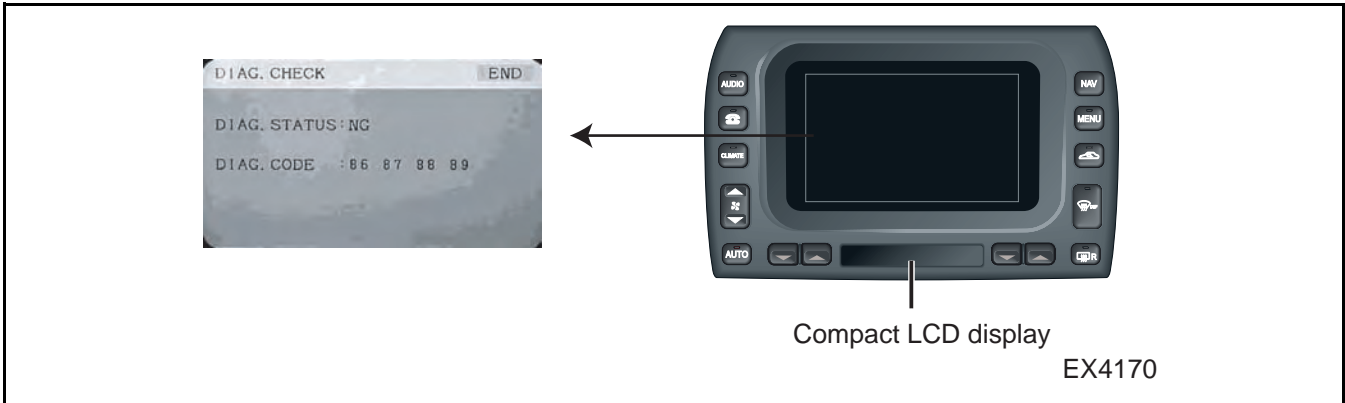## (2) Display Diagnosis

There are two methods for checking the display diagnosis: one to check it on the screen of the display panel, and the other to check it on the compact LCD display located below the display panel.

Compact LCD display

EX4170

[How to Enter Display Diagnosis]

There are two methods for entering the display diagnosis. When the Nav ECU is operating normally (the navigation screen appears when the engine is started), you can enter from the navigation diagnosis.

If the Nav ECU does not operate normally (nothing appears on the display when the engine is started), you can enter from the display diagnosis.
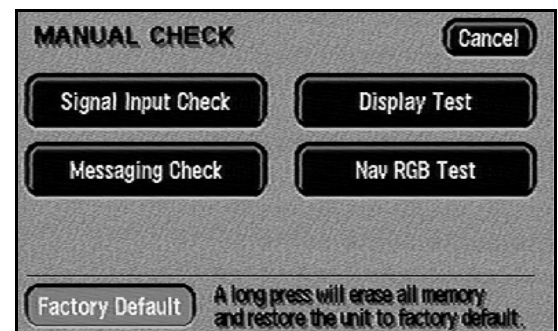
• When the Nav ECU operates normally:

1) Display the diagnosis menu screen (see page 16). Touch "Manual Check".
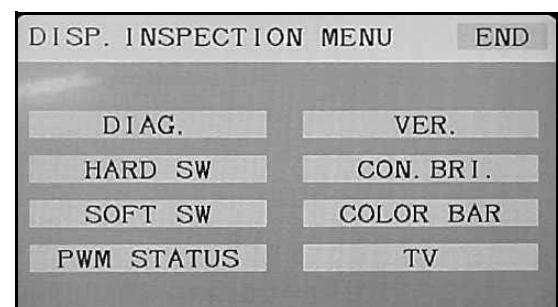

EA6098

2) Touch "Display Test".

EA6099

3) The diagnosis menu screen appears on the display.
The diagnosis has the following functions:
DIAG.: indicates diagnosis
HARD SW: tests hard switch
SOFT SW: test soft switch
PWM STATUS: tests PWM status
VER.: indicates version
CON.BRI.: tests brightness and contrast
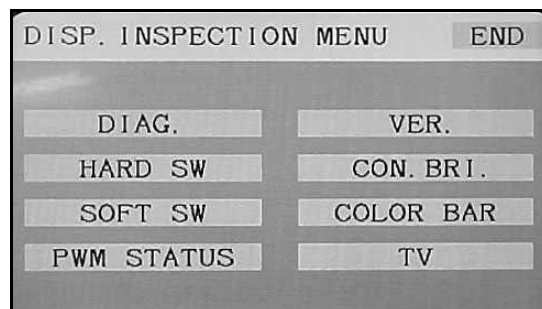COLOR BAR: tests color bars
TV: tests TV reception

EA6100

• When the Navigation does not operate normally (nothing appears on the display when the engine is started):
Press in the following order: [NAV] → [▲] → [NAV] → [▲] → [NAV] → [▲] → [AUDIO] → [AUDIO] → [AUDIO]
The diagnosis menu screen appears on the display.

EA6101

<Reference>
Perform the operation described above when a code appears on the compact LCD display.
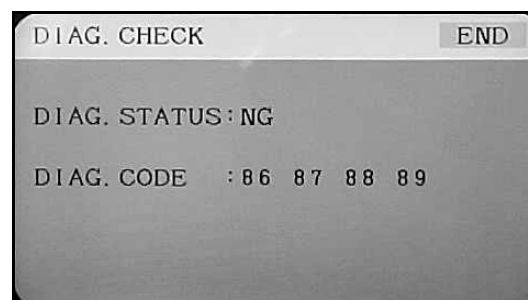It is used when only the power to the display panel is turned ON, such as when there is a communication error.

Compact LCD display
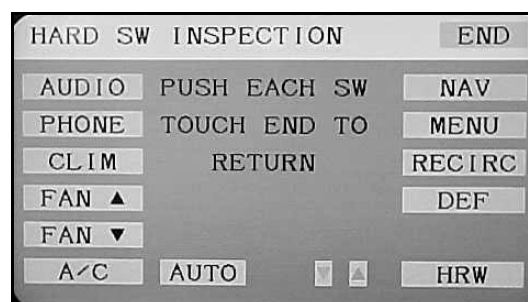
EX4171

[Displayed Diagnosis Screen]
1) DIAG.
Tests the system and shows the test results.

EA6103

2) HARD SW
Checks the operation of the hard switches. When the hard switches located on the right, left, and bottom of the display panel are pressed, the color of the corresponding graphic switch on the screen changes.
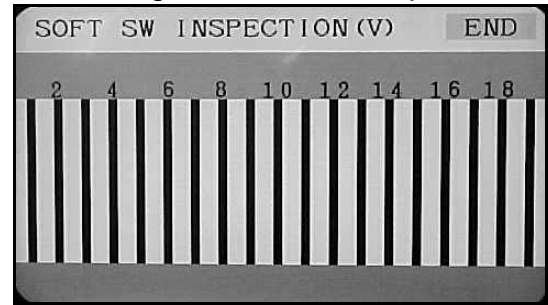

EA6104

3) SOFT SW

Checks the operation of the soft switches. When the screen is touched, the corresponding vertical (or horizontal) bar changes from black to gray.

<Checking Vertical Beam Operation>

EA6105

<Checking Horizontal Beam Operation>

EA6106

4) PWM STATUS

• PWM:
abbreviation for Pulse Width Modulation, it indicates short wave forms such as pulses.

Indicates on the screen:
PWM LOGIC*
The "*" portion is indicated as 0 or 1.
In accordance with the duty cycle of the dimmer signal:
Indicated as 0 if below 50%, and
Indicated as 1 if above 50%
By operating the dimmer switch that is provided on the vehicle, the LED illumination can be made brighter or darker. If the PWM does not indicate 0 or 1 by adjusting the switch, the possibility of the display being abnormal is great.
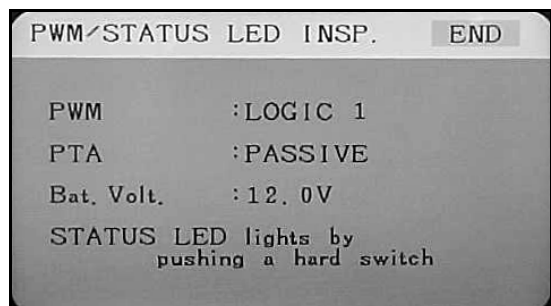

EA6107

• PTA
Indicates on the screen:
PTA *****
The "*" becomes active when the telephone is used, and passive when the telephone is not used. The PTA signal becomes active when the telephone is used even if ACC is OFF, causing the Nav ECU and the display to become operational.

• Bat. Volt
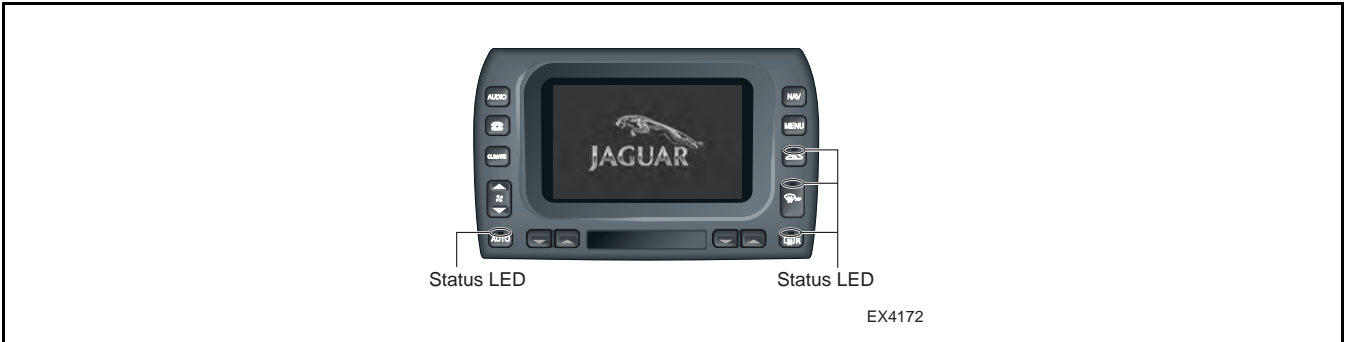This is the voltage value of +B.

• STATUS LED
When a hard switch that is provided with a status LED is pressed, the status LED of the pressed switch illuminates (or becomes extinguished).
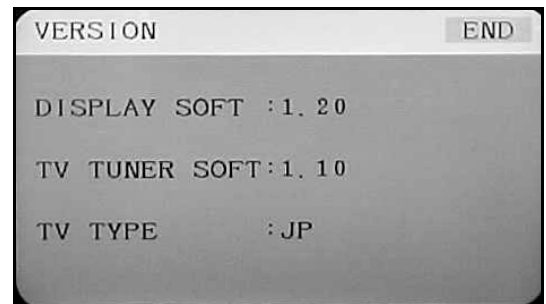
Status LED   Status LED

EX4172

5) VER. (Version)
Indicates the version of the display software and the TV tuner software. The TV TYPE indicates the destination for the TV tuner.

| VERSION | END |

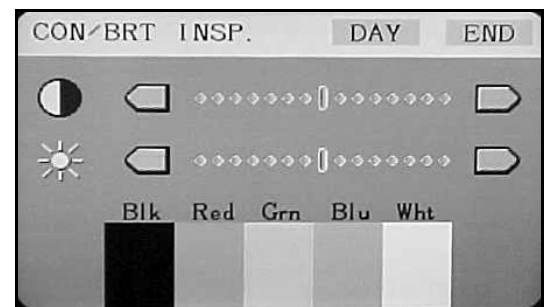DISPLAY SOFT : 1. 20

TV TUNER SOFT : 1. 10

TV TYPE : JP

EA6109

6) CON.BRI. (Contrast/Brightness)
The brightness and contrast can be adjusted by touching the [◀ ▶] on the screen. In addition, the daytime or nighttime screen mode can be checked by touching [DAY (NIGHT)].
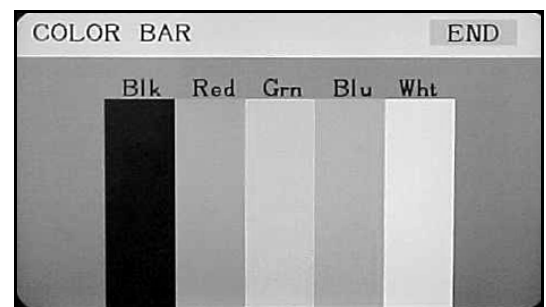
<Reference>
Touching "DAY" causes the screen to go into the daytime mode and the switch to indicate "NIGHT". Touching "NIGHT" causes the screen to go into the nighttime mode and the switch to indicate "DAY".

CON/BRT INSP.   DAY   END

Blk Red Grn Blu Wht

EA6110

7) Color Bars
The color bars are used for checking the colors on the screen. The selected color will appear on the entire screen when the colors on the screen are touched.
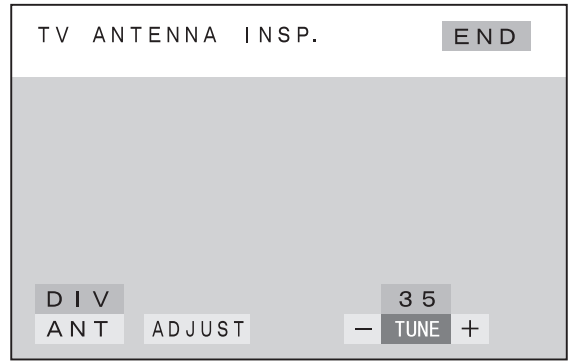

COLOR BAR   END

Blk Red Grn Blu Wht

EA6111

8) TV

Tests the reception conditions of the TV. Touching [ANT] causes the TV antenna selector to switch every 3 seconds in the following order: DIV. → ANT1 → ANT2 → ANT3 → ANT4 → DIV.

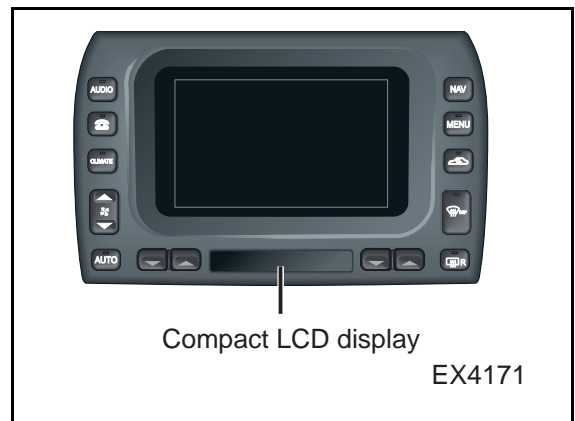Touching "−" and "+" at each end of TUNE moves the channels up or down, one channel at a time.

```
TV  ANTENNA  INSP.              END



D I V                            3 5
A N T     ADJUST            —  TUNE  +
```

EA6112

[DTC indication on compact LCD display]

If there is a malfunction, diagnostic codes will appear on the compact LCD display after a while following the starting of the engine (the diagnostic codes appear automatically).

If there are multiple diagnostic codes, they will appear in sequence at 2-second intervals.

Compact LCD display

EX4171