

3307858.005 DOMETIC FURNACE SIGNALING INTERFACE MODULE INSTALLATION INSTRUCTIONS

for use with

The 3109228.001 or 3109228.019 Comfort Control Center™

KIT CONTAINS:

1 ea 3307933.006 Control module
2ea ----- Screw, #6-7/16 Self Drill
1ea 3307934.004 Cable, Remote Sensor
1ea 3307980.049 Instructions

TOOLS REQUIRED:

Screw Driver
Wire Cutter & Stripper
Flat 4 conductor telephone cable
Two RJ11-6P-4C telephone plugs
RJ11 Telephone Crimping Tool

A. GENERAL INSTRUCTIONS

All field wiring modifications should be made in compliance with the latest revision of ANSI/NFP A70 N.E.C. and ANSI A119.2 for Recreational Vehicles.

This kit must be installed during the original installation of the Air Conditioner/Heat Pump by the OEM of the recreational vehicle.

Read instructions **ENTIRELY** before installing.

B. INSTALLATION PROCEDURE

1. Installation of the Dometic Furnace Signaling Interface Module is normally done at the same time as the Air Conditioner/Heat Pump. Shut off all AC and DC supply power in the recreational vehicle.

! WARNING

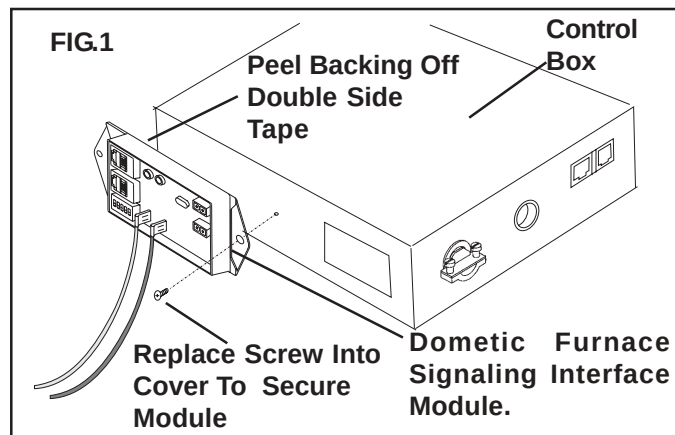
Disconnect all 120 volt AC power and the positive (+) 12 volt DC terminal at the supply battery. Failure to follow this instruction may create a shock hazard causing death or severe personal injury.

2. The model of the Air Conditioner/Heat Pump and the method (Ducted or Air Distribution Box) in which the unit is to be installed must be considered to determine the proper location for the Dometic Furnace Signaling Interface Module.

a. Installation using the 3109226.005 Electric Kit

1. Ducted Brisk Air, Ducted Penguin, being installed with the 3105007 or 3105935 return air packages and Penguin w/Air Distribution Box The Dometic Furnace Signaling Interface Module is mounted on the side of the control box, by removing the side cover screw and using it to fasten the module to the electrical box. See FIG.1.

Note: If the 3308120 return air cover is being used see steps "e" and "f" on page 4.



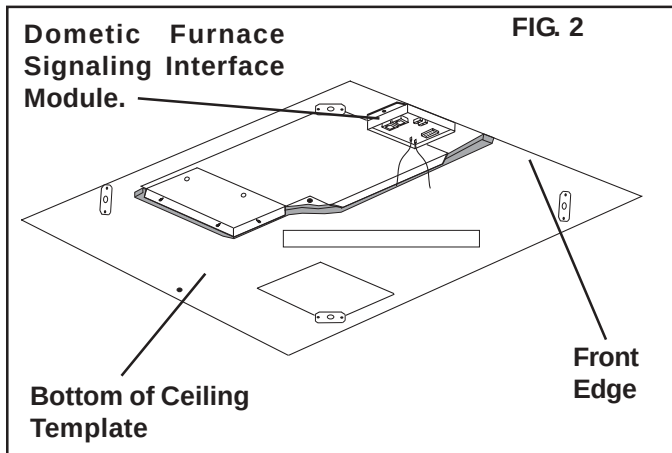
2. Remove the screw from the side of the control box, and keep for to secure Dometic Furnace Signaling Interface Module. See FIG.1.
3. Peel the backing off of the double sided tape on the Dometic Furnace Signaling Interface Module. See FIG.1.
4. Place the Dometic Furnace Signaling Interface Module on the Cover of the control box. Make sure the screw hole in the cover is in alignment with the mounting hole on the Dometic Furnace Signaling Interface Module. See FIG.1.
5. Replace screw in the control box cover to hold the Dometic Furnace Signaling Interface Module in place. See FIG.1.
6. Install control box on the Ceiling Template.
7. See Section "C" for Wiring Instructions.
8. Install AC/Heat Pump per the Installation Instructions.

REVISION

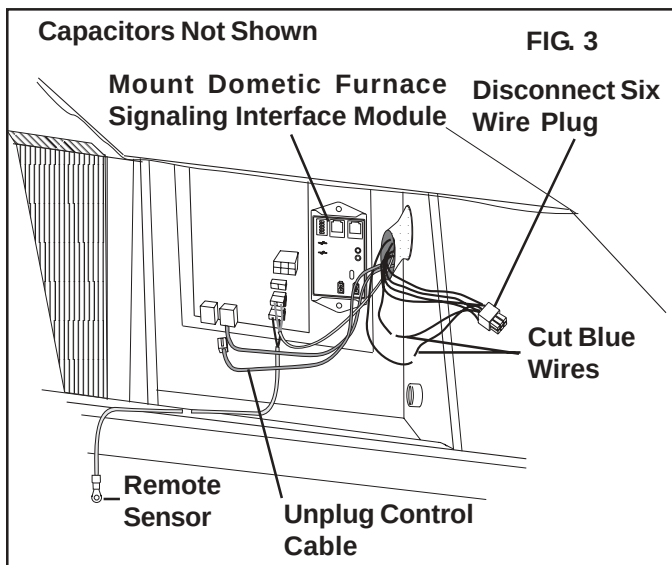
Form No. 3307980.049 5/06
(Replaces 3307980.031)
(French 3307981.047)
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b. Brisk Air w/Air Distribution Box

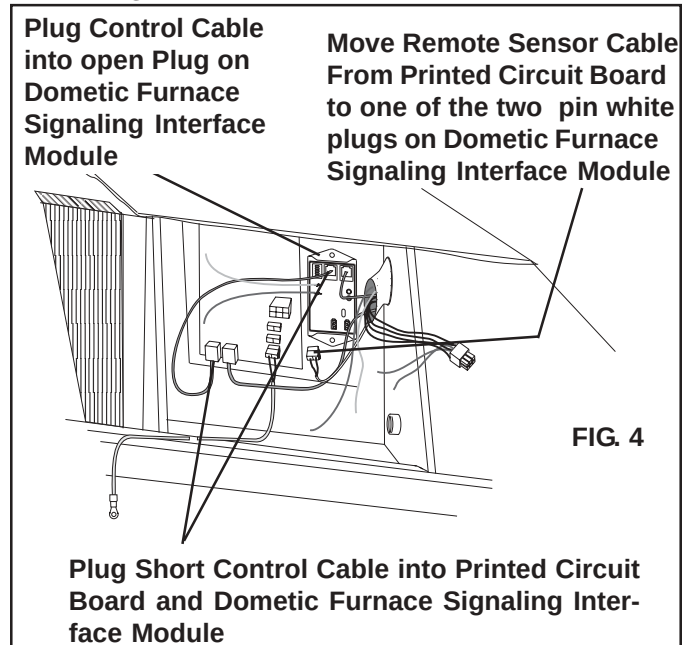
Brisk Air Models installed with the air distribution box requires the Dometic Furnace Signaling Interface Module to be fastened with two screws, between the ceiling template and air distribution box. See FIG. 2.



3. Mount control box assembly on ceiling template, as in a normal installation.
4. See Section "C" for Wiring Instructions.
5. Install AC/Heat Pump as a normal installation: except, before the Plastic Air Distribution Box is installed, drive in the two #6-7/16 self drilling screws in the ceiling template to secure the Dometic Furnace Signaling Interface Module.
- c. **620515, 620525, 620526, 630035, 630515 and 630516 Series Models with printed circuit boards installed in the upper electrical box.**
 1. Remove shroud from the unit and the electrical box cover.
 2. Remove the two screw that attach the capacitor mounting plate to the base pan. Save screw to be reinstalled later.
NOTE: If the unit is a heat pump the outdoor ambient sensor must be removed from the bulk head.
 3. Lift the capacitors and the mounting plate out of the electrical box. Be careful not to damage the printed circuit board. See FIG. 3.
 4. Unplug and move out of the way the Six Wire plug on the Printed Circuit Board. See FIG. 3.



5. Mount the Dometic Furnace Signaling Interface Module on the mounting plate beside the Comfort Control Printed Circuit Board. Secure with two #6-7/16" self drilling screws. See FIG. 3.
6. Locate the two Blue wires attached to the Six wire plug and cut 2" above the plug. See FIG. 3.
7. Locate the blue wires in the fiberglass sleeve in the return air opening on the bottom of the unit. Attach a green wire (18 gauge) 24" long to one of the blue wires. Pull the blue wire that is attached to the green wire through the fiberglass sleeve into the electrical box.
8. Make a short control cable with RJ11-6P-4C Connectors on both ends. See FIG. 11. Remove one of the control cable connectors from (P1 or P2) of the printed circuit board. Plug the new short control cable into the empty (P1 or P2) on the printed circuit board and the other end of the short control cable one of the phone plugs on the Dometic Furnace Signaling Interface Module. It does not matter which plug is used. See FIG. 4.
9. Connect the Control Cable removed from the Printed Circuit Board in instep 8 to the phone plug on the Dometic Furnace Signaling Interface Module. See FIG. 4.
10. Unplug the remote sensor from plug P4 of the Printed Circuit Board and place it into one of the two pin white plugs on the Dometic Furnace Signaling Interface Module. It does not matter which plug is used. See FIG. 4.



11. Plug the short Remote Sensor Cable (supplied) into the empty two pin white plug on the Dometic Furnace Signaling Module and into the P4 Plug on the Printed Circuit board. See FIG. 5.
12. Connect the Green Wire on the Dometic Furnace Signaling Interface Module with a wire nut to the green wire pulled up through the fiberglass sleeve in Step 8. See FIG. 5.
13. Connect the Blue Wire on the Dometic Furnace Signaling Interface Module with a wire nut to the blue wire in the fiberglass sleeve. See FIG. 5.

Connect Green Wire Off Dometic Furnace Signaling Interface Module To Green Wire Out of Fiberglass Sleeve

Plug Remote Sensor Short Cable in P4 on Printed Circuit Board and two pin plug on Dometic Furnace Signaling Interface Module

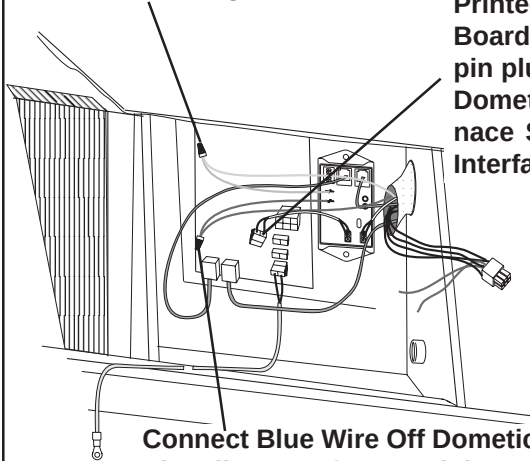
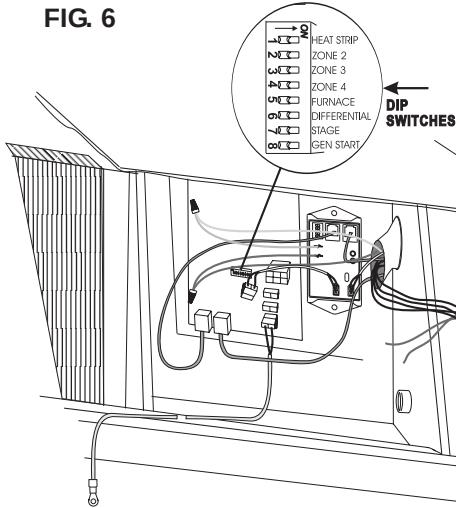


FIG. 5

Connect Blue Wire Off Dometic Furnace Signaling Interface Module To Blue Wire Out Of Fiberglass Sleeve

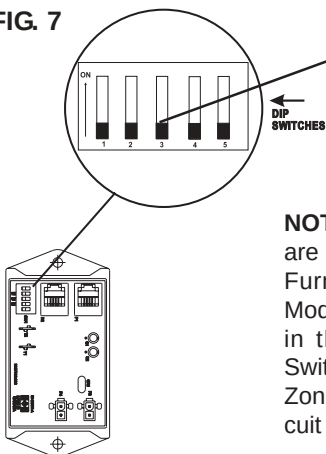
14. Turn on the “#5 Dip Switch “ (Furnace) of the Printed Circuit Board. See FIG. 6.

FIG. 6



15. If the Unit is installed in zone 1, then all the dip switches are left in the “OFF” position on the Dometic Furnace Signaling Interface Module. If the unit is in any other zone, then the Dip switch that matches that zone number is turned “ON”. See FIG. 7.

FIG. 7



Dip Switches Shown in “OFF” Position

NOTE: Dip Switches 1 and 5 are not used on the Dometic Furnace Signaling Interface Module and should always be in the “OFF” position. Dip Switches 2 , 3 and 4 match the Zones of the Main Printed Circuit Board.

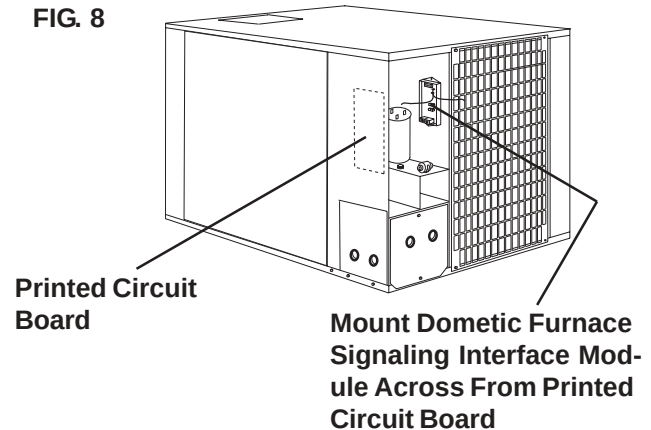
NOTE: Dip Switches 1 and 5 are not used on the Dometic Furnace Signaling Interface Module and should always be in the “OFF” position. Dip Switches 2 , 3 and 4 match the Zones of the Main Printed Circuit Board.

16. Replace the capacitors and ambient sensor removed in step 2.
17. See Section “D” System Reset and Test.

d. 39125, 39335 and 39424 Series Basement Models with the printed circuit board in the electrical box.

1. On Models 39125 and 39335 (Model 39424 go to step 4) the Dometic Furnace Signaling Interface Module is mounted inside the electrical box on the opposite wall across from the main circuit board. See FIG. 8.

FIG. 8



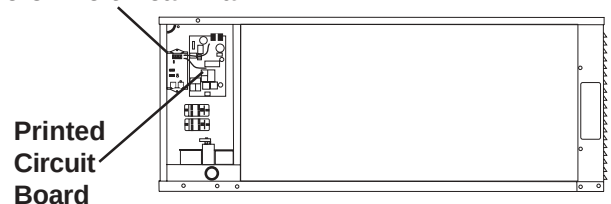
Printed Circuit Board

Mount Dometic Furnace Signaling Interface Module Across From Printed Circuit Board

2. See Section “C” for Wiring Procedure.
3. Install unit per its Installation Instructions.
4. On Model 39424 the Dometic Furnace Signaling Interface Module is mounted on the left rear wall of the electrical box. See FIG. 9.

Mount Dometic Furnace Signaling Interface Module on Left Rear Wall

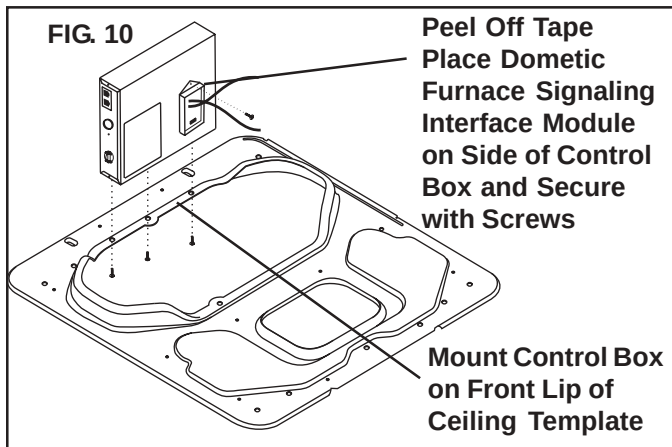
FIG. 9



Printed Circuit Board

5. See Section “C” for Wiring Procedure.
6. Install Air Conditioner/Heat Pump per its Installation Instructions.

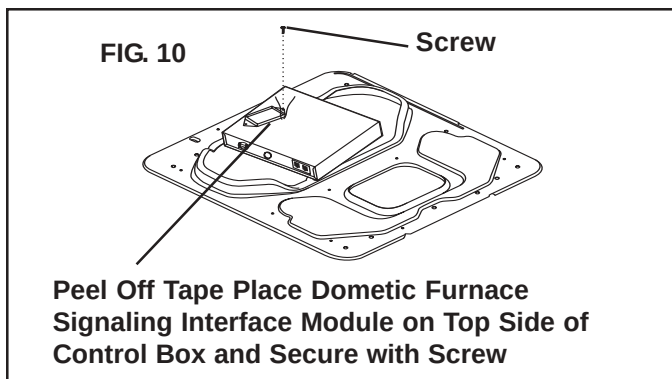
- e. **Brisk Air units being installed with 3308120 Return Air Cover.**
1. Brisk Air Models installed with the 3308120 Return Air Cover require the 3109226.005 electric kit to be mounted on the front lip of the ceiling template. See FIG. 10.



2. The Dometic Furnace Signaling Interface Module is to be placed on the side of control box between the its' cover and the right edge. See FIG.10.
3. Peel the protective tape off the Dometic Furnace Signaling Module and fasten it on the side of the control box with a blunt point screws. See Section C Wiring Procedure.

4. Install unit per its installation instructions.
- f. **Penguin Model units being installed with 3308120 Return Air Cover.**

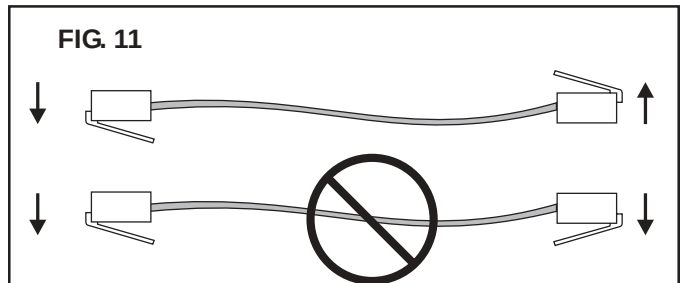
1. Some Penguin Models installed with the 3308120 Return Air Cover require the control box to be mounted across the large opening in the ceiling template (except models shown in Section B, item 2, paragraph c). See Fig. 11.
2. Peel the protective tape of the Dometic Furnace Signaling Interface Module. Place it on the upper flat surface of the control box (on the opposite side of the cover of the control box, aligned with one hole and box edge) as shown in FIG. 11.



3. Secure Dometic Furnace Signaling Interface Module with a blunt screws. See Section C Wiring Procedure.
4. Install unit per its installation instructions.

C. WIRING PROCEDURE

1. All Wiring connections use FIG. 10.
2. Connect White Sensor Harness (Supplied) to P4 plug on Main Printed Circuit Board (if Remote Sensor is used, it should be unplugged).
3. Connect White Sensor Harness into either of the 2-pin socket on Dometic Furnace Signaling Interface Module. (Plug Remote Sensor if used into the remaining 2-pin Socket).
4. Make a short (8 - 10") communication cable with RJ11-6P-4C connectors on each end. See FIG. 11.



5. Connect the new communications cable into one of the RJ11-6P-4C sockets on the Two Speed Power Module.
6. Connect the remaining end of the new communications cable into P1 or P2 (it makes no difference) on the main printed circuit board. If both P1 and P2 have a communication cable plugged into the main circuit board, remove one and plug it into the open RJ11-6P-4C socket on the Dometic Furnace Signaling Interface Module.
7. Use a wire nut to connect the green wire of the Dometic Furnace Signaling Interface Module to input signal ground connection (Atwood Green Wire).
8. Use a wire nut to connect the blue furnace wire of the Dometic Furnace Signaling Interface Module to furnace input signal connection (Atwood Blue Wire - Nominal + 8.5 VDC).
9. Set the Dip Switch #5 (furnace of the Main Printed Circuit Board to "ON".
10. Turn "ON" the Dip Switch on the Dometic Furnace Signaling Interface Module to match the zone number of the main printed circuit board dip switch.

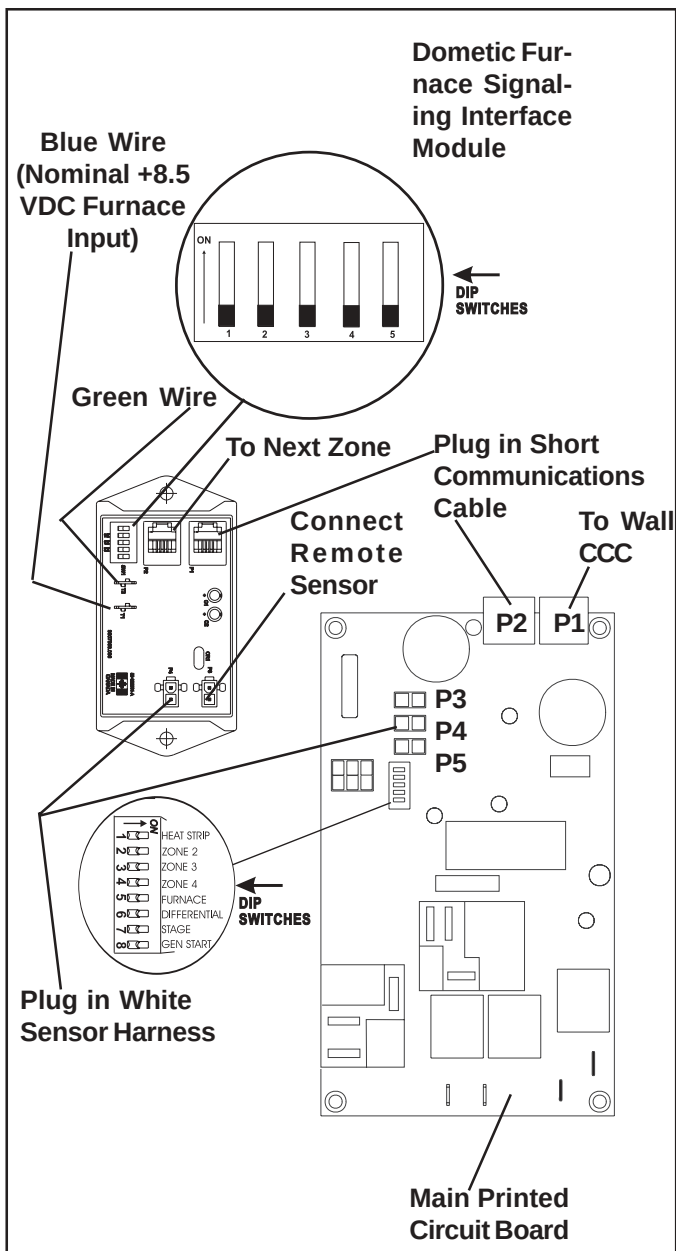
NOTE: Dip Switches 1 and 5 are not used on the Dometic Furnace Signaling Interface Module and should always be in the "OFF" position. Dip switches 2, 3 and 4 match the zones of the main printed circuit board.

11. After the unit is installed and power is available, the Comfort Control Center™ must be reset. See Section D.

D. SYSTEM RESET

After setting the dip switches in the electronic control kit, do a system reset.

1. Turn the ON/OFF switch to the "OFF" position.
2. Simultaneously depress and hold the MODE and ZONE push-buttons while turning the ON/OFF switch to "ON". FF should appear in LCD display until the mode and zone push-buttons are released.
3. When a dip switch is turned on after initial configuration, a system reset will need to be done before the Comfort Control Center™ will recognize the updated selection.



E. SYSTEMCHECKOUT

Verify that all features of the installed system work. Check fan speeds, cooling mode, heat pump mode, furnace (if connected) and heat strip. If the features do not work, check all wiring and confirm that the correct options have been selected on the Electronic Control Box. See **Comfort Control Center™** Operating Instructions.