

Gasoline and Electric
Vehicles:

- Precedent
- DS Golf Car

BREEZeasy Kit Installation Instructions

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AM1218301

Edition Code
0506A00000

These instructions apply to the following kits:

AM1217301

AM1217501

AM1217901

AM1218001

GENERAL INFORMATION AND PRECAUTIONS

This publication provides detailed instructions for installing the BREEZeasy on Precedent and DS golf car gasoline and electric vehicles. Ensure that all necessary replacement parts, the appropriate maintenance and service manual(s), and this document are available before this kit is installed. Thoroughly review this document before any installation procedures are performed.

The following safety statements relate to specific safety issues and must be read, understood, and heeded before a kit is installed. Failure to do so could result in personal injury and/or property damage.

DANGER

- **Battery – Explosive gases! Do not smoke. Keep sparks and flames away from the vehicle and service area. Ventilate when charging or operating vehicle in an enclosed space. Wear a full face shield and rubber gloves when working on or near batteries.**
- **Battery – Poison! Contains acid! Causes severe burns. Avoid contact with skin, eyes, or clothing. Antidotes:**
 - **External: Flush with water. Call a physician immediately.**
 - **Internal: Drink large quantities of milk or water. Follow with milk of magnesia or vegetable oil. Call a physician immediately.**
 - **Eyes: Flush with water for 15 minutes. Call a physician immediately.**
- **Gasoline – Flammable! Explosive! Do not smoke. Keep sparks and flames away from the vehicle and service area. Service only in a well-ventilated area.**
- **Do not operate gasoline vehicle in an enclosed area without proper ventilation. The engine produces carbon monoxide, which is an odorless, deadly poison.**

WARNING

- **Follow the procedures exactly as stated in this instruction, and heed all DANGER, WARNING, and CAUTION statements in this instruction as well as those on the vehicle and battery charger.**
- **Only trained technicians should service or repair the vehicle or battery charger. Anyone doing even simple repairs or service should have knowledge and experience in electrical and mechanical repair. The appropriate instructions must be used when performing maintenance, service, or accessory installation.**
- **Prior to servicing the vehicle or leaving the vehicle unattended, turn the key switch OFF, remove the key, and place the Forward/Reverse handle in the NEUTRAL position. Chock the wheels when servicing the vehicle.**

Gasoline vehicles only:

- **To avoid unintentionally starting the vehicle:**
 - **Disconnect battery cables, negative (–) cable first (Figure 1, Page 5).**
 - **Disconnect the spark plug wire from the spark plug.**
- **Frame ground – Do not allow tools or other metal objects to contact frame when disconnecting battery cables or other electrical wiring. Do not allow a positive wire to touch the vehicle frame, engine, or any other metal component.**

WARNING CONTINUED ON NEXT PAGE...

WARNING

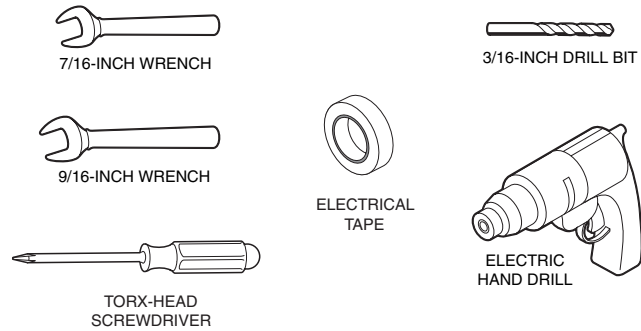
Electric vehicles only:

- **Electric Carryall Industrial trucks:**
Press the emergency stop switch down before disconnecting or connecting the batteries.
- **IQ System and PowerDrive Plus vehicles (with serial number 9801 and greater):**
Place Tow/Run switch in the TOW position before disconnecting or connecting the batteries. Failure to heed this warning could result in a battery explosion or severe personal injury.
- **All electric vehicles:**
To avoid unintentionally starting the vehicle, disconnect the batteries as shown (Figures 2 through 6, starting on page 5).
- **IQ System vehicles:**
After disconnecting the batteries, wait 90 seconds for the controller capacitors to discharge.
- **Carryall Electric Industrial trucks:**
After disconnecting the batteries, discharge the controller capacitors as follows:
 - Turn the key switch to ON, place the Forward/Reverse handle in the REVERSE position, and wait until the reverse warning buzzer can no longer be heard. When the buzzer stops sounding, the controller is discharged.
- **PowerDrive System 48, PowerDrive Plus vehicles, and 36-volt vehicles with speed controllers:**
After disconnecting the batteries, discharge the controller capacitors as follows:
 - Turn key switch to ON and place the Forward/Reverse handle or switch in REVERSE.
 - Slowly depress the accelerator pedal and keep it depressed until the reverse warning buzzer can no longer be heard. When the buzzer stops sounding, the controller capacitors are discharged.

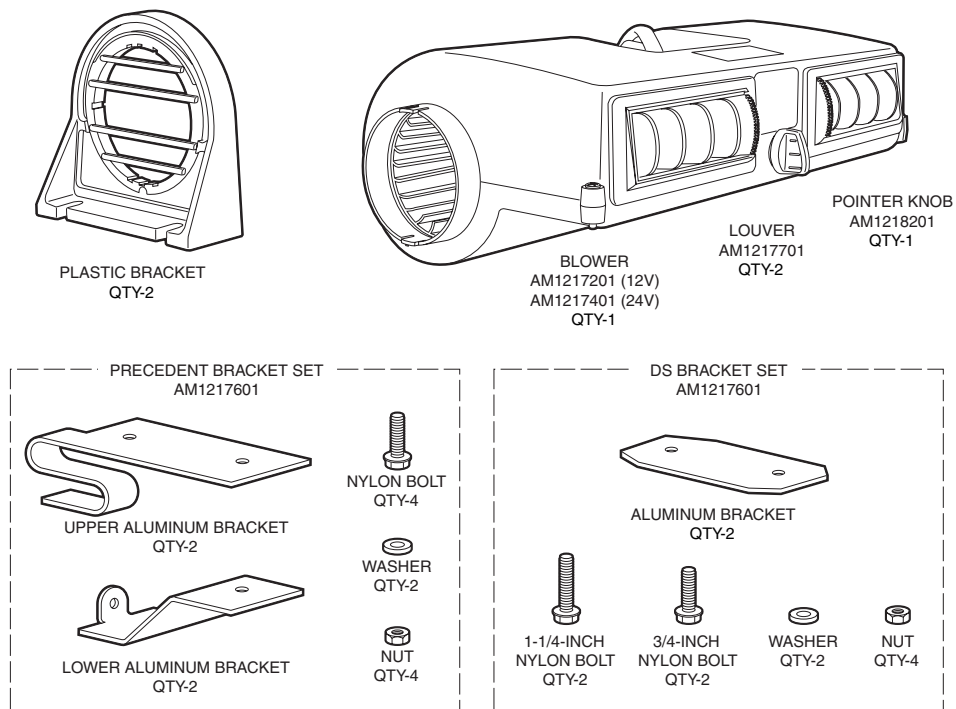
All vehicles:

- **Wear safety glasses or approved eye protection when servicing the vehicle or battery charger. Wear a full face shield and rubber gloves when working on or near batteries.**
- **Do not wear loose clothing or jewelry such as rings, watches, chains, etc., when servicing the vehicle or battery charger.**
- **Moving parts! Do not attempt to service the vehicle while it is running.**
- **Hot! Do not attempt to service hot engine, exhaust system, or motor. Failure to heed this warning could result in severe burns.**
- **Use insulated tools when working near batteries or electrical connections. Use extreme caution to avoid shorting of components or wiring.**
- **Lift only one end of the vehicle at a time. Use a suitable lifting device (chain hoist or hydraulic floor jack) with 1000 lb. (454 kg) minimum lifting capacity. Do not use lifting device to hold vehicle in raised position. Use approved jack stands of proper weight capacity to support the vehicle and chock the wheels that remain on the floor. When not performing a test or service procedure that requires movement of the wheels, lock the brakes.**
- **If wires are removed or replaced, make sure wiring and wire harness are properly routed and secured. Failure to properly route and secure wiring could result in vehicle malfunction, property damage, personal injury, or death.**
- **For vehicles with cargo beds, remove all cargo before raising the bed or servicing the vehicle. If the vehicle is equipped with a prop rod, ensure that it is securely engaged while bed is raised. Do not close bed until all persons are clear of cargo bed area. Keep hands clear of all crush areas. Do not drop cargo bed; lower gently and keep entire body clear. Failure to heed this warning could result in severe personal injury or death.**

TOOLS REQUIRED



PARTS IN THIS KIT



1. DISCONNECT THE BATTERY CABLES

- 1.1. Disconnect the battery cables as instructed. **See WARNING "To avoid unintentionally starting..." on page 2.**
- 1.2. Gasoline vehicles: Disconnect the spark plug wire from the spark plug.

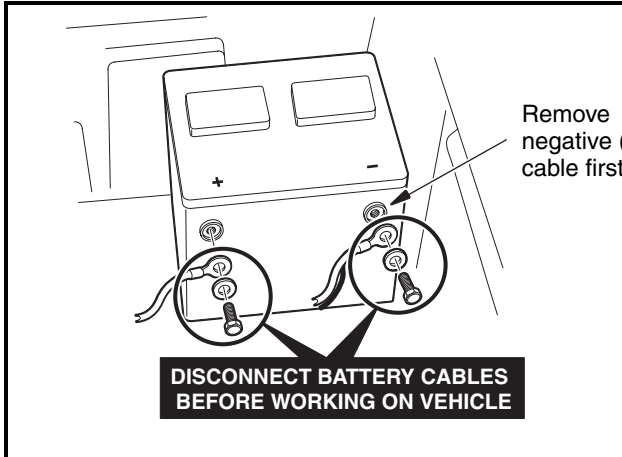


Figure 1 Battery Disconnect – Gasoline Vehicle

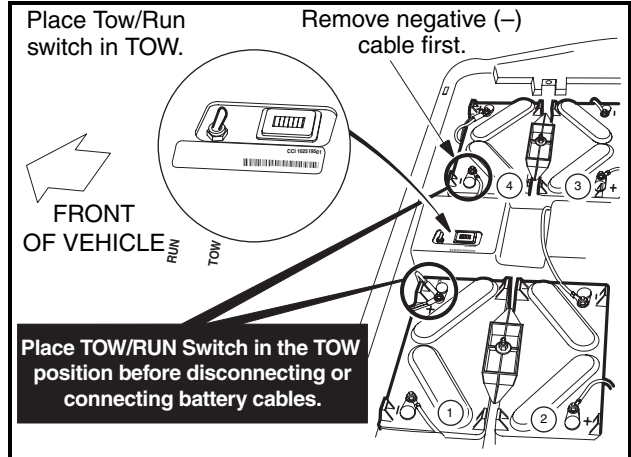


Figure 2 Battery Disconnect – Precedent Electric Vehicle

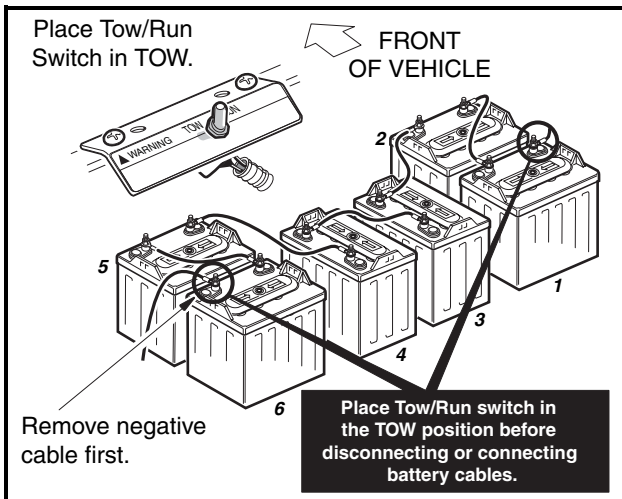


Figure 3 Battery Disconnect – IQ System and PowerDrive Plus Electric Vehicle

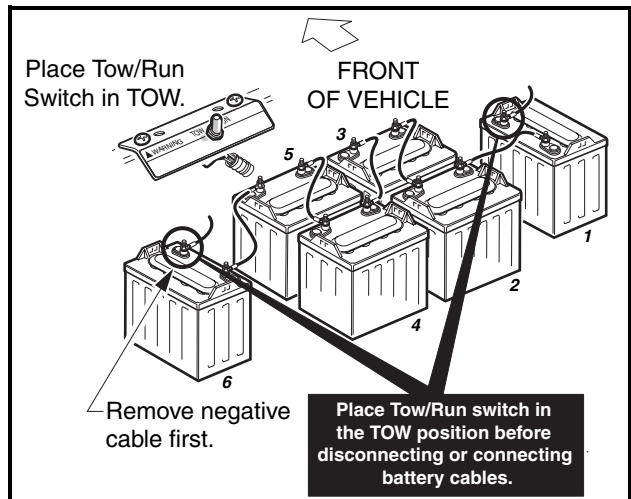


Figure 4 Battery Disconnect – PowerDrive Plus Electric Vehicle

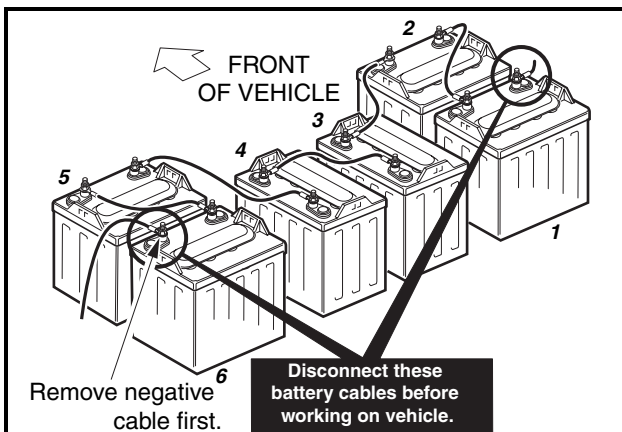


Figure 5 Battery Disconnect – PowerDrive System 48 Electric Vehicle

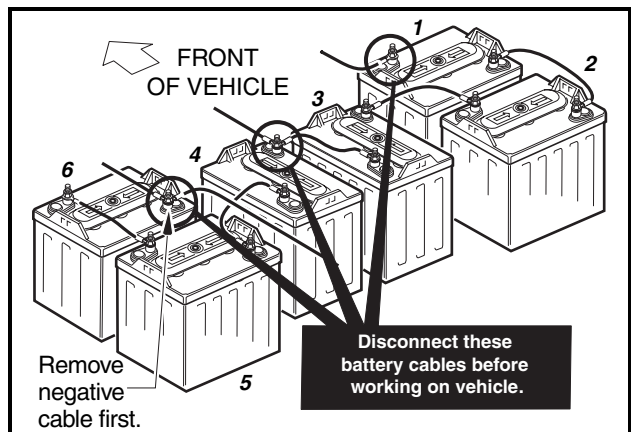


Figure 6 Battery Disconnect – V-Glide 36-Volt Electric Vehicle

2. INSTALL BREEZeasy ON PRECEDENT

- 2.1. Remove the four Torx-head screws that secure the cowl trim to the dash.
- 2.2. Align slots and firmly press the black plastic brackets (1) onto each end of the blower (2) until they snap into place (**Figure 7**).
- 2.3. Partially attach the upper aluminum brackets (3) to the plastic blower brackets with one nylon bolt (4) and nut at the end nearest the bend as shown. Tighten nuts 1/2 turn past snug only. **DO NOT OVERTIGHTEN.**
- 2.4. With brackets attached to blower, slide the bent part of the aluminum bracket under the cowl trim as shown (**Figure 8**).

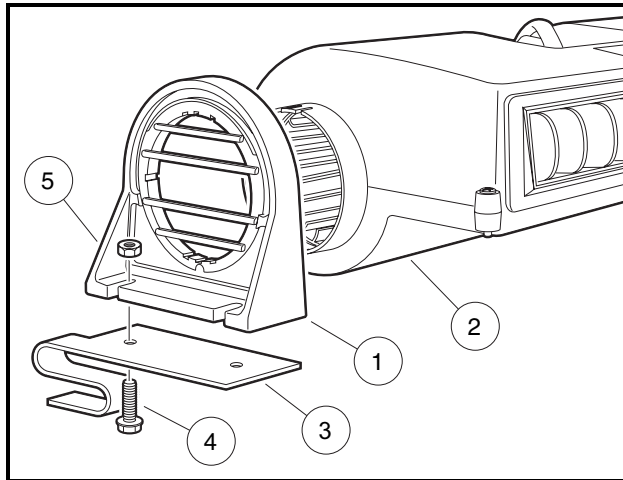


Figure 7 Assemble Blower Brackets

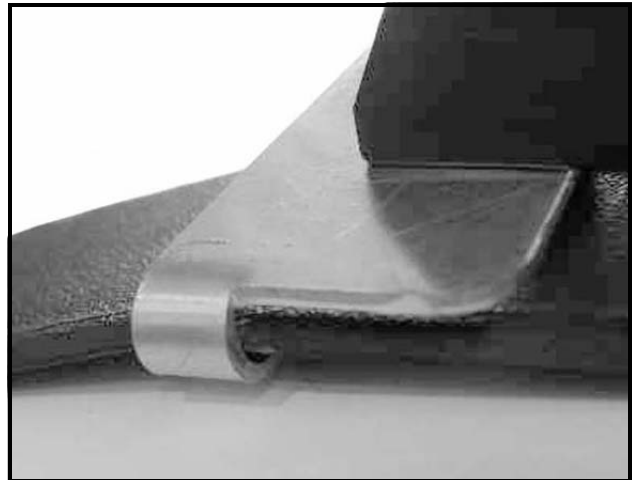


Figure 8 Slide Aluminum Bracket Under Cowl Trim

- 2.5. Insert the right and left outside Torx screw to hold the fascia trim and blower in place.
- 2.6. Before securing the lower aluminum brackets (8), fully thread the Torx screws (9) into the bracket holes (**Figure 9**). Secure the lower brackets to the cowl trim. Secure the upper and lower brackets together with remaining nylon bolts (10), washers (11), and nuts (12) as shown.

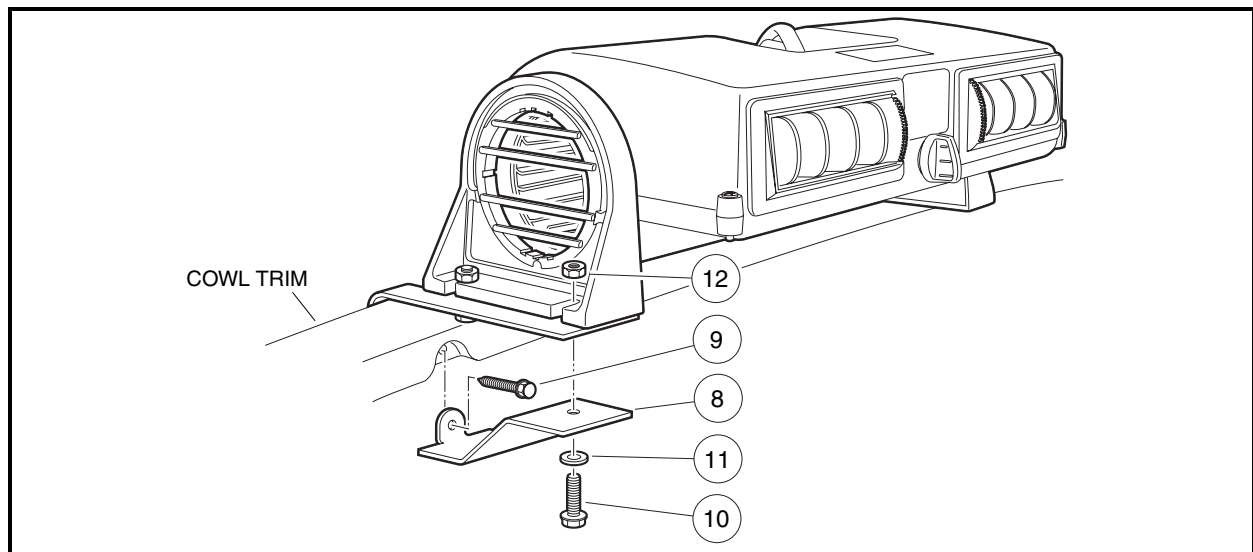


Figure 9 Secure Blower to Cowl

- 2.7. Thread the power cable under the plastic ribs of the blower as shown(**Figure 10**).
- 2.8. Lift up cowl trim and route cable under trim as shown (**Figure 10**) and toward passenger side of vehicle.

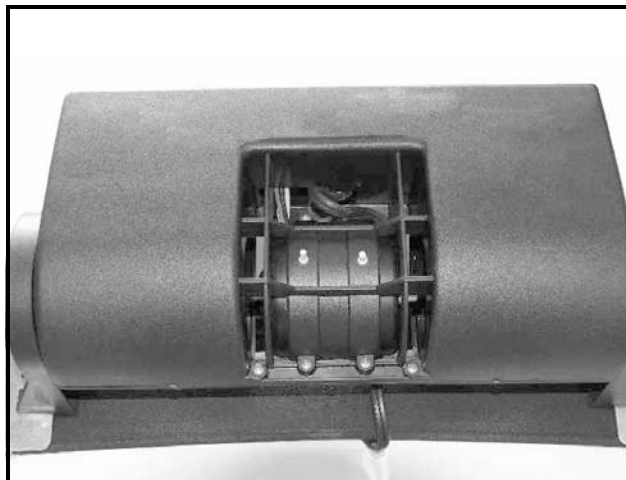


Figure 10 Route Power Cable



Figure 11 Route Power Cable

- 2.9. Lift up floor mat and route wire in channel to the battery compartment (**Figure 11**).
- 2.10. Secure power wire to vehicle with wire ties provided.
- 2.11. Connect the red wire with in-line fuse and male terminal (12) to the female terminal on the power wire (13) (**Figure 12**).
- 2.12. **Electric vehicle:** Attach the red wire to battery no. 1 positive (+) terminal. Attach the black (ground) wire (14) to battery no. 2 negative (-) terminal (**Figure 12**).

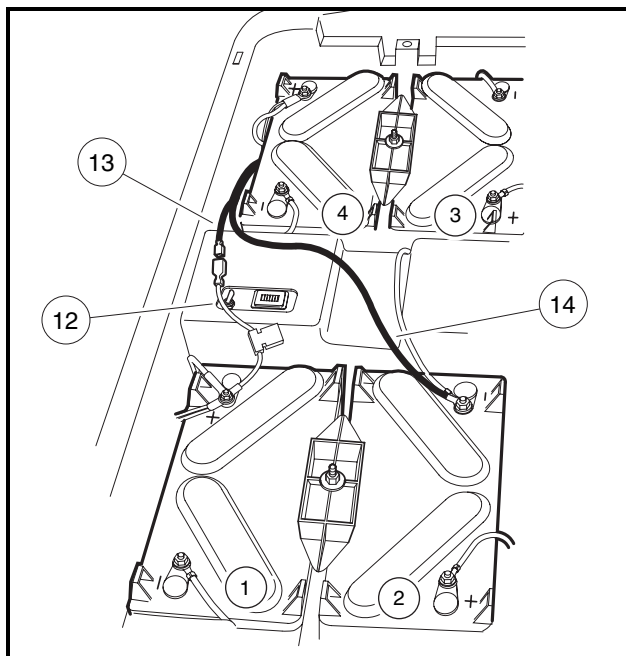


Figure 12 Power Wire Connections - Electric Vehicle

- 2.13. **Gasoline vehicle:** Attach the red wire to the positive (+) battery terminal. Attach the black (ground) wire to the negative (-) battery terminal.

3. INSTALL BREEZeasy ON DS

- 3.1. Remove screws that secure the key switch housing in place. Tilt housing to access entire bottom edge of aluminum dash trim (**Figure 13**).
- 3.2. Carefully measure and mark center of dash on aluminum trim.
- 3.3. Align slots and firmly press the black plastic brackets (1) onto each end of the blower (2) until they snap into place (**Figure 14**).



Figure 13 Key Switch Housing

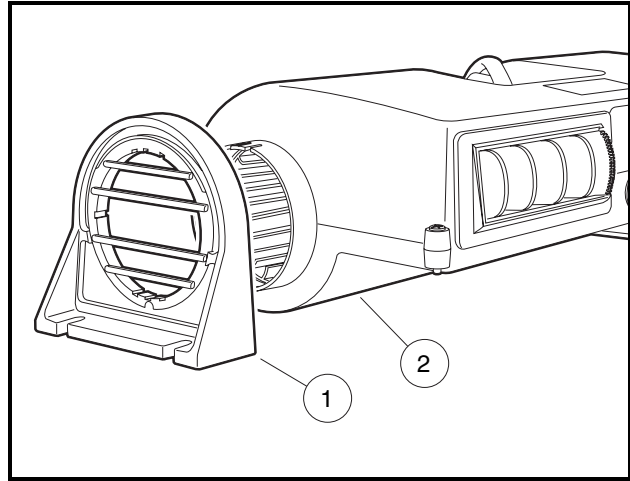


Figure 14 Attach Brackets to BlowerS

- 3.4. Center blower and mark hole locations (using front slots of plastic brackets) 1/2 inch from edge of dash.
- 3.5. Drill 1/4-inch holes down through aluminum dash trim.
- 3.6. Secure aluminum plates (3) to blower with 3/4-inch nylon bolts (4) and nuts (5) by inserting bolts up through bottom of plates using rear slots as shown (**Figure 15**).
- 3.7. Secure blower to dash by inserting 1-1/4-inch nylon bolts up through dash, aluminum plates, and blower brackets (**Figure 16**).

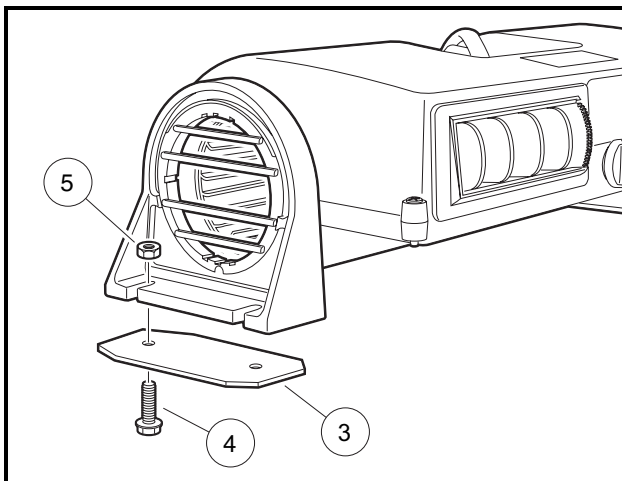


Figure 15 Install Aluminum Plates

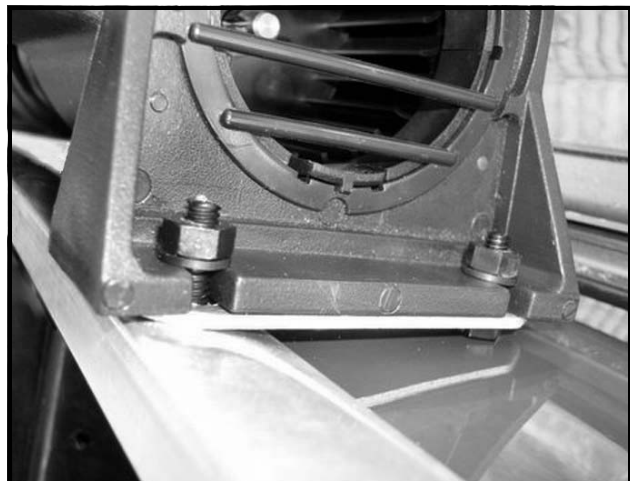


Figure 16 Secure Blower to Cowl

- 3.8. Reattach key switch housing.

- 3.9. Thread the power wire under the plastic ribs of the blower (**Figure 17**).

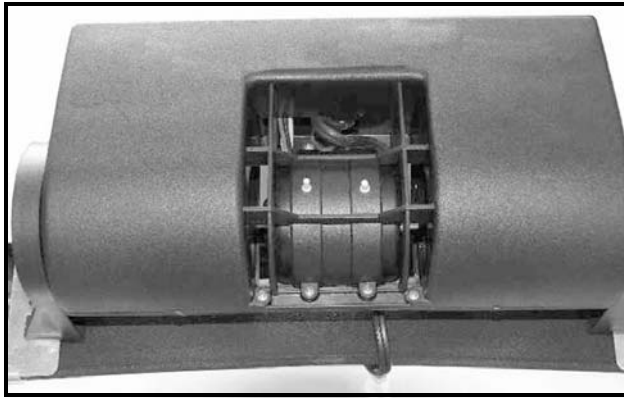


Figure 17 Route Power Wire

- 3.10. Drill a 3/8-inch hole in the cowl where the power wire comes out of the blower. See following NOTE and CAUTION.

NOTE: Drill hole as close to fan as possible to limit visibility of hole.

CAUTION

- Do not damage any components beneath surface of cowl during drilling operation.

- 3.11. Insert power wire through hole in cowl and route toward passenger-side of vehicle. Secure power wire to vehicle with wire ties provided while routing to battery compartment.
- 3.12. Connect the red wire with in-line fuse and male terminal (7) to the female terminal on the power wire (8) (**Figure 18**).
- 3.13. **Electric vehicle with six 8-volt batteries:** Attach the red wire to battery no. 1 positive (+) terminal. Attach the black (ground) wire (9) to battery no. 3 negative (-) terminal.
- 3.14. **Electric vehicle with four 12-volt batteries:** Attach the red wire to battery no. 1 positive (+) terminal. Attach the black (ground) wire (9) to battery no. 2 negative (-) terminal.

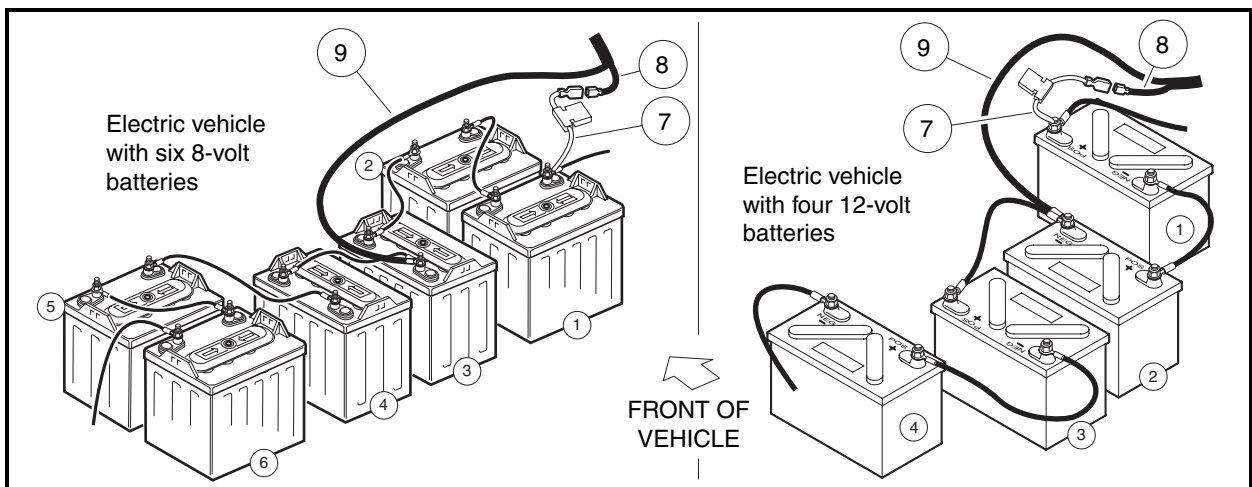


Figure 18 Power Wire Connections - Electric Vehicle

- 3.15. **Gasoline vehicle:** Attach the red wire to the positive (+) battery terminal. Attach the black (ground) wire to the negative (-) battery terminal.

4. CONNECT BATTERY CABLES

⚠ WARNING

- **IQ System and PowerDrive Plus vehicles (with serial number 9801 and greater):**
Place Tow/Run switch in the TOW position before disconnecting or connecting the batteries. Failure to heed this warning could result in a battery explosion or severe personal injury.
- Connect the battery cables, positive (+) cable first. For gasoline vehicles, tighten hardware to 20 ft-lb (27.1 N·m) **(Figure 1)**. For electric vehicles, tighten hardware to 110 in-lb (12.4 N·m) **(Figures 2 through 6, starting on page 5)**. Coat terminals with Battery Terminal Protector Spray (CCI P/N 1014305) to minimize corrosion.
- Connect the spark plug wire to the spark plug on gasoline vehicles.

QUESTIONS

Questions or comments regarding these kit instructions should be referred to your local Club Car dealer or distributor. Please know your vehicle model and have these kit instructions available when you call.