

Car AV Installation Set

TBXE-T004

This set is designed for models with driver's seat on the right side (Japan models).

Installation Manual

Thank you very much for purchasing this Kanatechs Car AV equipment installation set.
Please carefully read and follow the instructions in this manual before installation.
Car owner should retain this manual for future reference.



Caution Installation of this set involves handling of electronic parts. This manual assumes that installation work is performed by a specialist with skills and knowledge. Any damage to the parts during the installation or damage to electronic parts due to miswiring are not covered under the limited warranty.

★Removal of the Factory car AV disables the Factory air conditioning control. However the air conditioning control box included in this set takes over the control of the air conditioning and the information-center-display.

Compatible car make and models

| Model | Model Year | Compatibility | Note |
|------------------------|------------------------|---------------|----------|
| MAZDA 6 Sedan / 5-Door | May. 2002 to Jun. 2005 | All Models | Note 1-8 |
| MAZDA 6 Sports Wagon | Jun. 2002 to Jun. 2005 | | |

Note 1. This set is compatible with the Factory DVD car navigation system but the Factory TV function is disabled as the power supply from the Factory radio is no longer available. Some features such as the operation sounds of the Factory car navigation system may become disabled.

2. Car models with the BOSE sound system use a separate amplifier. Optional sound system translator for MAZDA Models **TBXE-X001** is required for proper operation.

3. The clock and audio display functions on the information-center-display become inoperative.

4. Automatic sound Level Control (ALC) becomes disabled.

5. Beep sound for air conditioning control is disabled.

6. When turning the ignition, the information-center-display may flicker or be delayed.

7. AMB (ambient temperature indicator) switch becomes disabled and continuously displayed on the left of the information-center-display.

8. The air conditioning control buttons and the hazard switch are continuously illuminated whenever the ACC is on and the dimming function (DIMMER or DIM on the Factory car navigation system) becomes disabled.

※For installation, the Factory Heater Control Unit, the air duct, the Factory switch panel and the cover need to be detached and reassembled on Panel included in this set.

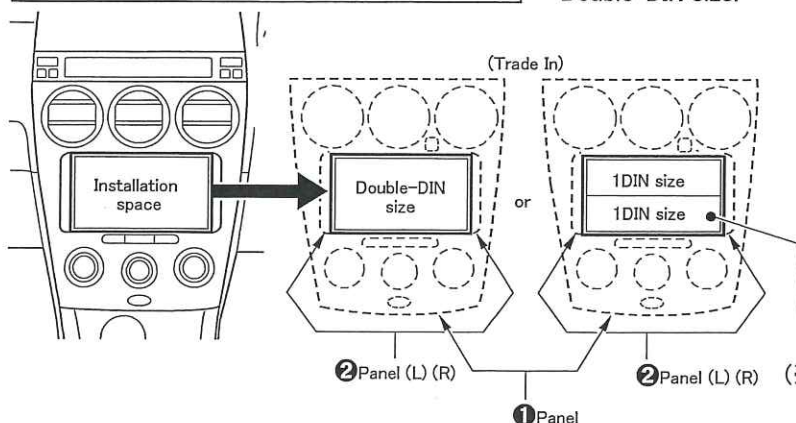
※Since Factory hazard lamp switch may not be relocated, use the hazard lamp switch included in this set.

※For cars with remote audio control switches on the steering wheel, depending on after-market car AV equipment, enables their operation on the steering wheel. Please confirm with each car A/V maker.

※There are additional messages for the information-center-display included with this set. (See Page 8)

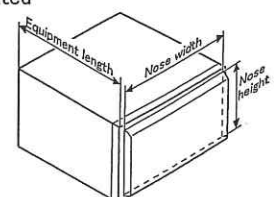
Designed Installation Size

◆For 1DIN + 1DIN size and Double-DIN size.



※Car AV equipment with front panel size over 172 mm width and 100 mm height cannot be installed.

※Car AV equipment up to 172mm in length may be installed. However, some equipment may be incompatible due to the position of wire connecting units located in the interior, to the irregularity of the shape of the connector units or to the space limitation for the connecting wires.



(※) Please separately obtain a pocket available in market if installing a pocket.

Necessary tools



Parts List

※Please use the enclosed parts according to the Instruction. Installing or using parts outside of the Instruction may result in damaging the vehicle or car AV equipment; or malfunction or dislocation of the car AV equipment.

| Part No. | Part name | Quantity | Part No. | Part name | Quantity |
|----------|-------------------------|----------|----------|--|----------|
| 1 | Panel | 1 | 7 | Hazard Switch/Air Conditioning Switch Circuit Board Assembly | 1 set |
| 2 | Panel (L) (R) | 1 each | 8 | Wire clamp | 1 |
| 3 | Bracket (L) (R) | 1 each | 9 | Adhesive Cushion | 1 Sheet |
| 4 | Rear Bracket | 1 | 10 | Control box | 1 |
| 5 | Rubber bushing | 1 | 11 | Power supply/front speakers/rear speakers (24P) | 1 |
| 6 | Light Shielding Cushion | 1 | 12 | Antenna power supply conversion cord. | 1 |
| | | | 13 | φ 3 × 8 tapping screw | 2 |
| | | | 14 | M5 × 8 screw (Note 1, 3) | 12 |
| | | | 15 | φ 5 × 10 tapping screw (Note 1) | 8 |
| | | | 16 | M4 × 5 screws (Note 1, 2) | 2 |
| | | | 17 | Light Shield Bushing | 3 |

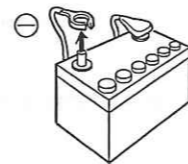
Note 1...Screw holes for co-attachment of 2 Panel (L) (R) and 3 Bracket (L) (R)

Note 2... "M4 × 5 screws" are used with in-dash-sliding-front-panel type AV equipment (including Double-DIN size models) where "M4 × 3screws" are enclosed in the car AV equipment. Even though the car AV equipment manual may indicate to use the shorter screws, please use 16 "M4 × 5 screw" enclosed in this package to properly attach the equipment with sufficient screw length.

Note 3...Four (4) screws are used to attach 3 Bracket (L) (R) to 1 Panel.

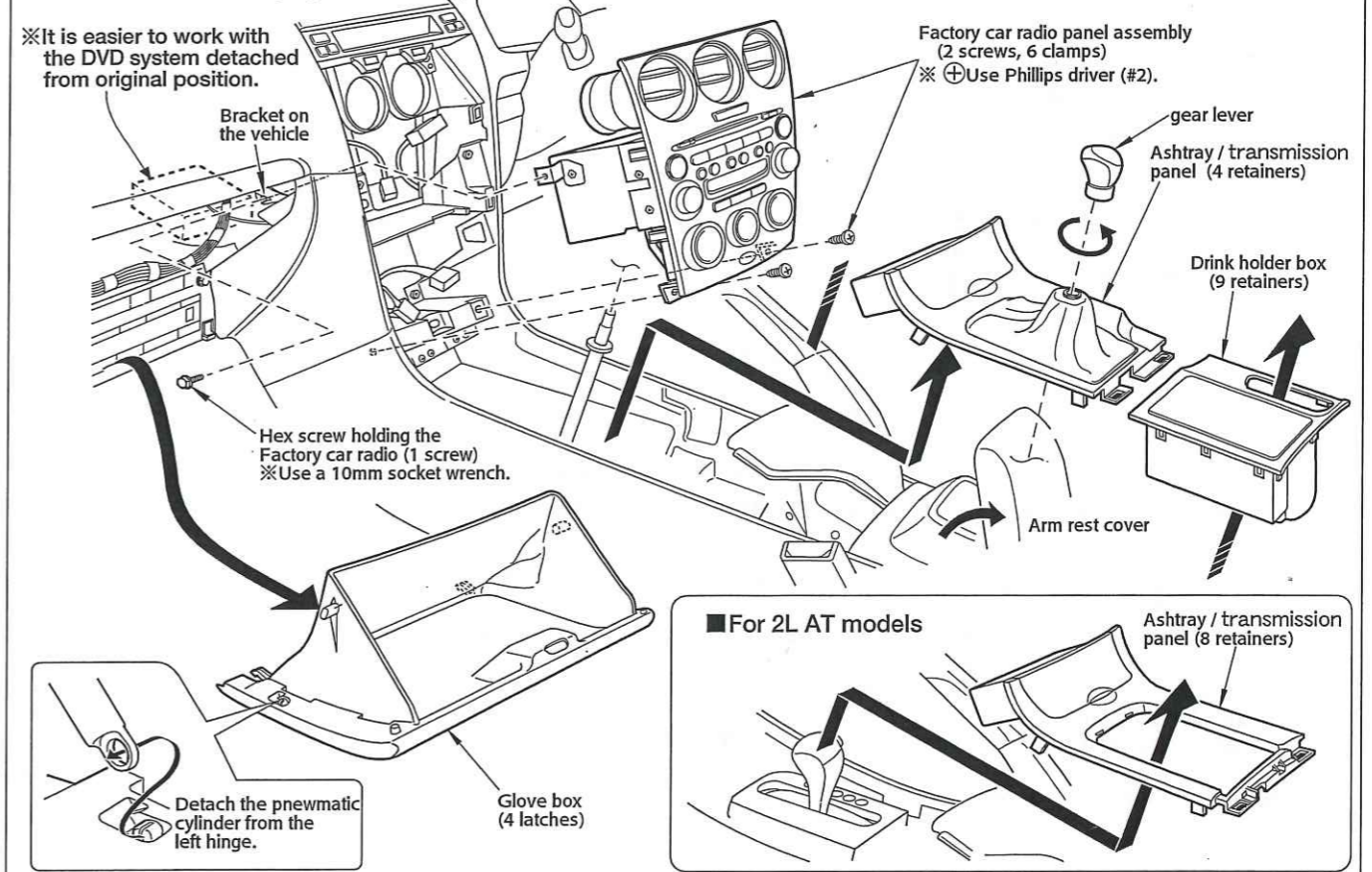
Read Before Starting the Wiring Work

- Warning** ⚠ Be sure to chock at least two wheels of the vehicle.
 - Caution** ⚠ Be sure that the parking brake has been securely set and locked by fully depressing pedal or by pulling the parking brake hand lever.
 - ※ Disconnect the ground terminal of the car battery before installation to prevent electrocution or any damage to equipment during the wiring work.
 - ※ Professional skills and experience are necessary for detaching, installation, and wiring work. Improper installation may cause serious damage to the vehicle and car AV equipment. For safety, please refer installation to dealers and specialized installation shops.
 - ※ Do not install car AV equipment at places disturbing the forward view, interfering with driving operation (steering wheel, transmission lever, and brake pedal, etc.) or causing possible danger to passengers.
 - ※ Watch for burrs on vehicle frames etc. to avoid injury.
 - ※ Use care during removal and installation to prevent damage to vehicle side panels or car AV panels. etc. (Example: affix vinyl or masking tape to protect delicate parts for removal and installation.)
 - ※ Use a magnetized screw driver when working in narrow spaces. (Screw drivers can be magnetized by attaching the driver to a speaker magnet for about 60 seconds.)
- Screws and clamps removed during the detachment may be needed again for installation. Use care not to damage or misplace these parts.



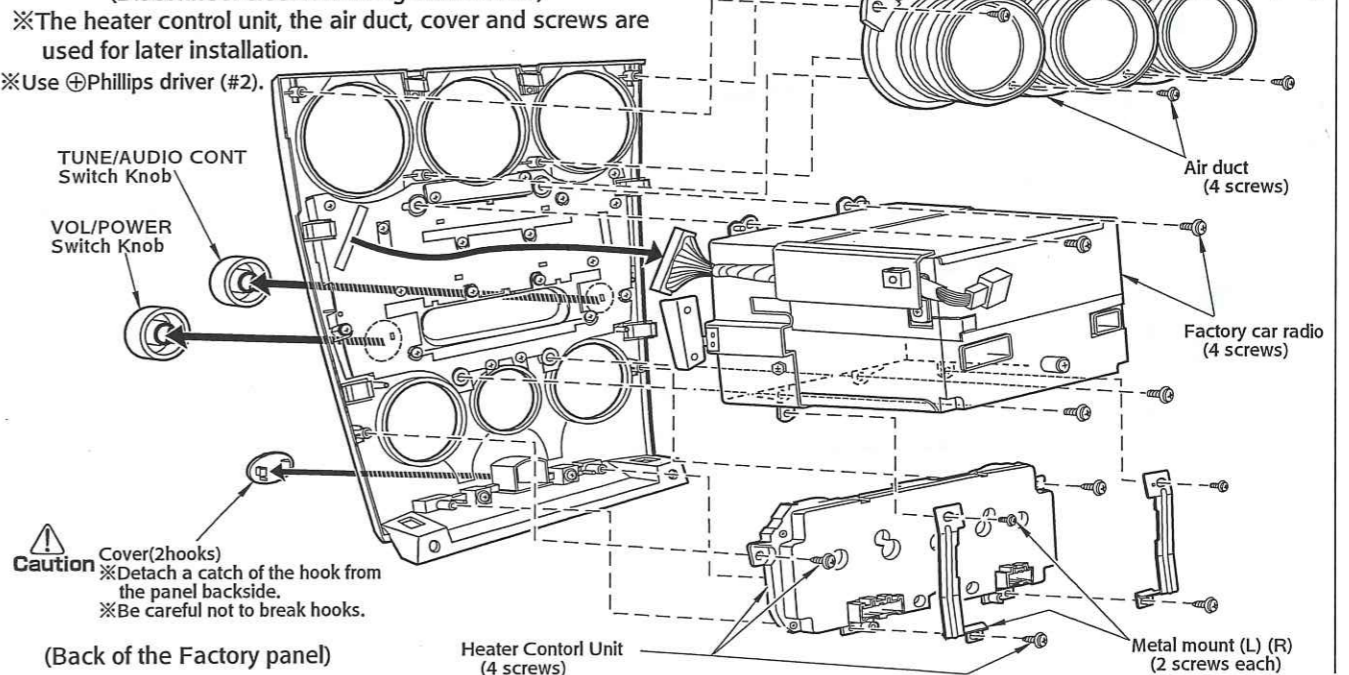
1 Remove the Factory car radio panel assembly.

- The figure shows the manual transmission model, follow the same procedure for the activematic models.
- Step 1. Remove the drink holder box after opening the arm rest cover.
- Step 2. Shift the transmission lever to the N (neutral) position, turn the transmission gear lever counterclockwise and remove. Detach the ashtray / transmission panel.
- ※ Remove the ashtray/transmission panel on the 2L AT model cars. (Disconnect wiring connectors... See figure below)
- Step 3. Remove the glove box and detach the hex screw on the left of the Factory car radio. Remove the 2 screws at the bottom of the panel. Pull out the Panel assembly to disassemble. (Disconnect all wiring connectors and the antenna plugs.)

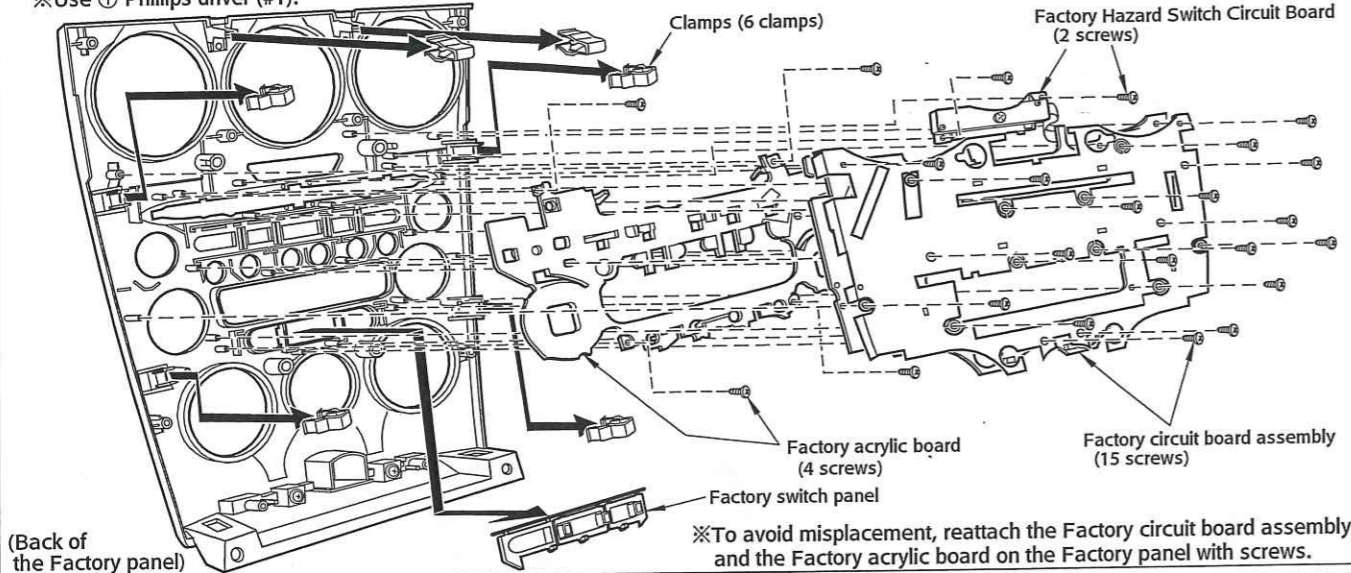


2 Remove the heater control unit etc. from the Factory Panel.

- Step 1. To detach the Factory panel, pull out the switch knobs (VOL/POWER and TUNE/AUDIO CONT).
- Step 2. Remove the cover from the lower part of the Factory panel, and detach the heater control unit and the Factory car radio from the back side, followed by removal of the air duct. (Disconnect electrical wiring connectors.)



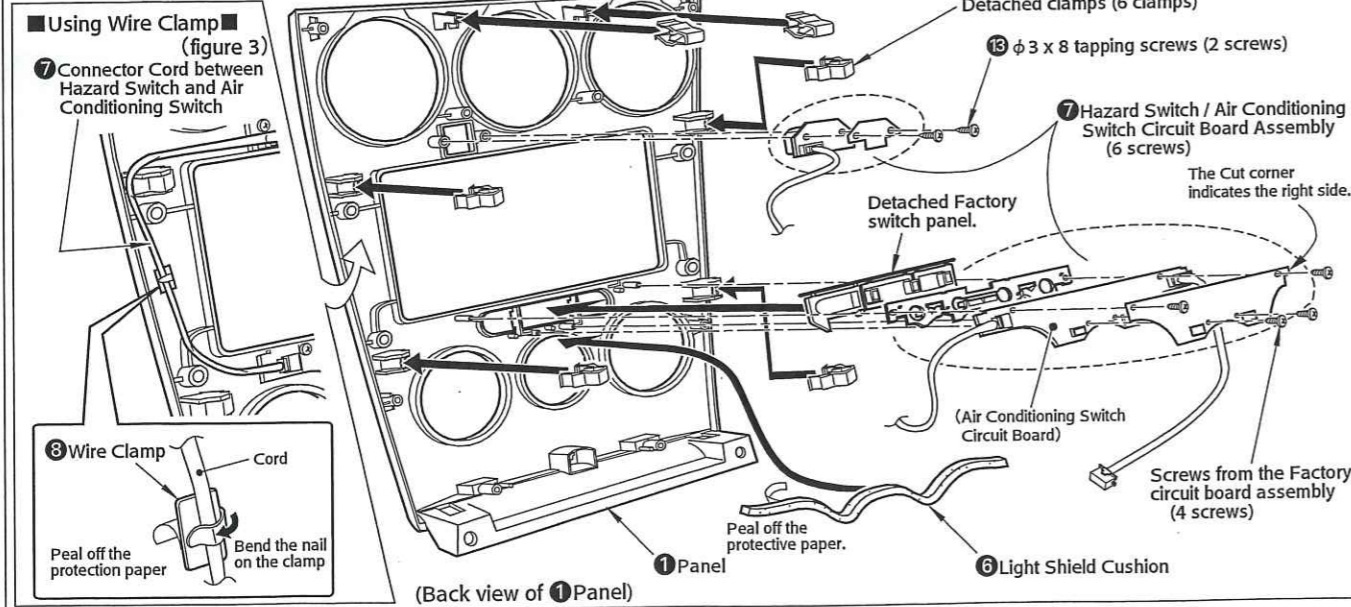
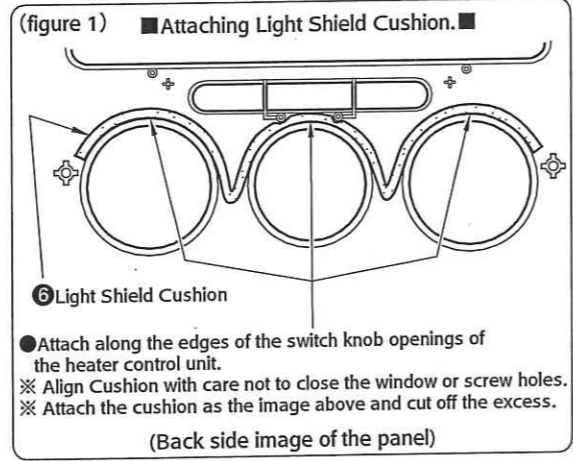
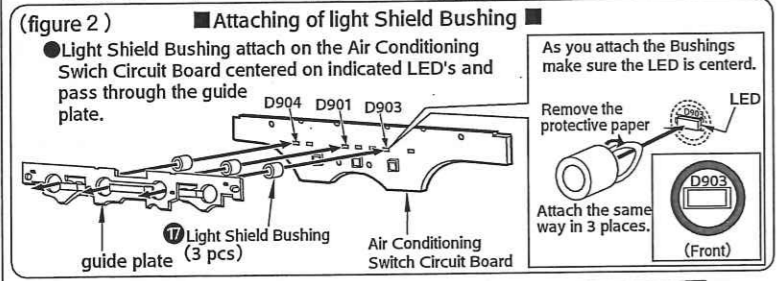
⚠ Handle the Circuit Board Unit with care to avoid physical or static damage.
Step 3. From the back of the Factory panel, detach the Factory circuit board assembly, the Factory acrylic board and the Factory switches, and pull out the clamps. (Disconnect each wiring connector.)
 ※ Detached Factory switch panel, clamps and screws for the Factory circuit board assembly are used for installation.
 ※ Use ⊕ Phillips driver (#1).



3 Attach the clamps and the Factory switch panel followed by the hazard switch and the air conditioning switch circuit board.

※ Use ⊕ Phillips driver (#1).
Step 1. Attach the Light Shield Cushion along top of the switch knob openings for the heater control unit. (See figure 1).
Step 2. Transfer the Factory clamps and Factory switch panel.
Step 3. On the Air Conditioning Switch Circuit Board Assembly attach the Light Shield Bushings centered on LED's (D904, D901, and D903) (See figure 2)
Step 4. Lay out the connector cord between the Hazard Switch and the air conditioning switch on the left side of the panel (with care not to block the screw holes), and secure with Wiring Clamp. (See figure 3)

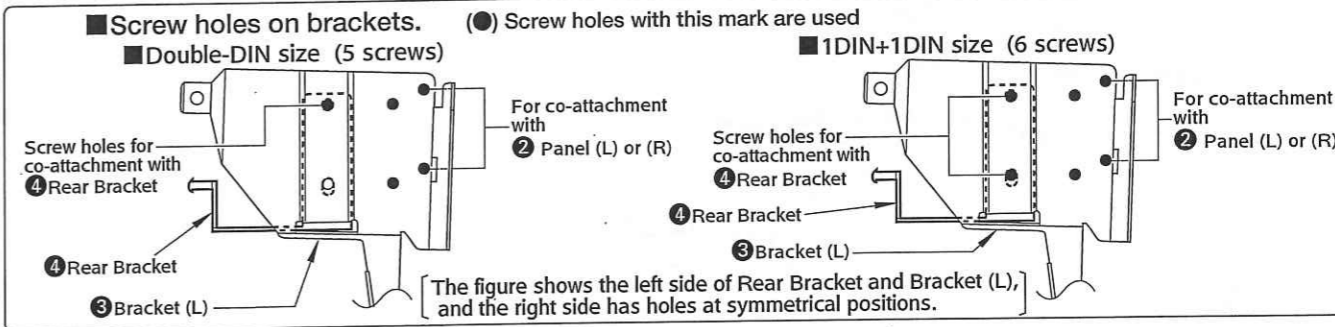
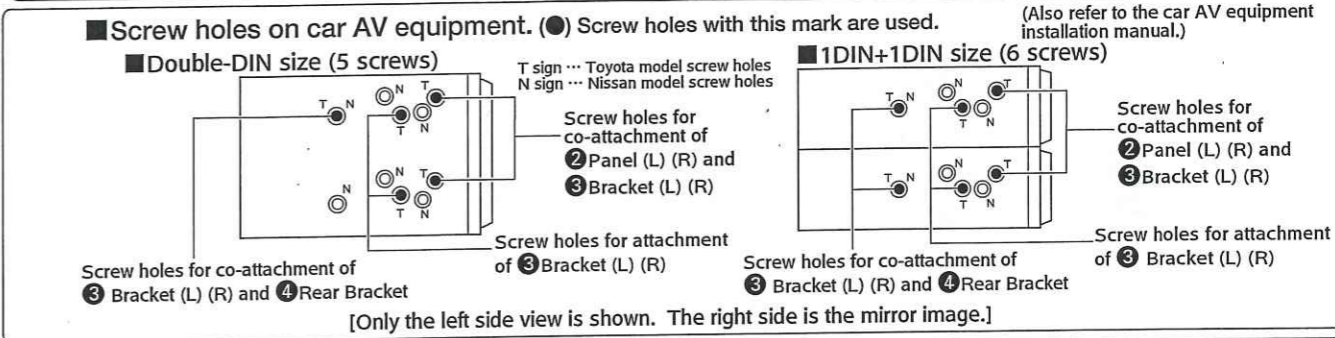
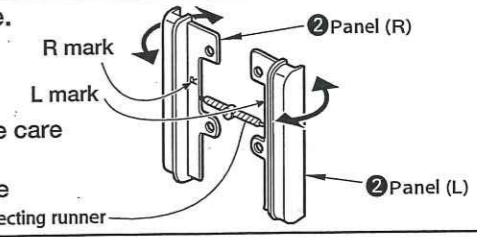
※ When attaching the Light Shield Cushion, Wire Clamp or Light Shield bushing, clean the surface free from dust or oil, remove the protective paper and apply pressure.



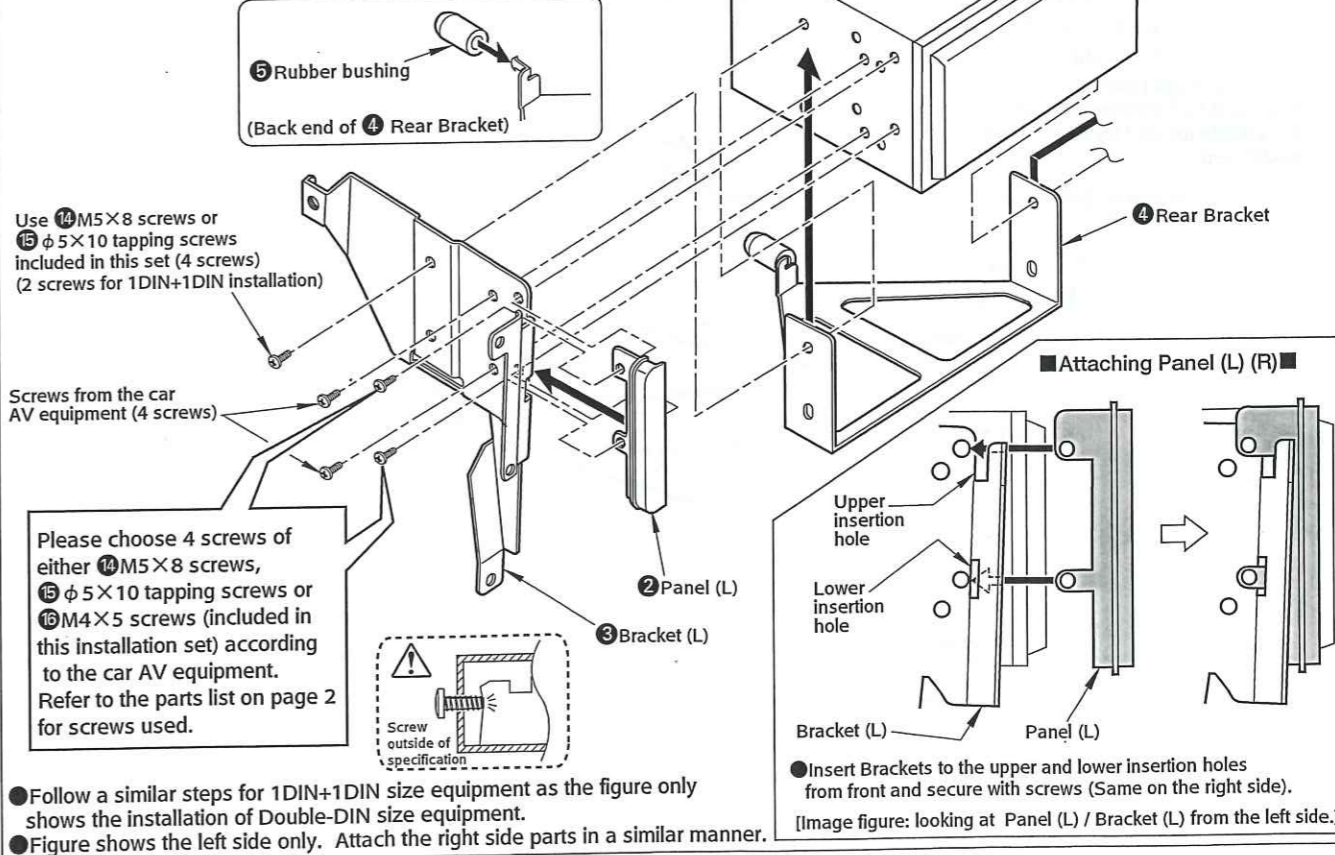
TBXE-T004

4 Attach Bracket (L) (R) / Rear Bracket and Panel (L) (R) to the car AV equipment.

⚠ **Caution**
 ※ Panel (L) and Panel (R) need to be cut out before use.
 ● Bending at the cut marks on the connecting runner between Panel (L) and Panel (R) should detach the parts.
 ※ Please use caution not to bend areas other than at the cut marks and not to damage surfaces of any other parts. Use care to avoid injury.
 ※ Each Panel is clearly marked with L or R. Please note these marks when attaching to the equipment.



Step 1. Attach Bracket (L) (R) / Rear Bracket and Panel (L) (R) to the car AV equipment.
 ※ Place Panel (L) (R) in front of Bracket (L) (R) to tighten together. (See bottom right figure)
Step 2. Insert Rubber bushing in back of Rear Bracket. (See figure below)
 ※ Use ⊕ Phillips driver (#2).



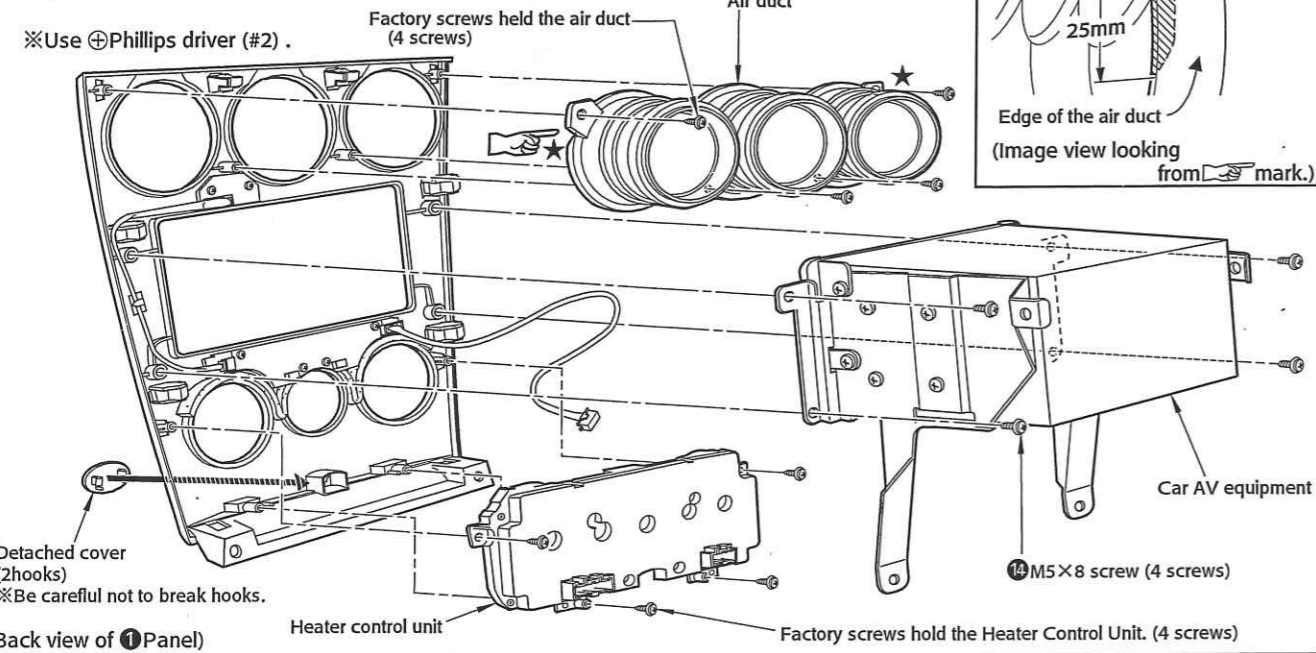
● Follow a similar steps for 1DIN+1DIN size equipment as the figure only shows the installation of Double-DIN size equipment.
 ● Figure shows the left side only. Attach the right side parts in a similar manner.

5 Attach the air duct, the heater control unit and the new AV equipment.

Step 1. Prepare air duct by cutting edges (indicated by ★).
 ⚠ **Caution** Most importantly avoid injury. (See figure on right)
 ※Be careful not to over cut or damage the parts' surfaces.

Step 2. Attach the air duct and the heater control unit followed by the new AV equipment.
 ※Be careful not to snag wiring cords from the left of the air conditioning switch circuit board.

Step 3. Attach the cover to the lower part of the panel.



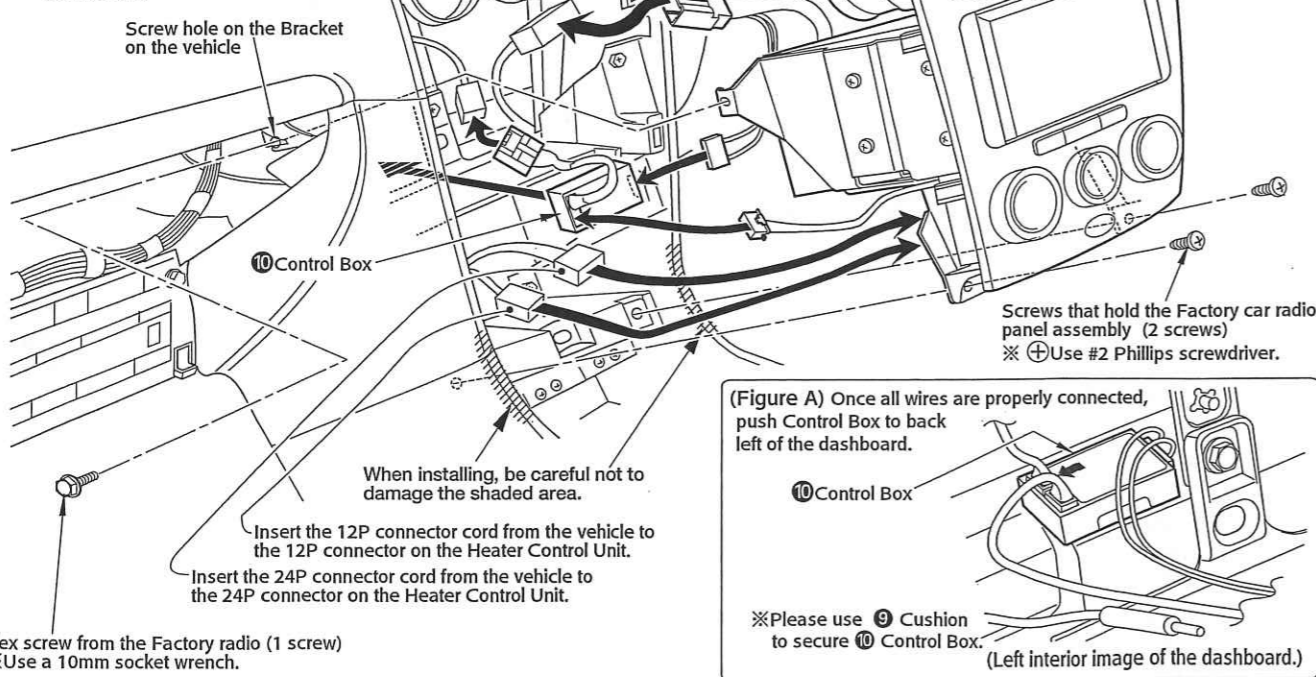
6 Connect the electrical wiring. (See page 7)

7 Install the car AV equipment on the dashboard, and confirm its operation.

Step 1. Connect the wiring cord from the air conditioning switch circuit board to the control box, and connect the 16P wiring cord from the control box to the display connector from the vehicle.

Step 2. Lay out the control box and the wiring cords at the back left of the dashboard (See figure A), then insert the car AV equipment into the dashboard. (Lay out the wiring with care not to be caught between parts.)

※Align the screw holes on Bracket (L) and the bracket on the vehicle located far back of the dashboard.



8 Restore parts (glove box/ashtray etc.) to their original position.

Once restored, test operation of the cigarette lighter etc.

Wiring Connections

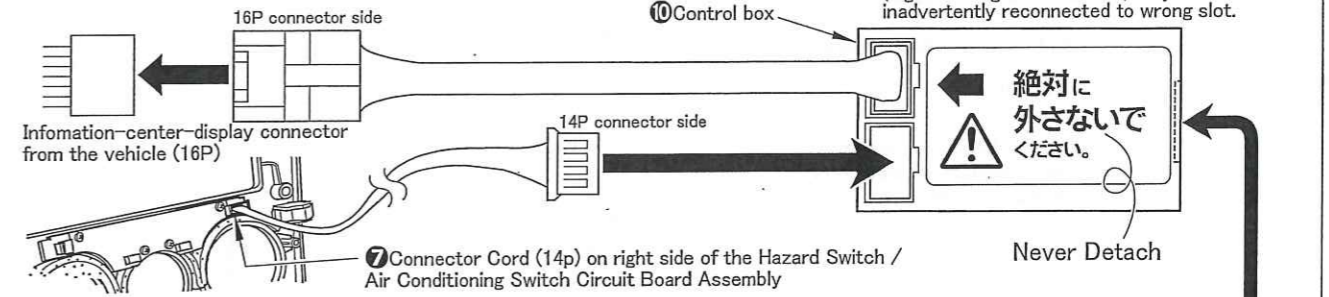


Cautions

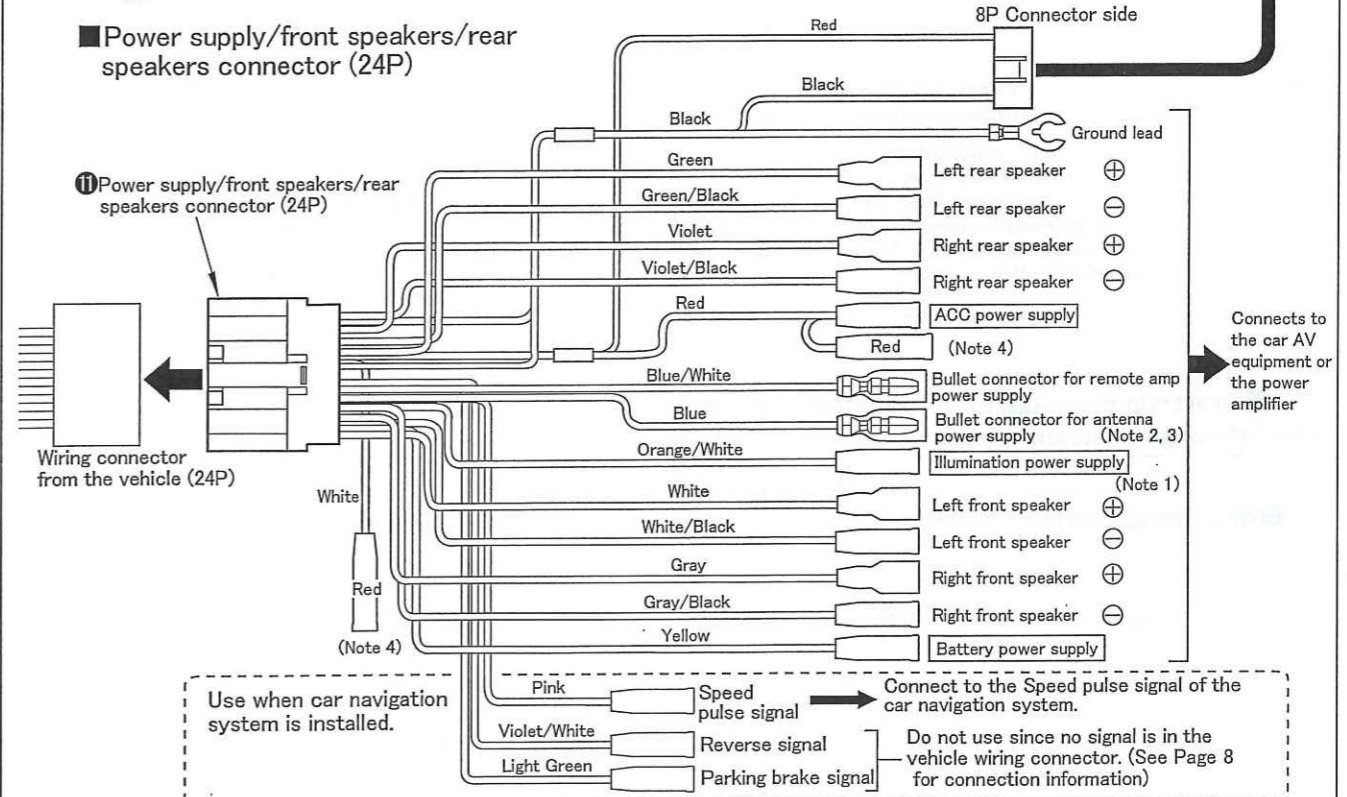
◇ Check the following before starting the wiring work. ◇

- Make sure that the maximum total current load (refer to the specification in the car AV equipment manual) connected to the wiring connector is 10A or less, which is the current capacity of the vehicle's radio circuit.
- If the main AV unit does not include a power amplifier unit or if the vehicle's radio current capacity needs to be exceeded, use power supply cables from the car AV equipment manufacturer (a wiring kit for taking electric current directly from the battery).
- While the coloring code and shapes for wires in this set follows the JEITA specification, the car AV equipment manufacturer may use another coloring specification. Please refer to the car AV equipment installation manual for proper wiring.
- Please fully insert electric quick connectors including the blade and bullet type connectors.
- When placing wires for installation, make sure that the wires are not caught in narrow spaces such as near body frames, screw holes or near moving parts such as sheet rails. Bundle and securely affix the wires out of the way of vehicle operation (keep away from the steering wheel, the transmission lever and the brake pedal motion path).

Control box



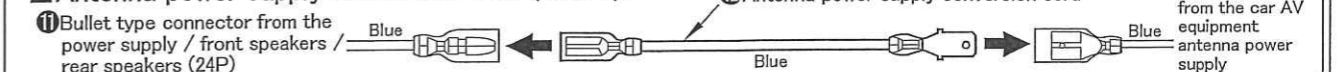
Power supply/front speakers/rear speakers connector (24P)



- Note 1. If the car AV equipment does not use the illumination power supply, it is not necessary to connect.
 2. If the car is equipped with a glass printed antenna, connect to the auto antenna lead (Blue) from the car AV equipment.
 3. If the antenna power supply connector from the car AV equipment is other than the bullet connector specified by JEITA (such as the blade type connector), insert the antenna power supply conversion cord included in this set.
 4. For cars with remote audio control switches on the steering wheel, depending on after-market car AV equipment, enables their operation on the steering wheel. Please confirm with each car A/V maker.

※Not connected to the connector cord (16P) for cars with a genuine car navigation system.

Antenna power supply conversion cord (Note 3).



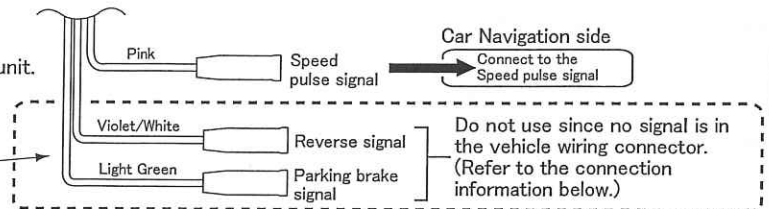
Connecting information for car navigation system

※It is possible that detail may be modified by the car manufacturer. Please verify compatibility at car dealers.

■ Connecting Speed pulse signal

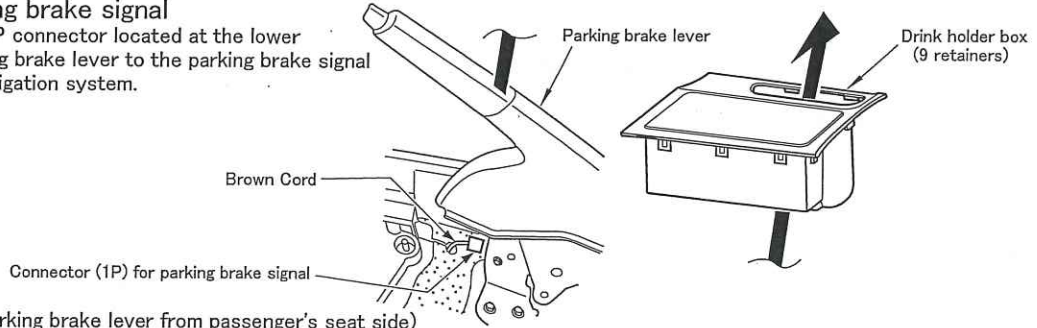
- Connect the Speed pulse signal terminal (Pink cord) on Power supply/front speakers/ rear speakers (24P) to the Speed pulse signal cord from the car navigation unit.

① Power supply/front speakers/ rear speakers (24P)



■ Connecting parking brake signal

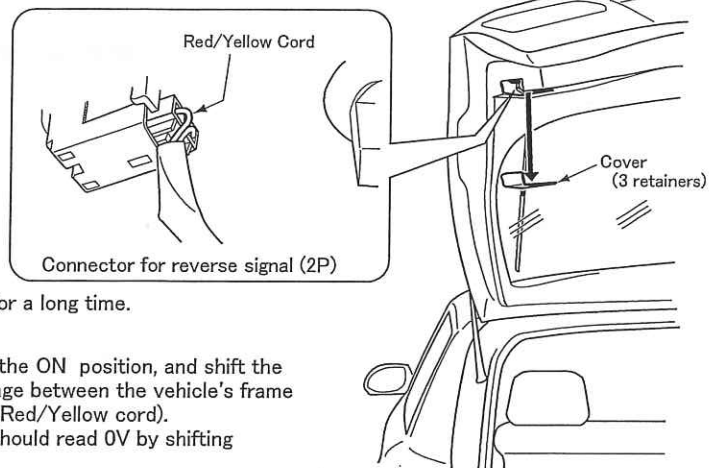
- Connect the brown 1P connector located at the lower left side of the parking brake lever to the parking brake signal wire from the car navigation system.



■ Connecting reverse signal

◎ For MAZDA 6 5-Door

- Connect the reverse signal (+) cord from the car navigation to the Red/Yellow cord on 2P connector for reverse located in the left side reverse lamp.



(Figure showing the rear left of the trunk door.)

⚠ Caution

- Do not start the engine (nor turn to START position).
- The battery may drain if the ignition key is turned on for a long time.

※How to verify the reverse signal connection.

Securely set the parking brake, turn the ignition switch to the ON position, and shift the transmission gear into reverse position. Measure the voltage between the vehicle's frame (Non-painted metal) and the reverse signal 6P connector (Red/Yellow cord). The connector side should read about +12V. The voltage should read 0V by shifting the gear from R (reverse) into other positions.

■ Start-up message on information-center-display

(The following Kanatechs's original message displays in this set.)

■ Display of the start-up message ■

- When the ignition key is turned from ACC to ON position, the following 4 messages will sequentially display.

Display of "MAZDA 6" followed by
↓
Display of "Presented" followed by
↓
Display of "by" followed by
↓
Display of "Kanatechs"

