

PREVOST

Instruction Sheet

IS-01028

XL2 OR H3 COACHES DC-AC INVERTER REPLACEMENT

XL2 COACHES NOT EQUIPPED WITH “MINI-CHEF” GALLEY

MATERIAL

Kit #065708 includes the following parts:

Part No.	Description	Qty
065519	Support, Inverter	1
5001182	Nut, Hex Nylon Insert SS M6-1	4
5001348	Nut, Wing Nylon ¼-20	6
500590	Nut, Hex Nylon Insert, ZP M4-0.7	1
502573	Washer, Flat SS M6 x 12.5 x 1.6	4
502637	Washer, Flat SS .200 x 7/16 x .037	1
560106	Terminal-R (W6) ¼-3/8	2
563082	Inverter 24VDC - 120VAC – 1800 W	1
563131	Cover, Inverter	1
952637	Clip, Cable ZP 28.6 x 12.7	1
IS-01028	Instruction Sheet	1
FI-01028	Feuille d'instructions	1

PROCEDURE

Warning : Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1. Open rear baggage compartment L.H. side door. Remove inverter from rear baggage compartment ceiling.
2. Weld support (065519) onto compartment rear partition wall as per instructions in figure 1.
3. Fix new inverter casing and cover (563082) onto support using wing nuts (5001348), washers (502573) and nuts (5001182).

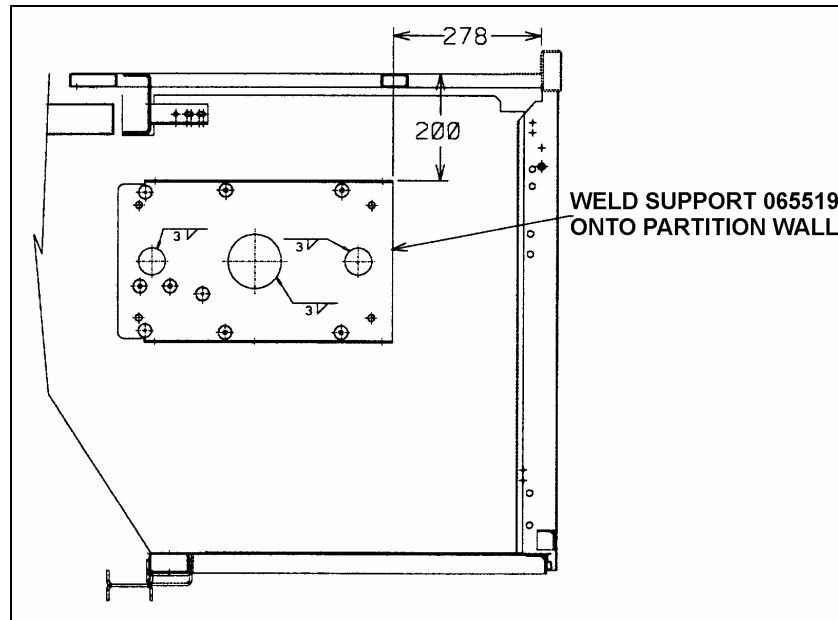


FIGURE 1

Note : *Welding must be done only by a qualified and experienced person.*

- a. Protective shields must be placed in order to protect components against heat, welding flash, welding arc and other elements associated with welding.
- b. Always wear the appropriate safety equipment.
- c. Weld in clean and well-ventilated area, and always have an appropriate fire extinguisher within your reach.
- d. The following precautions are to be taken to protect the electronic control components :
 - Cut off battery power (battery master switch) from battery compartment.
 - Disconnect wiring harness connectors from ECM (Electronic Control Module). The ECM is mounted on the starter side of the engine.
 - For vehicles equipped with an automatic transmission, disconnect wiring harness connectors from ECU (Electronic Control Unit). The ECU is located in rear electrical compartment (H3) or in front service compartment (XL2).
 - For vehicles equipped with ABS (Anti-Lock Brake System), disconnect wiring harness connectors from ABS Electronic Control Unit. The ABS Electronic Control Unit is located in the front service compartment.
 - Do not connect welding cables to electronic control components.
- e. Weld support as per figure 1 and refer to paragraph: **Steel – Steel Welding** for welding specifications:
- f. Once the welding beads are cold, we recommend to brush the beads then apply some lacquer thinner and finally apply a coat of primer.
- g. Reconnect components mentioned at step d.

STEEL – STEEL WELDING

Caution : *Before welding, disconnect electronic modules and battery terminals.*

Warning : *Welding surfaces must be free of scale, slag, rust, paint, grease, humidity or other foreign material that would render welding impossible.*

Warning : *Only a qualified and experienced person must do welding.*

- FCAW (Flux Cored Arc Welding) process ;
- Electrode wire conforms to A5.20 AWS (American Welding Society) specifications ;
- E4801T-9-CH, type electrode wire with 0,045" diameter (1,14 mm) ;

Material Thickness	Voltage	Current	Wire Feed Rate	Shielding Gas
1/8" to 1/2"	26 ± 2 volts	260 Amps	450 ipm. approx.	75% argon – 25% CO2 or 100% CO2

If necessary and with great care to prevent perforating the material, it is possible to use a conventional electric arc welding machine according to the following specifications :

- SMAW (Shielded Metal-Arc Welding) process ;
- Welding rod conforms to A5.1 of AWS (American Welding Society) specifications ; E 7018 type welding rod with 1/8" diameter (3,2 mm).
- Current: 100 amperes to 150 amperes; optimum at 120 amps.

It is important to grind weld bead starts and stops and also to grind arc strikes from surfaces.

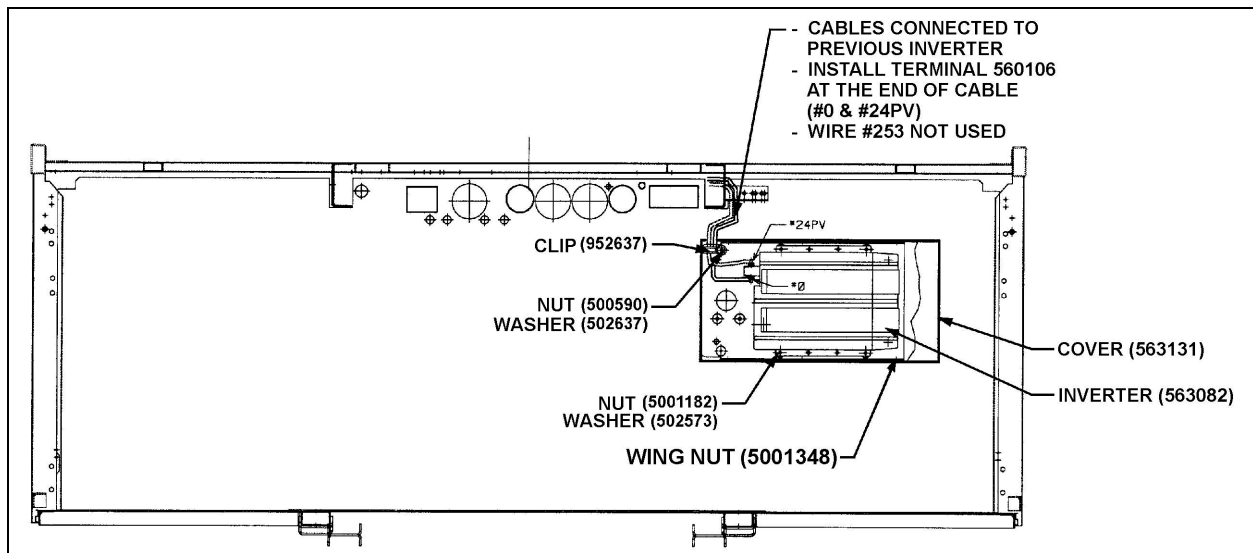


FIGURE 2

4. Install a terminal (560106) at the end of cables #0 & #24PV and fix cables onto inverter as per figure 2. Cut wire #253 and secure cables using cable clip (952637), wing nut (5001348), washer (502637) and nut (500590).
5. Install inverter cover (563131).

XL2 COACHES EQUIPPED WITH “MINI-CHEF” GALLEY

MATERIAL

Kit #065709 includes the following parts:

Part No.	Description	Qty
065519	Support, Inverter	1
060798	Diode	1

065540	Cable #24P2	1
065706	Cable #0	1
065707	Cable #24PV	1
065774	Cable	1
500998	Nut, Hexagonal Brass ½ -13	1
500482	Washer, Split lock ZP ½ x 7/8 x .125	1
5001330	Screw, Cap Hex Head SS ½ - 13 x 1	1
561005	Relay, Magnetic 24V 200A	1
500643	Screw, Tapping Binding Head Phillips, ZP #12 x ¾	4
500441	Washer, Flat ZP .312 x .734 x .065	4
5001182	Nut, Hex Nylon Insert SS M6-1	6
560083	Terminal	1
500590	Nut, Hex Nylon Insert, ZP M4-0.7	2
502573	Washer, Flat SS M6 x 12.5 x 1.6	6
502637	Washer, Flat SS .200 x 7/16 x .037	2
560815	Terminal	2
563082	Inverter 24VDC - 120VAC – 1800 W	1
562586	Wire, Electrical TXL 16GA Black	2.630
952637	Clip, Cable ZP 28.6 x 12.7	2
IS-01028	Instruction Sheet	1
FI-01028	Feuille d'instructions	1

PROCEDURE

Warning : Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

Note: Refer to figure 3 for all steps in this procedure.

1. Remove panel located on the galley's side to access to the inverter.
2. Disconnect cables 064429 & 064430 connected to previous inverter then remove inverter.
3. Install inverter support (065519) and secure using screws (500643) and washers (500441).
4. Install new inverter (563082) onto support and secure using washers (502573) and nuts (5001182).
5. Install diode (060798) onto magnetic relay (561005) and secure relay beside inverter using washers (502573) and nuts (5001182).
6. Run cable #24PV (065707) between relay and terminal 24V located behind galley.
7. Run cable #0 (065706) between inverter and terminal «GRD» located behind galley.

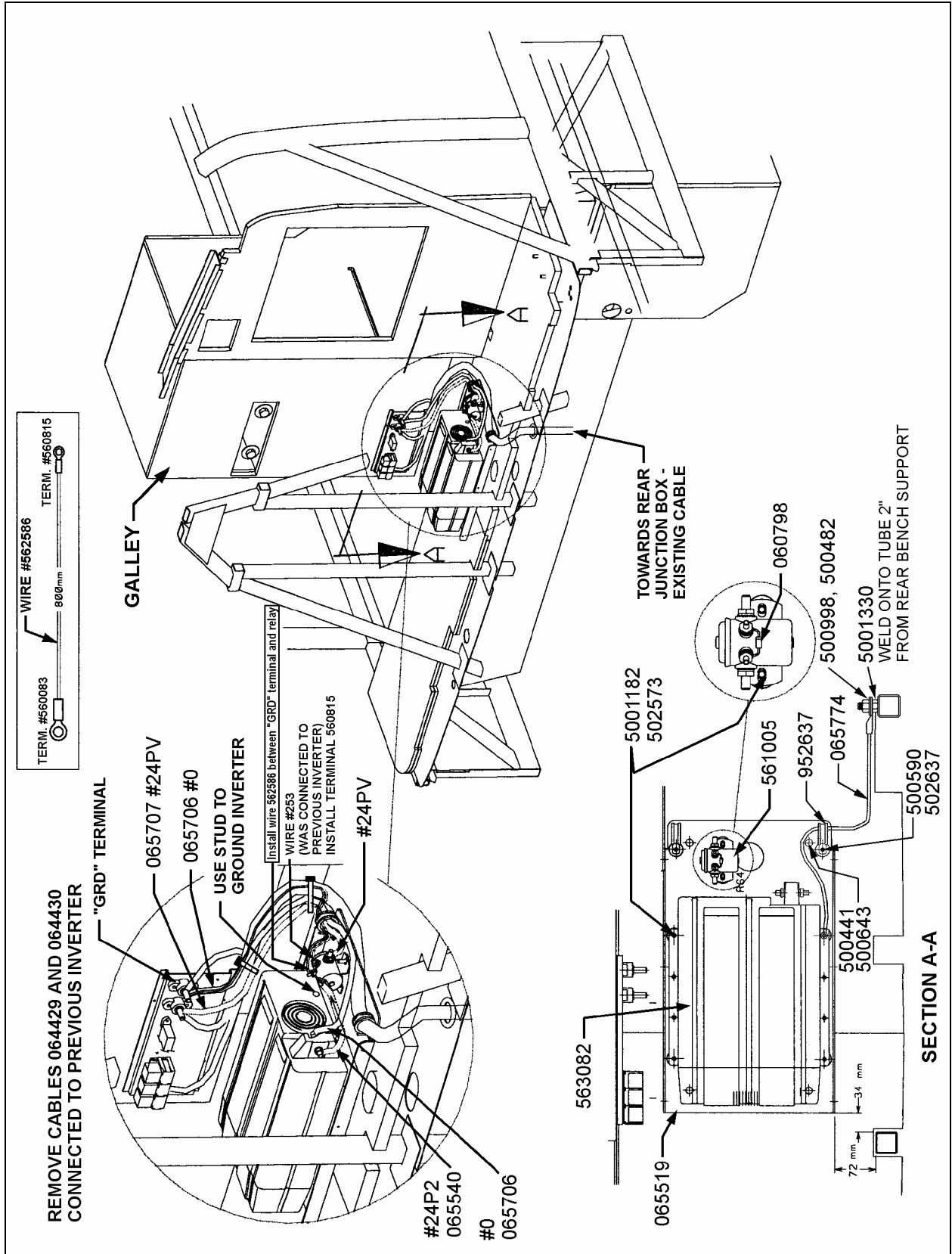


FIGURE 3

8. Run cable #24P2 (065540)) between inverter and relay.
9. Install terminal (560083) and terminal (560815) at the ends of wire (562586).
10. Run black wire (562586) between "GRD" terminal and relay.
11. Install terminal (560815) at the end of wire #253, which was installed on previous inverter, and connect wire to relay.
12. Weld cap screw head (5001330) onto structural tube 2" (50mm) from rear bench support.
13. Route cable (065774) through inverter housing lateral hole and secure cable end to stud inside inverter. Secure cable terminal to previously welded cap screw using washer (500482) and nut (500998) in order to ground inverter.
14. Secure cables using cable clips (952637), washers (502637) and nuts (500590).

H3 COACHES NOT-EQUIPPED WITH "MINI-CHEF" GALLEY

MATERIAL

Kit #065708 includes the following parts:

Part No.	Description	Qty
065519	Support, Inverter	1
5001182	Nut, Hex Nylon Insert, SS M6-1	4
5001348	Nut , Wing Nylon ¼-20	6
500590	Nut, Hex Nylon Insert, ZP M4-0.7	1
502573	Washer, Flat SS M6 x 12.5 x 1.6	4
502637	Washer, Flat SS .200 x 7/16 x .037	1
560106	Terminal-R (W6) ¼-3/8	2
563082	Inverter 24VDC - 120VAC – 1800 W	1
563131	Cover, Inverter	1
952637	Clip, Cable ZP 28.6 x 12.7	1
IS-01028	Instruction Sheet	1
FI-01028	Feuille d'instructions	1

PROCEDURE

Warning : Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1. Open rear baggage compartment L.H. side door. Remove inverter from rear baggage compartment partition wall.
2. Remove a portion of carpet from partition wall if necessary and weld support (065519) onto baggage compartment rear partition wall as per instructions in figure 4. Refer to pages 2 and 3 for welding specifications.

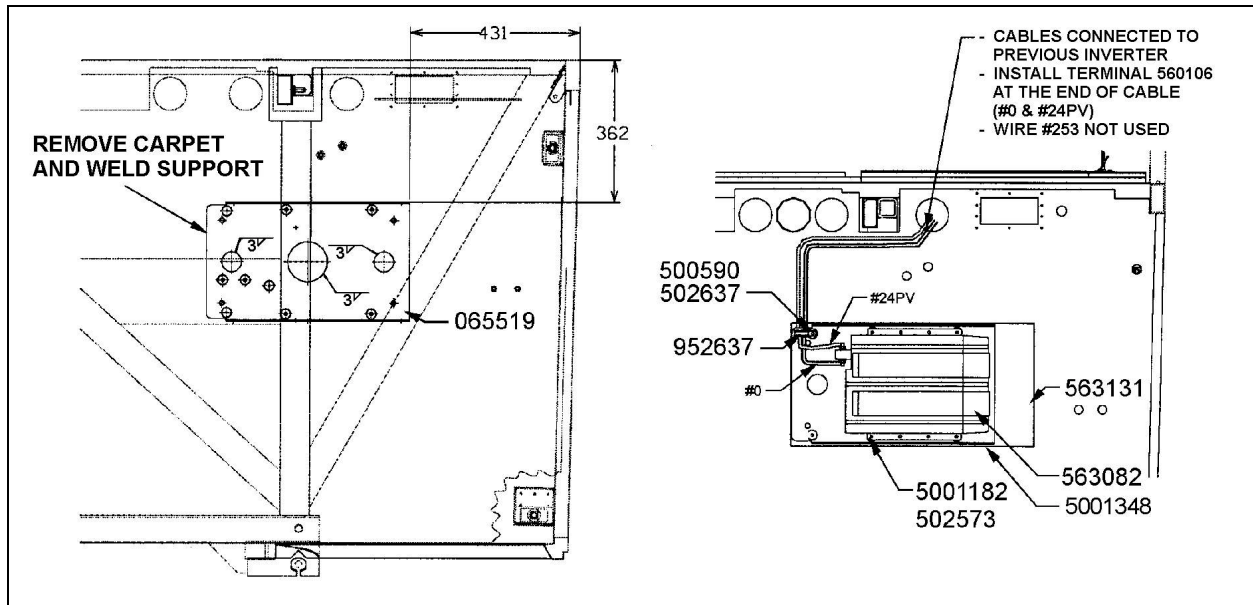


FIGURE 4

3. Secure new inverter casing and cover onto support using wing nuts (5001348), washers (502573) and nuts (5001182).
4. Install a terminal (560106) at the end of cables #0 & #24PV and fix cables onto inverter as per figure 4. Cut wire #253 and secure cables using cable clip (952637), wing nut (5001348), washer (502637) and nut (500590).
5. Install inverter cover (563131).

H3 COACHES EQUIPPED WITH “MINI-CHEF” GALLEY

MATERIAL

Kit #065710 includes the following parts:

Part No.	Description	Qty
065519	Support, Inverter	1
060798	Diode	1
065540	Cable #24P2	1
065542	Cable #0P2	1
065538	Cable #24PV	1
065672	Cable, Power 110V Galley	1
561005	Relay, Magnetic 24V 200A	1
5001330	Screw, Cap Hex Head SS ½ - 13 x 1	1
5001348	Nut , Wing Nylon ¼-20	6
500998	Nut, Hexagonal Brass ½ -13	1
504068	Grommet ¾ x 1/16 x 5/16 x 1 1/16	1

500482	Washer, Split lock ZP ½ x 7/8 x .125	1
561904	Terminal	1
562590	Wire, Electrical TXL 18GA Red	22.950
562664	Sheath, Metallic	8
563131	Cover, Inverter	1
5001182	Nut, Hex Nylon Insert SS M6-1	6
560083	Terminal	1
500590	Nut, Hex Nylon Insert ZP M4-0.7	1
502573	Washer, Flat SS M6 x 12.5 x 1.6	6
502637	Washer, Flat SS .200 x 7/16 x .037	1
560815	Terminal	2
563082	Inverter 24VDC - 120VAC – 1800 W	1
562586	Wire, Electrical TXL 16GA Black	2.950
952637	Clip, Cable ZP 28.6 x 12.7	1
IS-01028	Instruction Sheet	1
FI-01028	Feuille d'instructions	1

PROCEDURE

Warning : Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

Note: Refer to figures 5, 6 and 7 for all steps in this procedure.

1. Route cable 24PV (065538) between CB7 circuit breaker located inside main power compartment (battery compartment) and inverter. Feed cable through cable ducts and rear electrical compartment as shown in figure 5.
2. Open rear baggage compartment L.H. side door. Remove inverter from rear baggage compartment ceiling.
3. Remove a portion of carpet from partition wall if necessary and weld support (065519) onto baggage compartment rear partition wall as per instructions in figure 6. Refer to pages 2 and 3 for welding specifications.
4. Weld cap screw head (5001330) onto structural tube as per figure 6.
5. Secure new inverter casing and cover (563082) onto support using wing nuts (5001348), washers (502573) and nuts (5001182).
6. Install diode (060798) onto magnetic relay (561005) and secure relay beside inverter using washers (502573) and nuts (5001182).
7. Connect cable #24PV (065538) terminal to relay.
8. Route cable #0P2 (065542) between inverter and previously welded cap screw and secure terminal using washer (500482) and nut (500998) in order to ground inverter.

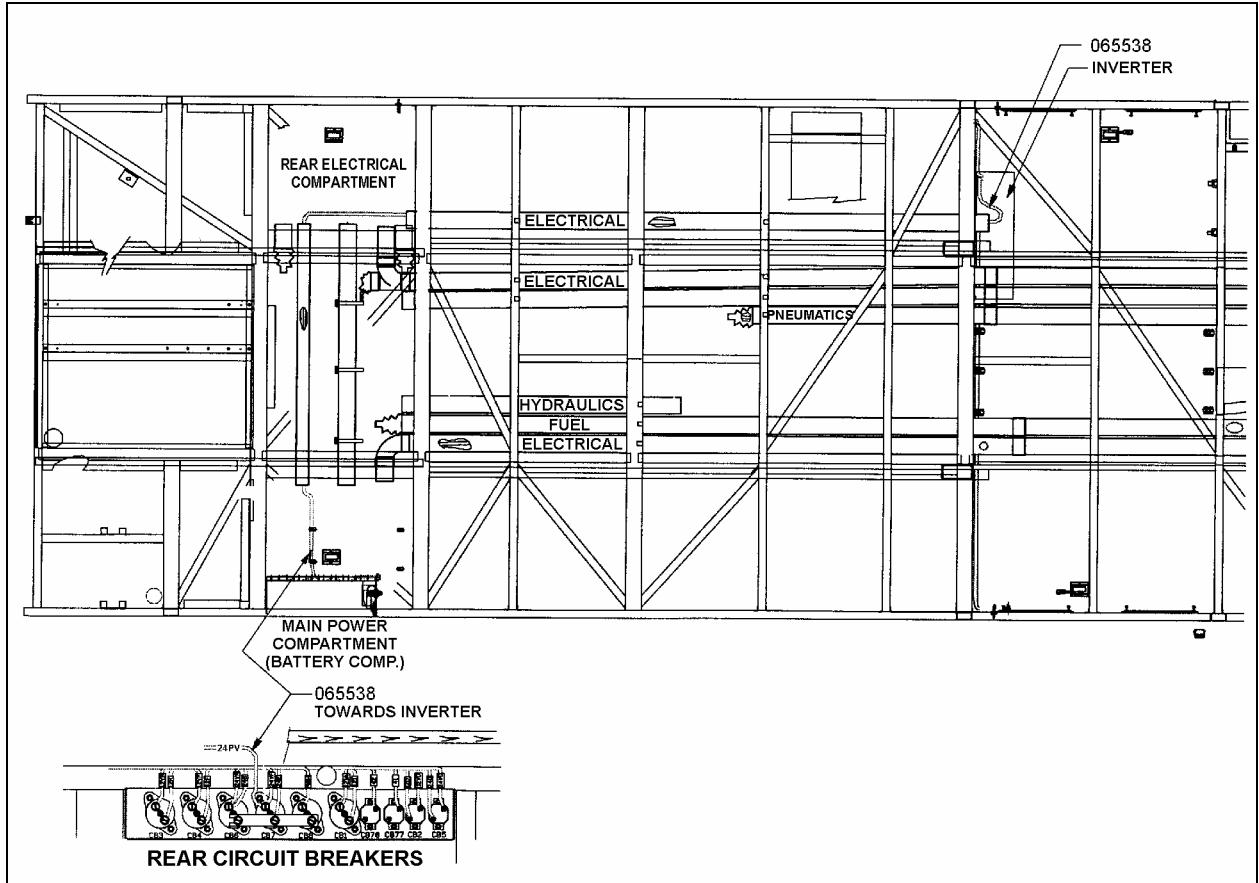


FIGURE 5

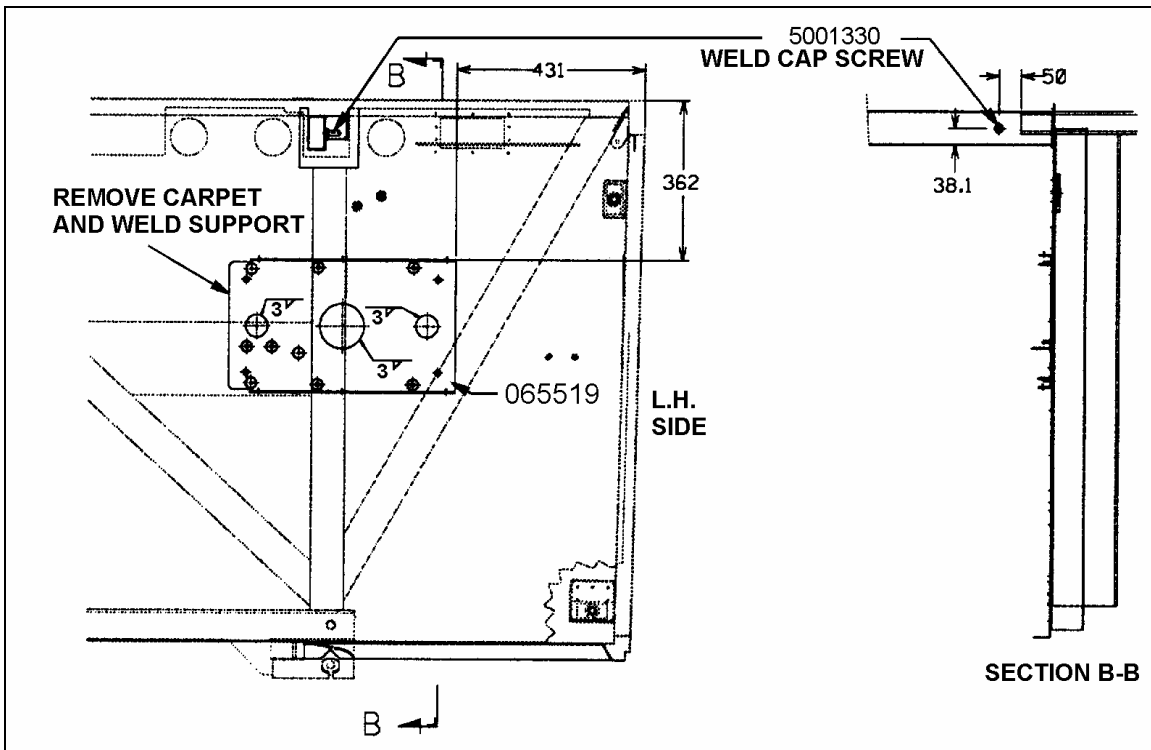


FIGURE 6

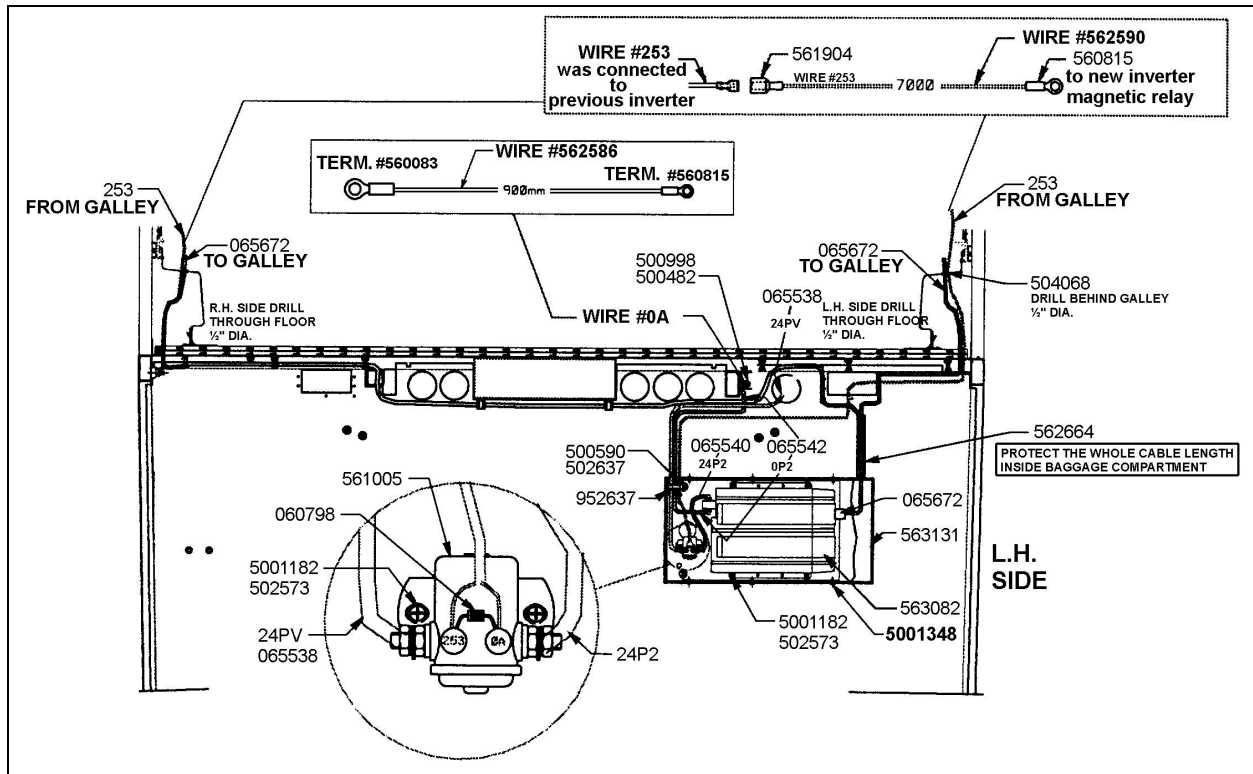


FIGURE 7

9. Run cable #24P2 (065540) between inverter and relay.
10. Install terminal (560083) and terminal (560815) at the ends of black wire (562586).
11. Run black wire (562586) #0A between ground screw and relay.
12. Install terminal (560815) and terminal (561904) at the ends of wire #562590, connect wire #562590 to wire #253, which was installed on previous inverter, and connect wire #562590 to relay.
13. Feed galley power cable (065672) through metallic sheath (562664), connect one end of cable to inverter then route cable towards galley. Drill a ½ inch dia. hole through the floor on the L.H. or R.H. side and also behind galley. Use grommet (504068) to protect cable.
14. Secure cables using cable clip (952637), washer (502637) and nut (500590).
15. Install inverter cover (563131).