Introduction / Comments:

The following instructions are for Ford Transit Connect with and without Aux batteries

Note:

Read all instructions prior to installation. Review the Adrian Steel **GENERAL PRECAUTIONS PAGES (56638**) before attempting installation. Only personnel familiar with using electrical best practices should perform this install. Reference **ELECTRICAL BEST PRACTICES MANUAL (54479)** before attempting installation.

Ford Transit Connect Inverter Instruction

Build Of Materials: All Kits

Kit 62448	KIT INV 0.7KW TC	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	4
FAS0025	SCREW,THP 10-24X.50 ZP	2
FAS0029	NUT,HEX NLK 10-24 ZP	2
FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	4
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
44918-B	BRKT, FUSE HLDR, F150	1
56904	INV TS12-700	1
61707	KIT CBL,0.7KW TC	1
62528	INS, INVERTER 700-1KW FTC	1

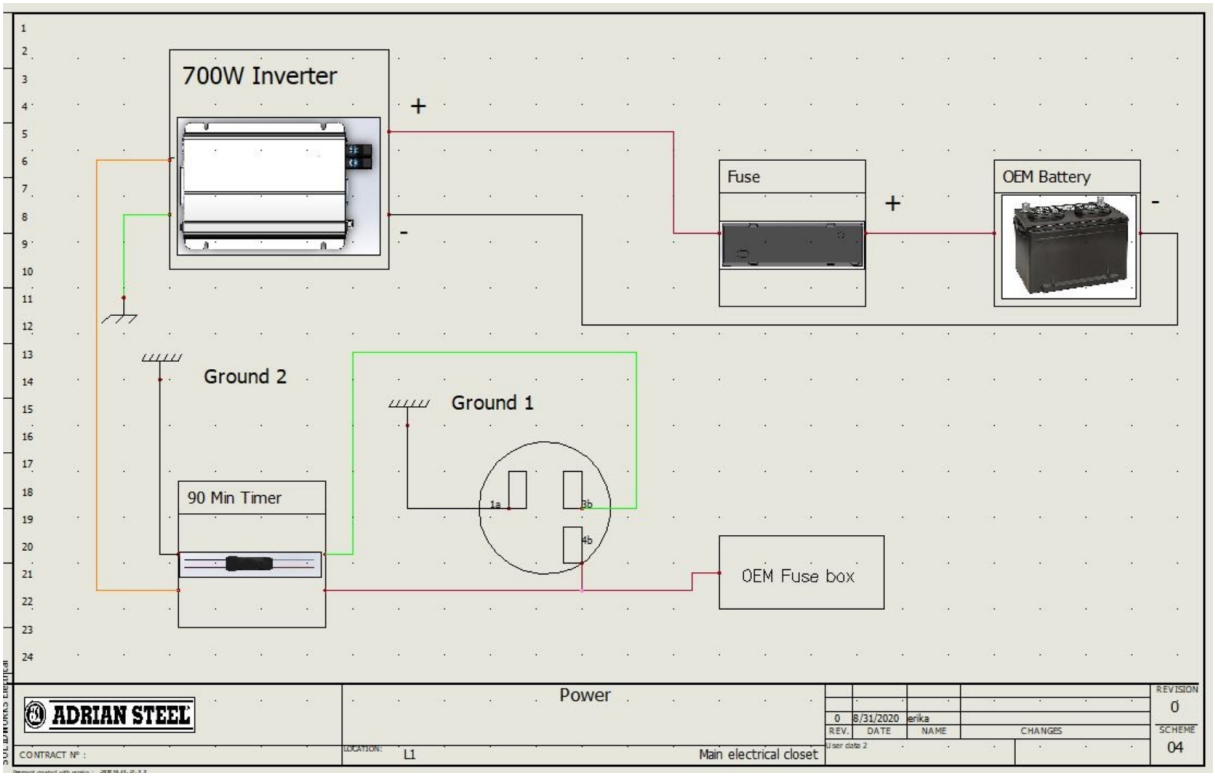
Kit 62449	KIT INV 1.0KW TC	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	4
FAS0025	SCREW,THP 10-24X.50 ZP	2
FAS0029	NUT,HEX NLK 10-24 ZP	2
FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	4
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
44918-B	BRKT, FUSE HLDR, F150	1
56903	INV TS12-1000	1
60409	KIT CBL,1.0KW TC	1
62528	INS, INVERTER 700-1KW FTC	1

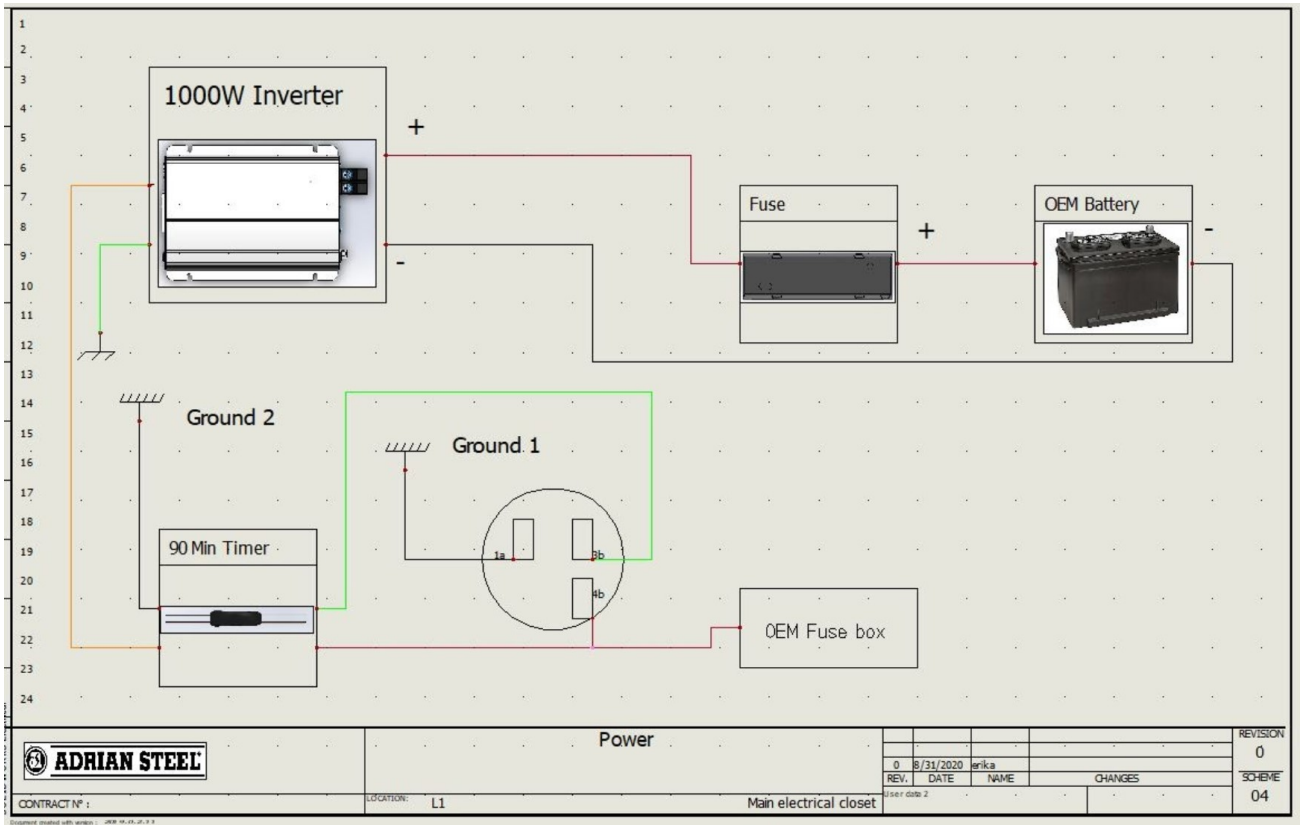
Build Of Materials: All Kits

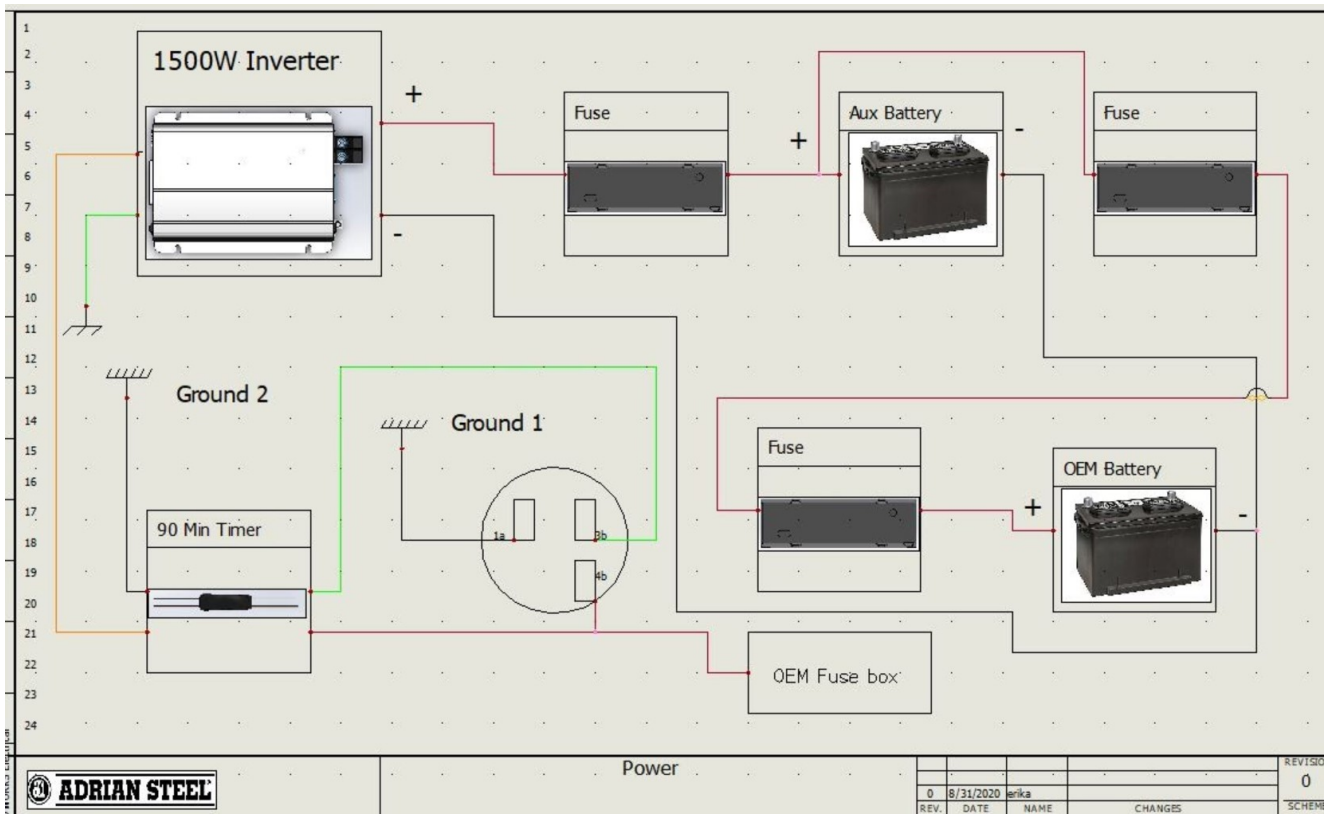
Kit 62450	KIT INV 1.5KW 1AUX TC	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	4
FAS0025	SCREW,THP 10-24X.50 ZP	6
FAS0029	NUT,HEX NLK 10-24 ZP	6
FAS0048	SCREW,BHCS 5/16-18X2.0 ZN	4
FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	4
FAS0091	PLUSNUT,5/16-18 PB DC	4
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
FAS0833	WASHER,CUP FLANGED 1.5"	4
03927-1	SPACER,FLR,1010,11/32 ZP	4
38352	BATTERY,AGM 92AH 12 VDC	1
44918-B	BRKT, FUSE HLDR, F150	1
56906	INV TS12-1500	1
62528	INS, INVERTER 700-1KW FTC	1
62886	KIT CBL.1.5KW 1AUX TC	1

Kit 62451	KIT INV 2.0KW 2AUX TC	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	4
FAS0025	SCREW,THP 10-24X.50 ZP	6
FAS0029	NUT,HEX NLK 10-24 ZP	6
FAS0048	SCREW,BHCS 5/16-18X2.0 ZN	8
FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	4
FAS0091	PLUSNUT,5/16-18 PB DC	8
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
FAS0833	WASHER,CUP FLANGED 1.5"	8
03927-2	SPACER,FLR,1010,11/16 ZP	8
38352	BATTERY,AGM 92AH 12 VDC	2
44918-B	BRKT, FUSE HLDR, F150	1
56905	INV TS12-2000	1
61697	KIT CBL,2.0KW 2AUX TC	1
62528	INS, INVERTER 700-1KW FTC	1

Review order drawings to determine inverter placement
Also if any power strip kits will need to be installed also and their placement.
NOTE: Not all applications will use all the components listed.






1500W Inverter
+
-
Fuse
+
Aux Battery
-
Fuse
Ground 2
Ground 1
90 Min Timer
1a
3b
4b
Fuse
OEM Battery
+
-
OEM Fuse box
ADRIAN STEEL
Power
0 8/31/2020 erika
REV. DATE NAME CHANGES
REVISION
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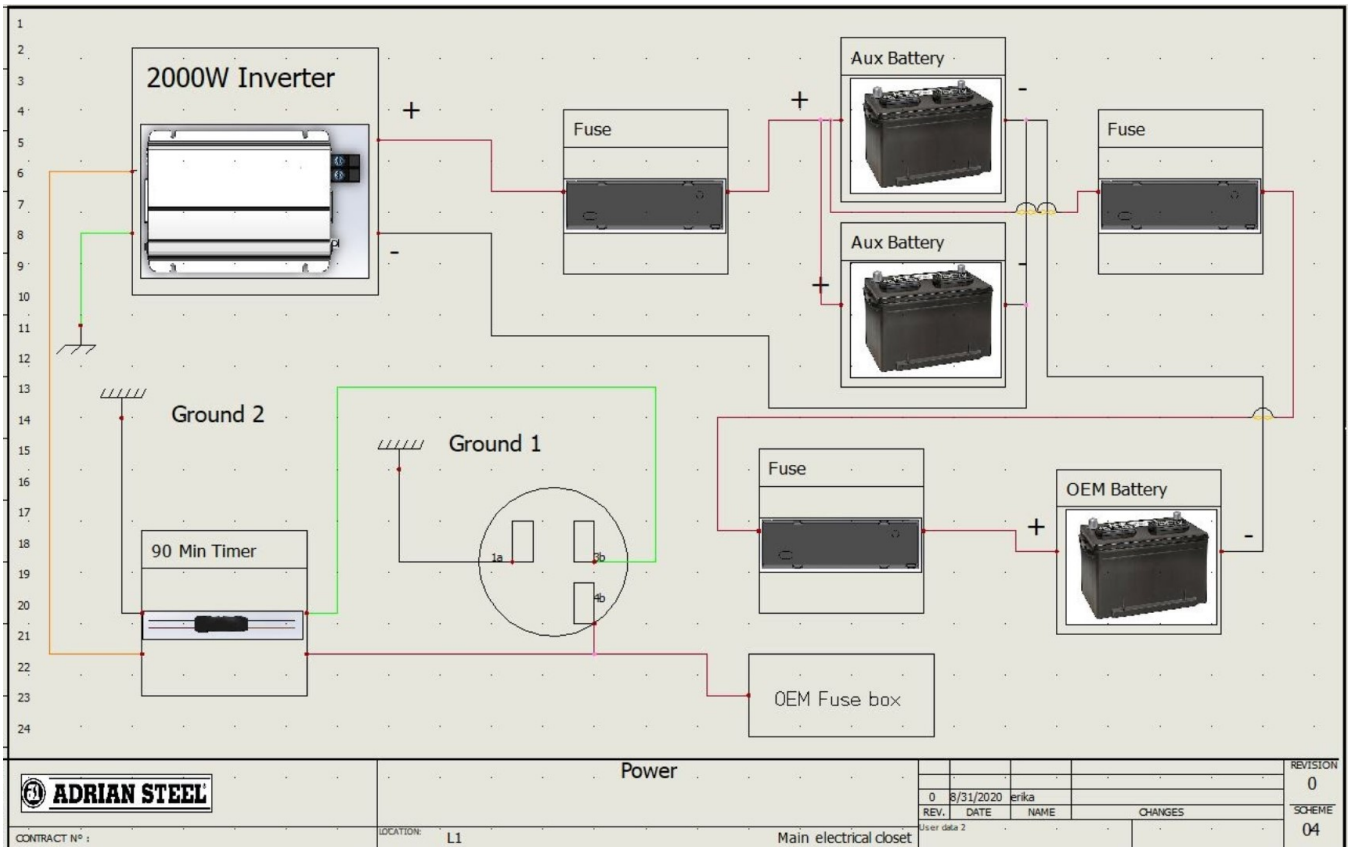
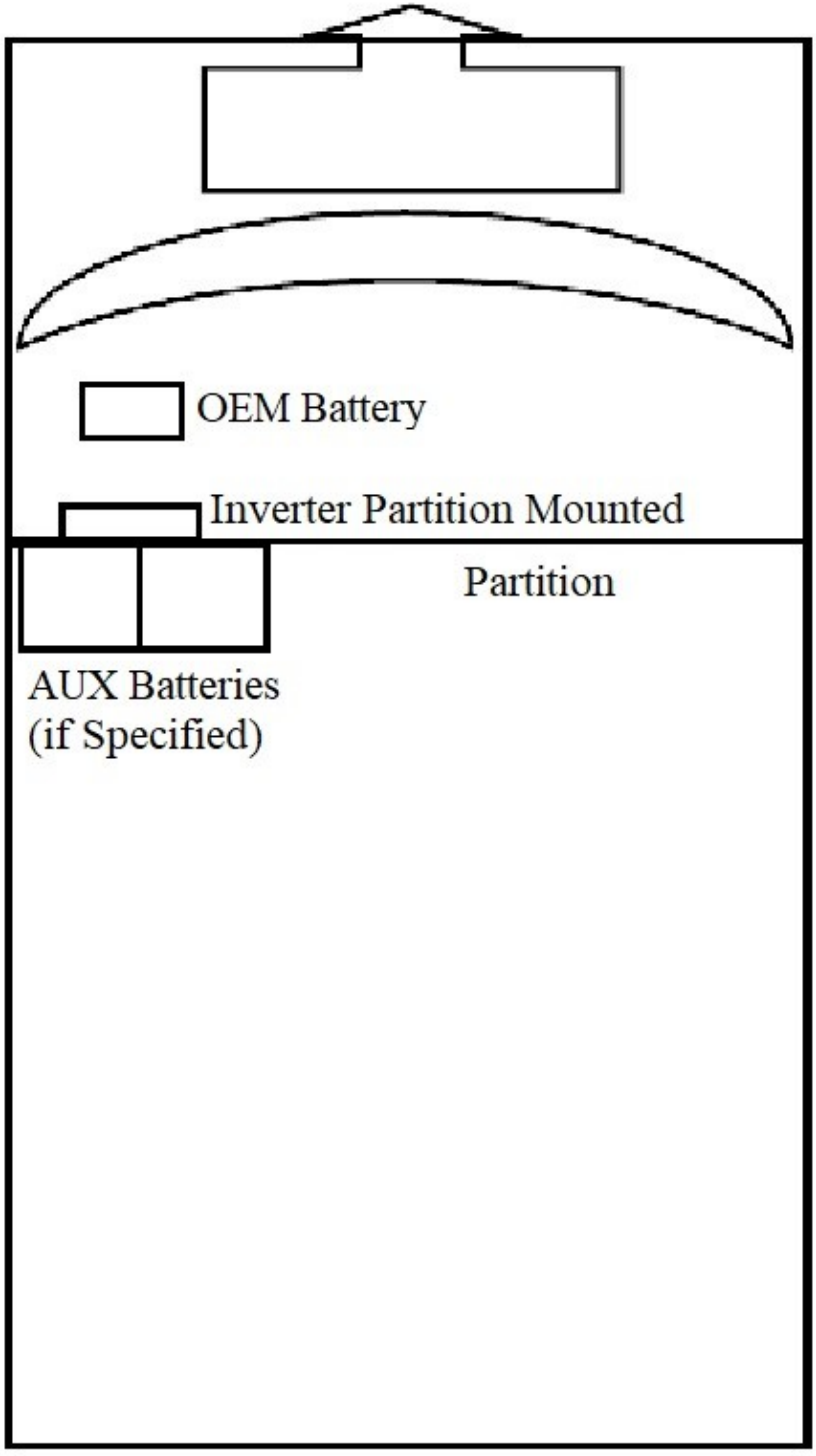

2000W Inverter
+
-
Fuse
+
Aux Battery
-
Aux Battery
+
-
Fuse
Ground 2
Ground 1
90 Min Timer
1a
3b
4b
Fuse
OEM Battery
+
-
OEM Fuse box
ADRIAN STEEL
Power
0 8/31/2020 erika
REV. DATE NAME CHANGES
REVISION
0
SCHEME
04
CONTRACT N° :
LOCATION:
L1
Main electrical closet
User data 2


OEM Battery
Inverter Partition Mounted
Partition
AUX Batteries
(if Specified)

Step 1: Disconnect Negative battery cable

Remove the plastic cover over the battery
Disconnect the Negative Battery Cable

Tools required:
1/2” Socket

Step 2: Route Inverter cables to OEM battery

Route both inverter cables through the square grommet on the firewall to the battery area.

**Battery box seems to be bigger in '20 Transit Connects. Installer used a 'wedge' tool to make routing the cables much easier

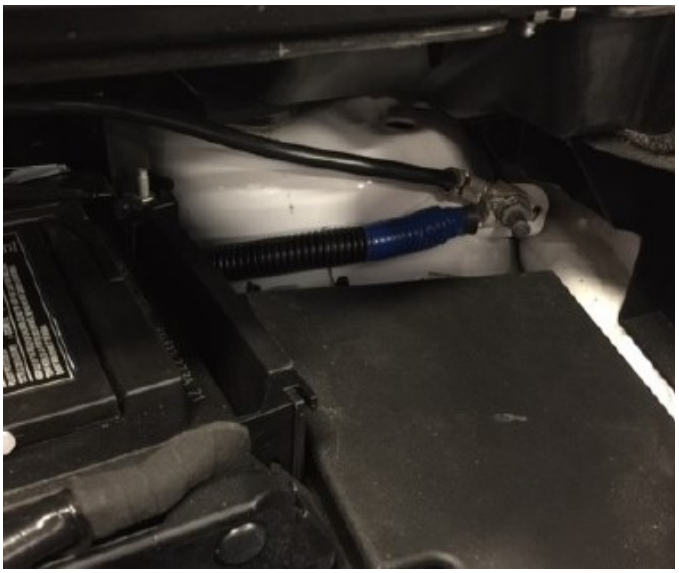
Step 3: Connect Inverter cables to OEM battery

Mount the short red wire to the positive terminal on the side of the battery

Mont the fuse holder onto the bracket and mount the bracket as shown, using the OEM cowl fastener

Use fasteners FAS0025, FAS0029, FAS00641

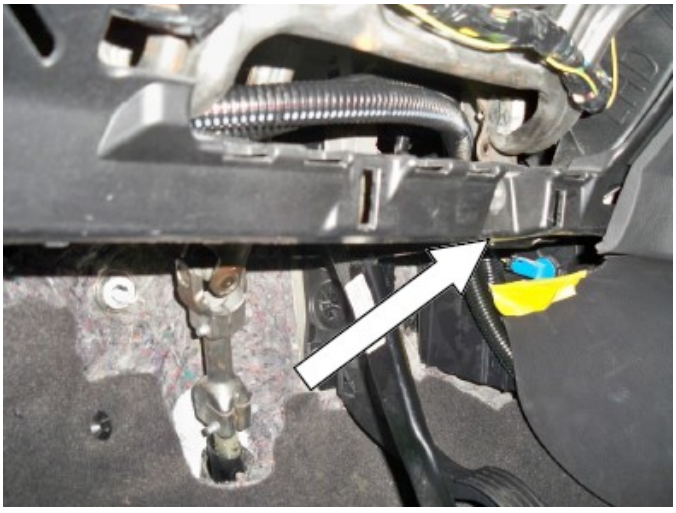
Notes:
Do not install the FUSE at this time



Notch the battery tray cover for the cable and re-install it

Mount the ground cable to the existing OEM ground cable location

Step 4: Route Inverter cables

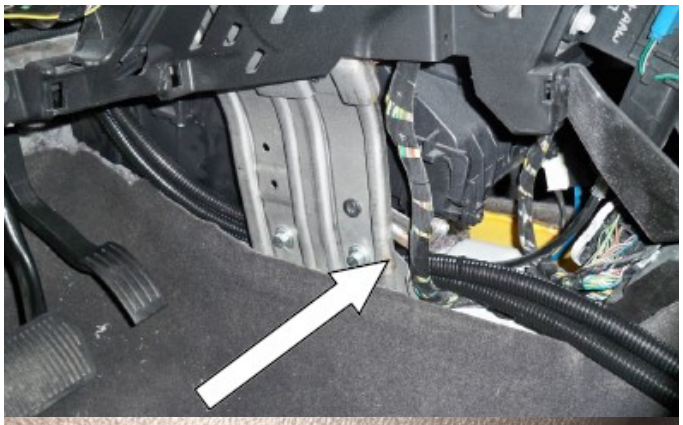


Route the harness behind the knee bolster panel.

Notes:
Take caution, do not route the cables so they interfere with any moving parts or pedals

Wire tie to the OEM wiring harnesses

Notes:
A plastic trim tool may aid in bolster removal



Remove the center console and route the cable down the center

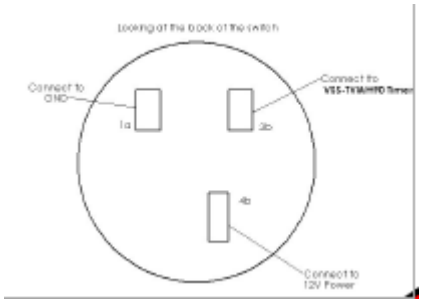
Notch the lower corner of the center console for cable clearance

Notes:
Be sure the cables do not contact the steering column and are clear of all pedals

Use silicone to seal holes in the grommet passing through the fire-wall

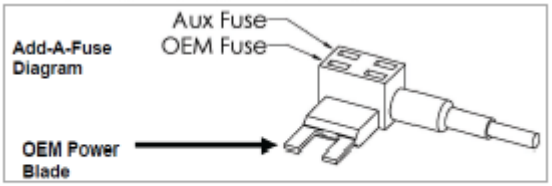
Continue routing the cables out-side the center console to the rear seat area

Step 5: Timer circuit connection

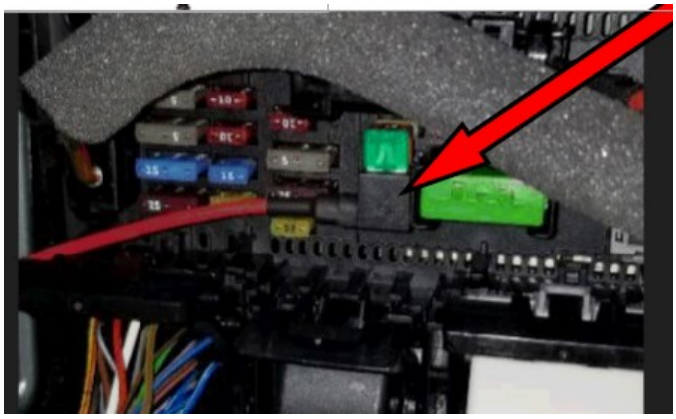


Assemble the VSS-TVMH90 to the switch harness

Route the 3 wire switch harness to the shifter area and connect it to the switch



Note OEM and Aux Fuse locations



Plug the Add-A-Fuse harness into the location F20 behind the glove box

Use the existing glove box fasteners to mount the ground wire

Secure the timer assembly to the heater box using wire ties

Assemble the switch to the harness and mount the switch with the switch decal

Tools required:
Wire Crimpers
Wire Strippers

Step 8: Inverter mounting

Mount the inverter as called out on the sales order drawing.

Use fasteners FAS0055 and FAS0018

Secure all cabling with wire ties

Notes:
Inverter Placement may require mounting kit for composite partition.
Make sure outlets are facing center of vehicle

Step 9: Aux battery installation (If applicable)

Set the battery boxes in place on the floor track based on the order drawing
Drill 3/8” holes in the box and floor of the vehicle
Remove the box and enlarge the holes in the floor to 1/2”
Install plusnuts FAS0091
Enlarge the holes in floor matting to 1 inch
Place the nylon strap under each box
Place spacer 03927-1 in each hole
Secure the boxes with fasteners FAS0048 and cupped washers FAS0833

Tools required
Plusnut gun
3/8” drill
1/2” drill
1” hole saw (if applicable)

Note:
Use grommets at partition pass thrus
If the vehicle has rail system use spacers 03927-2

Step 10: Aux. Battery Cable Connections (If applicable)

Connect Aux. battery cables as shown in the schematic supplied at the beginning of the instructions.
Tighten battery connections to 8Nm
Install fuses using fasteners supplied with fuse holders and tighten to 15Nm

Step 11: Connect the inverter

Attach the cables to the inverter
Tighten the cables
Wiggle test then tighten again
Install the green case ground
Attach the eyelet to the partition base bolt
Check the dip switches are set as follows
1 UP
2 UP
3 UP
4 Down

Step 12: OEM battery final connections

Attach the red cables to the respected side of the fuse holder.
Install the fuse and tighten nuts to 15Nm.
Install the fuse cover.
Reconnect the OEM negative battery cable and tighten to 8Nm.

Step 14: Secure Wiring

Using the supplied cable ties make sure all wiring is secured and clear of sharp objects, moving parts, and heat sources.

Step 15: Verify Inverter Powers Up

Turn on the switch on the Inverter case to REM (remote).
Turn on the switch on the gear shift column
Start the engine and verify the DC input LED on the inverter turns green.

Step 16: Test the Inverter Output

Ship Thru Operations:
Plug the load tester (part # 48340) into the inverter outlet.
Test the inverter as per the load tester instructions.

Step 17: Finalize and Cleanup

Review installation for any unsecure wiring watching out for sharp edges, moving parts, and heat sources.
Inspect all power connections for proper torque.
Install all trim removed in previous steps and battery covers on OEM and AUX batteries (if applicable).