## EasyStart Installation Instructions: (page 1)

- 1. Read and understand these instructions completely before proceeding. Improper wiring can result in damage to EasyStart or connected components including but not limited to wiring, compressors, and capacitors.
- 2. Turn off the breaker for the compressor's electrical system. Remove the roof-top air conditioner cover. Locate the control box and remove the cover. **Safety first** potential shock hazard identify the capacitors inside the air conditioner. There should be a run capacitor, a start capacitor, and there might be a fan capacitor. Short out the terminals on the capacitors to be sure no residual voltage is left in the capacitors.
- 3. Identify an appropriate location for EasyStart that allows mounting with the EasyStart wire exit pointing up. Securely mount the EasyStart box and route the wiring into the existing run capacitor location. Be sure to secure the harness to prevent vibration or movement damage. Note: Look at the wiring sizes on the EasyStart, and look at the connection wire sizes. Be sure to have the correct size butt splices available for the wiring steps below. The three-wire splice in step 8 below will require one size larger so that two wires can be combined on one end of the butt splice with the remaining single wire doubled over and crimped into the other end of the butt splice.
- 4. Consult the manufacturers installation manual and wiring diagram for the identification of the following: a. Compressor R, C, and S terminals and associated wire color for each connection. Compressors have a plastic cap with a single hex nut covering the connections. Wires can usually be identified without removing this cover however the cover or markings near the terminals can also be used to identify the wires. b. Run capacitor (typically in a metal can). This capacitor will have 2 or 3, multi-point terminal group connections. c. Control board switched-L1 output or main contactor compressor L1 output connecting to the compressor common "C" terminal wire. Note: Some systems utilize a contactor to switch power to the compressor, others use a power relay integrated into the main control board.
- 5. Identify the wire color connected to the compressor "S" terminal (red wire) and follow the wire to the run capacitor [HERM terminal]. Disconnect any other wire connected to the same terminal group. Follow the disconnected wire and remove it from the connector on the other end. If the wire goes into a PTCR (Precision Temperature Coefficient Resistor) device simply follow the second wire coming from the device, disconnect it and remove the PTCR. Not all systems will have a second wire on this terminal group. Connect the

## EasyStart Installation Instructions: (page 2)

- 6. Locate the wire connected from the compressor run winding "R" terminal (white wire) to the run capacitor "C" terminal, disconnect it from the run capacitor. Connect (splice) the brown wire from EasyStart to the disconnected wire.
- 7. For compressors under 3 tons (36 KBTU) [Your roof-top air conditioner on your Airstream is either 1300 BTU or 1500 BTU], connect the white wire from EasyStart to the same terminal of the run capacitor from which you disconnected the (white) run winding "R" wire in step 6 above. For all other compressors, splice the white wire to the L2 wire that feeds the run capacitor or connect it to the L2 connection at the contactor.
- 8. Connect the <u>black wire</u> from EasyStart to the switched-L1 connection coming from the main control board or main contactor that typically has a blue, black or purple wire that connects to the compressor common "C" terminal wire. (This is a three-wire connection made by combining the EasyStart black wire to a wired connection (two wires already wired together) in the wiring box, or, by cutting the blue, black, or purple wire and wiring the (now) three wires together).
- 9. Wiring is now complete. Close all open electrical boxes and panels.
- 10. Turn on the system circuit breaker using shore power.
- 11. EasyStart will now learn the characteristics of the compressor. Using the thermostat, start EasyStart five times from the utility AC power source before starting on a generator. Once the learning process is completed, the EasyStart can be operated on either shore or generator power. You must wait five minutes each time after the compressor stops for the compressor to restart.
- 12. Replace the roof-top air conditioner cover.

EasyStart installation is complete.