EasyStart Installation Guide for the Dometic Penguin II

RV Rooftop Air Conditioner

using the EasyStart 364 Soft Starter (ASY-364-X20-IP)

and the optional

EasyStart 364 Installation Kit

(ASY-364-DP1)

Micro Air Corporation 124 Route 526 Allentown NJ 08501 Phone (609) 259-2636 Fax (609) 259-6601 www.microair.net

- 1. Remove power from the unit then remove the large top cover.
- 2. Locate and mount the EasyStart in the corner behind the compressor's suction line (tube loop) and secure it with industrial-grade, double sided foam tape provided in the kit.

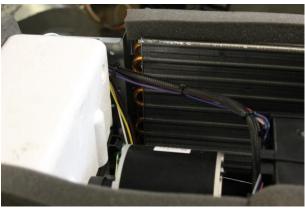
Note: Always mount the box with the wire harness exiting downward. This ensures the start capacitor inside the box is oriented properly. Additionally, this ensures that water cannot accumulate on the wire entry.



3. Pull back the grey putty around the wires that pass the compressor wires through the plastic air box separator. Pass the braided wires from EasyStart through the hole and form the putty back around the wires and over the hole.







- 4. Use five wire ties and tie the braided cable to the wire harness at several locations.
 - **Note:** Do not route the wires over the top of the foam. A good seal is necessary and compromising this seal can cause the compressor to overheat and trip its protection device.
- Remove the electrical box cover. Remove the factory strain relief where
 the wires pass into the top of the box from the compressor and motor.
 Squeeze the back side of the relief and push it through the hole to remove
 it.



6. Install the split plastic bushing provided in the kit. The split allows it to slide over the existing wires without having to disconnect them. Snap it into place in the existing hole. Once the bushing is in place, route the wires from EasyStart through the hole.



- 7. Using the wiring diagram, identify the compressor wires. Typically, the blue wire connects to the compressor common, the white wire connects to the run winding, and the red wire connects to the start winding. Note that these wires are also heavier gauge and thicker than the rest of the wires that enter the electrical box through the same hole.
- 8. If you wish to allow the installation to be completely reversible, defeat the factory-installed PTCR and the start capacitor by removing its associated white wire from the "C" (common) terminal of the run capacitor, and its associated red wire from the "HERM" (start) terminal of the run capacitor. Cover these connectors with electrical tape and secure then with a tie wrap somewhere out of the way in the electric box. Alternately, you can completely remove the PTCR and start capacitor, and all of its associated wires from the electrical box.



9. Connect the orange wire from EasyStart to the same terminal group on the run capacitor as the red wire connected to the compressor start winding. This terminal is often labeled HERM on top of the capacitor.



10. Remove the white wire that connects to the compressor run winding from the run capacitor. Be careful to identify the proper white wire since there are multiple white wires connected to this run cap terminal. Typically, the run winding wire is the thickest (i.e. has the largest wire gauge). Crimp a yellow male quick connect terminal to the brown wire from the EasyStart. Plug the white run winding wire into this male quick connect. If the terminal is not insulated, you must cover it with some electrical tape.





- 11. Connect the white wire from EasyStart to the run capacitor common terminal in the same location from where you disconnected the white run winding wire in step #10 (see photo from step #9).
- 12. In the installation kit, locate the short black wire with the blue flag and blue male quick connect crimped to it. Cut this wire exactly in half, strip both ends, and twist both to the black wire from the EasyStart, making a 3-way splice. Use a white end splice to secure this 3-way splice.
- 13. Disconnect the blue compressor common wire flag terminal from the relay on the control board. In its place, plug in the blue flag terminal from the 3-wire pigtail you created in step #12. Then, plug the blue compressor wire into the blue male quick connect, also on the 3-wire pigtail you created in step #12. If this flag terminal is not





insulated, you must cover it with some electrical tape.

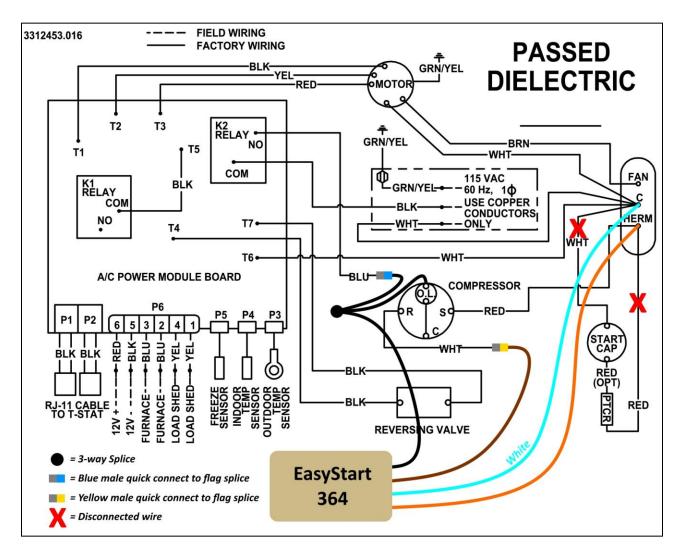
14. Neatly arrange the wires back inside the electric box, use a tie wrap to secure them, and re-install the electric box cover.

Finished Installation:





Wiring Diagram:



Parts list:

EasyStart 364: ASY-364-X36 Installation Kit: ASY-364-DP1