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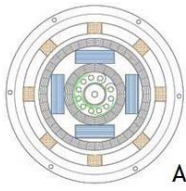
Generator Set Upgrade to 416 from CG13 (Standard Winnebago Size Compartment)



TOOLS NEEDED:

- Hydraulic Floor Jack w/ Transmission Mounting Plate or a low 1,000 lbs Transmission Jack
- Engine Hoist
- Hand Tools – For Removing Fasteners
 - 9/16" Wrench
 - 3/4" SAE / 19mm Wrench
- Cutting Torch or Plasma Cutter – For Sheet Metal Removal
- Hand Grinder – For Smoothing Sheet Metal Edges
- Black Automotive High Temperature Spray Paint
- Sound Attenuation Material for Compartment
- Fuel Injection Rated Hose (SAE30R9)





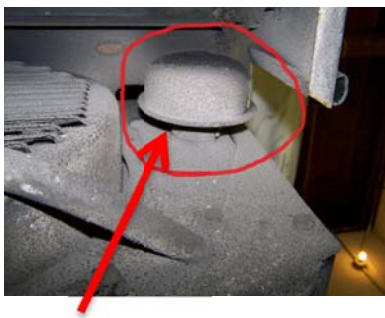
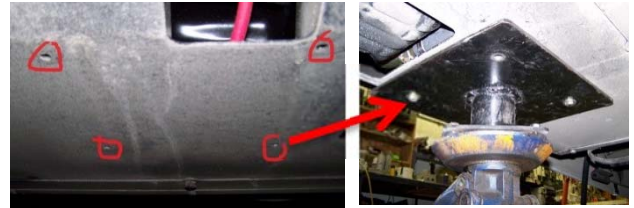
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STEP #1 – CG13 Removal

1. Position the Transmission Jack so that the mounting holes and plate are aligned. Secure the mounting plate to the generator housing with the (4) four provided 1" x 3/8" x 16 bolts using a 9/16" wrench.
2. Once secured to the mounting plate, remove connections in the following order:
 - A. Disconnect the remote start wiring harness plug.
 - B. Disconnect the 12VDC (battery) wiring and tape the "hot" end.
 - C. Disconnect the gasoline fuel line. Plug and secure so that fuel does not leak out.
 - D. Disconnect the exhaust pipe between the muffler and the heat riser system.
 - E. Remove the Air Cleaner (**picture A**).
 - F. Disconnect the 120/240 VAC power plug lead (**picture B**).
 - G. Remove the inboard mounting nuts using a 3/4" wrench, forward and rear (**picture C & D**).
 - H. Remove the outboard mounting nuts, forward and rear (**picture E**).



A



B



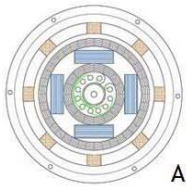
C



D



E



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STEP #2 – Generator Compartment Preparation:

There are four (4) templates included with the 416 generator.

- #1: Aft Compartment Wall
- #2: Midline (inboard) Compartment Wall
- #3: Forward Compartment Wall
- #4: Tow-Hitch Frame



#1

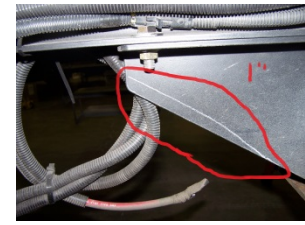
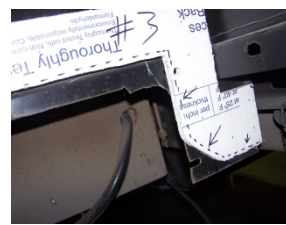


#2 & #3

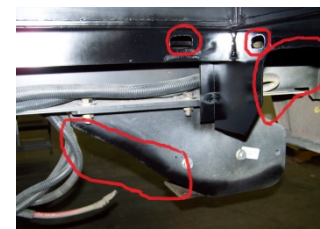


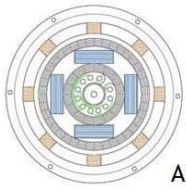
#4

1. Mark each wall for cuts and holes with the templates.



2. Cut sheet metal and enlarge holes as indicated by the templates with a plasma cutter or cutting torch.



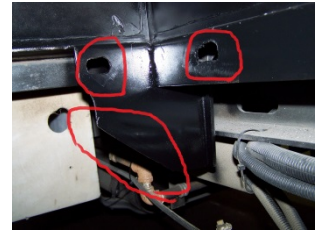
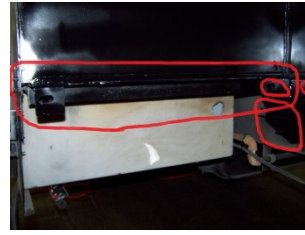
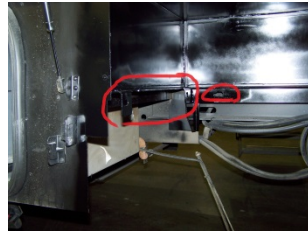
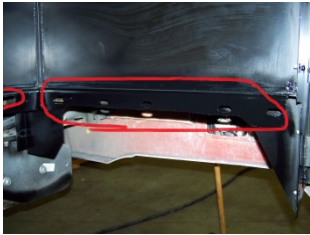


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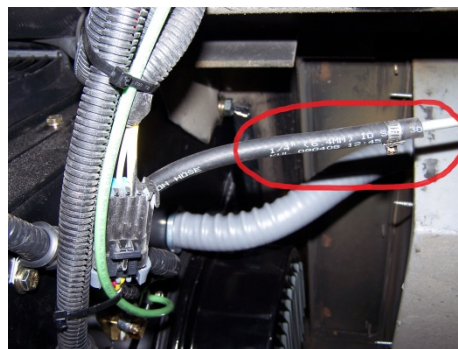
3. Prime and paint the sheet metal with black high temperature paint.



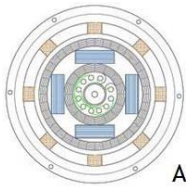
4. Install insulation /sound abatement materials.



5. Replace the existing fuel line with the included fuel injection rated hose (SAE3OR9)



You are now ready to install the 416 Generator.



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STEP #3 – Install the 416 Generator:

1. Removal of 416 from the shipping crate and Installation preparation.

NOTE: Save the crate for return of the CG-13 core to Advanced Dynamo for credit.

A. Using a power screw gun, remove the wood screws holding the top and sides of the shipping crate in place; set aside.

B. Remove the two wood lag bolts holding the metal shipping strips that are holding the bottom of the generator to the 2x6's on the base of the shipping crate.



C. Secure the 416 Generator to an engine hoist. Once the generator is safely suspended from the engine hoist, lift it off of the wooden shipping crate base. Remove the crate base and unbolt the metal shipping strips from the bottom of the generator by removing the two 1" x 3/8-16 UNC bolts with a 9/16" wrench.



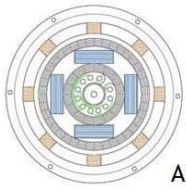
Be sure to keep the shipping strips.

D. Secure the Transmission Jack Mounting Plate Adapter to a floor jack.



E. Gently lower the generator onto the Transmission Jack Mounting Plate, aligning the four bolt mounting holes. Secure with four 1" x 3/8-16 UNC Hex Head Bolts using a 9/16" wrench.





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2. Installation of the 416 Series Generator

- A. With the generator securely mounted to the Transmission Jack Plate / Floor Jack, position the generator under the compartment. Align and slowly raise the generator into position to the rear stud holes in the compartment. It may take a two man team to accomplish this positioning procedure.

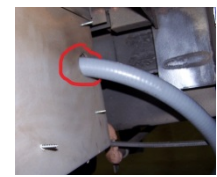


- B. Align the bolt holes in the compartment sheet metal to the bolt holes on the generator. Secure with the bolts, washers and lock nuts.



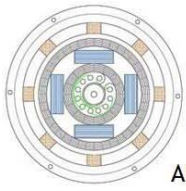
- C. With the generator securely bolted into the compartment execute the following electrical and fuel line connections:

- i. Connect to the 120/240 VAC Power Lead in the adjoining compartment, to a junction box, or mount and connect to a 14-15-R receptacle in the power cord compartment.



- ii. Connect the fuel line and a new fuel return line to the Ford gas fill **as per the separate instruction sheet.**

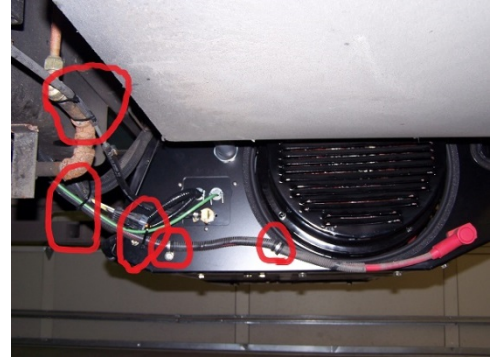
- iii. Connect Exhaust / Catalytic Converter components to the Heat / Exhaust Riser Pipe System **as per the separate instruction sheet.**



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- iv. Connect the 12VDC (Battery) cables. Connect the positive to the insulated terminal, and the ground to the chassis frame.
- v. Connect any remote starter wiring to the generator as necessary. The 416 takes a single momentary positive 12 Volt signal to activate or disconnect the latching relay. Pin #B fires the relay.



INSTALLATION COMPLETE!

Attachments:

- ADyI Fuel Return Line Installation Instructions
- ADyI Heat Riser Pipe Installation Manual