



Platinum Coast



Amateur Radio Society

PCARS

Emergency Generator Operation

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PCARS EMERGENCY GENERATOR OPERATION

The Emergency Generator will power the communications equipment in the trailer during loss of Utility power. The Emergency Generator is located under a shelter at the rear of the north east corner of the Fire Department building next to the Trailer. Figure 1 shows the location of the Utility Circuit Breaker Box, Emergency Power Receptacle Box, and the Generator Shelter.



Figure 1. Utility Circuit Breaker Box, Emergency Power Receptacle Box, and Generator Shelter.

UTILITY POWER LOSS

Step 1. When Utility power is lost, Place the Communications Trailer Main Circuit Breaker to the OFF position. See Figure 2 Communications Trailer Main Circuit Breakers and Circuit Breaker table below.



FIGURE 2. PCARS Communication Trailer Circuit Breaker Panel.

Circuit Breaker Panel.

PCARS Communication Trailer Circuit Breaker Panel		
BREAKER #	FUNCTION	
1	Main Breaker	Double 60A
2	South Air Conditioner	20A
3	Outlets/Lights	20A
4	Outlets/Lights	15A
5	North Air Conditioner	20A
6	Amplifiers	Double 20A
7	Radios	Double 20A

Step 2. At the Generator Shelter lift the front edge of the Shelter top cover, as shown in Figure 3, and slide towards the rear.



Figure 3. Emergency Generator Shelter cover being repositioned.

Step 3. Remove the Front Cover using the two handholds to slide the cover up. Set the cover to the side out of the way.

Step 4. Remove the Generator from the Shelter.





Figure 4. Emergency Generator Removed from Shelter..

Step 5. Check the Generator Oil level and add SAE 30 oil as necessary.

Step 6. Fuel the Generator with regular unleaded gasoline.

Step 7. Obtain the Power Cord located with the Generator.

Step 8. Connect the Power Cord Male Connector, see Figure 5, to the Generator as shown in Figure 6. Note: this is a twist-lock connector.



Figure 5. Power Cord Male and Female Connectors.



Figure 6. Power Cord Connection to Generator.

Step 9. Locate the Emergency Power Receptacle box, adjacent to the Utility Circuit Breaker Box shown in Figure 1

Step 10. Lift the cover and connect the female end of the Power Cord as shown in Figure 7.

Note: This is a twist lock connector.



Figure 7. Emergency Power Input Connector.

Step 11. See Figure 8. Move the Black gasoline Shutoff Valve to the right (counter clockwise) to turn on fuel flow to the engine.

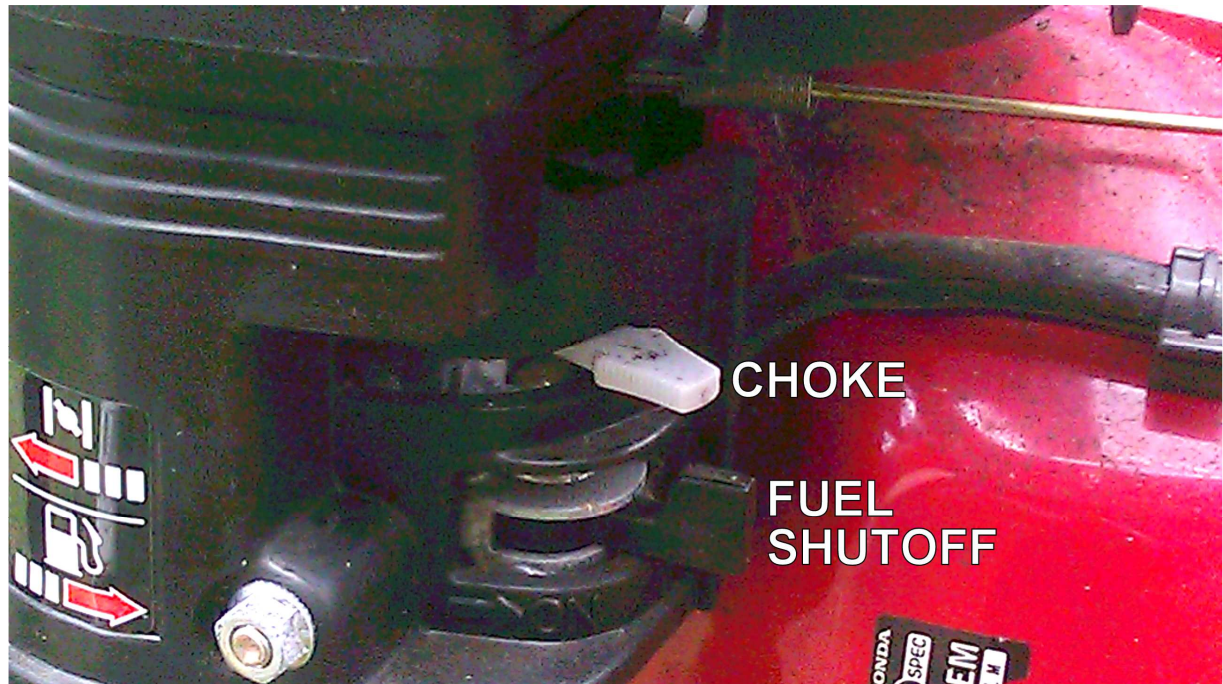


Figure 8. Emergency Generator Choke and Fuel Shutoff.

Step 12. Move the White Choke lever to the left (clockwise) to engage the choke.

Step 13. Locate the Starting Cord handle and give a mighty tug. Repeat as necessary. Engine will start.

Step 14. After the Generator Engine has run about 30 seconds, move the white Choke lever to the right (counter clockwise).

Step 15. At the Utility Circuit Breaker box, shown in Figure 1, open the cover. There are two 60A breakers. One labeled Utility and the other Generator, as shown in Figure 9.



Figure 9. Circuit Breakers shown on Utility Power.

Step 16. Place the Utility breaker to the OFF or down position. Place the Generator breaker to the ON or up position, as shown in Figure 10.



Figure 10. Breakers on Generator Power.

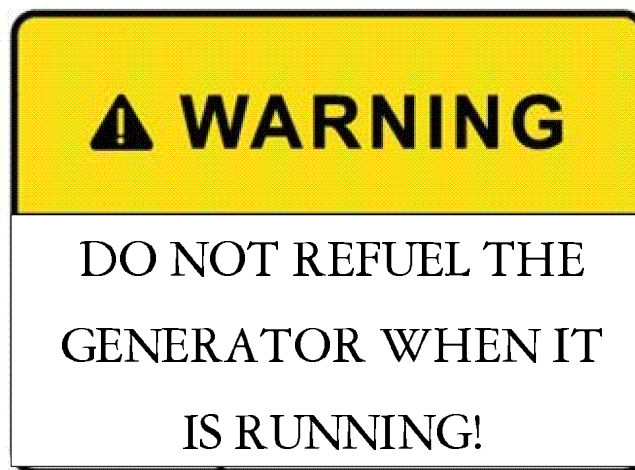
Step 17. In the Communications Trailer, place the Main and other necessary breakers to the ON position and resume Operations.

Routine Checks and Service

During extended operation of the Emergency Generator routine checks and services are required. The Generator will run approximately eight hours on a full tank of fuel.

Step 1. Power down all equipment in the Communications trailer and place the Main Circuit Breaker to the OFF position.

Step 2. At the Generator, Place the Fuel Shutoff Valve to the OFF (clockwise) position. Allow the generator to shut down.



Step 3. Check the oil level and refill as necessary.

Step 4. Fill the fuel tank with Regular Unleaded Gasoline.

Step 5. Return the Generator to service as outlined in UTILITY POWER LOSS paragraphs 11 through 14 above.

Step 6. Place the Communications Trailer Main Circuit Breaker to the ON position and resume operations.

UTILITY POWER RETURN

When the utility power returns and is stable:

- Step 1. Place the Communications Trailer Main Circuit Breaker to the OFF position.
- Step 2. At the Utility Circuit Breaker Box, place the Generator circuit breaker to the OFF (down) position and the Utility circuit breaker to the ON (up) position.
- Step 3. Place the Communications Trailer Main Circuit Breaker to the ON position to return to operation.
- Step 4. Move the black Generator fuel supply valve to the left (clockwise) OFF position.

RETURN TO NORMAL OPERATION

When the emergency operation is ended and the Emergency Generator will no longer be needed:

- Step 1. Disconnect the power cord from the Generator and the Trailer Input receptacles.
- Step 2. After the Generator has cooled, place it and the power cord back into the shelter and replace the shelter cover.

