

<u>70 HARTWELL ST., WEST BOYLSTON, MA 01583</u> www.curtiscab.com

# CURTIS CLIMATE CONTROL<sup>™</sup> 48V OVERHEAD HEATER CONSOLE INSTALLATION INSTRUCTIONS

# E-Z-GO RXV

48 Volt Electric Models Only Heater Unit Only: p/n 1HAP2 RXV Mount Kit with Hardware: p/n 1HAP2-RXV r

The contents of this envelope are the property of the owner. Be sure to leave with the owner when installation is complete.



### **DANGER!**

Battery—Explosive Gases. Do not smoke. Keep sparks and flames away from the vehicle and service area. Service only in a well ventilated area.

Battery—Poison! Contains acid! Causes severe burns! Avoid contact with skin, eyes, or clothing. Wear a full face shield and rubber gloves when working on or near batteries. If contact occurs: External—Flush with water. Call physician immediately.

Internal—Drink large quantities of milk or water. Follow with milk of magnesia or vegetable oil. Call physician immediately.

Eyes—Flush with water for 15 minutes. Call a physician immediately.

### WARNING!

Only trained technicians should service or repair the unit Anyone doing repairs or service should have knowledge and experience in electrical and mechanical repair. The appropriate instructions must be used when performing maintenance, service, or installation.

Follow the procedures exactly as stated in these instructions, and heed all DANGER, WARN-ING, and CAUTION statements both in this instruction manual as well as those posted on the vehicle.

Prior to servicing the vehicle, turn the key switch to OFF, move the tow/run switch under the seat to the tow position, and set the parking brake.

Always wear safety glasses or approved eye protection when servicing the vehicle.

Moving parts! Do not attempt to service the vehicle while it is running.

Hot! Do not attempt to service while motor is hot. Failure to heed this warning could result in severe burns.

Use insulated tools when working near batteries or electrical connections. Avoid shorting components or wiring.

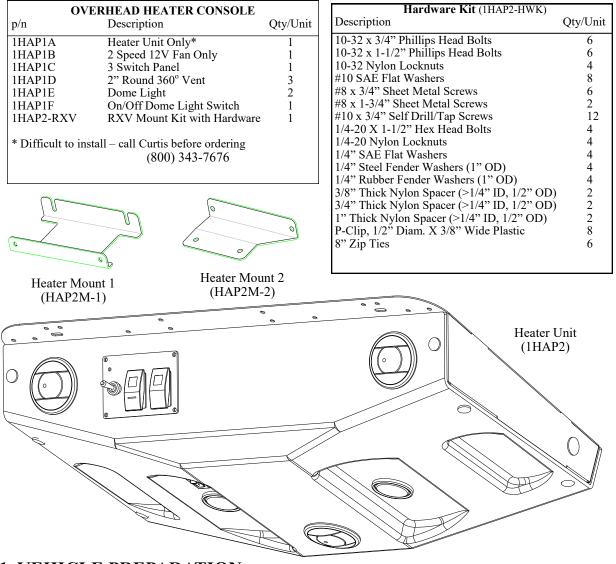
If wires are removed or installed, make sure wiring and wire harness are properly routed and secured. Failure to properly route and secure wiring could result in vehicle malfunction, property damage, personal injury, or death.

If necessary to lift the vehicle, lift only one end of the vehicle at a time. Use a suitable lifting device (chain hoist or floor jack) with 1000lb. minimum lifting capacity. Be sure to chock the wheels that remain on the floor when lifting and also to set the parking brake. Do not use the lifting device to hold the vehicle in raised position. Use only approved jack stands of proper weight capacity to support the vehicle.

### **TOOLS REQUIRED:**

OPEN END WRENCHES (METRIC AND SAE) RATCHET AND SOCKETS (METRIC AND SAE) ALLEN WRENCHES (METRIC AND SAE) SCREWDRIVER (PHILLIPS HEAD) ELECTRIC DRILL AND 6" PHILLIPS HEAD BIT DRILL BITS - 7/32", 5/16" & 1/2" TAPE MEASURE SCISSORS FINE POINT ERASABLE MARKER

## STANDARD PARTS INCLUDED



### **1. VEHICLE PREPARATION**

1.1 Read and understand all instructions before beginning installation.

1.2 Make sure batteries are fully charged and in good condition before installing the Curtis Climate Control overhead heater console.

1.3 Move the run/tow switch located under the seat to the tow position.

#### 2. Heater Installation with StreetPro SE Cab

2.1 Per fig. 2.1, loosen the front roof support bolts shown, with nuts only threaded on a couple of turns.

2.2 Per fig. 2.2, mark the center of the vehicle from side to side on the inside surface along the top of the front roof support tube. Then mark hole locations 1" down from the top of the tube and 2-5/8" to either side of center.

2.3 Per fig. 2.3, orient Heater Mount 1 as shown, lining up the holes in the mount with the marks made in the previous step. Attach using two #10 x3/4" long self-drilling/tapping screws using a drill, taking care not to over-tighten and strip out the threads.

2.4 Per fig. 2.4, partially thread two  $10-32 \times 3/4$ " long Phillips head bolts in the front of the heater unit. Leave about 1/4" gap between bolt head and heater unit to allow installation in slots on Heater Mount 1.

2.5 Push the front of the roof up to gain clearance for the heater unit. Note: If additional clearance is required, remove the front roof support nuts and washers completely from step 2.1 and place a block of wood between the roof and roof support tube. With someone supporting the back of the heater unit until the end of the next step, guide the 10-32 partially threaded bolts on the front of the heater unit (from the previous step) into the slots denoted per fig. 2.5. Tightened the 10-32 bolts.

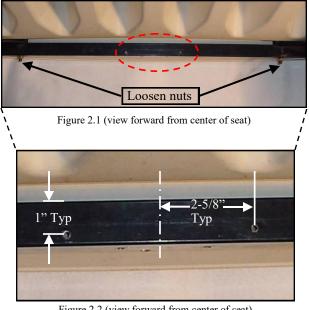


Figure 2.2 (view forward from center of seat)

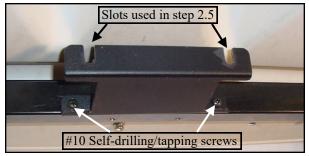


Figure 2.3 (view forward from center of seat)

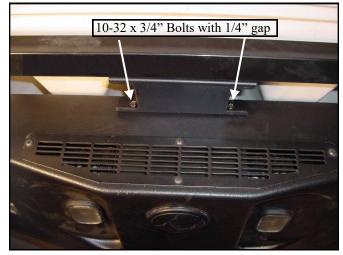


Figure 2.5 (view from front)



Figure 2.4 (view from above heater unit front)

#### 2. Heater Installation <u>with</u> StreetPro SE Cab (cont'd)

2.6 This step is for the old style roof (47-3/4" wide, side to side at handles). If you have a new style roof, skip to step 2.7. With the back of the heater unit still supported, install four #8 x 3/4" long screws through the four holes shown in fig. 2.6 and into the ribs in the roof. <u>CAUTION: these thread into plastic. Do not over-tighten. Over-tightening may damage the plastic threads and cause them to strip out.</u> Skip to step 2.8.

2.7 This step is only for the new style roof (44-3/8" wide, side to side at handles). With the back of the heater unit still supported, install two #8 x 3/4" long screws through the outmost two holes shown in fig. 2.7 and into the ribs in the roof. Install two #8 x 1-3/4" long screws in the center-most holes shown, through the 1" nylon spacers and into the ribs. <u>CAUTION: these thread into plastic. Do not over-tighten. Over-tightening may damage the plastic threads and cause them to strip out.</u>

2.8 Retighten the front roof support bolts that were loosened in step 2.1.

2.9 Route wire harness back along upper frame tube on cab as shown in fig. 2.8 (white line for reference). Use zip ties to attach to tube.

2.10 Per fig. 2.10, continue routing harness along upper frame tube, over the rear frame mount, and down the rear frame tube on the cab. Use p-clamps with #10 self drilling/tapping screws to attach to frame tube. Per fig. 2.10.1, continue routing harness down the rear frame tube of the cab and under the seat. Caution: route harness through one of the recessed areas between the cart's seat and body to prevent pinching and damaging the wires.

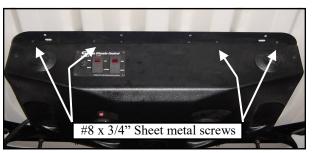


Figure 2.6 (view forward from center of seat - old style roof)

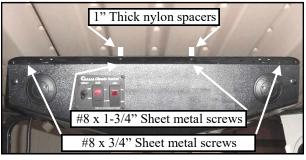


Figure 2.7 (view forward from center of seat - new style roof)

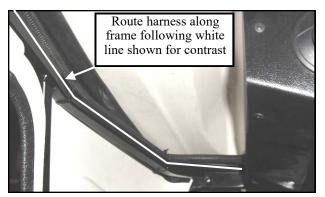


Figure 2.9 (view forward from driver's seat)



Figure 2.10.1 (view from passenger's side)

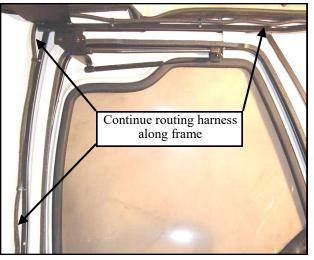


Figure 2.10 (view from passenger's side)

#### 3. Heater Installation without StreetPro SE Cab

3.1 Per fig. 3.1, mark the center of the vehicle from side to side on the bottom surface of the front roof support tube. Then mark hole locations 1-1/4" to either side of center mark, centered on the tube front to back.

3.2 Per fig. 3.2, orient Heater Mount 2 as shown, lining up the holes in the mount with the marks made in the previous step. The bent flange that attaches to the heater unit will be pointed downward. Attach with two  $\#10 \ge 3/4$ " long self-drilling/ tapping screws using a drill, taking care not to overtighten and strip out the threads.

3.3 Per fig. 3.3, install two  $10-32 \times 3/4$ " long Phillips head bolts in the front of the heater unit with someone supporting the back.

3.4 With the back of the heater unit still supported, install four #8 x 3/4" long sheet metal screws through the four holes shown in fig. 3.4 and into the ribs in the roof. <u>CAUTION: these thread into plastic</u>. Do not over-tighten. Over-tightening may damage the plastic threads and cause them to strip out.

3.5 Route wire harness forward along upper frame tube on cab as shown in fig. 3.5. Use zip ties and p-clamps with #10 self drilling/tapping screws to at-tach to roof support tube.

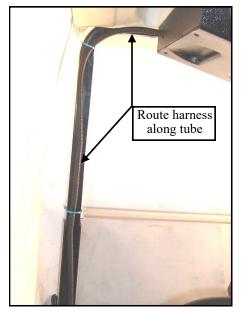


Figure 3.5 (view forward from driver's seat)

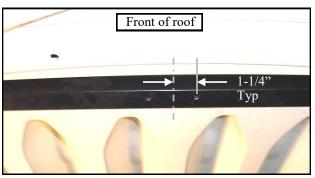


Figure 3.1 (view from front of vehicle)

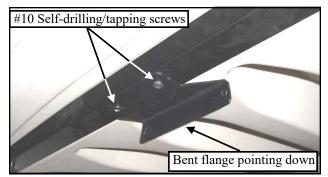


Figure 3.2 (view forward from driver's seat)

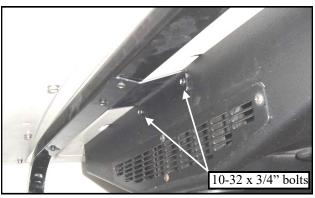


Figure 3.3 (view from left front corner)



Figure 3.4 (view forward from center of seat)

#### 3. Heater Installation <u>without</u> StreetPro SE Cab (cont'd)

3.6 Per fig. 3.6, remove the front roof support bolt access cover and route the wire harness down into the wheel well. Notch and replace access cover.

3.7 Per figs. 3.7 and 3.7.1, route harness along fender and under floor board. Secure with p-clamps and #10 self-drilling/tapping screws. Note: make sure harness is secured and not the lowest point to prevent wire pinching/snagging on obstacles.

3.8 Per fig. 3.8, route harness up through existing hole into battery box area. Secure with p-clamps and #10 self-drilling/tapping screws.

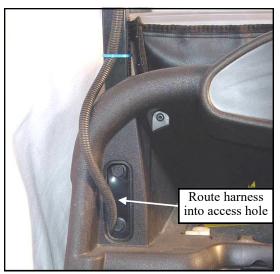


Figure 3.6 (view forward from driver's side)

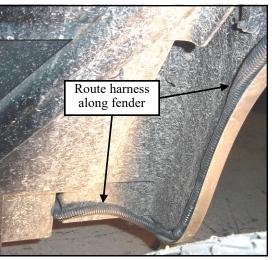


Figure 3.7 (view from above driver's side front tire)

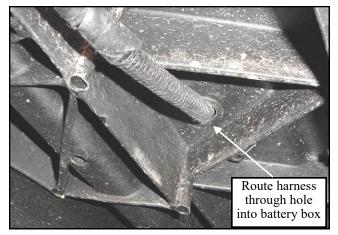


Figure 3.8 (view under driver's side floorboard)



Figure 3.7.1 (view under driver's side floorboard)

### 4. Heater Wiring

**Danger!** Batteries: Follow warnings listed in instructions and on vehicle.

Note: This heater unit is **only for 48 volt systems**. Using in any other systems can damage the unit and result in injury.

Note: It is recommended to use a 48V DC to 12V DC Converter to provide proper voltage and to distribute the load required to run the heater unit fan and lights over all the batteries. The RXV DC Converter Kit (E-Z-GO p/n 608788) is available from E-Z-GO. See fig. 4.3.

# For standard battery configurations (four 12 volt batteries):

Warning: Confirm all voltage outputs with a volt meter before connecting to heater unit.

4.1 Connect the black wire (ground) of the heater unit to the negative terminal on battery #1 (rear-most under basket), per fig. 4.1.

4.2 Connect the yellow wire (48V) of the heater unit to the positive terminal on battery #4 (passenger side).

4.3 If installing with the DC converter as recommended, connect the red wire (12V) of the heater unit to the positive 12V terminal on the DC converter shown in fig. 4.3.

If installing without the DC converter, connect the red wire (12V) to the positive terminal on battery #1 (rearmost under basket).

#### For all other battery 48V configurations:

4.4 If installing in a cart using any other 48 volt battery configurations, a DC to DC converter will be required. You will need to install the E-Z-GO RXV 48V DC to 12V DC Converter Kit (E-Z-GO p/n 608788) to provide a 12V supply. Connect the red wire (12V) of the heater unit to the DC converter's 12V supply.

4.5 Connect the black wire (ground) of the heater unit to the negative terminal on the first battery.

4.6 Connect the yellow wire (48V) of the heater unit to the positive terminal of the last battery.



Figure 4.1 (view under passenger's side seat, four 12v battery configuration)

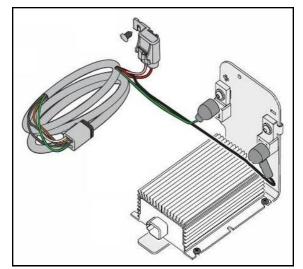


Figure 4.3 (E-Z-GO DC Converter Kit)

#### **USER NOTES:**

The Curtis Climate Control overhead heater has been designed to provide an instant heat source on those less than perfect days, and a nice cool breeze on the perfect ones.

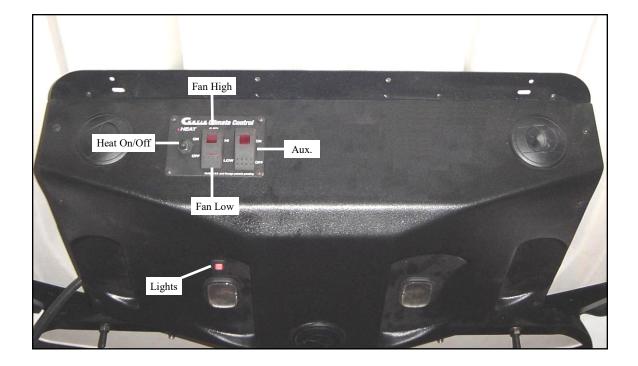
#### **OPERATION:**

**HEAT:** The heat switch operates the heating element and must be used in conjunction with the fan speed switch to select the amount of air required to defog the windshield or heat the cab.

**FAN:** The high output 12v fan provides two speeds of cool breeze when it's operated with the heat switch in the <u>off</u> position.

**AUX:** The auxiliary switch (AUX) is a 12v power source that is pre-wired and can be used for a strobe light, etc.

**INTERIOR LIGHT:** To turn the lights on, use the rocker switch located on the underside of the unit next to the driver's side dome light.



## CARE AND MAINTENANCE

Check and tighten hardware after 40 hours of operation.

Periodically inspect and tighten hardware for the remainder of the unit's service life.

### **QUESTIONS AND COMMENTS**

Questions or comments regarding this heater should be referred to your local golf car dealer.

When calling, please have your dealer number, vehicle model, part number, and quantity available.

For service parts, contact: Curtis Industries, LLC. Phone: 1-508-853-2200 Fax: 1-508-854-3377 www.curtiscab.com E-mail: info@curtiscab.com