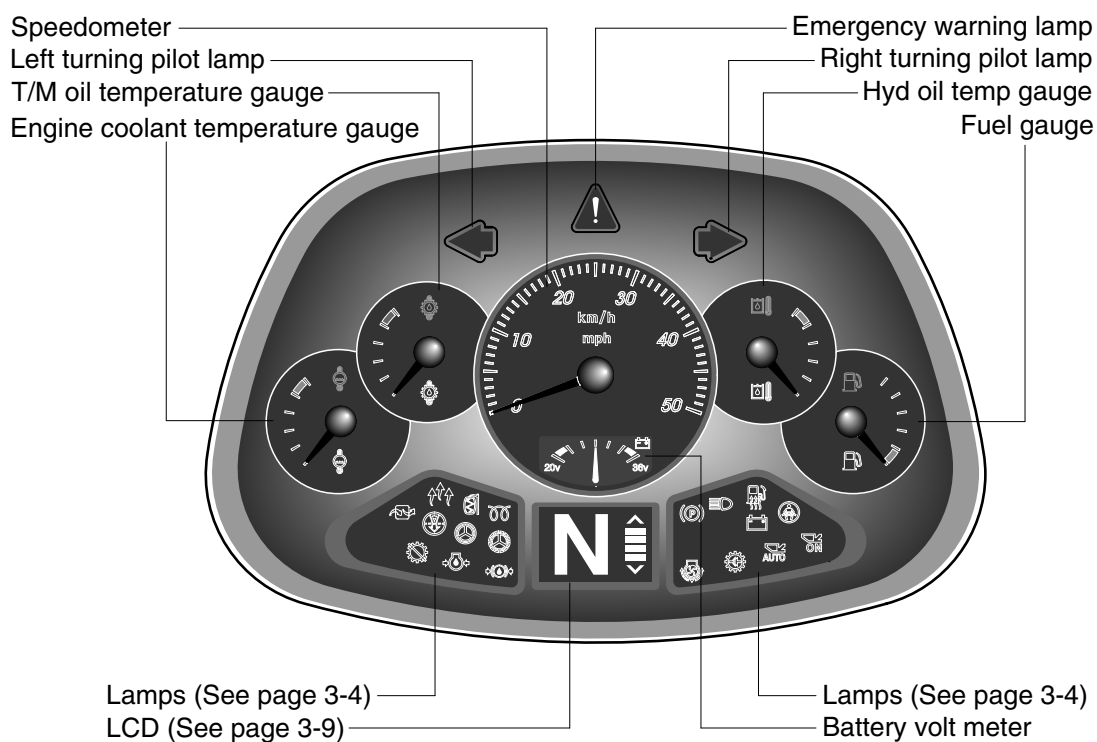Accelerator pedal
Operator's seat

7409S3CD01

2. CLUSTER

1) STRUCTURE

The cluster consists of gauges, lamps and LCD as shown below, to warn the operator in case of abnormal machine operation or conditions for the appropriate operation and inspection.
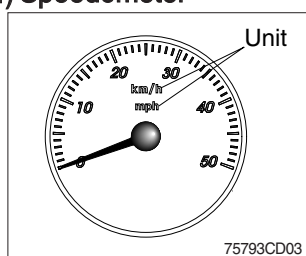
- ・ Gauges : Indicate operating status of the machine.
- ・ Warning lamps : Indicate abnormality of the machine.
- ・ Pilot lamps : Indicate operating status of the machine.
- ・ LCD : Indicates selected the driving speed and direction.

※ **The cluster installed on this machine does not entirely guarantee the condition of the machine. Daily inspection should be performed according to chapter 6, MAINTENANCE.**

※ **When the cluster provides a warning immediately check the problem, and perform the required action.**

Speedometer
Left turning pilot lamp
T/M oil temperature gauge
Engine coolant temperature gauge

Emergency warning lamp
Right turning pilot lamp
Hyd oil temp gauge
Fuel gauge

Lamps (See page 3-4)
LCD (See page 3-9)

Lamps (See page 3-4)
Battery volt meter

7409S3CD02
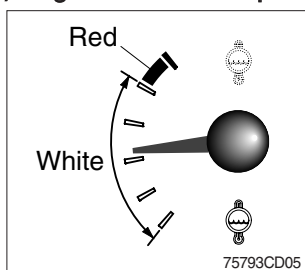
2) GAUGE

(1) Speedometer

Unit

75793CD03

① The speedometer displays the speed of machine in mph and km/h.

※ **The unit (km/h or mph) can be set by the display set up menu of the monitor and selected unit is displayed. Refer to page 3-22.**

(2) Fuel gauge
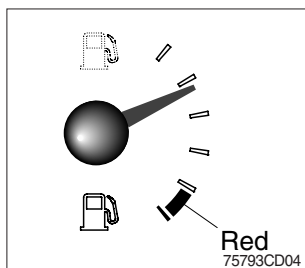
① This gauge indicates the amount of fuel in the fuel tank.

② Fill the fuel when the indicator moves red range or ⛽ lamp blinks in red, refuel as soon as possible to avoid running out of fuel.

※ **If the gauge indicates below red range even though the machine is on the normal condition, check the electric device as that can be caused by the poor connection of electricity or sensor.**

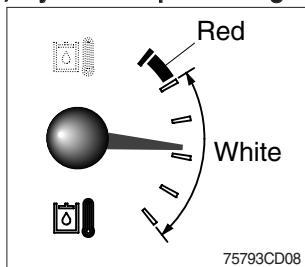## (3) Engine coolant temperature gauge

① This gauge indicates the temperature of coolant.
  · White range : 40~100˚C (104~212˚F)
  · Red range : Above 100˚C (212˚F)

② If the indicator is in the red range or 🌡 lamp blinks in red, turn OFF the engine and check the radiator and engine.

(4) Transmission oil temperature gauge
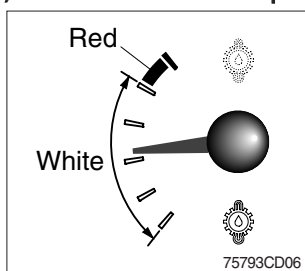
① This gauge indicates the temperature of transmission oil.
  · White range : 40~107˚C (104~225˚F)
  · Red range : Above 107˚C (225˚F)

② If the indicator is in the red range or 🌡 lamp blinks in red, it means the transmission is overheated. Be careful that the indicator does not move into the red range.

(5) Hyd oil temperature gauge

① This gauge indicates the temperature of hydraulic oil.
  · White range : 40~105˚C (104~221˚F)
  · Red range : Above 105˚C (221˚F)

② If the indicator is in the red range or 🌡 lamp blinks in red, reduce the load on the system.
③ If the gauge stays in the red range, stop the machine and check the cause of the problem.

(6) Battery volt meter
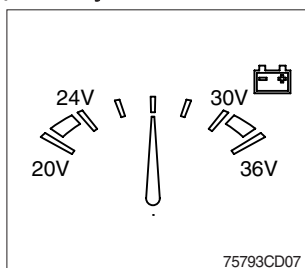
① This gauge indicates the voltage in the charging system when the engine is running.

② If the indicator is below 24V, it means that the electricity is being discharged. If the indicator is above 30V, an unusually high voltage may damage the alternator. Check the charging system in both cases.

3) WARNING LAMPS

Emergency warning lamp
T/M oil temperature warning lamp
Engine overheat warning lamp
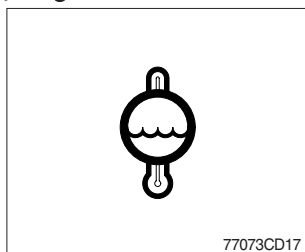
Hydraulic oil temperature warning lamp
Fuel level warning lamp

T/M error warning lamp
Air cleaner warning lamp
Engine oil pressure warning lamp
Steering warning lamp(Primary)

Battery charging warning lamp
Steering warning lamp(Emergency)
Brake fail warning lamp

7409S3CD09

(1) Emergency warning lamp

① This warning lamp blinks and the buzzer sounds when communication error occur between monitor and MCU.

② When this warning lamp blinks, machine must be checked and service immediately.

75793CD95

(2) Engine overheat warning lamp

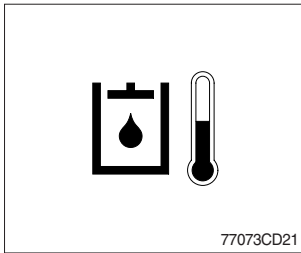① This lamp is turned ON when the temperature of coolant is over the normal temperature (100˚C, 212˚F).

② Check the cooling system when the lamp is ON.

77073CD17

(3) Transmission oil temperature warning lamp
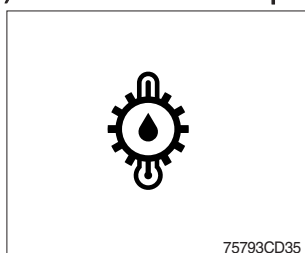
① This lamp informs the operator that transmission oil is above the specified temperature.

② When this lamp lights up during operation, stop the engine and check the machine.

75793CD35

(4) Hydraulic oil temperature warning lamp

① This warning lamp operates and the buzzer sounds when the temperature of hydraulic oil is over 105°C (221°F).

② Check the hydraulic oil level when the lamp is turned ON.

③ Check for debris between oil cooler and radiator.

77073CD21

(5) Fuel level warning lamp
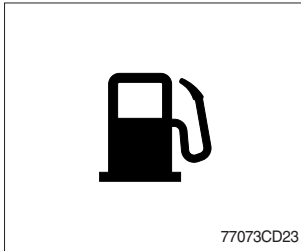
① This warning lamp lights ON when the fuel level is low.
Refuel the machine as soon as possible.

77073CD23

(6) Transmission error warning lamp
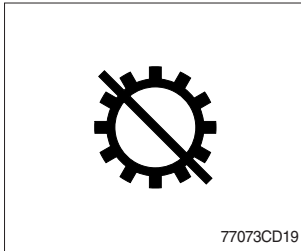
① This lamp lights ON and the LCD display show the error codes when an error occurs in the transmission.

② Immediately pull the machine to a convenient stop. Stop the engine. Investigate the cause.

※ **Consult a HYUNDAI dealer to investigate the cause.**
※ **Do not operate until the cause has been corrected.**

77073CD19

(7) Air cleaner warning lamp
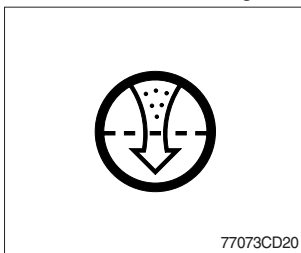
① This lamp lights ON when the filter of air cleaner is clogged.

② Check the filter and clean or replace it when the lamp is ON.

77073CD20

(8) Engine oil pressure warning lamp
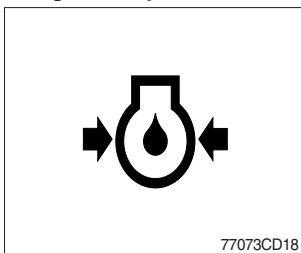
① This lamp is comes ON after starting the engine because of the low engine oil pressure.

② If the lamp comes ON during engine operation, shut OFF engine immediately. Check engine oil level.

77073CD18

(9) Steering warning lamp

① **Primary**

This lamp indicates that the primary steering has failed. When the indicator comes on and the action alarm sounds, steer the machine immediately to a convenient location and stop the machine. Stop the engine and investigate the cause.

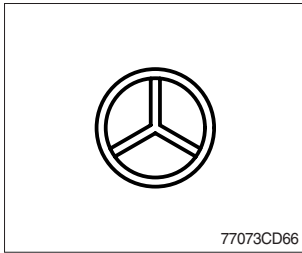※ **Do not operate the machine until the cause has been corrected.**
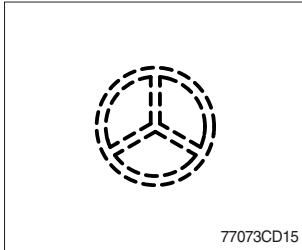
② **Emergency**

This lamp indicates the emergency steering system is active.

※ **Immediately pull the machine to a convenient stop and stop the engine.**

※ **The emergency steering system can be manually tested. Refer to page 3-27.**

(10) Battery charging warning lamp
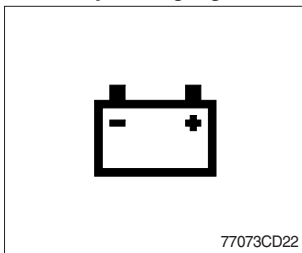
① This lamp is ON when key ON, it is turned OFF after starting the engine.

② Check the battery charging circuit when this lamp comes ON, during engine operation.

(11) Brake fail warning lamp
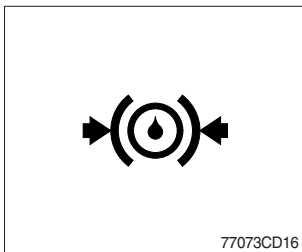
① The lamp lights ON when the oil pressure of service brake drops below the normal range.

② When the lamp is ON, stop the engine and check for its cause.

※ **Do not operate until any problems are corrected.**

4) PILOT LAMPS

Warming up pilot lamp

Mirror defrost pilot lamp

Preheater pilot lamp

Seat belt pilot lamp

Fuel warmer pilot lamp

High beam pilot lamp

Parking brake pilot lamp

Fan reverse pilot lamp

Maintenance pilot lamp

Clutch cut off pilot lamp

Ride control pilot lamp(Auto)

Ride control pilot lamp(On)
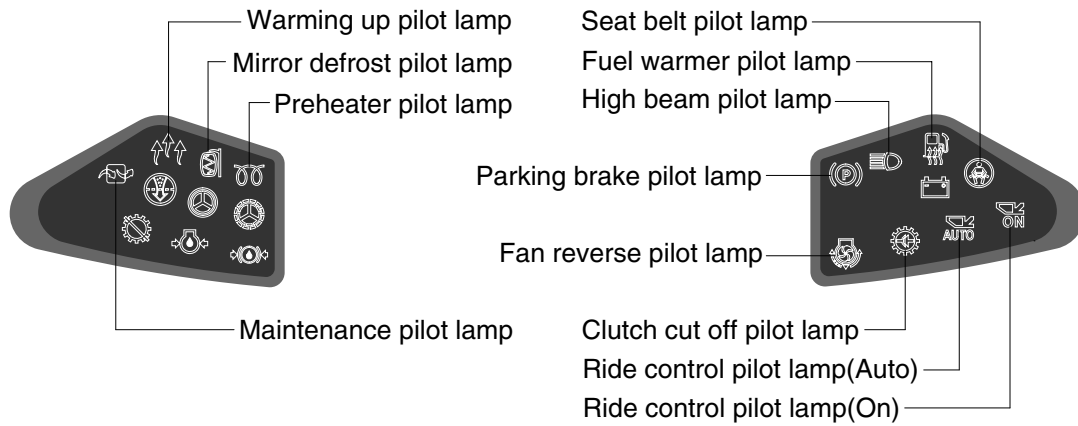
7409S3CD10

(1) Warming up pilot lamp

75793CD31
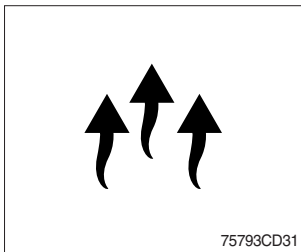
① This lamp is turned ON when the coolant temperature is below 30˚C (86˚F).

② The automatic warming up is cancelled when the engine coolant temperature is above 30˚C, or when 10 minutes have passed since starting the engine.

(2) Seat belt pilot lamp

75793CD17
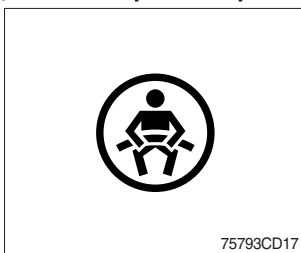
① This lamp lights ON for the first five seconds after starting the engine.

(3) Mirror defrost pilot lamp

7807A3CD11
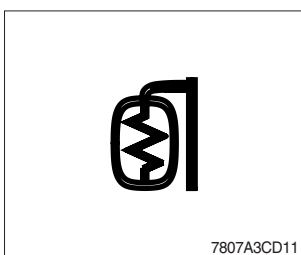
① This lamp comes ON when mirror defrost switch is pressed.

(4) High beam pilot lamp
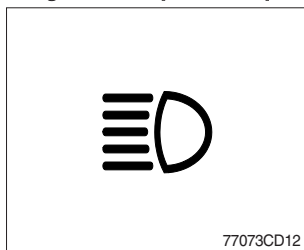
① This lamp works when the illuminating direction is upward.

② This lamp comes ON when the dimmer switch is operated, e.g., when passing another vehicle.

77073CD12

(5) Preheat pilot lamp
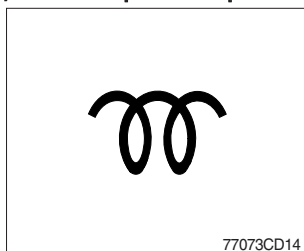
① This lamp lights ON when start switch is turned clockwise to the ON position. Light will turn off after approximately 5~45 seconds, depending on engine temperature, indicating that preheating is completed.

② When the lamp goes out the operator should start cranking the engine.

※ Refer to page 4-5.

77073CD14

(6) Parking brake pilot lamp

① When the parking brake is actuated, the lamp lights ON.

※ Check the lamp is OFF before driving.

77073CD13

(7) Maintenance pilot lamp
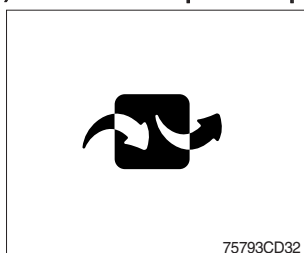
① This lamp will be ON when the consuming parts are needed to change or replace. It means that the change or replacement interval of the consuming parts remains below 30 hours.

② Check the message in maintenance information of the monitor menu. Also, this lamp lights ON for 3 minutes when the start switch is ON position.

75793CD32

(8) Clutch cut off pilot lamp
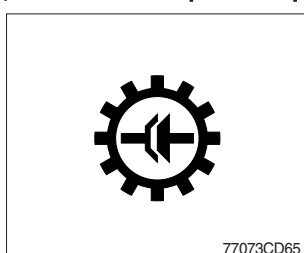
① This lamp lights ON when the clutch cut off mode switch is positioned L, M, H.

※ Refer to page 3-27.

77073CD65

(9) Ride control pilot lamp (option)

75793CD33
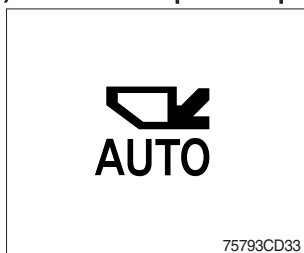
① **Auto ride control**

This lamp lights ON when push in the bottom of the ride control switch (auto position).

※ **Refer to page 3-26.**

75793CD34

② **Manual ride control**

This lamp lights ON when push in the top of the ride control switch (manual position)

※ **Refer to page 3-26.**

(10) Fan reverse pilot lamp

7707A3CD40
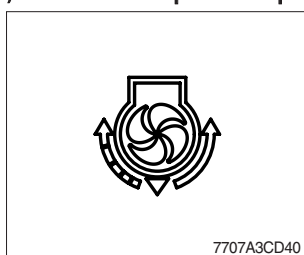
① This lamp lights ON when the fan control switch is pressed.

※ **Refer to page 3-26.**

(11) Fuel warmer pilot lamp

21093CD43
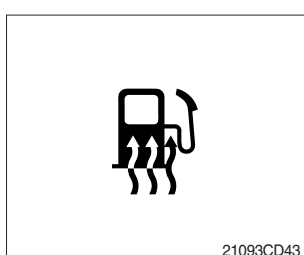
① This lamp is turned ON when the coolant temperature is below 10˚C (50˚F) or the hydraulic oil temperature 20˚C (68˚F).

② The automatic fuel warming is cancelled when the engine coolant temperature is above 60˚C and the hydraulic oil temperature is above 45˚C since the start switch was ON position.

5) LCD

75793CD39
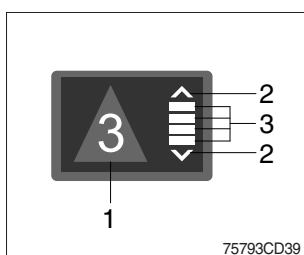
(1) The LCD can be used with the gear selector.
It indicates speed and driving direction.

No	Symbol	Meaning	Remark
1	△, ▽, □	Actual gear display	Forward, reverse, neutral
	1, 2, 3, 4		Actual gear
	P		Parking brake mode active
2	⋀ , ⋁	Forward, reverse	Automatic mode
3	≡	Gear range display	Automatic mode

3. MONITOR

· The monitor is adjustable.
- Vertical : 14˚
- Horizontal : 30˚

Vertical

Horizontal

Main display

Menu button

Enter button

Left move button

Right move /
buzzer stop button

Camera / ESC button

7609S3CD23

1) BUTTONS

(1) Menu button

MENU

75793CD90

① Main display to main menu, main menu to main display.

② AEB cancel button in AEB setting.

(2) Left move button

◀

75793CD91

① Move in menu (left, up).

(3) Camera / ESC button

▣/ESC

75793CD92

① Enter rear camera mode in main display.

② Cancel button except in main display (move previous menu).

(4) Right move / Buzzer stop button

▶/◻✕

75793CD93

① Move in menu (right, down).

② Buzzer stop.

(5) Enter button

↵

75793CD94

① Select menu (enter).

② AEB cancel button in AEB setting.

2) MAIN MENU

Main display

TYPE A (default)

TYPE B

Press
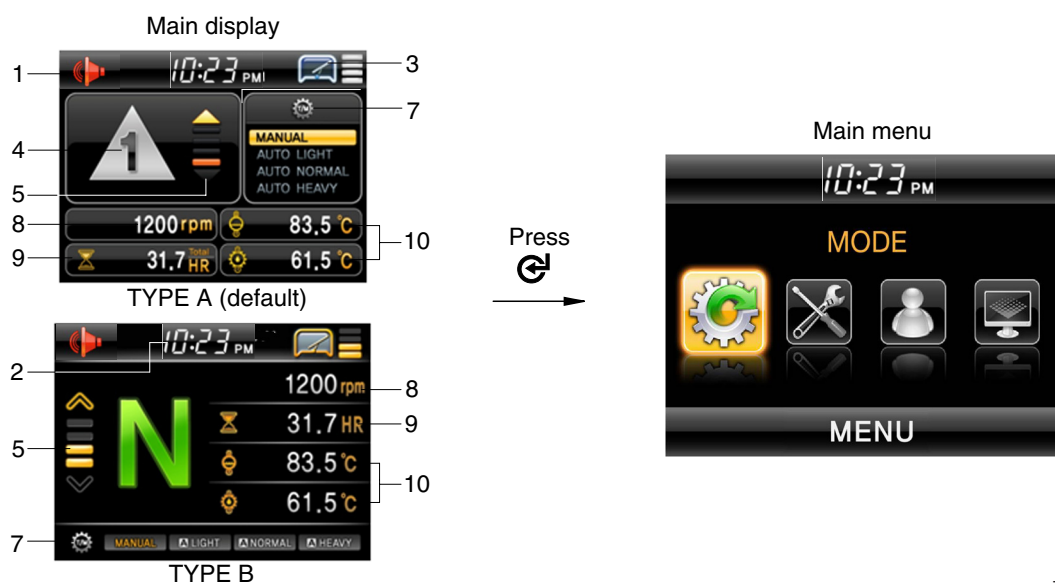
Main menu

MODE

MENU

7609S3CD11

1	Buzzer	4	Actual gear	8	Engine rpm
2	Clock	5	Select gear	9	Hour meter, odometer
3	Wiper speed	7	Transmission mode	10	Monitoring

※ **Display type can be changed by operator. See page 3-22.**

(1) Structure

No	Main menu	Sub menu	Description
1	MODE 75793CD12	Speed meter Kick down Wiper speed Fan-auto mode AEB	Pulse setting Mode 1 (down/up), Mode 2 (down only) 4 steps Interval and time setting AEB setting
2	MONITORING 75793CD13	Fault code Machine monitoring Monitoring history	Active, logged fault (Machine, TCU) Hyd temp, Battery, Coolant temp T/M oil temp Hour meter, ODO meter
3	MANAGEMENT 75793CD14	Machine security Maintenance Machine information Service contact Service menu	ESL system setting, Change password Replacement, Change interval (oils and filters) Version, Status Service contact S/W download
4	DISPLAY SET UP 75793CD13	Clock Display Unit Rear camera Language	Clock Brightness setting (Manual/Automatic) Type display (A or B type) Temp (˚F/˚C), Distance (km/mile), Pressure (bar, Mpa, kgf/m², psi) Reverse mode, Active camera, Display order 18 languages

(2) Mode
① Speed meter

7609S3CD20

7609S3CD20B

7609S3CD20A
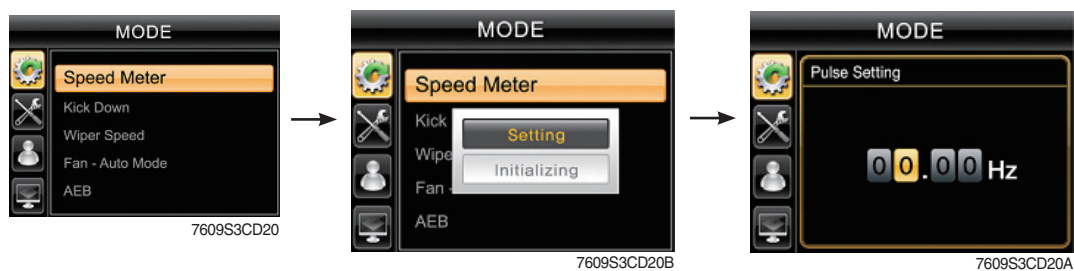
· Press ⏎ and hold for 3 seconds.

· To change the pulse value, press ◄ or ►/⋇ .

· To change the position, press ⏎ .

※ **Only for the serviceperson.**

② Kick down

7609S3CD17

7609S3CD17A

· Mode 1 (down/up)   : Press kick down switch once, shift down and press button again, shift up.

· Mode 2 (down only) : Press kick down switch every time, shift to lower gear respectively.

※ **Refer to page 3-28.**

③ Wiper speed

7609S3CD18

7609S3CD18A

· Setting wipe speed 1 to 4.

④ Fan-auto mode

7609S3CD110

7609S3CD111

7609S3CD112

7609S3CD113

7609S3CD114
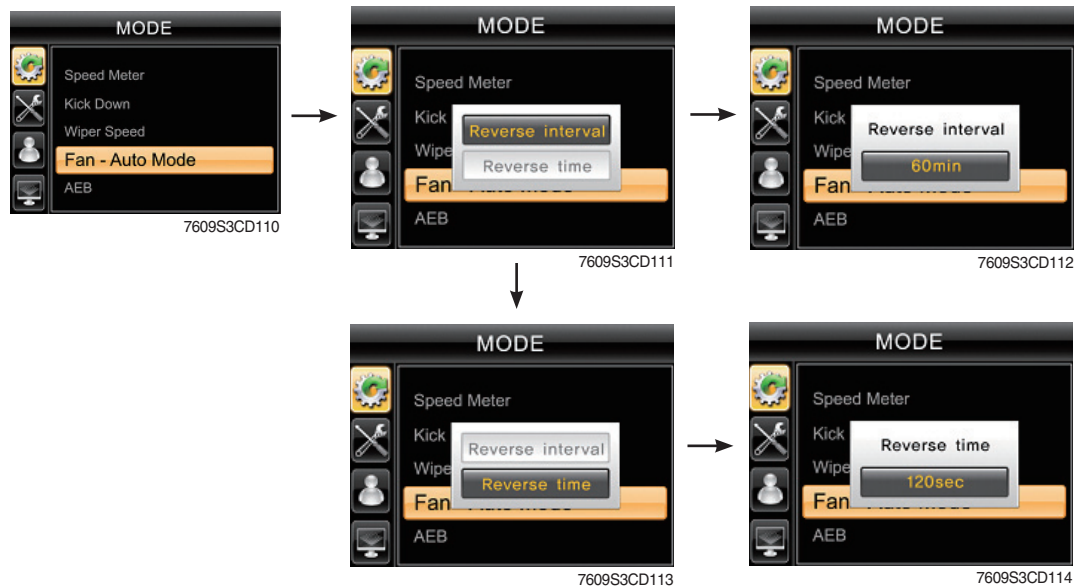
· Select reverse interval or reverse time.
· Set reverse interval (30~300 min) or reverse time (30~300 sec).
※ Default : Interval (60 min), time (120 sec)
※ Refer to page 3-26, fan control switch.

⑤ AEB

Actual gear window

7609S3CD19

7609S3CD19A
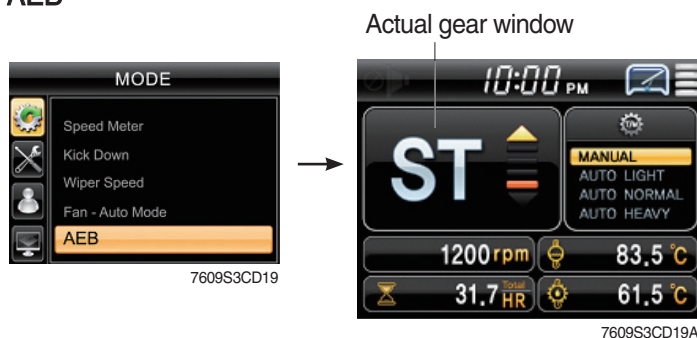
· AEB mode controls the disk clearance of the transmission, automatically.
· To start AEB, press ⏎ and hold for 3 seconds.
· To cancel AEB, press **MENU**, ▣/**ESC** or ⏎.
· If "OK" in actual gear window, press **MENU**, ▣/**ESC** or ⏎ to complete AEB setting.
· **Display during AEB mode**

Symbol	Meaning
ST	Start AEB
K1~K4, KV, KR	Calibrating clutch K1~K4, KV or KR respectively
OK*	Calibration for all clutches finished
Spanner and Kx*	Kx couldn't be calibrated, AEB finished
△E	Engine speed too low - Raise engine speed
▽E	Engine speed too high - Lower engine speed
△T	Transmission oil temperature too low - Heat up transmission
▽T	Transmission oil temperature too high - Cool down transmission
FO*	Output speed not zero
FN*	Shift lever not in neutral position
FP*	Parking brake not applied

* **:** Transmission stays in neutral, you have to restart the TCU (ignition off/on).

(3) Monitoring
① Fault code

75793CD23

75793CD23C

7609S3CD23D

75793CD23E

7709S3CD23

7609S3CD23G

75793CD23H

75793CD23I

75793CD23J
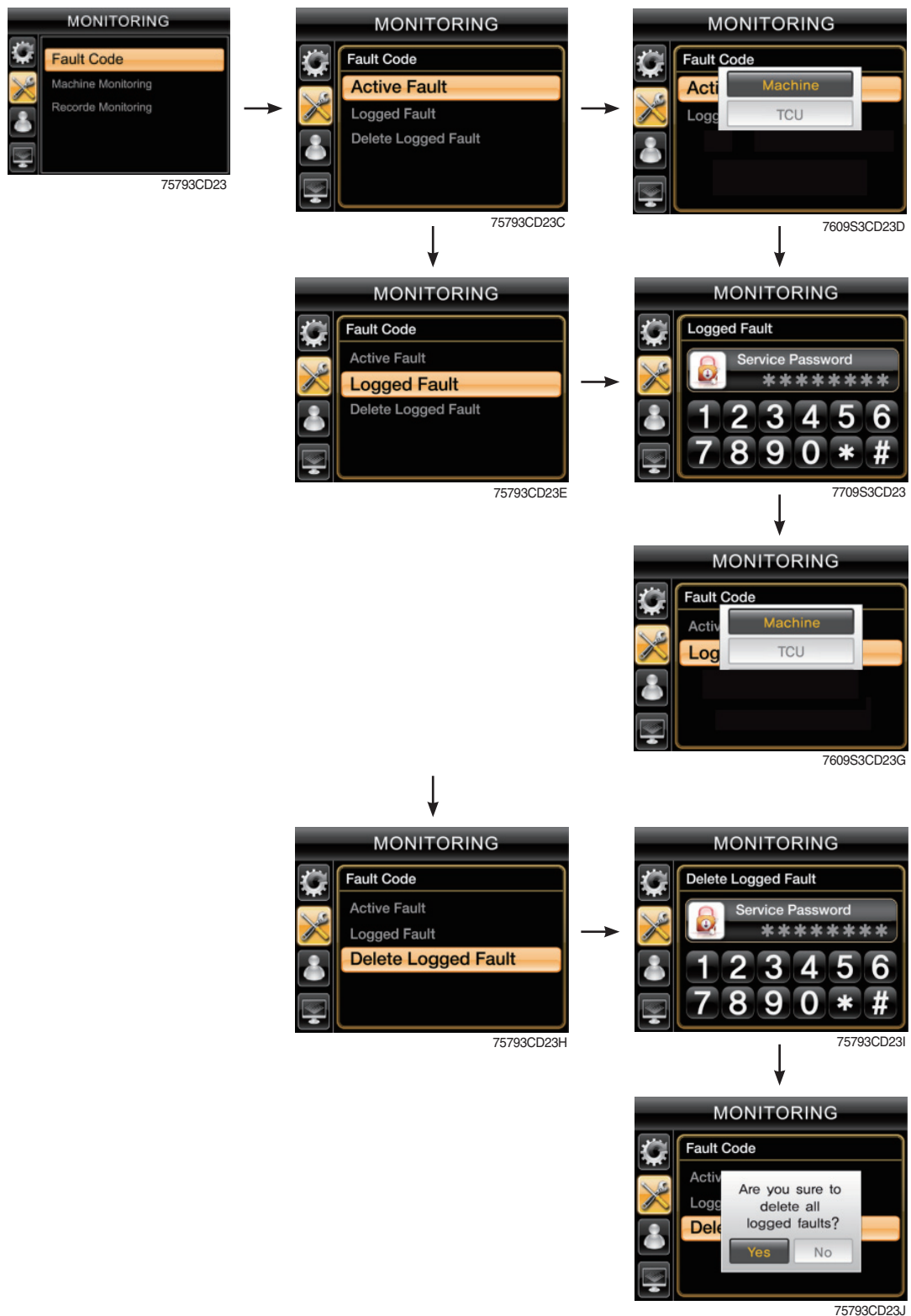
　· Monitor the fault code of the Machine / TCU .

　※ Not define will be indicated in case of that there's no fault.

② Machine monitoring

75793CD24

7609S3CD24A

7609S3CD24B
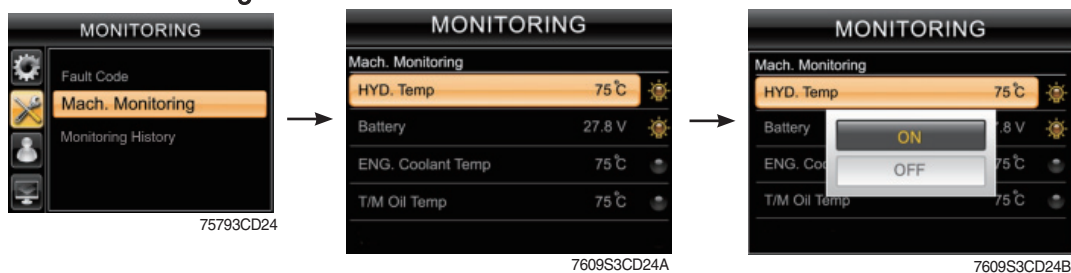
· Monitor the status of the machine.
· To check the item in main display, choose it and press ⏎ .
· The right icon shows ON/OFF status.

③ Record monitoring

75793CD25

75793CD25A

75793CD25C

75793CD25D
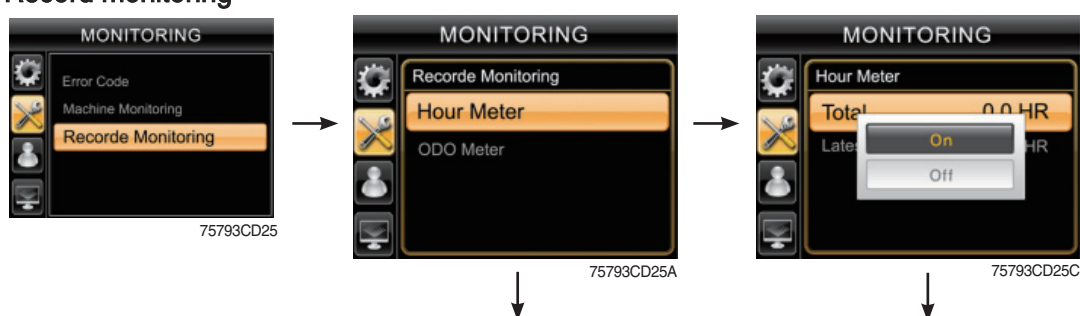
· **Hour meter**
  - **Total** : total hour meter
    To show the item in the main display, select "ON" and press ⏎ (this item could not reset).
  - **Latest** : the latest hour meter after reset.
    To show the item in the main display, select "ON" and press ⏎.
    To reset the latest hour meter, select "initializing" and press ⏎.

75793CD25F

75793CD25H

75793CD25J

· **ODO meter**
  - **Total** : total ODO meter
    To show the item in the main display, select "ON" and press ⏎ (this item could not reset).
  - **Latest** : the latest ODO meter after reset.
    To show the item in the main display, select "ON" and press ⏎.
    To reset the latest odometer, select "initializing" and press ⏎.

(4) Management
① Machine security

75793CD26

75793CD26A

75793CD26B

· **ESL system setting**
- ESL : Engine Starting Limit
- ESL mode is designed to be a theft deterrent or will prevent the unauthorized operation of the machine.
- If the ESL mode was selected Enable, the password will be required when the start switch is turned ON.
- Disable   : Not used ESL function
  Enable   : The password is required whenever the operator start engine.
  Interval mode : The password is required when the operator start engine first. But the operator can restart the engine within the interval time without inputting the password.
  The interval time can be set maximum 2 days.

※ **Default password : 00000 ✳**

75793CD26C

75793CD26D

· Interval setting
- If set interval setting to 5 minutes, ESL system is activated after 5 minutes.
  Therefore, the password does not need to restart engine within 5 minutes.

75793CD26J
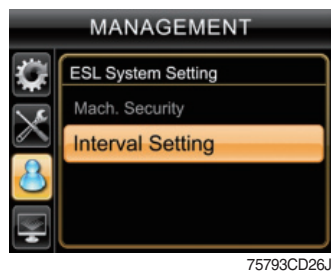
75793CD26K

· **Change password**

  - Input 5 to 10 digits and press *.

75793CD26G

75793CD26H
Enter the current password.

75793CD26L
Enter the new password.

75793CD26N
The new password is stored in the MCU.

75793CD26M
Enter the new password again.

② Maintenance

75793CD27

75793CD27A

75793CD27B

75793CD27D

75793CD27C
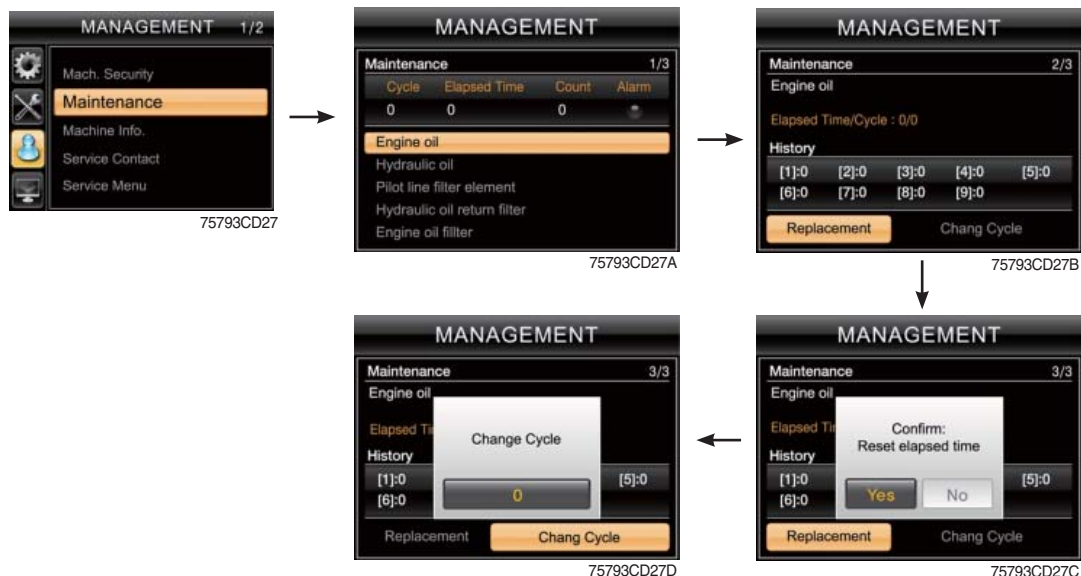
- · Alarm (☼) : Warning

  Replacement : The elapsed time will be reset to zero.

  Change cycle : The change or replace cycle can be changed in the unit of 50 hours.
- · To change cycle, press ◀ or ▶/☼ .
- · **Change or replace interval**

No	Item	Interval
1	Engine oil	250
2	Hydraulic oil	★1 2000 ★2 5000
3	Pilot line filter element	250
4	Hydraulic oil return filter	250
5	Engine oil filter	250
6	Fuel filter element	500
7	Fuel pre-filter	500
8	Hydraulic tank air breather	250
9	Radiator coolant	2000
10	Transmission oil and filter	1000
11	Axle oil (front and rear)	1500

★1 : Conventional hydraulic oil

★2 : Hyundai genuine long life hydraulic oil

3-19

③ **Machine information**

75793CD28

75793CD28A

7409S3CD28

75793CD28C

75793CD28D

75793CD28E
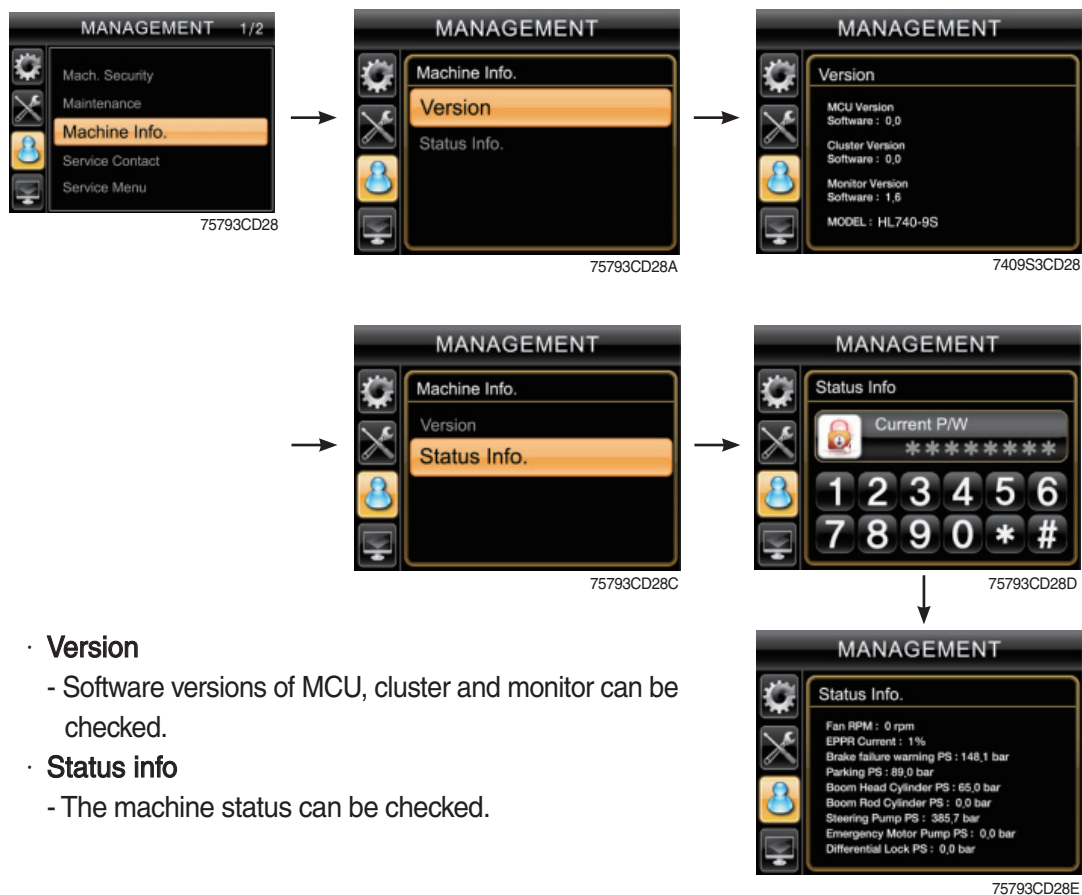
· **Version**
  - Software versions of MCU, cluster and monitor can be
    checked.
· **Status info**
  - The machine status can be checked.

④ **Service contact**

75793CD29

75793CD29A

75793CD29B
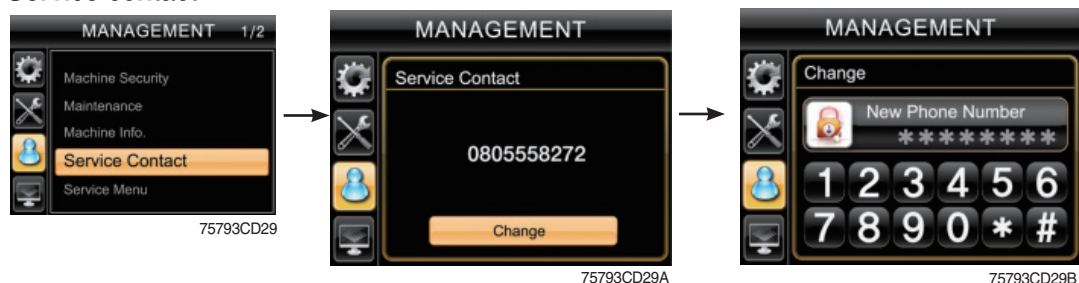
· The phone number of the service man can be checked and changed.

⑤ **Service menu**

75793CD30

75793CD30A

75793CD30B

· The software of monitor can be downloaded.

(5) DISPLAY SET UP
① Clock

75793CD32

75793CD32A
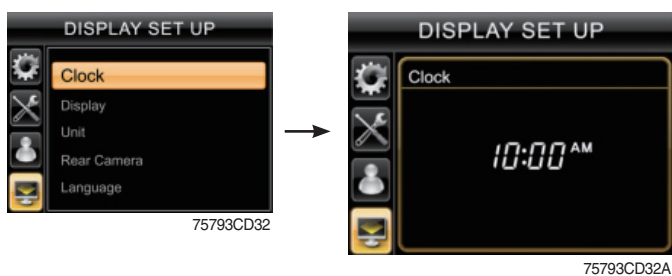
- · To set time, press ◀ or ▶/◫☀ .
- · To move position, press ↵ .

② Display
· **Brightness setting**

75793CD33

75793CD33A

75793CD33B

Manual (1st~8th step)

75793CD33C

75793CD33D

Auto (day / night)

75793CD33E
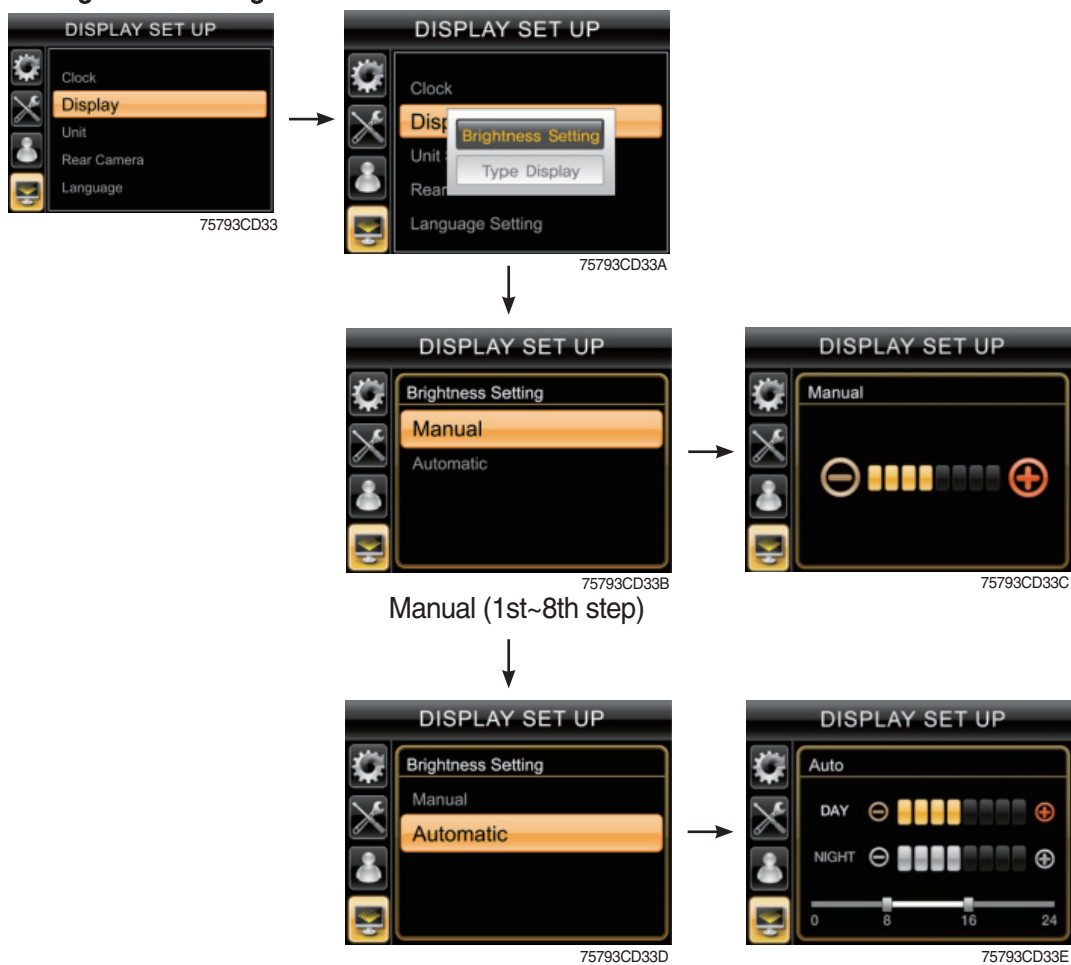
※ If "Automatic" is chosen, brightness for day and night can be differently set up. Also by using the bar in lower side, users can define which time interval belongs to day and night. (in bar figure, gray area represents night time while white shows day time)

· **Type display**

75793CD33F

75793CD33G

7609S3CD40

A type

7609S3CD33

B type

③ **Unit**

75793CD34

75793CD34A

75793CD34B

· Temperature : ˚C ↔ ˚F
· Distance   : km ↔ mile
· Pressure   : bar ↔ Mpa ↔ kgf/m² ↔ psi

④ **Rear camera**

DISPLAY SET UP

Clock
Display
Unit
Rear Camera
Language

75793CD35

DISPLAY SET UP

Rear Camera
Reverse Mode
Active Camera

75793CD35A

DISPLAY SET UP

Rear Camera
Reverse Mode
Activ

ON
OFF

75793CD35B

DISPLAY SET UP

Rear Camera
Reverse Mode
Active Camera

75793CD35C

DISPLAY SET UP

Active Camera
Number of Active Camera   ◄ 2 ►
Display Order
Order   Camera No.
1st   C1
2nd   C2
3rd   C3

75793CD35D

DISPLAY SET UP

Active Camera
Number of Active Camera   ◄ 2 ►
Display Order
Order   Camera No.
1st   C1
2nd   C2
3rd   C3

75793CD35E

DISPLAY SET UP

Active Camera
Number of Active Camera   ◄ 2 ►
Display Order
Order   Camera No.
1st   ◄ C1 ►
2nd   C2
3rd   C3

75793CD35F

·   **Reverse mode**
   - If transmission engages the reverse gear (R1~R3), the camera mode is displayed
     automatically in main display.
·   **Active camera**
   - Three cameras can be installed on the machine.
   - The display order can be set by this menu.
·   If the camera was not equipped, this menu is not useful.
·   In main display, if the ▣/ESC button is pushed, the first ordered display camera will be viewed.

⑤ **Language**

DISPLAY SET UP

Clock
Display
Unit
Rear Camera
Language

75793CD36

DISPLAY SET UP

Language   1/2
한국어   English   Deutsch
Fançais   Español   Portugues
中国語   Россия   Italian

75793CD36A

DISPLAY SET UP

Language   2/2
Nederlands   Arab   Swedish

75793CD36B

·   User can select preferable language and all display are changed the selected language.

4. SWITCHES

Cab ceiling LH side

Mirror defrost switch(option)
Rear wiper/washer switch
Beacon switch(option)
USB socket(-#0093)

Fan control switch
Emergency test switch(opt)

Main light switch
Work lamp switch
Hazard switch
Kick down switch
T/M shift mode switch
Clutch cut off mode switch
Multi function switch
Horn button

Parking brake switch
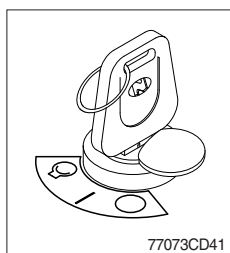Ride control switch(opt)

Starting switch

7409S3CD29

1) STARTING SWITCH

77073CD41

(1) There are three positions, OFF, ON and START.

- ◯ (OFF) : None of electrical circuits activate.
- │ (ON) : All the systems of machine operate.
- ⌖ (START) : Use when starting the engine.
  Release key immediately after starting.

※ **If you turn ON the starting switch in cold weather, the fuel warmer is automatically operated to heat the fuel by sensing the coolant temperature. Start the engine in 1~2 minutes after turning ON the starting switch. More time may take according to ambient temperature.**

※ **Key must be in the ON position with engine running maintain electrical and hydraulic function and prevent serious machine damage.**
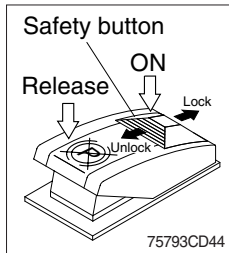
2) HAZARD SWITCH

ON OFF

75793CD42
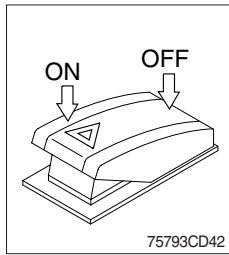
(1) Use for parking, or loading the machine.

(2) Both turn signal lights will flash simultaneously.

※ **If the switch is left ON for a long time, the battery may be discharged.**

3) PARKING BRAKE SWITCH

Safety button

Release ON

Lock

Unlock

75793CD44

(1) When the switch is pressed to ON position, the parking brake will start to operate and the cluster warning lamp will comes ON.

(2) Press the release position in order to disengage the parking brake.

※ **When operating the gear selector lever, be sure to release the parking brake. If the machine is operated with the parking brake engaged, the brake will overheat and may cause the brake system to go out of order.**

※ **This switch can be set to ON or Release position only when the safety button is pulled to the unlock position.**

4) MAIN LIGHT SWITCH

75793CD45
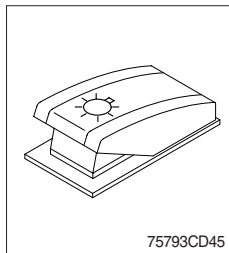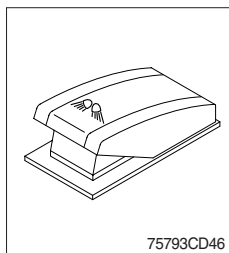
(1) This switch use to operates the clearance lamp and head light by two step.
  · **First step** : Clearance lamp and cluster illumination lamp comes ON. Also, all indicator lamp of switches come ON.
  · **Second step** : Head light comes ON.

5) WORK LAMP SWITCH

75793CD46

(1) This switch use to operates the front and rear work lamps by two step.
  · **First step** : Front work lamp located on the cab comes ON.
  · **Second step** : Rear work lamp located on the cowl comes ON.

6) REAR WIPER AND WASHER SWITCH

ON OFF

75793CD47
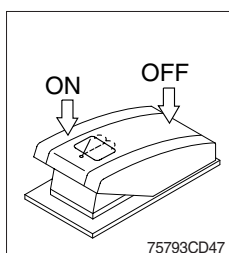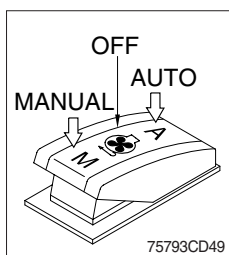
(1) The switch use to operates the rear wiper and washer by two step.
 · **First step** : The rear wiper operates.
  · **Second step** : The washer liquid is sprayed and the rear wiper is operated only while pressing. If release the switch, return to the first step position.
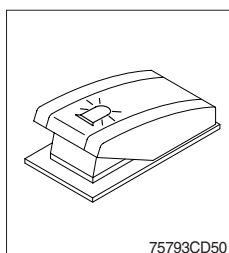
7) FAN CONTROL SWITCH

```
        OFF
            AUTO
MANUAL
        M ✿ A
              75793CD49
```

(1) This switch use to control the cooling fan.
(2) This switch has three positions.
   · **AUTO**   : The fan automatically work in reverse according to set
                    up interval and time.
                    ※ Refer to page 3-13.
   · **OFF**   : Only forward rotation is possible.
   · **MANUAL** : The fan rotates reverse only while pressing this position.
                    If release the switch, return to the OFF position.
(3) On pressing the switch, the indicator lamp is turned ON.

8) MIRROR DEFROST SWITCH (option)

```
              75793CD48
```
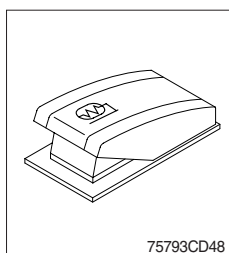
(1) If the mirror defrost switch is pressed in condition of key ON, it oper-
    ates for 15 minutes. After 15 minutes, the defrost function stops
    automatically.
(2) One more pressing the switch in operation also stops defrost func-
    tion.
(3) On pressing the switch, the indicator lamp is turned ON.

9) BEACON SWITCH (option)

```
              75793CD50
```

(1) This switch turns ON the rotary light on the cab.

10) RIDE CONTROL SWITCH (option)

```
        OFF
            MANUAL
AUTO
        M
              75793CD51
```
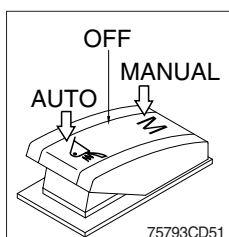
(1) AUTO

Press in the bottom of the ride control switch in order to turn on the
automatic ride control. The automatic ride control automatically
turns on when the travel speed exceeds a preset speed of approxi-
mately 7 km/h. The automatic ride control automatically shuts off dur-
ing low speed travel (below 7 km/h).

(2) MANUAL

Press in the top of the ride control switch in order to turn on the sys-
tem for ride control regardless speed. The ride control will smooth
the ride of the machine during travel.

(3) OFF

Press the ride control switch to the middle position in order to turn
off the system for the ride control.

11) EMERGENCY TEST SWITCH (option)

75793CD52
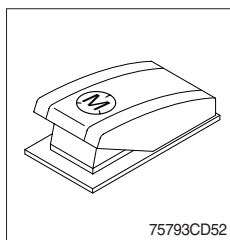
(1) The emergency steering system can be manually tested. Push the switch in order to determine if the emergency steering and the emergency steering lamp are functional.

(2) When the switch is pressed, the emergency steering pump motor will run. The emergency steering lamp will light. If the emergency steering lamp does not light, do not operate the machine.

12) CLUTCH CUT OFF MODE SWITCH

OFF L M H

M mode
L mode
H mode
Left brake pedal

75793CD58
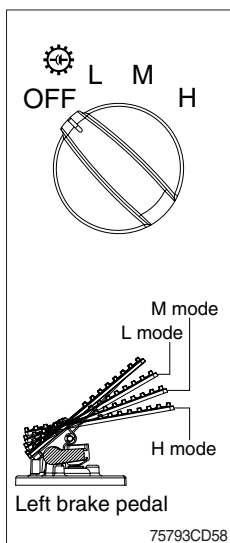
(1) Four modes are available for operator's preference and job condition.
　・ OFF　　　　　 : The clutch cut off function is disable.
　・ L (Low)　　　 : The clutch is disengaged early for short-distance and rapid loading.
　・ M (Medium) : The clutch is disengaged normally for general digging and loading operation.
　・ H (High)　　　 : The clutch is disengaged lately for slope ground.

(2) The clutch cut off functions of the left brake pedal depend on the position of the left brake pedal and the position of the clutch cut off mode switch.

Positions for clutch cut off function			
Clutch cut off mode switch	L	M	H
Left brake pedal	L, M, H	M, H	H

13) TRANSMISSION SHIFT MODE SWITCH

MAN AL AN AH

75793CD59
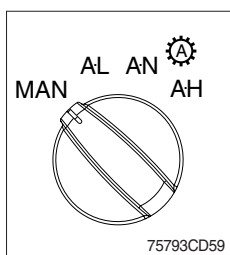
(1) Four modes are available for operator's preference and job condition.
　・ MAN (Manual)　　　: Machine is operated by selected gear on lever.
　・ AL (Auto Light)　　 : Automatic shifting point is fast for long-distance transportation and fuel efficiency.
　・ AN (Auto Normal) : Automatic shifting point is normal without automatic kick-down to 1st gear for general digging and loading operation.
　・ AH (Auto Heavy)　 : Automatic shifting point is normal with automatic kick-down to 1st gear for more powerful operation.

14) HORN BUTTON

Horn button

7609S3CD16
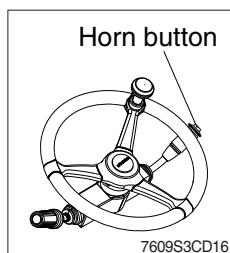
(1) If you press the button on the top of the multifunction switch, the horn will sound.

15) CAB LAMP SWITCH

DOOR   ON

75793CD63
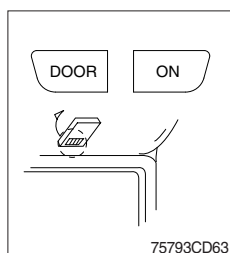
(1) This switch turns ON the cab room lamp.
① DOOR
  The lamp comes ON when the door is opened.
  When the door is closed the lamp is OFF.
② ON
  This switch is used to turn the lamp ON or OFF.
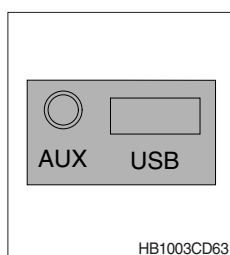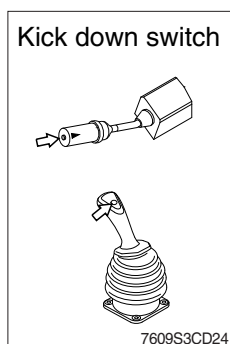
16) USB SOCKET (machine serial No. : -#0093)

AUX   USB

HB1003CD63

(1) MP3 files are played when a USB device is connected to the USB port.

(2) In addition, the AUX port enables headphone and other devices.

17) KICK DOWN SWITCH

Kick down switch

7609S3CD24

(1) Manual mode
  It is effective 2nd speed to 1st speed only and recover to 2nd speed quickly when push the switch one more time.

(2) Automatic mode
① Mode 1 (down/up)
  It shifts down quickly from current gear to one step lower speed by pushing the switch and recover to current speed quickly when push the switch one more time.
② Mode 2 (down)
  It shifts down from current gear to one step lower speed when push the switch every time.
  The kick down function is released in only 1st speed.

※ Refer to page 3-12 for the kick down setting.
※ The normal autoshift function continues after the kick down switch is released.

18) MULTI FUNCTION SWITCH

O J I II

73033CD29
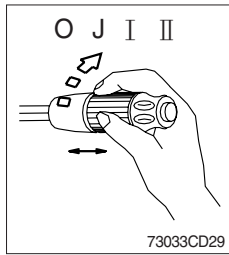
(1) Front wiper and washer switch

① When the switch is in **J** position, the wiper moves intermittently.
② When placed in Ⅰ or Ⅱ position, the wiper moves continuously.
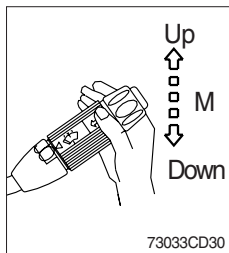③ If you push the grip of the lever, washer liquid will be sprayed and the wiper will be activated 2-3 times.

※ **Check the quantity of washer liquid in the tank. If the level of the washer liquid is LOW, add the washer liquid (in cold, winter days) or water. The capacity of the tank is 1 liter.**

Up
M
Down

73033CD30

(2) Dimmer switch

① This switch is used to turn the head lights direction.
② Switch positions
　· Up 　　: To flash for passing
　· Middle : Head lights low beam ON
　· Down 　: Head lights high beam ON
③ If you release the switch when it's in up position, the switch will return to middle.

Left turning

Right turning

73033CD31
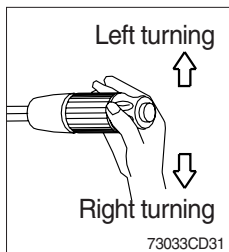
(3) Turning switch

① This switch is used to warn or signal the turning direction of the machine to other vehicles or equipment.
② Push the lever up for turning left, pull the lever down for turning right.

5. CONTROL DEVICE

Steering wheel lever

Steering wheel

Gear selector lever

Brake pedal

Remote control lever

Hydraulic safety lever

Accelerator pedal
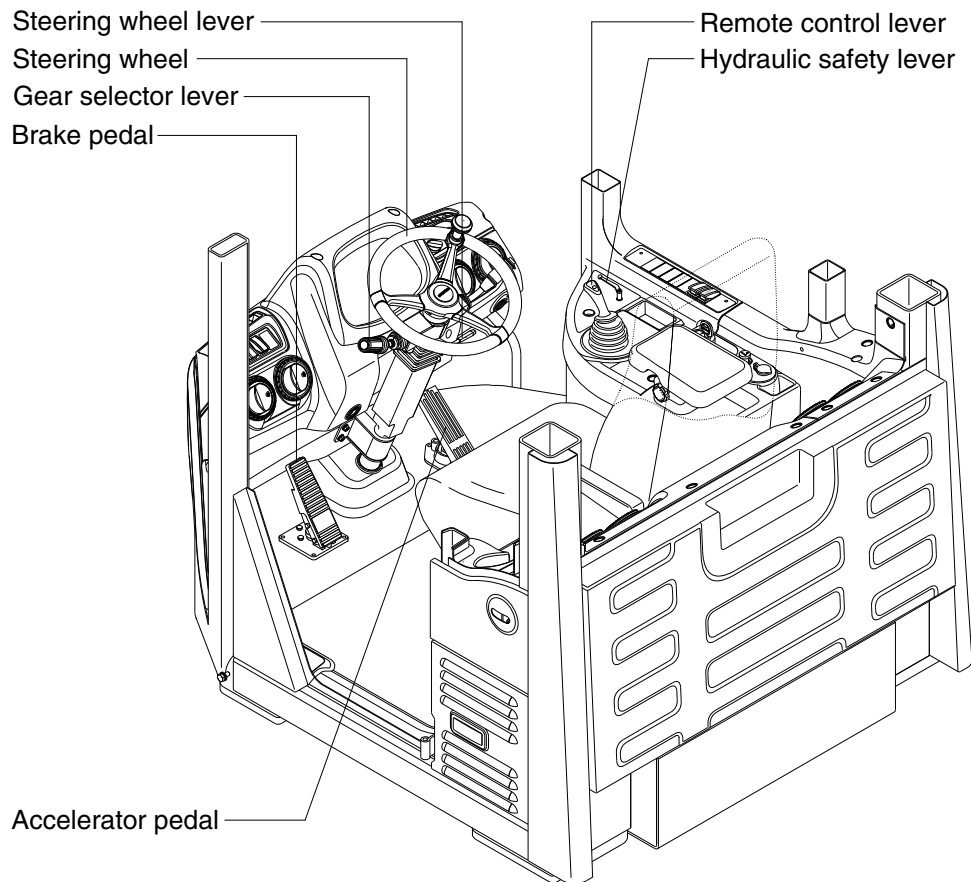
7409S3CD28

1) REMOTE CONTROL LEVER

7409S3CD61
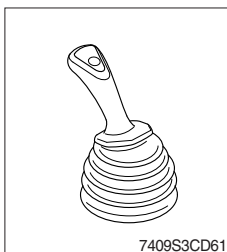
(1) These joystick are used to control the boom and the bucket.

(2) Refer to operation of working device in chapter 4 at page 4-9.

2) GEAR SELECTOR LEVER

Acceleration

Deceleration

Forward

Backward

7803ACD36
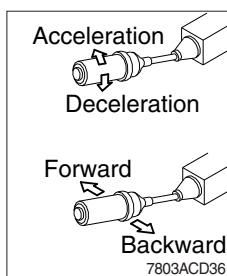
(1) This lever is used for gear selection, forward 4 stages and reverse 3 stages.

(2) If you push the gear selector lever, the machine moves forward, but if pull the gear selector lever, the machine moves backward.

(3) If you turn the gear selector lever forward, the machine increases the speed, but if you turn the gear selector lever backward, the machine reduces the speed.

3) ACCELERATOR PEDAL
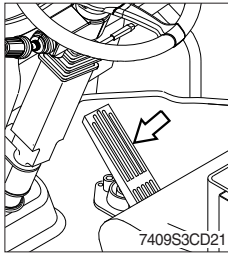
(1) This pedal controls the engine speed. The engine speed will increase in proportion to the degree of force applied to this pedal.

(2) Unless this pedal is pressed, the machine will run at low idling.

4) BRAKE PEDAL (service brake + clutch cut off function)

(1) If the pedal is pushed down, this will generate braking force and bring the machine to a stop.

(2) If the power train operation is to be cut off, set the clutch cut off mode switch to ON (L , M, H) and press the pedal.

⚠ **Even if the brake is applied while clutch cut off mode switch is OFF, power train will not cut off.**

※ **Do not operate the machine with foot the brake pedal unnecessarily, or bring premature wear of brake disc.**

(3) Clutch cut off function : Refer to page 3-27.

5) STEERING WHEEL
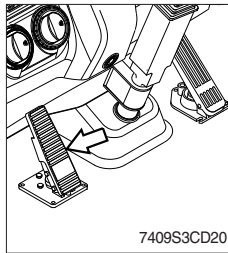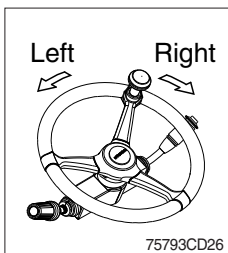
(1) Two multi-motion cylinders in the center of the machine will operate the steering function.

(2) If the steering wheel is turned to left, the machine will move to the left and turn it to the right, the machine will move to the right.

6) STEERING WHEEL LEVER
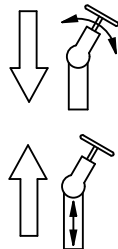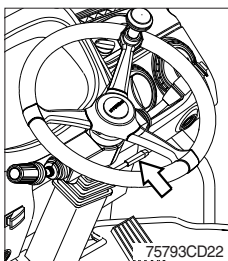
(1) By pulling down the lever, the wheel is adjustable to tilt.
 · Tilting : 40˚

(2) By pulling up the lever, the wheel is adjustable to telescope.
 · Telescoping : 80 mm

6. AIR CONDITIONER AND HEATER

■ FULL AUTO AIR CONDITIONER AND HEATER

Full auto air conditioner and heater system automatically keeps the optimum condition in accordance with operator's temperature configuration sensing ambient and cabin inside temperature.

Fresh air switch   LCD   Mode switch

Auto switch

Power OFF switch

Fan speed switch   Air conditioner switch

Air recirculation switch   Temperature control switch
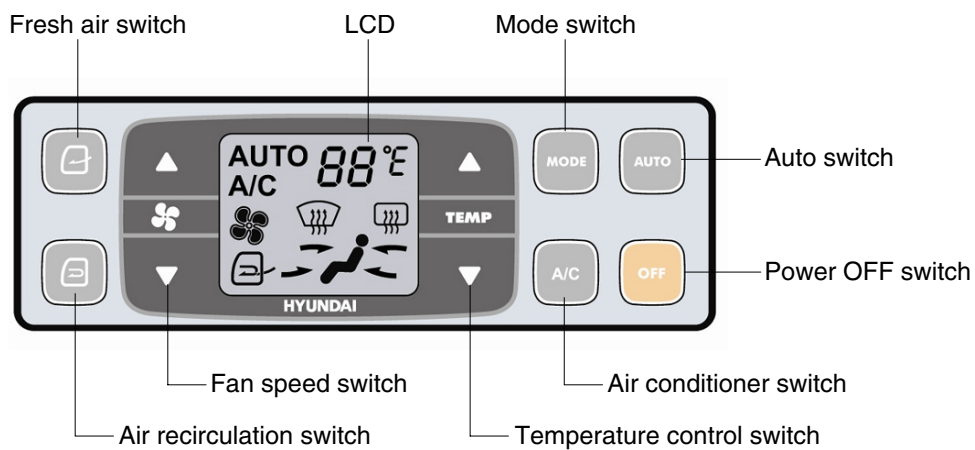
· **Location of air outlet**

7409S3CD37

3-32
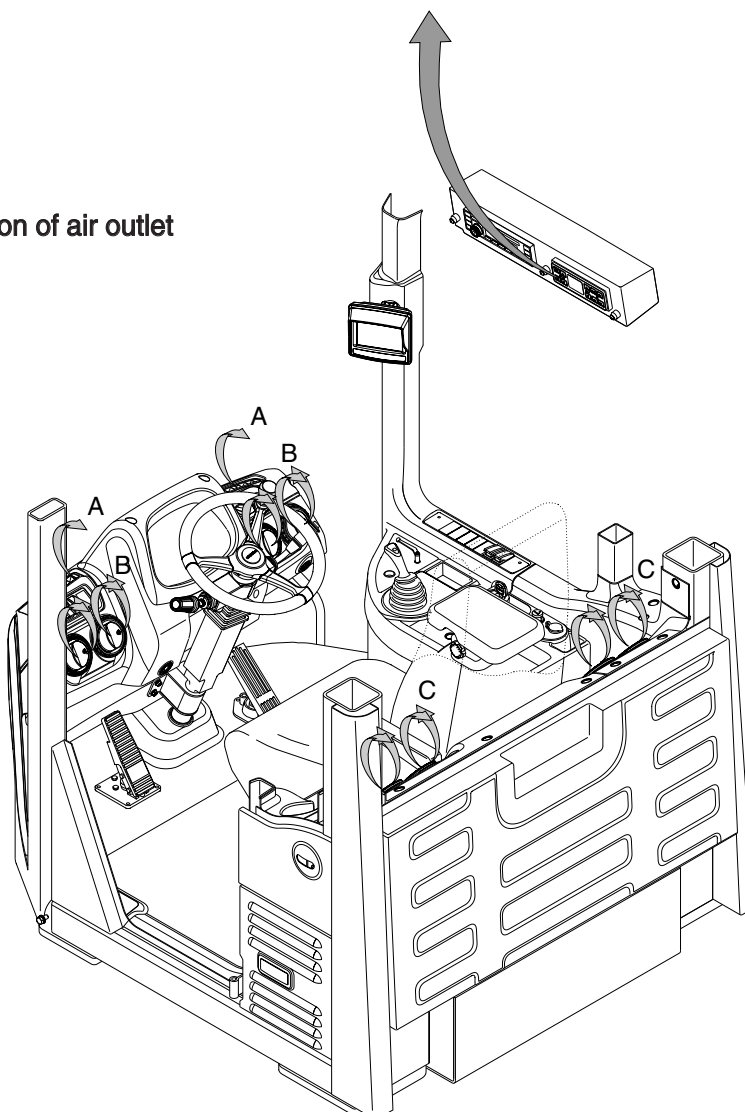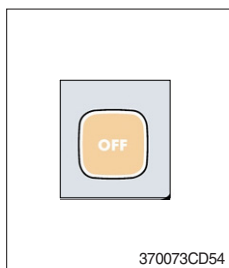
1) POWER OFF SWITCH

(1) This switch makes the system and the LCD OFF.
Just before the power OFF, set values are stored.

(2) **Default setting values**

Function	Air conditioner	In/outlet	LCD	Temperature	Mode
Value	OFF	Inlet	OFF	Previous sw OFF	Previous sw OFF

370073CD54

2) AUTO SWITCH
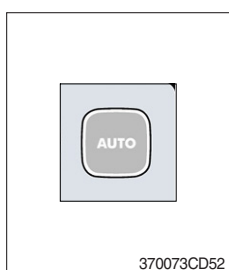
(1) Turn the starting switch to ON position, LCD lights ON.
Auto air conditioner and heater system automatically keeps the optimum condition in accordance with operator's temperature configuration sensing ambient and cabin inside temperature.

(2) This switch can restart system after system OFF.

370073CD52

3) AIR CONDITIONER SWITCH (compressor switch)
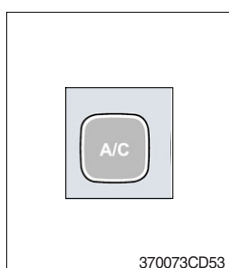
(1) This switch turns the compressor and the LCD ON.

(2) In accordance with the temperature sensed by duct (evaporator) sensor, compressor turns ON or OFF automatically.

※ **Air conditioner operates to remove vapor and drains water through a drain hose. Water can be sprayed into the cab in case that the drain cock at the ending point of drain hose has a problem.**
In this case, exchange the drain cock.

370073CD53
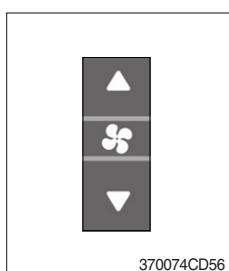
4) FAN SPEED SWITCH

(1) Fan speed is controlled automatically by setted temperature.

(2) This switch controls fan speed manually.
· There are 8 up/down steps to control fan speed.
· The maximum step or the minimum step beeps 5 times.

(3) This switch makes the system ON.

370074CD56

5) TEMPERATURE CONTROL SWITCH

370074CD57
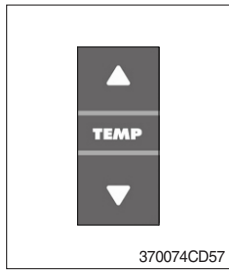
(1) Setting temperature indication
　① Type A : 17~32˚C, scale : 1˚C
　② Type B : Lo, 18~31˚C, Hi, scale : 1˚C

(2) Max cool and max warm beeps 5 times.

(3) The max cool or the max warm position operates as following table.

Temperature	Compressor	Fan speed	In/Outlet	Mode
Max cool	ON	Max (Hi)	Recirculation	Vent
Max warm	OFF	Max (Hi)	Fresh	Foot

(4) Temperature unit can be changed between celsius (˚C) and fahrenheit (˚F)
　① Default status (˚C)
　② Push Up/Down temperature control switch simultaneously more than 5 second displayed temperature unit change (˚C → ˚F)

6) MODE SWITCH

370074CD50
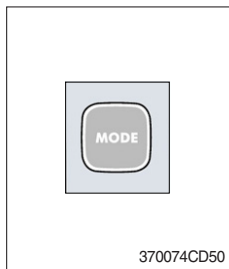
(1) Operating this switch, it beeps and displays symbol of each mode in order. (Human → Human/Rear → Human/Def → Def/Rear)

Mode switch		Human	Human/Rear	Human/Def	Def/Rear
Outlet	A			●	●
	B	●	●	●	
	C		●		●

(2) When defroster switch operating, FRESH AIR/AIR RECIRCULATION switch turns to FRESH AIR mode and air conditioner switch turns ON.

(3) When this switch ON, the system operates with previous configuration.

7) FRESH AIR/AIR RECIRCULATION SWITCH

36073CD58
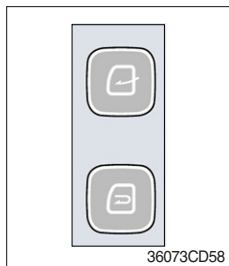
(1) It is possible to change the air-inlet method.
　① **Fresh air (🔲)**
　　Inhaling air from the outside.
　※ **Check out the fresh air filter periodically to keep a good efficiency.**
　② **Air recirculation (🔲)**
　　It recycles the heated or cooled air to increase the energy efficiency.
　※ **Change air occasionally when using recirculation for a long time.**
　※ **Check out the recirculation filter periodically to keep a good efficiency.**

8) SELF DIAGNOSIS FUNCTION

(1) Procedure

```
                    ┌──────────────────────┐
                    │  Starting switch ON  │
                    └──────────┬───────────┘
                               ▼
        ┌──────────────────────────────────────────────┐
        │ Press the air recirculation button over 5 times within │
        │ 2 secondsduring pressing the AUTO switch       │
        └──────────────────────┬───────────────────────┘
                               ▼
              ┌───────────────────────────────┐
              │ All symbol of LCD blink 5 times │
              └──────────────┬────────────────┘
                             ▼
        ┌──────┐      ┌─────────────┐  Switch OFF  ┌──────────────┐
        │      │      │ Error check │─────────────▶│  System OFF  │
        │      │      └──────┬──────┘              └──────────────┘
        │      Press AUTO switch │
        │             ▼
        └───▶┌──────────────────────────────────────────┐
             │ Cancelled diagnosis function(normal function) │
             └──────────────────────────────────────────┘
```
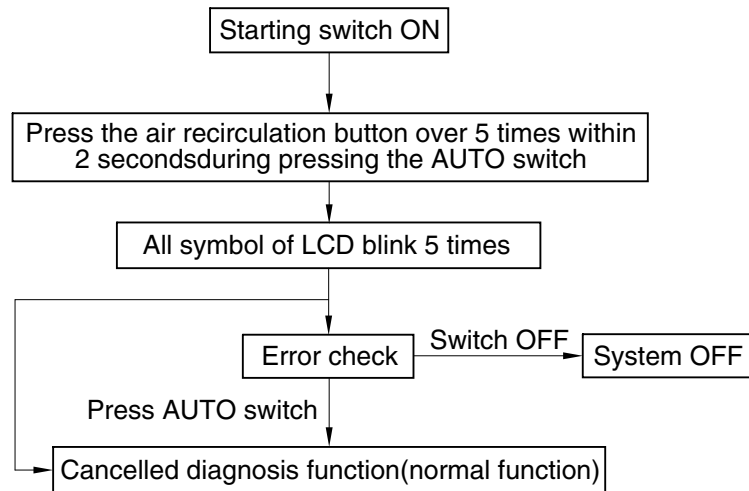
3607A3CD69

(2) Error check

· The corresponding error code flickers on the setup temperature display panel, the other symbol will turn OFF.

· Error code flickers every 0.5 second.

· If error code is more than two, each code flickers 2 times in sequence.

· Error code

Error code	Description	Error code	Description
11	Cabin inside sensor	16	Mode actuator 1
12	Ambient sensor	17	Mode actuator 2
14	Duct (evaporator) sensor	18	Intake actuator
15	Temp actuator	-	-

(3) Fail safe function

Error description	Fail safe function
Cabin inside sensor (11)	25°C alternate value control
Ambient sensor (12)	20°C alternate value control
Duct (evaporator) sensor (14)	1°C alternate value control
Temp actuator (15)	If opening amount is 0 %, the alternate value is 0 %
	If not, the alternate value is 100 %
Mode actuator 1, 2 (16, 17)	The alternate value is Vent

7. OTHERS

Master switch

Cab roof

Radio & USB player

LH battery box

Machine
control unit(MCU)

Transmission
control unit(TCU)

Rear camera(opt)

12V socket(opt)
Cigar lighter

Fuse & relay box
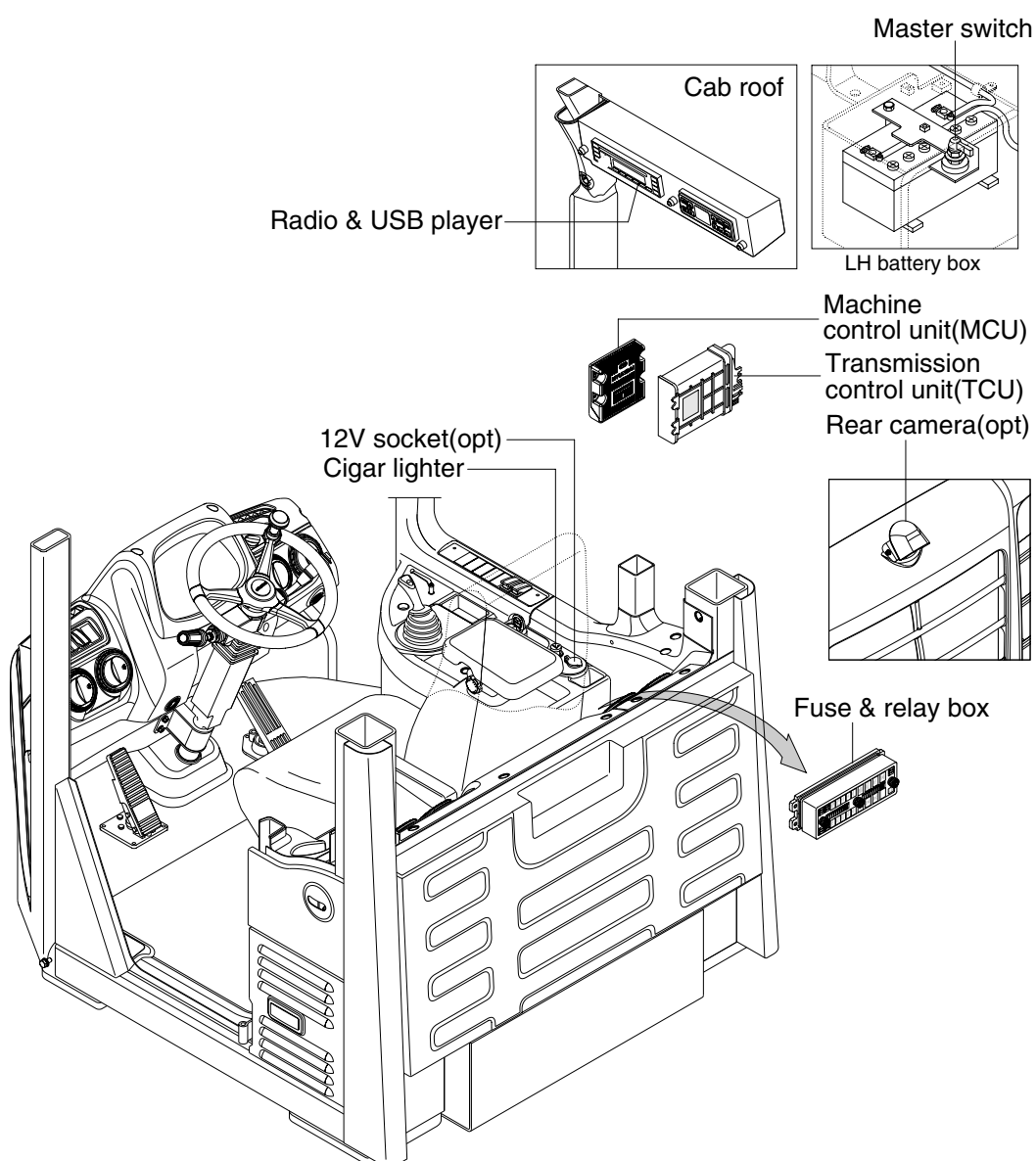
7409S3CD38

1) CIGAR LIGHTER

73033CD49
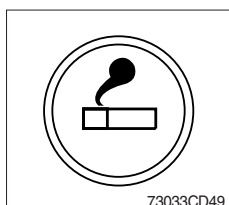
(1) This can be used when the engine starting switch is ON.

(2) The lighter can be used when it springs out in a short while after being pressed down.

※ **Service socket**
Use cigar lighter socket when you need emergency power.
Do not use the lighter exceeding 24 V, 100 W.

2) SEAT

The seat is adjustable to fit the contours of the operator's body. It will reduce operator fatigue due to long work hours and enhance work efficiency.
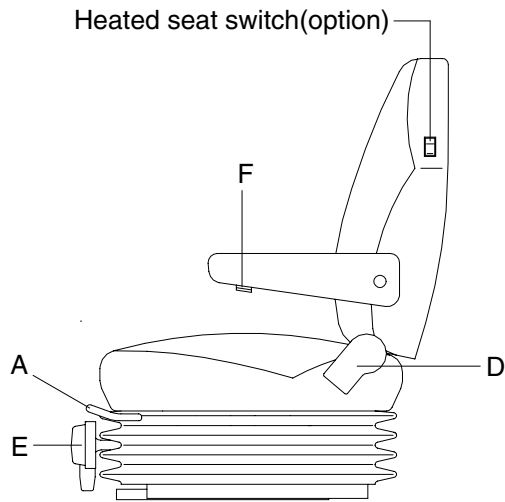
Heated seat switch(option)

F

A

E

D

75793CD102

(1) Forward/Backward adjustment
① Pull lever A to adjust seat forward or backward.
② The seat can be moved forward and backward over 210 mm (8 in) in 21 steps.

(2) Reclining adjustment
Pull lever D to adjust seat back rest.

(3) Arm rest adjustment
This can be adjusted by turning the handle F to right and left.

(4) Weight adjustment (E)
Adjusting handle to the operator's weight.

(5) Heated seat switch (option)
Press this switch in order to heat the seat.

3) 12V SOCKET (option)

12V
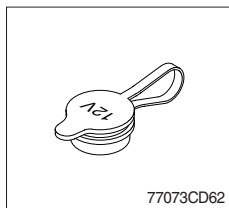
77073CD62

(1) Utilize the power of 12 V as your need and do not exceed power of 12 V, 30 W.

4) MASTER SWITCH

O   I

DISCONNECT SWITCH

OFF
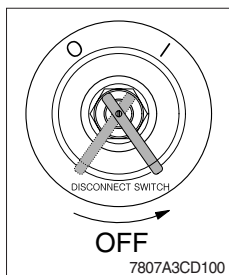
7807A3CD100

(1) This switch is used to shut off the entire electrical system.

(2) Ⅰ : The battery remains connected to the electrical system.
O : The battery is disconnected to the electrical system.

※ **Never turn the master switch to O (OFF) with the engine running. Engine and electrical system damage could result.**

5) FUSE & RELAY BOX

6 MCU(24V) 20	12 CLUSTER(IG) 10	CR-4 WIPER - HI	CR-58 BACK-UP BZ	CR-63 STOP LAMP	CR-38 NEUTRAL	CR-36 PRE-HEAT	CR-37 EMERGENCY STEERING	CR-59 RIDE CONTROL SPEED	CR-60 RIDE CONTROL	CR-46 FUEL WARMER	FUSE HOLDER
5 NC-SPARE 20	11 TCU(IG) 10										
4 TCU(24V) 10	10 MCU(IG) 20										

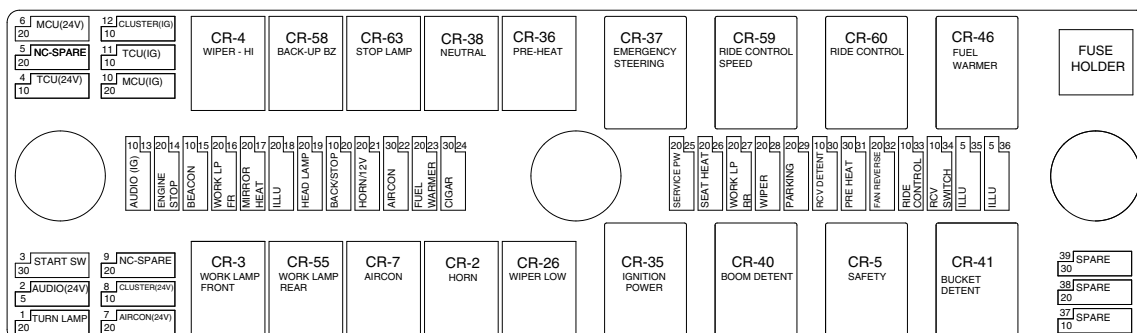10 13 AUDIO (IG) | 20 14 ENGINE STOP | 10 15 BEACON | 20 16 WORK LP FR | 20 17 MIRROR HEAT | 20 18 ILLU | 20 19 HEAD LAMP | 10 20 BACK/STOP | 20 21 HORN/12V | 30 22 AIRCON | 20 23 FUEL WARMER | 30 24 CIGAR

20 25 SERVICE PW | 20 26 SEAT HEAT | 20 27 WORK LP BR | 20 28 WIPER | 20 29 PARKING | 10 30 RCV DETENT | 30 31 PRE HEAT | 20 32 FAN REVERSE | 10 33 RIDE CONTROL | 10 34 RCV SWITCH | 5 35 ILLU | 5 36 ILLU

3 START SW 30	9 NC-SPARE 20	CR-3 WORK LAMP FRONT	CR-55 WORK LAMP REAR	CR-7 AIRCON	CR-2 HORN	CR-26 WIPER LOW	CR-35 IGNITION POWER	CR-40 BOOM DETENT	CR-5 SAFETY	CR-41 BUCKET DETENT	39 SPARE 30
2 AUDIO(24V) 5	8 CLUSTER(24V) 10										38 SPARE 20
1 TURN LAMP 20	7 AIRCON(24V) 20										37 SPARE 10

7409S3CD107

(1) The fuses protect the electrical parts and wiring from burning out.

(2) The fuse box cover indicates the capacity of each fuse and circuit it protects.

※ **Replace a fuse with another of the same capacity.**

⚠ **Before replacing a fuse, be sure to turn OFF the starting switch.**

6) MACHINE CONTROL UNIT (MCU)

LED

75793CD88
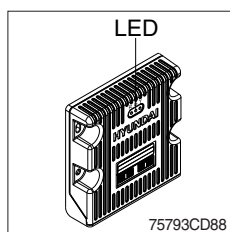
(1) It consists of electronic parts and controls all lamps and buzzers on cluster in accordance with signals transmitted from the switches, the MCU, TCU, the engine and the hydraulic pressure sensors.

(2) Three LED lamps on the MCU display as below.

| LED lamp	Trouble	Service
G is turned ON	Normal	-
G and R are turned ON	Trouble on MCU	· Change the MCU
G and Y are turned ON	Trouble on serial communication line	· Check if serial communication lines between controller and cluster are disconnected
Three LED are turned OFF	Trouble on MCU power	· Check if the input power wire (24V, GND) of controller is disconnected · Check the fuse

G : green, R : red, Y : yellow

7) TRANSMISSION CONTROL UNIT (TCU)

77073CDS91
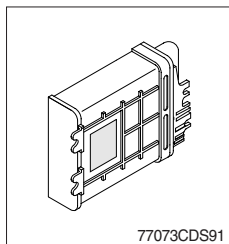
(1) The control unit is shifting the required speeds fully-automatically under consideration of the following criteria.

· Gear selector lever position
· Driving speed
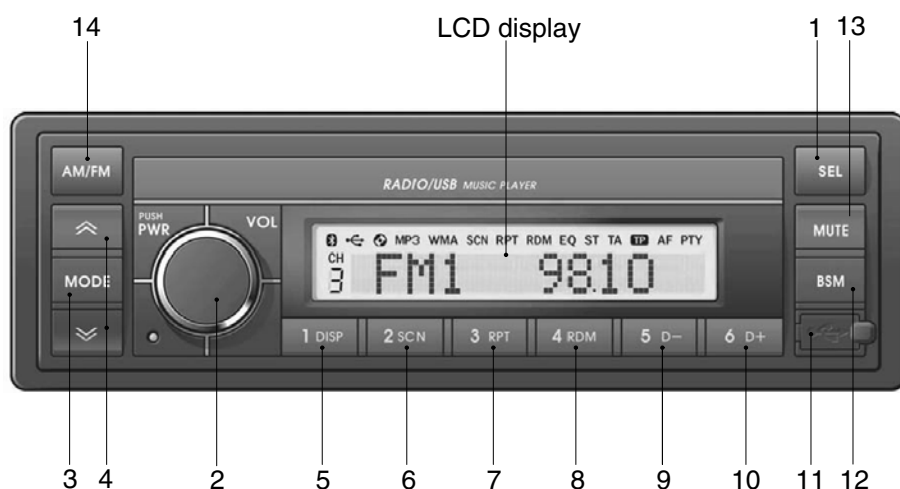· Load level

8) REAR CAMERA (option)
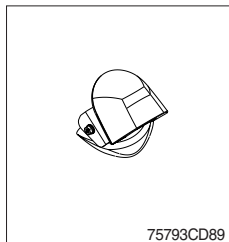
75793CD89

(1) The rear camera is available as a option.

※ **Refer to page 3-23.**
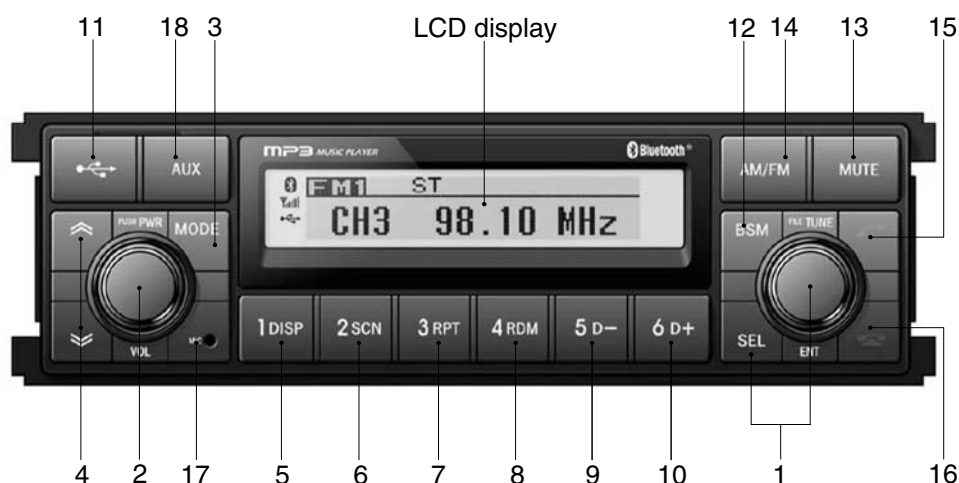
9) RADIO AND USB / PLAYER

■ **Type A**

14   LCD display   1 13

3   4   2   5   6   7   8   9   10   11 12

75793CD62

■ **FRONT PANEL PRESENTATION**

1   SEL   ······· Sound function selection button (audio selection)

2   (knob)   ······· Power and volume button

3   MODE   ······· Mode button (select RADIO / USB / AUX)

4   ⌃/⌄   ······· UP / DOWN tuning button

5   1   ······ Preset memory button 1
    DISP   ········· ID3 v2 display

6   2   ······ Preset memory button 2
    SCN   ··········· File scan

7   3   ······ Preset memory button 3
    RPT   ··········· Repeat play selector

8   4   ······ Preset memory button 4
    RDM   ··········· Random play selector

9   5   ······ Preset memory button 5
    D-   ··············· Directory down

10   6   ······· Preset memory button 6
     D+   ·············· Directory up

11   (USB)   ······· Aux function

12   BSM   ······· Preset scan (PS) Best station memory (BSM)

13   MUTE   ······· Audio mute button

14   AM/FM   ········ AM / FM button (radio)

3-40

■ Type B

75793CD62-2

■ FRONT PANEL PRESENTATION

1   SEL   ······· Audio selection button

    ⬤   ······· Audio selection knob

2   ⬤   ······· Power and volume button

3   MODE   ······· Mode button
                  (select RADIO / USB / AUX)

4   ⌃   ······· UP / DOWN tuning button
    ⌄

5   1   ······· Preset memory button 1
    DISP   ·········· ID3 v2 display

6   2   ······· Preset memory button 2
    SCN ············ File scan

7   3   ······· Preset memory button 3
    RPT ············ Repeat play selector

8   4   ······· Preset memory button 4
    RDM ············ Random play selector

9   5   ······· Preset memory button 5
    D- ················ Directory down

10   6   ······· Preset memory button 6
     D+ ·············· Directory up

11   ⚡   ······· Aux function

12   BSM   ······· Preset scan (PS)
                   Best station memory (BSM)

13   MUTE   ········ Audio mute button

14   AM/FM   ········ AM / FM button (radio)

15   📞   ········ Send

16   📞   ········ End

17   MIC   ········ MIC (microphone)

18   AUX   ········ Aux connector

■ GENERAL

### (1) Power and volume button

75793CD66

① **Power ON/OFF button**
Press power button to turn the unit ON or OFF shortly.
When the power is ON, the previous mode (last memory) will appear.

② **Volume up / down control**
Turn volume up / down button right to increase the volume level. The level will be shown in VOLUME xx on the LCD display. Turn it left to decrease the volume level. After 5 seconds of volume indication, display will return to the previous mode.

(2) Sound function selection button (audio selection)

SEL
75793CD65
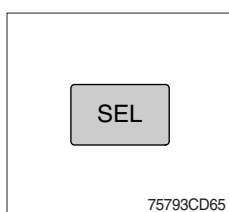
① This button is to adjust the sound. Each time you press SEL button shortly, LCD displays each mode as follows :

・**Type A**
BASS → TREBLE → BAL → BEEP → LOUD → EQ → VOLUME

・**Type B**
BASS → TREBLE → BAL → LOUD → EQ

※ When this button is pressed, LCD display shows selected function for 5 seconds and then returns back to the previous mode. On selected function, level can be controlled by turning this button. The display will automatically return to normal indication in 5 seconds after the last adjustment is made or when another function is activated.

② **Bass control**
To adjust the bass level, first select the bass mode by pressing the SEL button until BASS indication appears on the LCD display. Within 5 seconds of choosing the bass mode, turn power button (type A) or selection knob (type B) right / left to adjust the bass level as desired.
The bass level will be shown on the LCD display from a minimum of BASS –10 to a maximum of BASS +10.
The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.

③ **Treble control**
To adjust the treble level, first select the treble mode by pressing the SEL button until TREBLE indication appears on the LCD display. Within 5 seconds of choosing the treble mode, turn power button (type A) or selection knob (type B) right / left to adjust the treble level as desired.
The treble level will be shown on the LCD display from a minimum of TREBLE -10 to a maximum of TREBLE +10.
The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.

④ **Balance control**

To adjust the left-right speaker balance, first select the balance mode by pressing the SEL button until the BAL indication appears on the LCD display.

Within 5 seconds of choosing the balance mode, turn power button (type A) or selection knob (type B) right / left to adjust the balance as desired.

The balance position will be shown on the LCD display from BAL 10L (full left) to BAL 10R (full right).

When the volume level between the left and right speakers is equal, BAL L=R will be shown on the LCD display panel.

The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.

⑤ **Beep control (type A only)**

To adjust the beep mode, first select the beep mode by pressing the select button SEL until BEEP indication appears on the LCD display.

The beep mode will be shown on the LCD display from BEEP 2ND, BEEP OFF and BEEP ON by turning power button right / left.

The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.

Select BEEP ON when you wish to hear the BEEP sound whenever any function button is pressed.

Select BEEP 2ND when you wish to hear the BEEP sound whenever any tuner pre-set button and/or tune seek buttons are pressed for more than 3 seconds.

⑥ **Loud control**

When listening to music at low volume levels, this feature will boost the bass and treble response.

This action will compensate for the reduction in bass and treble performance experienced at low volume.

To select the loudness feature, press SEL button until LOUD ON or LOUD OFF is displayed, then turn power button (type A) or selection knob (type B) left or right to activate or deactivate loudness.

⑦ **Equalizer (EQ)**

You can select an equalizer curve designed for 4 music types (POP, ROCK, CLASSIC, JAZZ).

To select the desired curve, first select the EQ mode by pressing SEL button until the "EQ OFF" indication appears on the display panel. Within 5 seconds of choosing the EQ mode, turn power and volume button (type A) or selection knob (type B) to select an equalizer curve as desired.

(3) Mode button

MODE

75793CD67
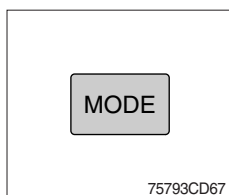
① Press mode button to select RADIO / USB / AUX / BT audio.
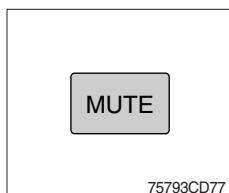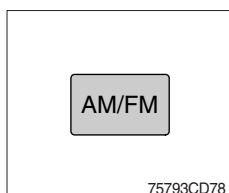
(4) Audio mute button

MUTE

75793CD77

① Press mute button momentarily to mute volume and MUTE mark will blink on the LCD display.
Press the button again to return to the mode in use before the mute mode was activated.

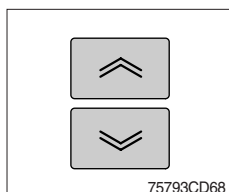# ■ RADIO

(1) AM / FM / LW band selector

AM/FM

75793CD78

① Each time this button is pressed, the radio button is changed.
Each time this button is pressed, LCD displays each band as follows :

FM1 → FM2 → FM3 → AM → LW

※ LW band is only available for Europe.

(2) Up / down tuning

75793CD68

① To automatically select a radio station, momentarily press the up tune seek button ⩘ or down tune seek button ⩗ for less than 3 seconds to search for the closest radio station.
To manually select a radio station, press the up tuning & down tuning button for longer than 3 seconds.
The radio frequency will move up or down step by step each time you press button.

(3) Station pre-set button

1	2
3	4
5	6

75793CD69~74
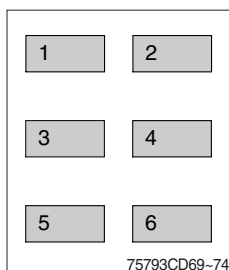
① Pressing these buttons shortly will recall your favorite pre-set radio stations.
To store your favorite stations into any of the 6 pre-set memories in each band (AM/FM/LW), use the following procedure :
a. Turn the radio ON and select the desired band.
b. Select the first station to be pre-set using the manual up/ down or automatic seek tuning control button.
c. Press the chosen pre-set button to store your selected station into and continue to hold it in. The beep sound will be momentarily heard and the pre-set number will apear on the LCD display indicating that the station is now set into that pre-set memory position and can be recalled at any time, by pressing that pre-set button.

(4) Pre-set scan (PS) / Best station memory (BSM) button

BSM

75793CD76
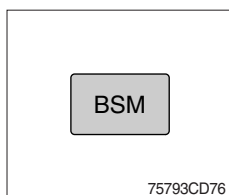
① Pre-set scan (PS)

Press BSM button shortly to scan the 6 pre-set station stored the memories on each band (AM/FM/LW).

The unit will stop at each pre-set station (the pre-set number on the LCD display will flash during pre-set scan operation) and remain on the selected frequency. Press the button momentarily again to remain on the station currently being heard.

② Best station memory (BSM)

Pressing BSM button for longer than 2 seconds will activate the BSM tuning feature which will automatically scan and enter each station into memory.

If you have already set the pre-set memories to your favorite stations, activating the BSM tuning feature will erase those stations and enter the new ones.

This BSM feature is most useful when traveling in a new area where you are not familiar with the local stations.

■ USB PLAYER

(1) USB function

There are two ways to play mp3 files in a USB device : using USB socket in the cab and the USB/AUX cable connected to the front side of the player.

· Use of USB socket

① Connect a USB device, which saves mp3 files, to USB socket in the cabin.

② If a USB device has not been connected, MP3 files are automatically played when you insert it into the USB port.

③ If a USB device has connected, MP3 files are played when you press mode for USB.

· Use of USB/AUX cable (option)

· Type A

75793CD81

① Connect the USB/AUX cable to the player in order to play MP3 files in a USB device.

② If a USB device has not been connected, MP3 files are automatically played when you insert it into the cable.

③ If a USB device has connected, MP3 files are played when you press mode for USB.

· Type B

75793CD81-1

① **USB function**

   a. Connect a USB device if you want to listen to MP3 file in a USB device.

   b. It will automatically play MP3 file in the USB device and the LCD display will show "READING USB".

   ※ If there are no files on USB device, playback will revert back to the previous mode after displaying "NO FILE".

② **AUX function**

   a. If you want to listen to music of a external audio device, connect a external audio device through AUX cable.

   b. Change AUX mode by pressing MODE button.
   If audio file of Audio device is playing, you can listen to music through speaker.

(2) File selection & cue / review button
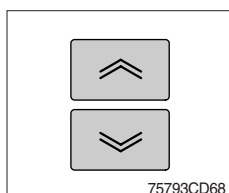
75793CD68

① **File selection function**

   This button is used to select file up / down.

   Each time the forward file select ⌃ is pressed, file number is increased.

   Each time the backward file select ⌄ is pressed, file number is decreased.

② **Cue / review functions**

   High-speed audible search of file on a USB can be made by this button (the cue and review functions).

   Press and hold the cue button ⌃ to advance rapidly in the forward direction or the review button ⌄ to advance rapidly in the backward direction.

(3) MP3 directory / file searching

① The D-, D+ button is used to select a particular directory and file.
Press and hold for more than 3 seconds while playing MP3 file.
Turn right / left the power button (type A) or selection knob (type B) to search the directory. Press the button when you find the wanted directory.
For example, the directory search generally changes in two methods depending on the order of writing as follows.

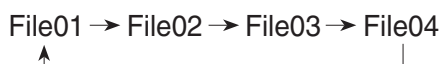· Method 1 : ROOT→ Dir01→ Dir02→ Dir03→ Dir04→ Dir05 →Dir06→Dir07

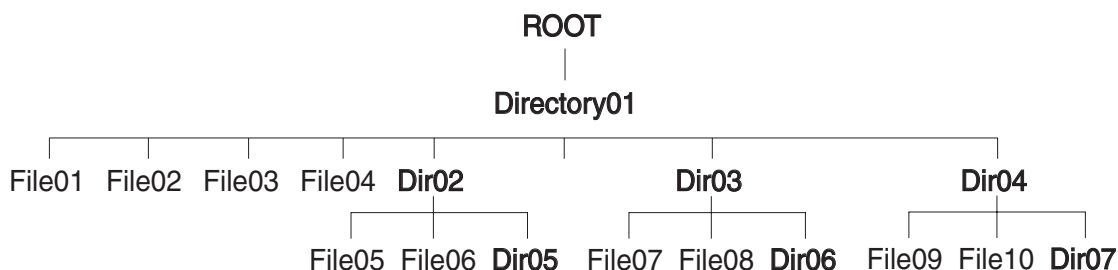· Method 2 : ROOT→ Dir01→ Dir02→ Dir05→ Dir03→ Dir06 →Dir04→Dir07

If you want to search the file in the located directory, turn right / left the power button (type A) or selection knob (type B) consecutively. Press the button when you find the wanted file. The unit will then play the selected file.
For instance, the file search changes in Dir01 as follows.

File01 → File02 → File03 → File04

※ MP3 directory / file configuration

ROOT

Directory01

File01   File02   File03   File04   **Dir02**   **Dir03**   **Dir04**

File05   File06   **Dir05**   File07   File08   **Dir06**   File09   File10   **Dir07**

(4) ID3 v2 display

1 DISP

75793CD82
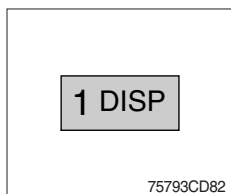
① Disp button is used to change the display information.
While playing an MP3 file, you can change the file information shown on the LCD display.
Each time you press DISP (display), the display changes to show the following.
※ If the MP3 disc does not have any ID3 information, the display will show NO ID3 on LCD display.

Directory name / file name (normal mode)

Album name / performer / title

File number / elapsed time

(5) File scan (SCN)

2 SCN

75793CD83

① During USB play, press SCN button to play the first 10 seconds of each file on the whole file on the USB (SCN mark will appear on the LCD display).
When a desired file is reached, press the SCN button again to cancel the function.
The unit will then play the selected file.
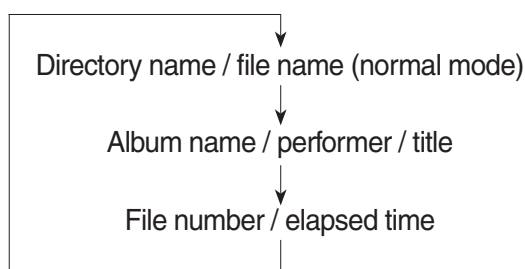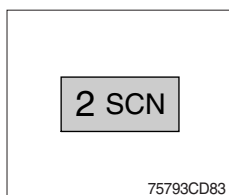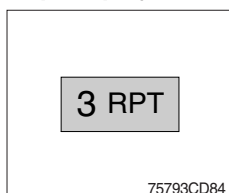
※ In case of playing MP3 file, when the SCN (scan) button is pressed and held for longer than 2 seconds, the SCN mark will blink on the LCD display and all files in the selected directory will be introduced until the file scan mode is cancelled by pressing the SCN button again or by activating the random or repeat functions.

(6) Repeat play selector (RPT)

3 RPT

75793CD84

① During USB play, press RPT button to play the selected file repeatedly (RPT will appear on the LCD display).
Play of the file will continue to repeat until this button is pressed again and the RPT disappears from the LCD display.

※ In case of playing MP3 file, when the RPT button is pressed and held longer than 2 seconds, the RPT mark will blink on the LCD display and play all files in the selected directory and will be repeated until the directory repeat mode is cancelled by pressing the repeat button again or by activating the scan or random functions (RPT mark will disappear from LCD display).

(7) Random play selector (RDM)

4 RDM

75793CD85
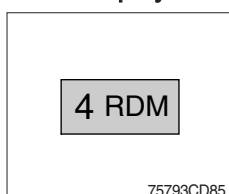
① During USB play, press RDM button to play the files on the USB in a random shuffled order (RDM will appear on the LCD display). The file select function will also select file in the random order instead of the normal process.
The random play mode can be cancelled by this button again.

※ In case of MP3 file, when the random button is pressed and held longer than 2 seconds, the RDM mark will blink on the LCD display and play all files in directory randomly until the directory random mode is cancelled by pressing the random button again or by activating the scan or repeat functions (RDM mark will disappear from LCD display).

(8) Directory down

5 D-

75793CD86
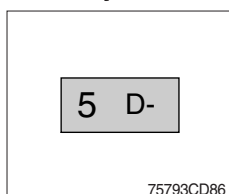
① Press D- button briefly while playing MP3. The previous directory is located each time you press this button.

(9) Directory up

75793CD87
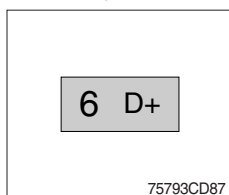
① Press D+ button briefly while playing MP3 . The next directory is located each time you press this button.

※ If the MP3 file does not have a directory, the unit play MP3 at 10-file intervals.

※ If any MP3 file does not exist in USB, this button can not operate.

■ AUX PLAYER

(1) Aux function

· **Use of USB socket** (machine serial No. : -#0093)

HB1003CD63
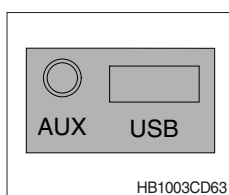
① If you want to listen to music of a external audio device, connect a external audio device into the USB port.

② Press mode button to change a current mode for AUX. If audio file of audio device is playing, you can listen to music through speaker.

· **Use of USB/AUX cable** (option)
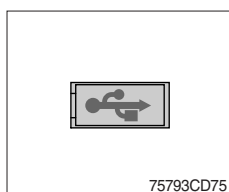
75793CD75

① If you want to listen to music of a external audio device, connect a external audio device through USB/AUX cable.

② Press mode button to change a current mode for AUX. If audio file of audio device is playing, you can listen to music through speaker.

■ BLUETOOTH (TYPE B ONLY)

(1) Introduce

The bluetooth radio supports bluetooth wireless technology. Bluetooth technology provides a wireless link between a bluetooth mobile phone or bluetooth music player and the hyundai bluetooth radio.

The bluetooth radio features a hands-free system so that you may talk on the telephone without taking your eyes off the road or your hands off the wheel. A microphone built into the front of the radio receives your voice and the calling party can be heard through the speakers.

Additionally, a bluetooth music player can be wirelessly connected to be the bluetooth radio and playback music tracks in high quality sound through the speakers. Many bluetooth mobile phones include a music player and can provide both hands-free calling and music playback.

Check your mobile phone owner's manual for details.

※ When the starting switch is in the ON position, the bluetooth radio is on standby to connect with your mobile phone even if the radio is switched off. The machine battery may therefore become drained if the ignition switch remains in the ON position for an extended period of time.

※ Bluetooth technology uses low power radio transmission to connect to your bluetooth mobile phone or bluetooth music player. As radio signal strength reduces over distance, the quality of sound performance during phone calls and music playback may become poor if the distance between the radio and device widens. It is recommended that the mobile phone or music player is kept inside the cab for best results.

※ As a bluetooth wireless connection can extend to 10 meters, your bluetooth device may automatically connect to the bluetooth radio even if the device is not in the machine.

※ The bluetooth radio uses the latest digital noise & echo suppression system to provide the best sound clarity with little or no distortion, but in some conditions there may be some echo and noise experienced. It is recommended to keep the car windows closed during hands-free calls for best results.

7709A3BT01

① **Bluetooth indicator**

The bluetooth logo is displayed when a bluetooth device is connected, and not displayed, when no bluetooth device is connected. If the bluetooth mobile phone is connected but the connection is not of satisfactory quality, the bluetooth logo is not displayed.

7709A3BT02
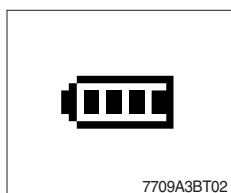
② **Battery strength indicator**

This is an indication of your mobile phone battery condition. If your mobile phone is not unable to transmit battery condition level, the indicator is not displayed.

7709A3BT03

③ **Single level indicator**

This is an indication of the mobile phone network signal strength in your current location. If your mobile phone is not able to transmit signal level, the indicator is not displayed.

(2) Bluetooth function

① Pairing a bluetooth mobile phone or music player

A bluetooth connection must first be established between your bluetooth mobile phone or bluetooth music player and the bluetooth radio. The first step to connecting the bluetooth radio and bluetooth device is to introduce or "Pair" the bluetooth radio and bluetooth device together.

It is recommended that you have the instruction manual for your bluetooth mobile phone or music player with you during the pairing process described below to understand how to set your device to pair with the bluetooth radio.

※ It is recommended that all other bluetooth devices other than mobile phones are switched off during the registration or pairing process.

a. Connection method

a) Press SEND button for 2 seconds in any mode, **PAIRING** appears on the bluetooth radio display.

b) Browse your mobile phone or music player menu to find the **SETTINGS** or **CONNECTIVITY** section to find the bluetooth connection section.

c) Find the command that may be called search for bluetooth device or discovery mode so that your bluetooth device can locate all the bluetooth devices within range that may be connected.

d) After the search is complete, **HHI AUDIO** should appear on your mobile phone or music player screen.

e) Select **CONNECT** or **SELECT** on your mobile phone or music player.

f) The mobile phone or music player should now prompt you top enter a PIN code. Enter 0000 into your bluetooth device and select OK.

g) The mobile phone or music player should confirm that it has established a new paired connection with the bluetooth radio.

h) The connecting process is now complete.

i) If the connecting process is successful, the bluetooth logo appears on the radio display and paired phone name (e.g. Samsung or LG) and **CONNECTED** appear on the display for 2 seconds.

j) Your bluetooth device is now ready for use with the bluetooth radio.

k) If the pairing failed, **FAIL** appears on the bluetooth radio display.

※ (a) The bluetooth radio allows a maximum of 6 bluetooth devices to be paired.

(b) Bluetooth technology only allows one phone to be connected to your bluetooth radio at one time.

(c) If a bluetooth music player is to be connected together with a mobile phone, refer to the page 3-53, PLAYING MUSIC USING BLUETOOTH AUDIO.

(d) Bluetooth connection with a mobile phone is normally established using the Hands-Free Profile (HFP). However, in some cases, the connection may use Head Set Profile (HSP) and some functions may not be available.

(e) As each mobile phone or music player brand and model has a different menu structure and control names, you may need to refer to the user manual of your bluetooth device for the correct procedure to connect to another bluetooth device.

(f) Once the bluetooth pairing is complete, automatic connection between mobile phone and the bluetooth radio is possible whenever the starting switch is switched ON.

The mobile phone must be set to automatically connect to the bluetooth radio to allow this automatic connection.

(g) The bluetooth radio will give connection priority to the last connected mobile phone.

(h) It is recommended that all other bluetooth devices other than mobile phones are switched off during the registration or pairing process.

② **Disconnecting a bluetooth device**

If you need to disconnect your bluetooth mobile phone or music player with the bluetooth radio, follow the steps below.

a. Press END button for 2 seconds in any mode.

b. When the bluetooth connection is lost, bluetooth logo disappears and the previously connected device name (e.g. Samsung or LG) and **DISCONNECTED** appear on the display.

③ **Select a bluetooth device**

The bluetooth radio can pair up to 6 bluetooth devices. A previously paired mobile phone or music player can be selected for connection using the method described below. Refer to the table 2-1 for examples.

Preset No.	Bluetooth device name (for example)
1	Samsung
2	LG
3	Apple
4	Motorola
5	EMPTY
6	EMPTY

Table 2-1

a. Press SEND button, to select **BLUETOOTH** mode.

b. Press SEL button. **SELECT PHONE** will appear on the display.

c. Turn selection knob, until **SELECT PHONE** is displayed.

d. When **SELECT PHONE** appears on the display, press SEL button.

e. Press the preset button to display the name of the bluetooth device name of the mobile phones or music players previously paired. You may also turn selection knob to display the paired devices.

· Each time you turn selection knob, the LCD displays as follows :

SAMSUNG → LG → APPLE → MOTOROLA → BACK

f. If the bluetooth mobile phone name is Samsung as in the example of table 2-1, then **Samsung** appears on the display. When preset button ⬚ is pressed or selection knob is turned 1 click to the right.

g. Once the name of the bluetooth device you wish to connect is displayed, in this example **Samsung**, press SEL button to have the Samsung device connected.

h. If the connection is successful, the bluetooth logo appears on the display and paired phone name **Samsung** and **CONNECTED** appears on the display for 2 seconds.

④ Deleting a previously paired bluetooth device
　　If you no longer need to use a paired bluetooth device with the bluetooth radio, it can be deleted.
　　It is from the registration assignment for another mobile phone.
　　Refer to the example of paired devices shown table 2-1.

a. Press SEND button, to select **BLUETOOTH** mode.
b. Press SEL button and **SELECT PHONE** appears on the display.
c. Turn selection knob, until **DELETE PHONE** is displayed.
d. When **DELETE PHONE** appears on the display, press SEL button.
e. Press the preset button to display the name of the bluetooth device name of the mobile phones or music players previously paired. You may also turn selection knob to display the paired devices.
f. Once the name of the bluetooth device you wish to delete is displayed, in this example **Samsung**, press SEL button to have the Samsung device deleted.
g. The display will then show **DELETE NO** or if knob selection knob is turned, **DELETE OK** on the display.
h. To confirm your wish to delete the selected device, when **DELETE OK** appears on the display press SEL button.
i. If the bluetooth device being deleted (in this example) was connected, the display will show previous paired phone name "Samsung" and DISCONNECTED.
j. In the example above, the number of paired devices is now reduced to 3, leaving 3 vacant memory locations for additional devices. Table 2-2 shows the example.

Preset No.	Bluetooth device name (for example)
1	LG
2	Apple
3	Motorola
4	EMPTY
5	EMPTY
6	EMPTY

Table 2-2

⑤ Basic telephone operation

a. Using the bluetooth radio for hands-free calls
　a) When an INCOMING call arrives at the bluetooth radio via your connected bluetooth mobile phone, **INCOMING CALL** appears on the display for 3 seconds then the calling telephone number is shown.
　b) Press SEND button to answer the INCOMING call. **HANDSFREE** appears on the display.
　c) To end the call, press END button and the call will end and **END CALL** is displayed.
　d) If you wish to reject an INCOMING call, press END button.
　e) To make an OUTGOING call use the keypad of the connected bluetooth mobile phone to enter a number and press the **OFF-HOOK** (SEND) button on your mobile phone.
　f) **OUTGOING CALL** is displayed on the bluetooth radio and the call continues in hands-free mode.
　g) The call can be ended by pressing END button the **ON-HOOK** (END) button of the connected mobile phone.
　※ Some mobile phones may not reject an INCOMING call using the action of d) above. In this case, press the **ON-HOOK** button on the connected mobile phone to reject.

b. Last call number redials

Select **BLUETOOTH** mode by pressing SEND button. To making a call to the last dialed number, press SEND button again. **OUTGOING CALL** appears on the radio display for 1 second.

※ Some mobile phones may require an additional press of SEND button to start the last number redial call.

c. Switching to private (headset) mode during a call

During an INCOMING or OUTGOING call started in hands-free mode, it is possible to switch to the private call mode using the mobile phone handset to speak and to hear the calling party in private.

a) Press SEND button during the conversation ; **PRIVATE** appears on the display.

b) To switch back to hands-free mode using the bluetooth radio, press SEND button again during the private conversation ; **HANDSFREE** is shown on the display and hands-free call operation continues.

※ The above switching function may cause disconnection of the bluetooth link between the bluetooth radio and some mobile phones.
If SEND button is pressed during the private conversation, the bluetooth connection will return automatically.

(3) Funtion of bluetooth audio player

① Playing music using bluetooth audio

The bluetooth radio supports the bluetooth profile Audio Advanced Distribution Profile (A2DP). If your mobile phone or music player supports this profile then it is possible to listen to music tracks located on your bluetooth device through the bluetooth radio and speakers.
Additionally, the bluetooth radio supports the Audio Video Remote Control Profile (AVRCP).
If your bluetooth mobile phone or music player supports this profile then it is possible to advance to the next track or replay previous tracks on using the buttons on the front of the bluetooth radio your machine.

a. Press MODE button until **BT AUDIO** is displayed.

b. When **BT AUDIO** appears on the display, select the music player feature on your bluetooth device. And then bluetooth device play automatically to begin playback.

c. To pauses the bluetooth audio playback, press SEL button for 2 seconds. Press the knob again for 2 seconds to resume playback.

d. Press buttons (⌃,⌄) advance to the next or previous music track.

※ (a) Check your bluetooth device owner's manual for details of how to play music tracks via an external bluetooth audio system such as the bluetooth radio.

(b) Some bluetooth mobile phones cannot play music at all or may play music tracks in low-quality audio through the bluetooth radio.

(c) Some mobile phones require additional pairing to allow bluetooth audio playback.

(d) Information about songs (ID3) (e.g. the elapsed playing time, song titles, song index, etc.) playing using bluetooth audio profile cannot be displayed on this bluetooth radio.

② Connecting a bluetooth music player and mobile phone simultaneously

It is possible to connect a bluetooth mobile phone and a separate bluetooth music player to the bluetooth radio at the same time. Phone calls can be sent and received using the hands-free feature while music is playing using the bluetooth audio feature.

(4) Bluetooth setting

① Setting the automatic call answer feature

If this function is selected, the bluetooth radio automatically answers all INCOMING calls.

This feature enhances safety as the driver does not need to take their hands from the steering wheel to accept an INCOMING call.

Note that this feature cannot be set at different settings for each of the paired mobile phones.

a. Press SEND button to select BLUETOOTH mode.

b. Turn selection knob until **SETTINGS** is displayed.

c. Press SEL button until **AUTO ANSWERING** is displayed.

d. Press SEL button and turn selection knob. The LCD then displays as follows :

ANSWER OFF → ANSWER 5 SEC → ANSWER 10 SEC → RETURN

· ANSWER OFF = Automatic answer function is not active.

· ANSWER 5 SEC = Automatic answers all INCOMING calls after a 5 second delay.

· ANSWER 10 SEC = Automatic answers all INCOMING calls after a 10 second delay.

· RETURN = Return to previous menu.

e. After making your selection, press SEL button to store the selection.

f. **SETTINGS** is then displayed for adjustment if required.

g. If you do not wish to adjust any further bluetooth settings, press END button to return to the last selected mode.

② Setting calling voice volume

This function is to set the level of the mobile phone's calling voice volume to be heard through the bluetooth radio and speakers.

a. Follow steps a. to c. of above setting below ①.

b. When **VOICE VOLUME** appears on the display, press SEL button to display the current level of the calling voice. Turn selection knob right or left to adjust the calling voice volume as desired. This is the level the calling voice volume will be set to each time the bluetooth radio is used after the stating switch is turned off and then on again.

c. After making your selection, press SEL button to store the selection.

d. **SETTINGS** is then displayed for adjustment if required.

e. If you do not wish to adjust any further bluetooth settings, press END button to return to the last selected mode.

③ Setting the ring volume

This function is to set the level of the mobile phones ring tone volume to be heard through the bluetooth radio and speakers.

a. After making your selection, press SEL button to store the selection.

b. When **RING VOLUME** appears on the display, press the SEL button to display the current level of the ring tone. Turn selection knob right or left to adjust the ring tone volume as desired. This is the level the ringer volume will be set to each time the bluetooth radio is used after the starting switch is turned off and then on again.

c. After making your selection, press SEL button to store the selection.

d. The press END button to return to the last selected mode.

RADIO AND USB PLAYER (WITH BLUETOOTH) : MACHINE SERIAL NO.: #0200~

1   LCD   2

3
4
5

17 6 7 8 9 10 11 15 16

12
13
14

9403CD100

■ FRONT PANEL PRESENTATION

1 ········ Power ON/OFF,
   Volume UP/DOWN button

2 ········ Manual UP/DOWN Tuning,
   File search, SEL button

3 ········ Mode button,
   Audio mute button

4 ······· Call & Pair button

5 ······· Call end button

6 ······· Station preset 1
DIS ··········· Display button

7 ······· Station preset 2

8 ······· Station preset 3
RPT ··········· Repeat play button

9 ······· Station preset 4
RDM ·········· Random play button

10 ······ Station preset 5
DIR- ··········· Directory down button

11 ······· Station preset 6
DIR+ ·········· Directory up button

12 ······· Scan play button (SCAN)
   Best station memory (BSM) button

13 ········ Auto tune up, Seek up button

14 ········ Auto tune down, Track down button

15 ········ USB connector

16 ········ AUX IN Jack

17 ········ MIC hole

RADIO AND USB PLAYER (WITHOUT BLUETOOTH) : MACHINE SERIAL NO.: #0200~

9403CD101

■ FRONT PANEL PRESENTATION

1 ········ Power ON/OFF,
　　　　　Volume UP/DOWN button

2 ········ Manual UP/DOWN Tuning,
　　　　　File search, SEL button

3 ········ Mode button,
　　　　　Audio mute button

4 ······· Radio seek up button

5 ······· Radio seek down button

6 ······· Station preset 1
DIS ············ Display button

7 ······· Station preset 2

8 ······· Station preset 3
RPT ··········· Repeat play button

9 ······· Station preset 4
RDM ·········· Random play button

10 ······· Station preset 5
DIR- ··········· Directory down button

11 ······· Station preset 6
DIR+ ··········· Directory up button

12 ········ Scan play button (SCAN)
　　　　　Best station memory (BSM) button

13 ········ Track up button

14 ········ Track down button

15 ········ USB connector

16 ········ AUX IN Jack

3-56

■ GENERAL

(1) Power and volume button

9403CD102

① **Power ON / OFF button**

Press power button (1) to turn the unit on or off.

② **Volume UP/DOWN control knob**

Turn VOL knob (1) right to increase the volume level.
Turn VOL knob (1) left to decrease the volume.
After 5 seconds the display will return to the previous display mode.

③ **Initial volume level set up**

I-VOL is the volume level the unit will play at when next turned on.
To adjust the I-VOL level, press and hold VOL button (1) for longer than 2 seconds. The current volume level displays on the display panel.
Then turn button (1) right or left to set the volume level as the I-VOL level.

④ **Clock ON/OFF control**

The CLOCK was default at off status. To turn CLOCK ON, press and hold VOL button (1) for longer than 2 seconds to display I-VOL, then short press VOL again, turn VOL knob while CLOCK OFF display, then the CLOCK ON will be displayed.

※ **Due to time tolerance, the clock display on the Audio unit might have little difference.**

⑤ **Clock adjustment**

With CLOCK ON selected, press VOL knob again after CLOCK ON display, the hour will blink, turn VOL knob right or left to adjust hour.
Simply press VOL again, the minute will blink, turn VOL knob to adjust minute. Then press VOL again to confirm the clock once finished.

(2) Menu Selection

9403CD103

① This button can adjust the sound effect and other things.
Each time you press this button (2), LCD displays as follows :

BAS → TREB → BAL L=R → FAD F=R → EQ → LOUD ON → BEEP 2ND

On each setting, the level can be controlled by turning TUNE knob (2). When the last adjustment is made, after 5 seconds, the display will automatically return to the previous display mode.

② **Bass control**

To adjust the bass tone level, first select the bass mode by pressing SEL button (2) repeatedly until BASS appears on the display panel. Then turn knob (2) right or left within 5 seconds to adjust the bass level as desired. The bass level will be shown on the display panel from a minimum of BASS-7 to a maximum of BASS+7.

③ **Treble control**

To adjust the treble tone level, first select the treble mode by pressing SEL button (2) repeatedly until TREB appears on the display panel. Then turn knob (2) right or left within 5 seconds to adjust the treble level as desired. The treble level will be shown on the display panel from a minimum of TREB -7 to a maximum of TREB +7.

④ **Balance control**

To adjust the left-right speaker balance, first select the balance mode by pressing SEL button (2) repeatedly until BAL indication appears on the display panel. Then turn knob (2) right or left within 5 seconds to adjust the balance as desired. The balance position will be shown by the bars on the display panel from BAL 10R (full right) to BAL 10L (full left).

⑤ **Fader control**

To adjust the front-rear speaker balance, first select the fader mode by pressing SEL button (2) repeatedly until FADER indication appears on the display panel. Then turn knob (2) right or left within 5 seconds to adjust the front-rear speaker level as desired. The fader position will be shown by the bars on the display panel from FAD 10F (full front) to FAD 10R (full rear).

⑥ **EQ control**

You can select an equalizer curve for 4 music types (CLASSIC, POP, ROCK, JAZZ). Press button (2) until EQ is displayed, then turn knob (2) right or left to select the desired equalizer curve. Each time you turn the knob, LCD displays as follows :

EQ OFF → CLASSIC → POP → ROCK → JAZZ

※ **When the EQ mode is activated, the BASS and TREBLE modes are not displayed.**

⑦ Loud control

When listening to music at low volume levels, this feature will boost the bass and treble response. This action will compensate for the reduction in bass and treble performance experienced at low volume.

To select the loudness feature, press button (2) until LOUD is displayed, then turn knob (2) right or left to activate or deactivate loudness.

⑧ Beep control

To adjust the BEEP mode, first select the BEEP mode by pressing button (2) repeatedly until BEEP indication appears on the display panel. Then turn knob (2) left or right within 5 seconds to select BEEP 2ND, BEEP OFF or BEEP ON.

· BEEP 2ND : You will only hear the beep sound when the buttons are held down for more than 2 seconds.
· BEEP OFF : You can not hear the sound beep when you press the buttons.
· BEEP ON : You can hear the beep sound each time you press the buttons.

(3) Mute control

① Press and hold MUTE button (3) for over 2 seconds to mute sound output and MUTE ON will blink on the LCD. Press the button again to cancel MUTE function and resume to normal playing mode.

(4) Mode selection

① Repeat press MODE button (3) to switch between FM1, FM2, AM, USB, AUX, BT MUSIC.

※ **If there is no USB, AUX, Bluetooth Phone connected, it would not display USB, AUX, BT when you press button (3).**

■ RADIO

(1) Mode button

9403CD104

① Repeat press MODE button to select FM1, FM2 or AM.

(2) Manual tuning button

9403CD105

① To manually tune to a radio station, simply turn encoder TUNE (2) left or right to increase or decrease the radio frequency.

(3) Auto tuning button

9403CD106

① To automatically select a radio station, simply press Seek up or Track down button.

9403CD107

(4) Station preset button

9403CD108

① In radio mode, pressing buttons (6) to (11) will recall the radio stations that are memorized. To store desired stations into any of the 6 preset memories, in either the AM or FM bands, use the following procedure :

  a. Select the desired station.
  b. Press and hold one of the preset buttons for more than 2 seconds to store the current station into preset memory. Six stations can be memorized on each of FM1, FM2, and AM.

(5) Preset scan (PS) / Best station memory (BSM) button

9403CD109

① Press BSM button (12) momentarily to scan the 6 preset stations stored in the selected band. When you hear your desired station, press it again to listen to it.

Press BSM button (12) for longer than 2 seconds to activate the Best Station Memory feature which will automatically scan and enter each station into memory.

※ **If you have already set the preset memories to your favorite stations, activating the BSM tuning feature will erase those stations and enter into the new ones. This BSM feature is most useful when travelling in a new area where you are not familiar with the local stations.**

■ USB PLAYER

(1) USB playback

9403CD110

① The unit was equipped with a front USB jack and also a rear USB Jack.
With a USB device plugged in the front USB jack, it will be detected as front USB mode. And with a USB device plugged in the rear USB jack, it will be detected as rear USB. To get to a USB mode, press MODE (3) button momentarily or insert the USB device in front or rear USB jack.

※ **If no mp3 or wma files in USB device, it will convert to the previous mode after display NO FILE.**

(2) Track Up / Down button

9403CD106

9403CD107

① Press SEEK up (13) or TRACK down (14) to select the next or previous track. Press and hold the buttons to advance the track rapidly in the forward or backward direction.

(3) MP3 directory / File searching

9403CD111

① Button (2) is used to select a particular directory and file in the device. Turn button (2) right or left to display the available directories. Press button (2) momentarily when the desired directory is displayed, then turn button (2) right or left again to display the tracks in that directory. Press button (2) to begin playback when the desired file is displayed.

(4) Directory Up / Down button

9403CD112

① During MP3/WMA playback, simply press DIR- button (10) to select the previous directory (if available in the device); simply press DIR+ button (11) to select the next directory (if available in the device).

※ **If the USB device does not contain directories, it would play MP3/WMA tracks at 10- file when you press DIR- button (10), and play MP3/WMA tracks at 10+ file when you press DIR+ (11) button.**

(5) Track Scan Play (SCAN) button

9403CD113

- SCAN playback : Simply press SCAN (12) button to play the first 10 seconds of each track.
- SCAN folder : Press and hold SCAN button for longer than 2 seconds to scan play the tracks in current folder.
- SCAN off : Simply press it again to cancel SCAN feature.

(6) Track Repeat Play (RPT) button

9403CD114

- REPEAT playback : Simply press RPT (8) button to play current track repeatedly.
- REPEAT folder : Press and hold RPT for longer than 2 seconds to repeat play the tracks in current folder.
- REPEAT off : Simply press it again to cancel REPEAT feature.

(7) Track Random Play (RDM) button

9403CD115

- RANDOM playback : Simply press RDM (9) button to play the tracks in the device in a random sequence.
- RANDOM folder : Press and hold RDM button for longer than 2 seconds to random play the tracks in current folder.
- RANDOM off : Simply press it again to cancel RANDOM feature.

(8) ID3 v2 (DISP)

9403CD116

① While a MP3 file is playing, press DISP button (6) to display ID3 information. Repeat push DISP button (6) to show directory name / file name and album name / performer / title.

※ **If the MP3 disc does not have any ID3 information, it will show NO ID3.**

∗ USB Information and Notice
  a. Playback FILE SYSTEM and condition allowance.
    - FAT, FAT12, FAT16 and FAT32 in the file system.
    - V1.1, V2.2 and V2.3 in the TAG (ID3) version.
  b. Display up to 32 characters in the LCD display.
  c. No support any of MULTI-CAED Reader.
  d. No high speed playback but only playing with normal full speed.

  ※ **DRM files in the USB may cause malfunction to playback in the radio unit.**
  ※ **The temperature below -10 Celsius, the audio unit with USB hook up would be affected to play well.**

■ AUX OPERATION

It is possible to connect your portable media player to the audio system for playback of the audio tracks via the cab speakers.

To get the best results when connecting the portable media to the audio system, follow these steps :

- Use a 3.5 ㎜ stereo plug cable to connect the media player headphone socket at each end as follows.
- Adjust the portable media player to approximately 3/4 volume and start playback.
- Press the MODE button (3) on the audio unit to change into AUX mode.
- The volume and tone can now be adjusted on the audio unit to the desired level.

※ **The audio quality of your media player and the audio tracks on it may not be of the same sound quality as the audio system is CD Player.**

※ **If the sound of the media player is too low compared with the radio or CD, increase the volume of the player.**

※ **If the sound of the media player is too loud and/or distorted, decrease the volume of the player.**

※ **When in AUX mode, only the Volume, Bass, Treble, EQ and Mode functions of the audio unit can be used.**

■ BLUETOOTH (if equipped)

1) Using a bluetooth wireless connection

(1) Your audio unit supports bluetooth wireless technology. You can set up a wireless link with bluetooth cellular phone.

(2) Keep PAIRING the cellular phone with audio unit in a few minutes as the phone are being switched on well enough.

※ Since this audio unit is on standby to connect with your cellular phone via bluetooth wireless technology, using this audio unit without running the engine can result battery drainage.

※ This audio unit phone call reception is on standby when ignition switch is set to ACC OFF or ON.

※ The line-of-sight distance between this audio unit and your cellular phone must be 10 meters or less for sending and receiving voice and data via bluetooth wireless technology. However the transmission distance may become shorter than the estimated distance depending on the environment in use.

※ Digital Noise & Echo suppression system provides the best sound clarity with little or no distortion (Echo & side tone will happen depending on cellular phone or service network).

※ To ensure the quality of calling, you should select a proper bluetooth VR level. This audio unit has already set with the best bluetooth VR level.

290F3CD215
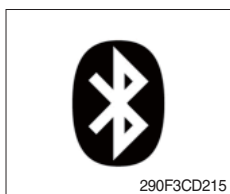
① Bluetooth icon

It will blink while establishing the bluetooth pairing.
It will light after a bluetooth device connected.

7709A3BT02
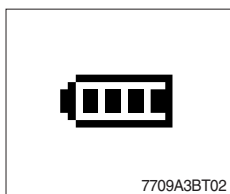
② Battery icon

It indicates the battery status of the connected bluetooth device.

7709A3BT03

③ Single strength icon

It indicates the signal strength of the connected bluetooth device.

2) Pairing in hands free modes

9403CD117

(1) Press and hold CALL button (4) for 2 seconds until you hear beep sound, then appears PAIR STR on the display.

(2) For the next procedure, go to cellular phone pairing mode.

(3) If it is in pairing status with audio unit and cellular phone, PAIRING will show on the display.

(4) If you want to exit pairing mode, press CALL END button (5) briefly while pairing, then it will show PAIR CLR on the display.

(5) Bluetooth Icon and PAIR OK appear on the display when pairing is successful.

3) Cellular phone pairing mode

(1) Browse your cellular phone menu and find the connectivity or bluetooth connection section.

(2) Select search for a new handsfree device function and allow the phone to find the mobile.

(3) HYUNDAI should appear on your cellular phone screen.

(4) Press connect menu among the handsfree option on your cellular phone.

(5) The cellular phone should prompt for a pin code. Insert the pin code 1234.

(6) The cellular phone should confirm that it has established a new paired connection.

(7) Close the menu. The pairing is now completed. It appears PAIR FAIL on the display for 3 seconds.

※ Each cellular phone type has distinct phone menu so you may need to refer to your manufactures instruction for the correct procedure on how to connect a new bluetooth device.

※ Please retry to the pairing instruction if HYUNDAI does not appear on the cellular phone screen.

※ Please select authorized, if there is authorized menu in the menu of bluetooth connection in your cellular phone.

※ Once the bluetooth pairing is completed between your cellular pone and this audio unit, the both units will be automatically recognized on its paring and when you turn on the key in your car even though this audio unit is turned off.

※ This audio unit can store up to 6 phones pairings. If the memory is full, the first stored paired phone will be deleted.

※ The connecting priority will be given to the last connected cellular phone.

※ If you want to change the connecting priority, try to connect this audio unit from the cellular phone.

4) Bluetooth connection and disconnection

(1) When established bluetooth connection between this audio unit and the cellular phone, bluetooth icon on the display appears and then the display shows HF/AV CONN when handsfree & AV profile connected.

9403CD118

(2) To disconnect bluetooth link
Press and hold CALL END button (4) for 2 seconds, it shows DIS CON and disappears bluetooth Icon on the display.

9403CD117

(3) To disconnect bluetooth link
Press CALL button (3) briefly, it blinks bluetooth Icon on the display while bluetooth is being connected. If the connection is completed, it appears bluetooth Icon on the display.

※ When your cellular phone battery is at low charge, the bluetooth connection may occasionally be lost. To maintain good connectivity ensure that your phone battery is adequately charged.

※ In case of failure of bluetooth pairing :
- Delete item in paired list on your phone.
- Reset both phone by power off/on and the audio unit by ACC off/on.

※ Connecting priority of handsfree profile is higher than headset profile.

※ The headset mode does not support caller ID, reject call and call Transfer.

5) Using the audio unit as a handsfree device

(1) When the audio unit is ringing, it shows CALL and follows with the phone number ********** on the display.

9403CD117/8

(2) To accept call
Press CALL button (4), it appears ANSWER CALL and follows TALKING on the display.

(3) To end call
To end call, press CALL END button (5), it appears REJECT on the display.

※ If reject call is activated in your phone, then your cellular phone does not support reject call function.

6) Audio transfer between the audio unit and phone

The audio transfer function is for switching the call from the audio unit to the cellular phone for private conversation.

9403CD117

(1) Press CALL button (4) briefly during conversation, it appears CALL TRANS on the display. To switch back to the audio unit, press button (4) briefly during private conversation, then it appears CALL TRANS on the display again.

※ **This function will be a cause of disconnection of bluetooth link in some nokia phones, but you do not worry just press button (4) during private conversation, then switch back to the audio unit automatically.**

※ **The quality of calling between cellular phone and audio unit is better than calling between one audio unit and another one.**

7) Last call number dialing

9403CD117

(1) Press CALL button (4) briefly, it appears CALL TO, then simply press CALL button once again, it would make the last call with phone number display on LCD.
If Reject call is activated in your phone, then your cellular phone does not support Reject Call function.

※ **If you are using SAMSUNG phone, then you may need to press once more send button. First press button shows phone contact list in your phone, then second press make the last call.**

8) To make a call by cellular phone

The audio transfer function is for switching the call from the audio unit to the cellular phone for private conversation.

(1) The audio unit activated automatically when you make a call by cellular phone.
(2) When you make a call processing by cellular phone, it shows CALLING on the display.
(3) When you receive a call, the phone number ******** appears on the display.

9) Using the audio unit as bluetooth music

The audio unit supports A2DP (Audio Advanced Distribution Profile) and AVRCP (Audio Video Remote Control Profile), and both profiles are available to listen music at the audio unit via cellular phone which is supporting the two profiles above.

(1) To play music, search the menu on your cellular phone as below :
    i.e : Menu → File manager → Music → Option → Play via bluetooth.
    It appears BT MP3 on the display.

(2) During BT MP3 playing, you could select the previous or next track by pressing SEEK up or TRACK down button on audio unit or operate via your cellular phone.

(3) To stop music, press button (5) briefly and it will automatically switch into the previous mode.

(4) To resume music playing, press the play button on your cellular phone.

※ This function maybe different depends on cellular phone. Please follow the cellular phone menu. Some kinds of phone need to pair once more for bluetooth MP3 connection.

※ This function will be caused to disconnect A2DP, AVRCP depends on cellular phone.

※ Information about songs (e.g.: the elapsed playing time, song title, song index, etc.) cannot be displayed on this audio unit.

■ **RESET AND PRECAUTIONS**

1) Reset function

Interfere noise or abnormal compressed files in the MP3 disc or USB instrument may cause extraordinary operation (or unit frozen/locking up). It's strongly recommended to use appropriate USB storage not cause any malfunction to the audio unit. In the unlikely event that the player fails to operate correctly, try out to reset unit by any of following two methods.

(1) press and hold [SEEK] [5 DIR-] simultaneously for about 5 seconds. (without Bluetooth)

Press and hold [☎] [5 DIR-] simultaneously for about 5 seconds. (with Bluetooth)

(2) Take out the fuse for the audio system in the vehicle once and then plug again.

※ It will be necessary to re-enter the radio preset memories as these will have been erased when the microprocessor was reset.

After resetting the player, ensure all functions are operation correctly.

2) Precautions

When the inside of the car is very cold and the player is used soon after switching on the heater, moisture may form on the disc or the optical parts of the player and proper playback may not be possible.

If moisture forms on the optical parts of the player, do not use the player for about one hour. The condensation will disappear naturally allowing normal operation.

(1) Operation voltage : 9~32 volts DC, negative

(2) Output power : 40 watts maximum (20 watts x 2 channels)

(3) Tuning range

Area	Band	Frequency range	Step
USA	FM	87.5~107.9 MHZ	200K
	AM	530~1710 KHZ	10K
EUROPE	FM	87.5~108.0 MHZ	50K
	AM	522~1620 KHZ	9K
ASIA	FM	87.5~108.0 MHZ	100K
	AM	531~1602 KHZ	9K
LATIN	FM	87.5~107.9 MHZ	100K
	AM	530~1710 KHZ	10K

● AREA Selection :
- To select an area, press and hold related buttons at FM1 band for about 3 seconds.
- USA Area: Press and hold mode + 1DIS buttons for 3 seconds
- EUROPE Area: Press and hold mode + 2 buttons for 3 seconds
- ASIA Area: Press and hold mode + 3RPT buttons for 3 seconds
- LATIN Area: Press and hold mode + 4RDM buttons for 3 seconds.

(4) USB version : USB 1.1

(5) Bluetooth version : V2.1

(6) Bluetooth supported profile :
- A2DP : Advanced Audio Distribution Profile
- AVRCP : Audio/Video Remote Control Profile
- HFP : Hands-Free Profile