

**Global Electric Motorcars, LLC** 

A DaimlerChrysler Company

# INSTRUCTIONS

Product: GEM Electric Motorcars Models: All Subject: Instructions for installing Stereo Accessory Estimated Completion Time: .75 Hours

See Page # 7 Parts:

### **REQUIRED TOOLS & SUPPLIES:**

- (1) 3/8" Drive Ratchet (1) 3/8" Socket (1) Small felt tip Marker (1) Drill (1) Center Punch (1) Ø 1/4" Drill Bit (1) Ø 3/8" Drill Bit (6") Masking Tape (1) Phillips Screwdriver (1) Small Flat Screwdriver (7) Butt Connectors
- (1) Med. Flat Screwdriver (1 Pair) Safety Glasses (1) Wire Cutter (1) Needle Nose Pliers (1) Wire Stripper (1) Wire terminal Crimper (1) Tape Measure (1) 6 Ft. of 18 Ga. Mechanics Wire (6) Tie Straps

## WARNING!

To prevent personal injury or property damage: Switch the 72-volt Master Disconnect to "OFF", be sure the ignition switch is always in the "OFF" position and that the "KEY" is removed. Set the parking brake, then make sure that all moving parts have come to a complete stop before servicing, adjusting, or repairing.

## WARNING!

### HIGH VOLTAGE



You could be seriously or fatally injured by electric shock if you attempt to open, repair, test, inspect or adjust. Only qualified technicians should open and service. Consult service manual.

The following instructions are for installing the Stereo accessory to all models of GEM cars. To install the stereo, proceed as follows.

1. Remove bench seat cushion (rear bench seat cusion for 4 passenger vehicles) to access the Master Disconnect switch. Switch master disconnect off. (See Fig. # 1.

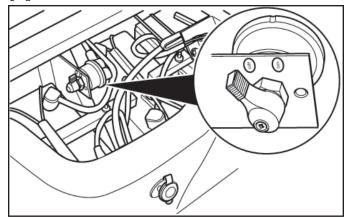


Fig. #1 Switch master disconnect off

2. Remove the Qty. two (2) 1" Dia. Hood Knobs securing the hood. (See Fig # 2).



Fig. # 2 Loosen and remove hood knobs

3. Newer models only require for the latch to be unclasped. (See Fig # 3).



Fig. #3 unclasp latch

4. Open the hood.

#### **REMOVING THE DASH**

5. Loosen the Qty. two (2) dash mount bolts securing the upper dash located on the front of the lower wind-shield support.



Fig. # 4 Loosen dash mount bolts

6. Remove upper dash. (See Fig. # 5)

10. Mark the hole locations for the wiring harness to be routed at the driver side of vehicle on the roof rail and stereo console. (See Fig. # 8, 9, 10 & 11)

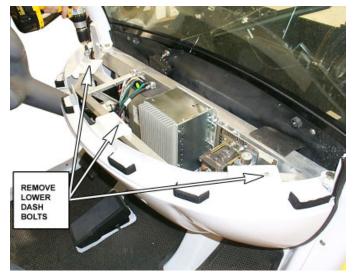


Fig. #6 Remove lower dash mount bolts



Fig. # 5 Remove upper dash

Fig. # 7 Remove grab handles

 Remove Qty. three (3) lower dash mounting bolts. (See Fig. # 6)

#### **REMOVING THE GRAB HANDLES**

8. Remove grab handles from each side of vehicle. First remove the plastic caps with a small flat tip screwdriver. Then remove the screws securing the grab handles. (See Fig. # 7)

#### LOCATING THE STEREO CONSOLE

9. Locate the stereo console on the inside roof of vehicle.



Fig. # 8 Mark hole locations for wiring harness



Fig. #9 Drill Ø3/8" hole in stereo console and install rubber grommet



Fig. # 10 Mark and drill Ø3/8" hole in roof rail 1/2" down from ceiling



Fig. # 11 and 3-1/4" from front window brace

#### **ROUTING WIRING HARNESS**

11. Remove stereo console from roof. Drill holes to Ø3/8" previously marked through one side of roof rail and console. Deburr holes after drilling.

**Note:** GEM suggests using rubber grommets for the drilled holes in roof rail and console available at your local hardware store.

12. Drill a Ø3/8" hole at the lower inner corner of roof rail below dash.



Fig. # 12 Drill lower hole in roof rail

- 13. Use a 6Ft. length of 18 Ga. mechanics wire to form a fish tape and insert in the top hole an out the bottom hole.
- 14. Attach wiring harness (opposite of diode end) to fish tape and pull up through bottom hole and out top hole. (See Fig. # 13)

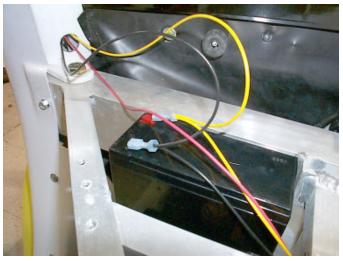


Fig. #13 Route wiring harness

#### **INSTALL BATTERY**

#### **INSTALLING ANTENNA**

15. Install the 12 volt battery to the brake pedal housing using supplied bracket.



*Fig. # 14 Install battery to car chassis above brake pedal housing* 

#### WIRING

#### NOTE:

Use the wiring schematic located on page # 5 Fig. # 15.

- 16. Route wiring harness along the same path as the existing wiring harness that leads to the circuit board and secure with tie straps.
- 17. Connect the **RED** wire to the circuit board marked **J9**. (See Wiring Diagram)
- 18. Connect the **YELLOW** end of the wire with the diode to the circuit board marked **J7**. (See Wiring Diagram)
- 19. Connect the remaining **YELLOW** wire lead to the positive **(+)** terminal of the battery. (See Fig. # 14)
- 20. Connect the remaining **BLACK** wire lead to the positive (-) terminal of the battery. (See Fig. # 14)
- (Rev 1-to the negative and J8 post)
- 21. Secure remaining wires with tie straps.

#### **CONSOLE PREPARATION**

- Drill Qty. eight (8) Ø.25 holes in console at locations specified in (Fig. # 16).
- 23. Consult the stereo installation manual for correct cutout dimensions for stereo chassis. See (Fig. # 16).
- Consult the speaker installation manual for correct cutout dimensions for speakers into console. See (Fig. # 16).

#### **TERMINATING STEREO TO WIRE HARNESS**

25. Terminate wiring harness to radio. See (Fig. # 16) for correct wiring.

Install antenna at the dimensions specified in (Fig. # 17)

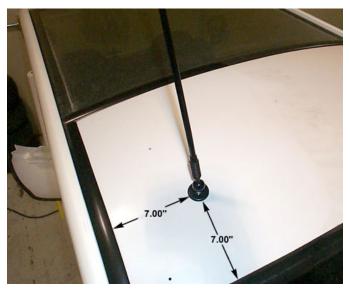


Fig. #17 Install antenna

27. Connect the male end of the antenna to the female end of the radio antenna connector.

#### INSTALL CONSOLE TO VEHICLE

- 28. Place console on roof in desired position.
- 29. Drill through the predrilled holes of the console, through the roof with a Ø.25 drill bit.
- Attach stereo console to roof using Qty. (6) screw binding posts and Qty. (6) Nut binding posts. (See Fig. # 18).

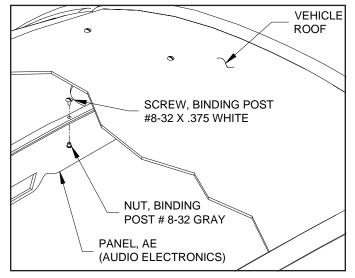
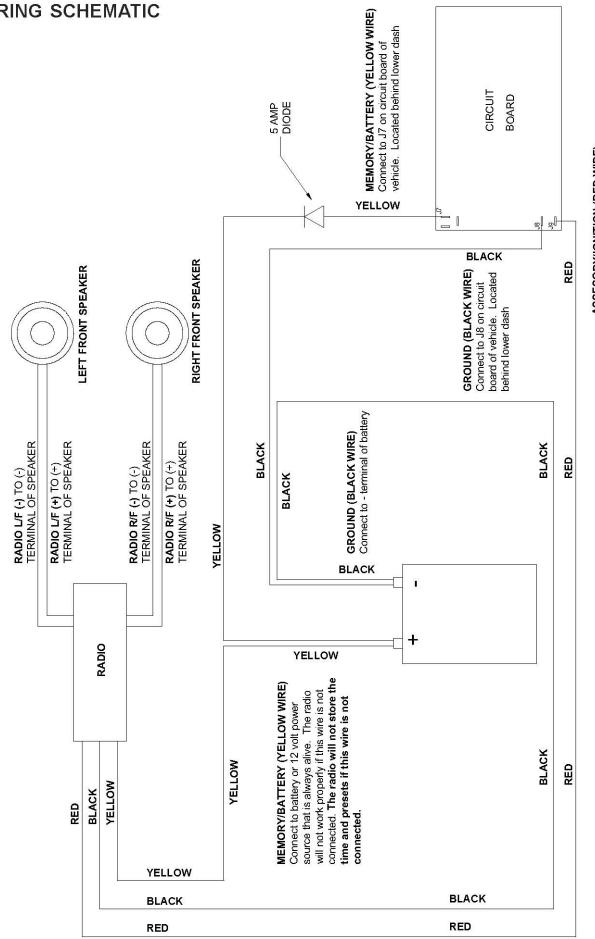


Fig. #18 Attach Stereo console to roof using hardware

#### (Rev 1 - see 20. Changed positive to negative and added J8)





ASSESORY/IGNITION (RED WIRE) Connect to J9 on circuit board of vehicle. Located behind lower dash

#### **RE-ASSEMBLY**

- 31. Re-install grab handles to roof rail.
- 32. Install lower and upper dash in the reverse dis-assembly procedure.
- Install safety decal to location shown in (Fig. # 19). Use P/N 0350-00549 for 2 passenger vehicles. Use P/N 0350-00548 for 4 passenger vehicles.
- 34. Close hood.
- 35. Turn master disconnect switch to the "ON" position.

**NOTE:** The stereo may stay on up to 40 seconds after the ignition is turned to the "OFF" position.



Fig. #19 Stereo installation finished

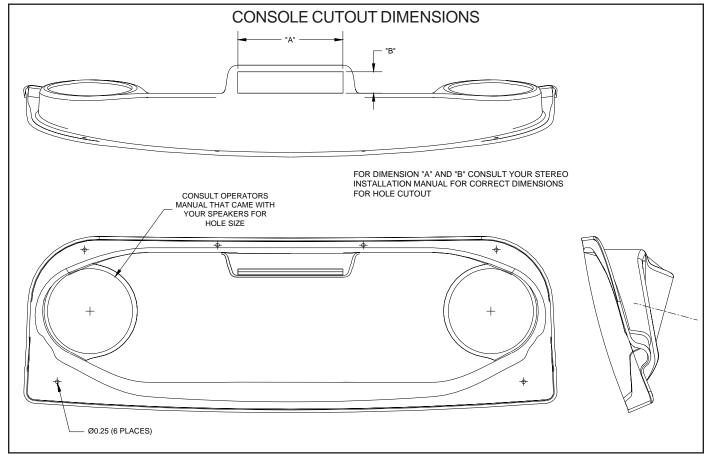


Fig. #16

IN PROCESS



Toll Free: 866.764.0616 Fax: 701.232.0600 e-mail: service@gemcar.com Web Site: www.gemcar.com