

Introduction / Comments:

The following Instructions are for Ford F150 - With/Without Aux Batteries and With Timer

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 F150 Inverter With and Without Aux Batteries

Build Of Materials: All Kits

Kit 62486	700W F150 Inverter Kit	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	7
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	7
FAS0060	WASHER,LCK SPLIT 1/4 ZP	4
FAS0067	WASHER,FLAT USS 1/4 ZP	4
FAS0079	SCREW,HH 1/4-20X1.5 G8 ZP	4
FAS0086	WASHER,FLAT USS 5/16 ZP	2
FAS0095	SCREW,HH 5/16-18X2 G8 ZDY	2
FAS0098	WASHER,LCK SPLIT 5/16 ZP	2
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0164	WASHER,FLAT SAE 5/16 AL	4
FAS0218	PLUSNUT,1/4-20 PB WS450	4
FAS0222	PLUSNUT,5/16-18 PB WS450	2
FAS0317	NUT,HEX NLK M8-1.25 SS	4
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
03927-2	SPACER,FLR,1010,11/16 ZP	2
44918-B	BRKT, FUSE HLDR, F150	1
52929-G	PLATE,UNIV.INV.MOUNT-GRAY	1
52930-G	BRACKET,UNIV.INV.PLT.GRAY	1
56904	INV TS12-700	1
62887	KIT CBL,0.7KW F1	1
63029	INS INV ALL INVS F1	1

Kit 62487	1000W F150 Inverter Kit	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	7
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	7
FAS0060	WASHER,LCK SPLIT 1/4 ZP	4
FAS0067	WASHER,FLAT USS 1/4 ZP	4
FAS0079	SCREW,HH 1/4-20X1.5 G8 ZP	4
FAS0086	WASHER,FLAT USS 5/16 ZP	2
FAS0095	SCREW,HH 5/16-18X2 G8 ZDY	2
FAS0098	WASHER,LCK SPLIT 5/16 ZP	2
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0164	WASHER,FLAT SAE 5/16 AL	4
FAS0218	PLUSNUT,1/4-20 PB WS450	4
FAS0222	PLUSNUT,5/16-18 PB WS450	2
FAS0317	NUT,HEX NLK M8-1.25 SS	4
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
03927-2	SPACER,FLR,1010,11/16 ZP	2
44918-B	BRKT, FUSE HLDR, F150	1
52929-G	PLATE,UNIV.INV.MOUNT-GRAY	1
52930-G	BRACKET,UNIV.INV.PLT.GRAY	1
56903	INV TS12-1000	1
61273	KIT CBL,1.0KW F1	1
63029	INS INV ALL INVS F1	1

Use 57757 as another example

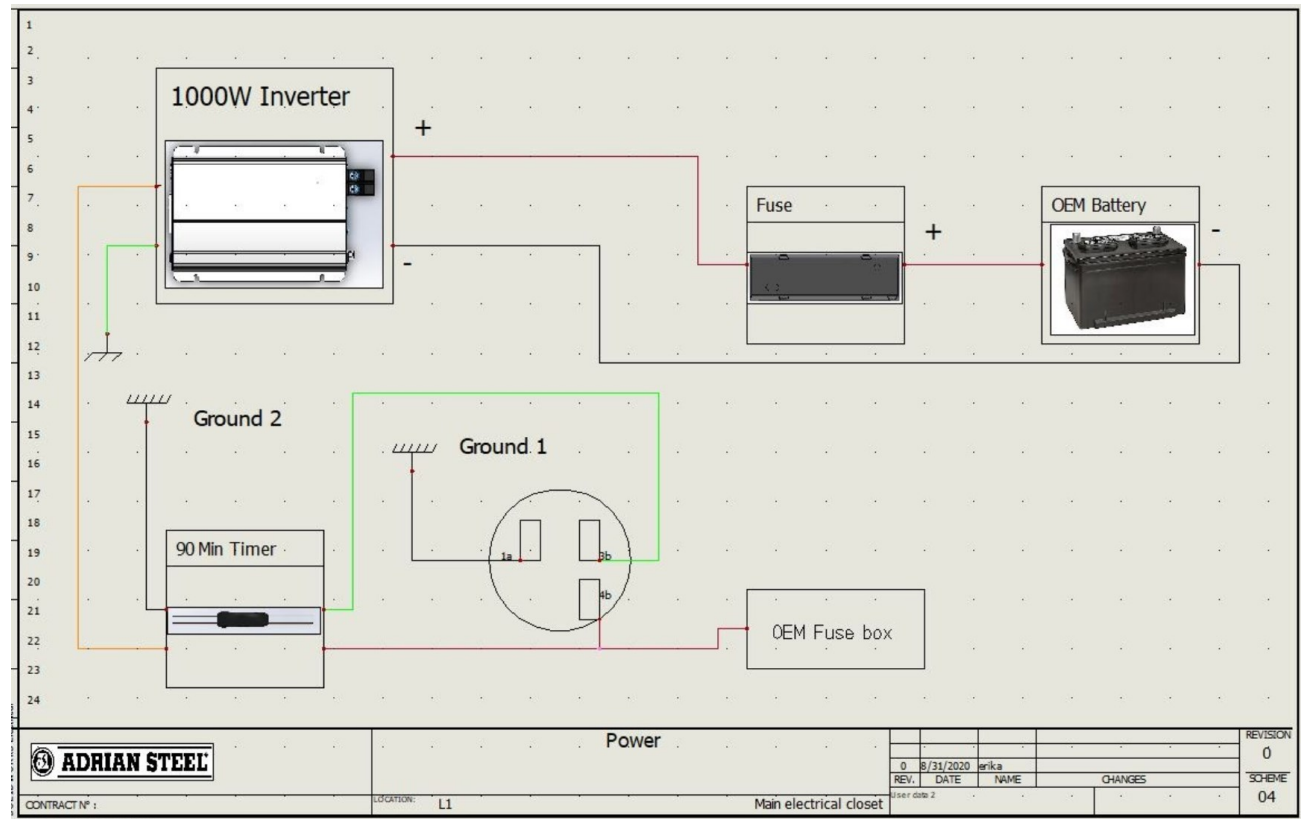
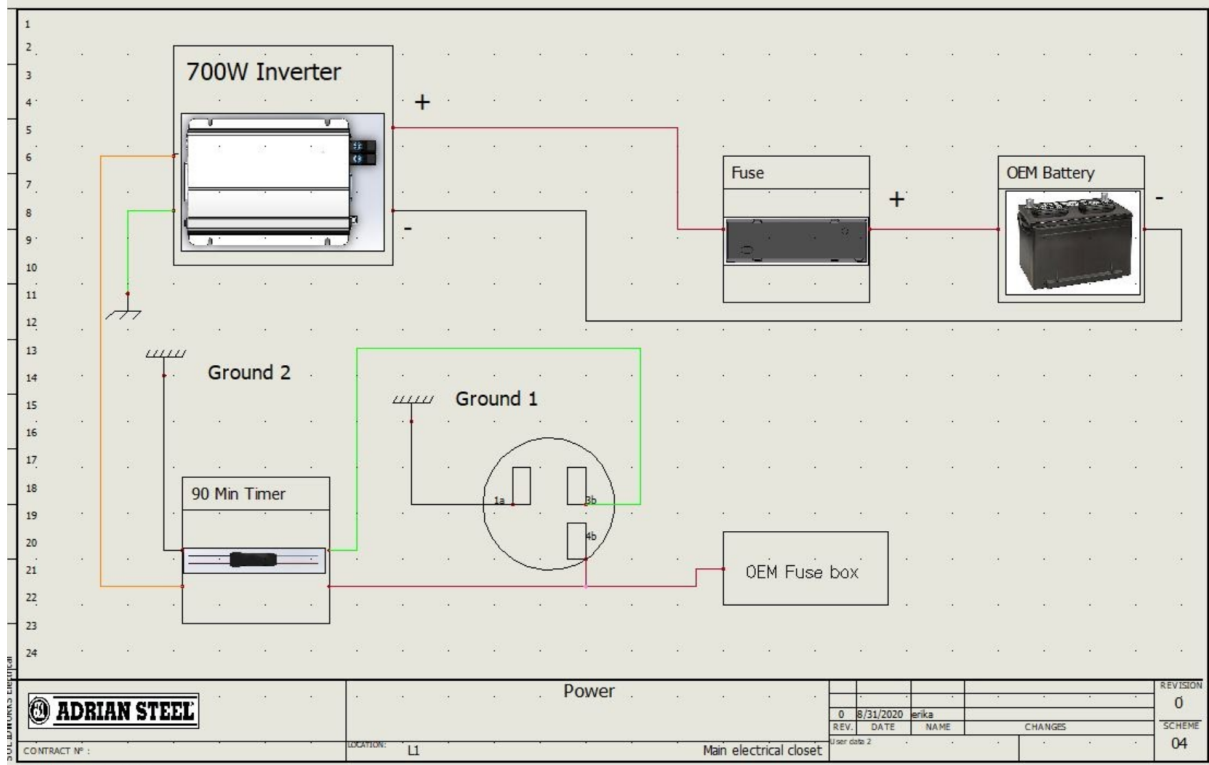
Build Of Materials: All Kits

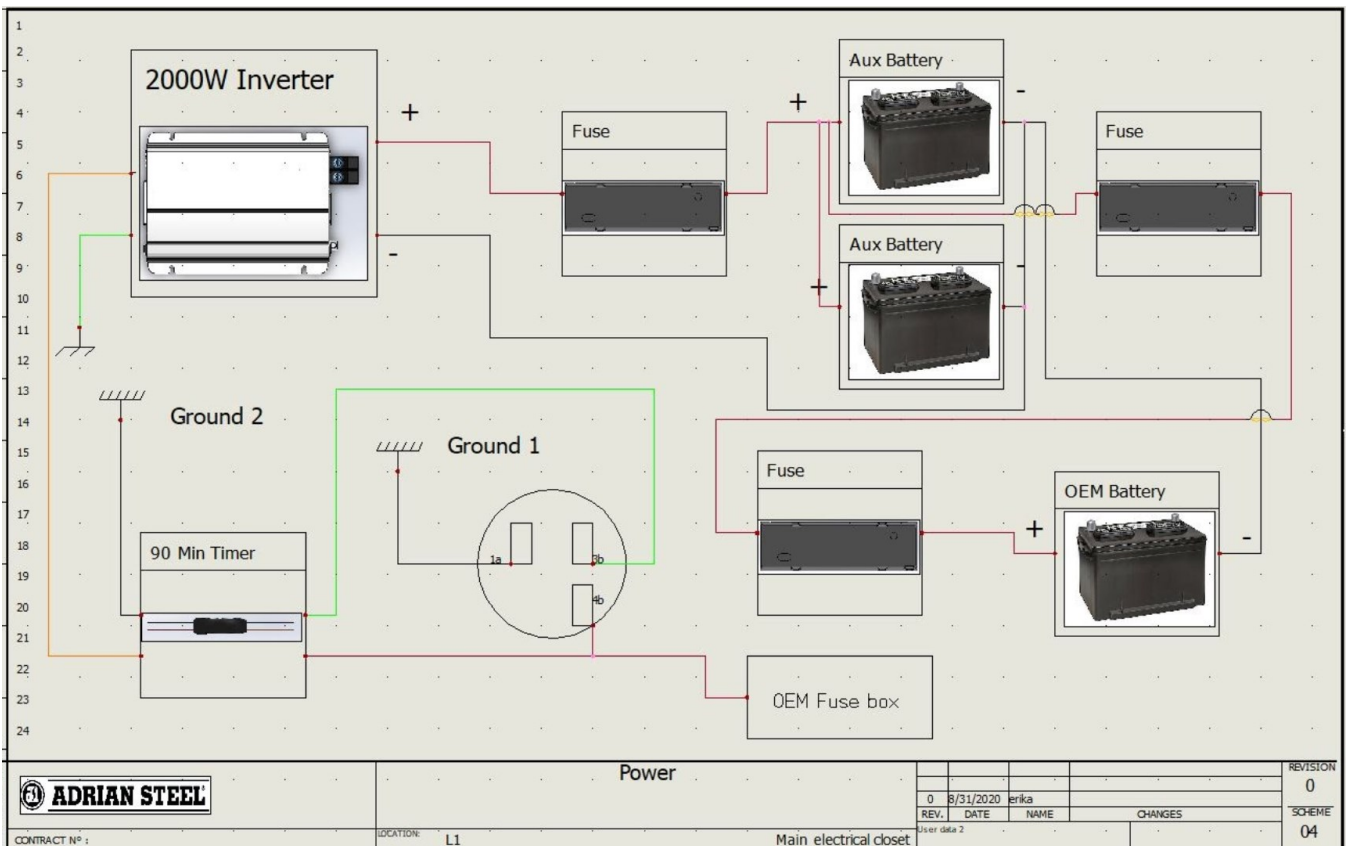
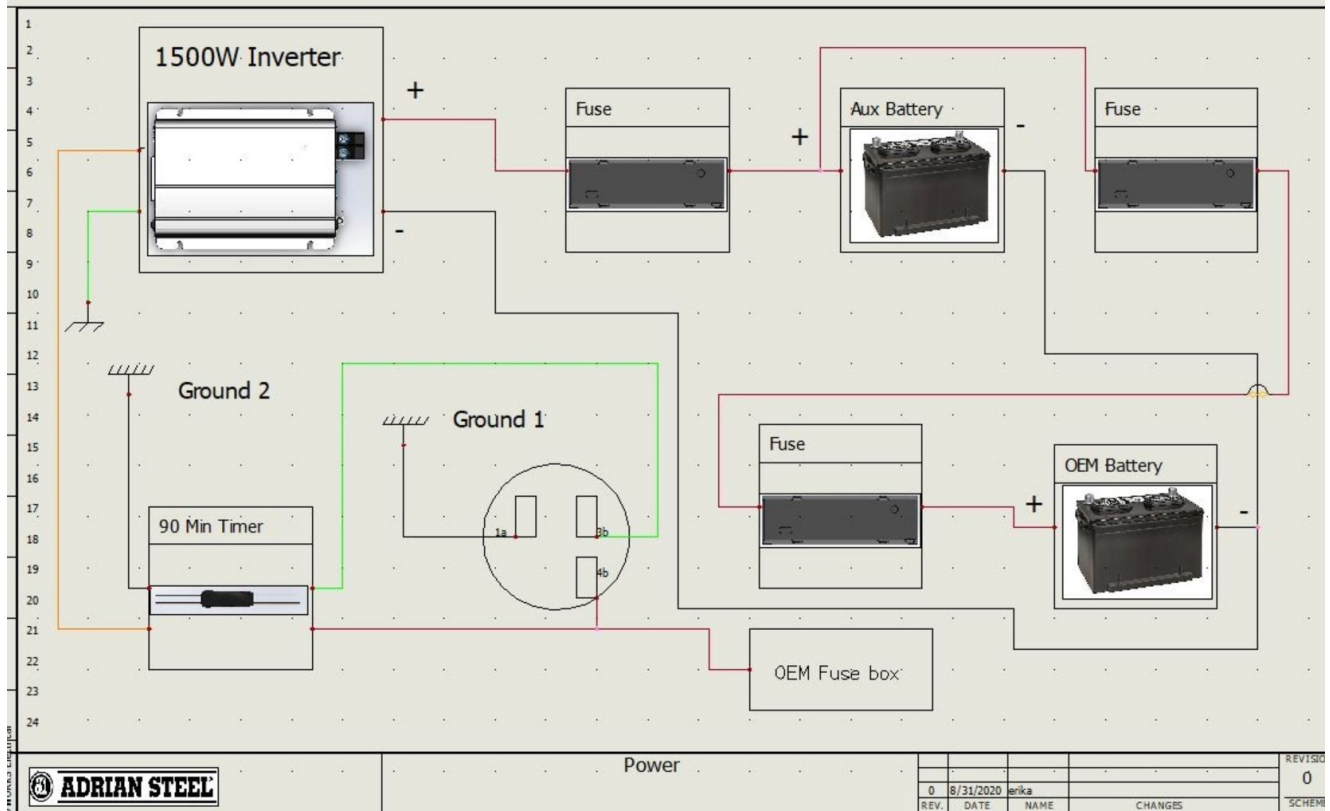
Kit 62488	1500W F150 Inverter Kit	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	7
FAS0025	SCREW,THP 10-24X.50 ZP	6
FAS0029	NUT,HEX NLK 10-24 ZP	6
FAS0048	SCREW,BHCS 5/16-18X2.0 ZN	4
FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	7
FAS0060	WASHER,LCK SPLIT 1/4 ZP	4
FAS0067	WASHER,FLAT USS 1/4 ZP	4
FAS0079	SCREW,HH 1/4-20X1.5 G8 ZP	4
FAS0091	PLUSNUT,5/16-18 PB DC	4
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0164	WASHER,FLAT SAE 5/16 AL	2
FAS0218	PLUSNUT,1/4-20 PB WS450	4
FAS0317	NUT,HEX NLK M8-1.25 SS	2
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
52929-G	PLATE,UNIV.INV.MOUNT-GRAY	1
52930-G	BRACKET,UNIV.INV.PLT.GRAY	1
56906	INV TS12-1500	1
62888	KIT CBL,1.5KW 1AUX F1	1
63029	INS INV ALL INVS F1	1

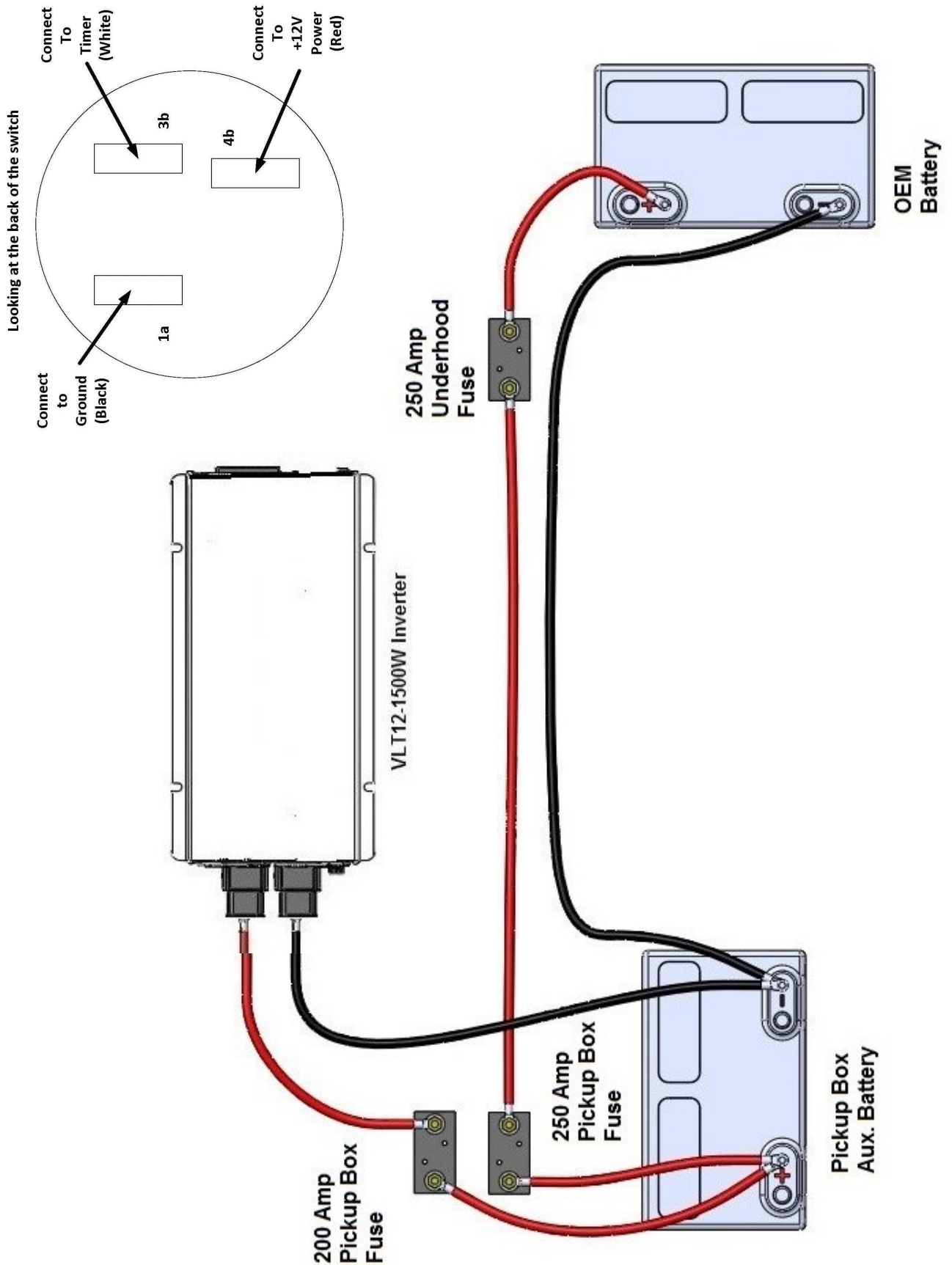
Kit 62489	2000W F150 Inverter Kit	Quantity
FAS0018	SCREW,HFLNG 1/4-20X.62 ZP	7
FAS0025	SCREW,THP 10-24X.50 ZP	6
FAS0029	NUT,HEX NLK 10-24 ZP	6
FAS0048	SCREW,BHCS 5/16-18X2.0 ZN	8
FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	7
FAS0060	WASHER,LCK SPLIT 1/4 ZP	4
FAS0067	WASHER,FLAT USS 1/4 ZP	4
FAS0079	SCREW,HH 1/4-20X1.5 G8 ZP	4
FAS0091	PLUSNUT,5/16-18 PB DC	8
FAS0148	SCREW,FHP TEK 10-24X.5 ZN	1
FAS0164	WASHER,FLAT SAE 5/16 AL	2
FAS0218	PLUSNUT,1/4-20 PB WS450	4
FAS0317	NUT,HEX NLK M8-1.25 SS	2
FAS0641	SCREW,HH TEK 1/4-20X.7 ZP	2
FAS0833	WASHER,CUP FLANGED 1.5"	8
03927-1	SPACER,FLR,1010,11/32 ZP	8
38352	BATTERY,AGM 92AH 12 VDC	2
44918-B	BRKT, FUSE HLDR, F150	1
52929-G	PLATE,UNIV.INV.MOUNT-GRAY	1
52930-G	BRACKET,UNIV.INV.PLT.GRAY	1
56905	INV TS12-2000	1
62889	KIT CBL,2.0KW 2AUX F1	1
63029	INS INV ALL INVS F1	1

Review order drawings to determine inverter placement, cable routing, Aux. battery, power strip and extension cord placement.

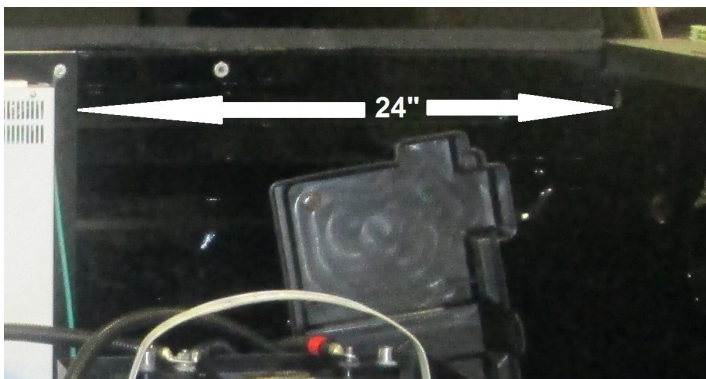
NOTE: Not all applications use the components listed. Make sure to review the order to determine what components are used.



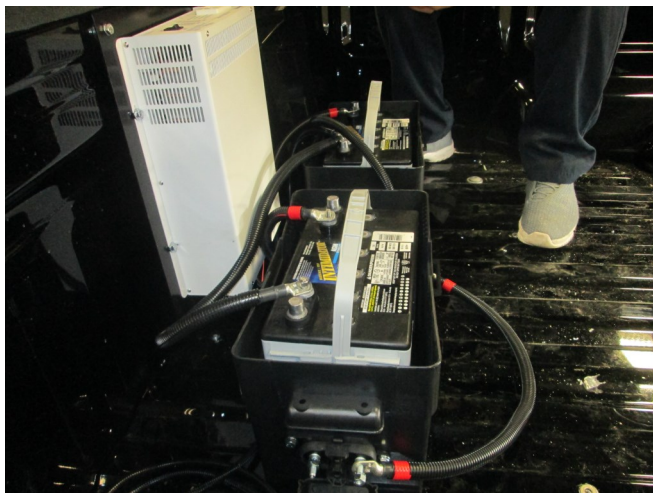




- Create a template to mark the holes for the inverter plate (49010-B) for the holes to be drilled into the front of the pickup box.
- Make sure the inverter's rear (fan) side is facing down and the plate is 24" from the curbside of the pickup bed. Refer to Picture 3.1.
- Drill four 3/8" holes at the four location marked for the plate fasteners. Apply self-etching primer to the holes and allow it to dry.
- Set four 1/4" plusnuts (FAS0218) in the holes.
- Drill two 1-1/4" holes in the floor of the pickup box on the curbside front corner. They both are in the center of the curbside valley in the floor as shown in Picture 3.2. The forward most hole is 8" rearward of the front of the box. The rear hole is 2" behind of the front hole.
- Apply self-etching primer to the holes and allow it to dry. Insert the grommets into the holes.
- Insert the end of the 55" red 2 AWG cable with a blunt end into red clamp on the inverter and tighten it.
- Insert the end of the 55" black 2 AWG cable with a blunt end into black clamp on the inverter and tighten it.
- Remove the switch jump from the green block on the back of the inverter by loosening the set screws on the side. Insert the end of the orange switch wire into the lower switch hole.
- Insert the green casing grounding cable into the silver clamp.
- Mount the inverter to the its mounting plate with four 1/4"-20 x 5/8" HH screws (FAS0018) and four 1/4"-20 Nylock Flange nuts (FAS0055).
- Mount the plate to the plusnuts with two 1/4"-20 x 1-1/2" HH screws (FAS0077) for the lower two holes, two 1/4"-20 x 1" HH screws (FAS0078) for the upper two holes, four 1/4" split lock washers (FAS0060) and four 1/4" flat washers (FAS0067). Place the ring terminal of the green case grounding cable on the upper StreetSide fastener. Use spacers (03927-2) on lower two fasteners.

**Picture 3.1****Picture 3.2**

- Locate the battery box. Create a template for the battery box holes. The two holes will be in opposite corners. The holes will be 1" from the near side and 2" from the near end. Mark the holes in the battery box. Drill the two 3/8" holes in the battery box.
- Create a template to drill the floor for mounting the battery box. The battery placement is 4" rearward of the inverter and the battery is placed under the curbside KD shelf. The battery box's holes should be placed on the ridges of the pickup box. Mark the two holes for the battery box on the floor.
- Drill the two 1/2" holes for the marked holes of the battery box. Apply self etching primer to the holes and allow them to dry. Set (2) FAS0222 plusnuts into the holes.
- Locate two of the fuse holders. Use the fuse holder to create a template. Mark the fuse holder mounting holes on the StreetSide of the battery box. The front fuse holder should be 1" up from the bottom of the battery box and 3/4" rearward of the front side. The rear fuse holder should 3/4" forward of the rear side. Drill the four 1/4" holes in the side of the battery box. Mount the fuse holders to the battery box with four 1/4"-20 x 3/4" THP screws (FAS0062) and four 1/4" Nylock Flange nuts (FAS0055). The truss head of the screw must be on the inside of the battery box.
- Mount the battery box to the floor with (2) FAS0048 screws and (2) FAS0833 washers. Remember to put the Nylon straps under each box before mounting it.
- Place the battery into the box.
- Picture is for Reference ONLY. This Install will ONLY HAVE 1 BATTERY BOX



Picture 4.1



Picture 4.2

- Locate the F150 fuse holder bracket (44918-B).
- Under the hood, remove the harness locator pin from the OEM battery box. Insert the bracket into the battery box. Insert the harness pin in the outer holes.
- Drill a 1/4" hole in the lip of the battery box. Secure the bracket with one #10 screw (FAS0674) with one Nylock nut (FAS0554).
- Mount the fuse holder to the bracket with two 1/4" screws (FAS0018) and two Nylock nuts (FAS0055).
- Connect the ring terminal of the short red cable to the front stud on the fuse holder. Do not connect the other end of this cable to the battery at this time.
- Connect the ring terminal of the long red cable to the rear stud of the fuse holder.
- Lay the long black cable so its ring terminal is near the negative post of the battery.

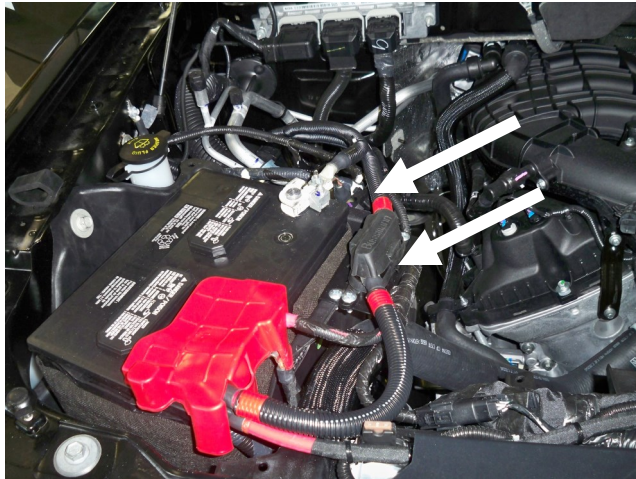


Picture 5.1



Picture 5.2

- Refer to page 2 for cable routing diagram.
- Route the two long cables rearward along the curbside to the firewall (refer to Picture 6.1), then down the curbside to the pickup bed holes with grommets. Refer to Picture 6.2.
- Retain the cables with wire ties to OEM harnesses and tubing under hood.
- Secure the cables with cable clamps under body to the OEM studs.
- Route the cables through the grommets into the pickup bed.
- Route the red cable to the fuse holder on the StreetSide battery box. Secure the cable to the forward stud of the fuse holder.
- Route the black cable to the negative post of the StreetSide battery.
- Route the 20" red 1/0 AWG cable from the rear stud of the forward fuse holder to the positive post of the battery.
- Route the 16" red 2 AWG cable with two ring terminals from the positive post of the battery to the rearward stud of the rear fuse holder on the battery box.



Picture 6.1



Picture 6.2

- Attach the red cable from to the inverter to the forward stud of the rear fuse holder.
- Attach the black cable from the inverter to the negative battery post in the battery box.
- Drill a 3/8" in the lower corner of the vent grommet on the StreetSide of the pickup box. Refer to Picture 7.1.
- Route the switch harness through the hole.
- Route the harness to the OEM harness near the frame rail. Secure the harness to the OEM harness with wire ties.
- Route the harness to the rear section of the driver's door.
- Remove the stepwell trim from the driver's door area. Pull the OEM ductwork out the way. Drill a 1/2" hole in the stepwell area. Apply self-etching primer to the hole. Insert the 3/8" ID grommet into the hole.
- Route the harness through the grommet and forward to the driver's kick panel area.



Picture 7.1



Picture 7.2

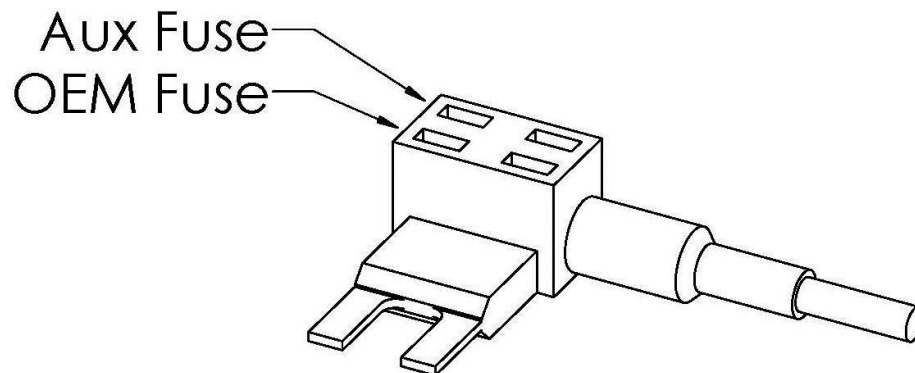


Picture 7.3

- Locate the fuse panel in the passenger kick panel area.
- Remove the fuse panel trim cover.
- Locate fuse #4 by checking the display supplied. Remove the #4 fuse.
- Locate the red switch power wire and the add a fuse.
- Route the red switch power wire from the StreetSide of the dash to the fuse panel. Remove the trim panel at the base of the center console to route it pass the console area.
- Strip the end of the red wire. Insert the end of the wire into the add a fuse and crimp it.
- Insert a 20 Amp mini fuse (high profile) into the add a fuse in the OEM Fuse location to replace the low profile fuse you pulled. Refer to Diagram 8.1.
- Insert the 5 Amp mini fuse into the add a fuse in the Aux. Fuse location.
- Insert the add a fuse into F4 fuse location.

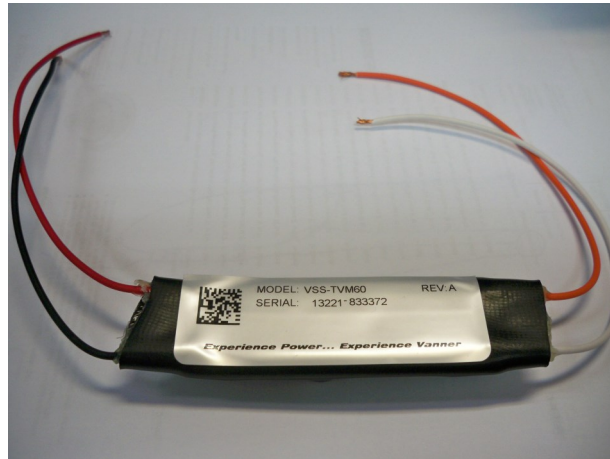


Picture 8.1



Picture 8.2

- Route the orange harness up from the driver's kick panel area.
- Retain the harnesses under the dash, so that they do not interfere with the foot pedals and do not hang down in the foot area of the driver or passenger.
- Locate the inverter Timer. Refer to Picture 9.1.
- Insert the orange wire from the timer into the butt connector on the end of the orange wire harness and crimp it.
- Insert the red wire from the timer into the butt connector on the red wire harness and crimp it.
- Insert the white wire from the timer into the white wire butt connector and crimp it.
- Insert the black wire from the timer into the black wire butt connector and crimp it.
- Drill a 3/4" hole in the lower dash to the left of the steering column. Refer to Picture 9.2. Switch placement is 0.75" to the right from the edge of the parking brake handle and 1.25" below the headlight switch cluster.
- Ground the black wires to the metal area of the dash with a Tek screw.
- Route the white and red wires and the black ground wire through the hole.
- Refer to the switch diagram (page 2) for the connections to the switch.
- Insert the switch. Apply the decal around the switch.



Picture 9.1



Picture 9.2



- Connect the long black cable to the negative stud of the battery cable.
- Refer to the Page 2 Diagram for fuse locations. Remember, the 200 Amp fuse goes on the curbside battery box fuse holder. All other fuses are 250 Amp.
- Connect the short red cable to the positive stud of the battery cable.
- Trim the red plastic cover to allow it to be replaced.
- Turn on the switch on the inverter. Turn on the dash switch. The inverter should be on.
- Turn off the dash switch.
- Turn the inverter dash switch on.

- Plug in the load tester into an outlet of the extension cord, turn it on, and test it at 1500W. Confirm that the remaining inverter outlet also functions.

- Seal all grommets with silicone. Replace all trim panels. Turn off the dash switch. DO NOT turn off the switch on the front of the inverter. Confirm the GFCI is reset.

**DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL
FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!**