TT-790 INSTRUCTIONS

Battery Heater Kits PA–258885 and PA–273564 Standby Generator Sets

Kit No. PA-258885

PA-273564

Model 20–100ROZJ 20–150RZ 20–150ROZ 125–180ROZJ 200ROZD

The battery heater kit provides a means to increase battery temperature in cold climates. The battery warmers are connected to a thermostat for controlled heating.

A WARNING



Sulfuric acid in batteries can cause permanent damage to eyes, burn skin, and eat holes in clothing. Always wear splash–proof safety goggles when working around the battery. If battery electrolyte is splashed in the eyes or on skin, immediately flush the affected area for 15 minutes with large quantities of clean water. In the case of eye contact, seek immediate medical aid. Never add acid to a battery once the battery has been placed in service. Doing so may result in hazardous spattering of electrolyte.

A WARNING



Battery gases can cause an explosion.

Do not smoke or permit flame or spark to occur near a battery at any time, particularly when it is being charged. Avoid contacting terminals with tools, etc. to prevent burns and to prevent sparks that could cause an explosion. Remove wristwatch, rings, and any other jewelry before handling battery. Never connect negative (-) battery cable to positive (+) connection terminal of starter solenoid. Do not test battery condition by shorting terminals together or sparks could ignite battery gases or fuel vapors. Any compartment containing batteries must be well ventilated to prevent accumulation of explosive gases. To avoid sparks, do not disturb battery charger connections while battery is being charged and always turn charger off before disconnecting battery connections. When disconnecting battery, remove negative lead first and reconnect it last.

A CAUTION



Hot parts can cause personal injury.

Do not touch hot engine parts. An engine gets hot while running and exhaust system components get extremely hot.



Accidental starting can cause death or serious personal injury. Turn Generator Master Switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

INSTALLATION

- 1. Disconnect battery(ies), negative lead first. Remove battery(ies) from battery rack.
- Place receptacle box bracket 275451 on skid and use as a template to drill two 11/32 in. (9 mm) dia. through skid. Drill holes at the *two* hole locations which are 5.875 in. (149 mm) apart. See Figure 1 and the appropriate view for location. Remove burrs from holes.
- 3. Mount receptacle box bracket to skid using two screws X-465-16, plain washers X-25-40, and lock nuts X-101-8.
- 4. Remove four screws to open relay box assembly.
- Mount relay box assembly (receptacle outlet box) A-272826 (PA-258885 kit) or A-272825 (PA-273564 kit) to bracket using two screws X-125-3, split-lock washers X-21-1, and nuts X-82-2.

6. Locate black and white leads and connect power source. See Figure 2. Wiring should be done according to local codes and National Electrical Code (N.E.C.)

NOTE

All electrical connections should be done by a certified electrician or competent electrical technician.

 Install battery plate warmer 255649 to top of battery rack using two screws X–73–14, plain washers X–25–40 and lock nuts X–101–8. Be sure to place end of battery plate warmer with cord nearest to relay box assembly. Do not plug battery plate warmer into relay box assembly at this time.

Install second battery plate warmer (kit PA-258885 only).

- 8. Replace battery(ies) in battery rack. Secure using battery rack hardware. Do NOT connect battery cables at this time.
- 9. Attach battery wrap heater(s) 258780 to battery(ies) using supplied cable ties. Be sure to place end of battery wrap heater with cord nearest to relay box assembly and with arrow on battery wrap heater(s) pointing upward.
- Plug battery plate warmer(s) into top outlet and plug battery wrap heater(s) into bottom outlet of relay box assembly.
- 11. Energize battery heater kit.
- 12. Reconnect battery, negative lead last.

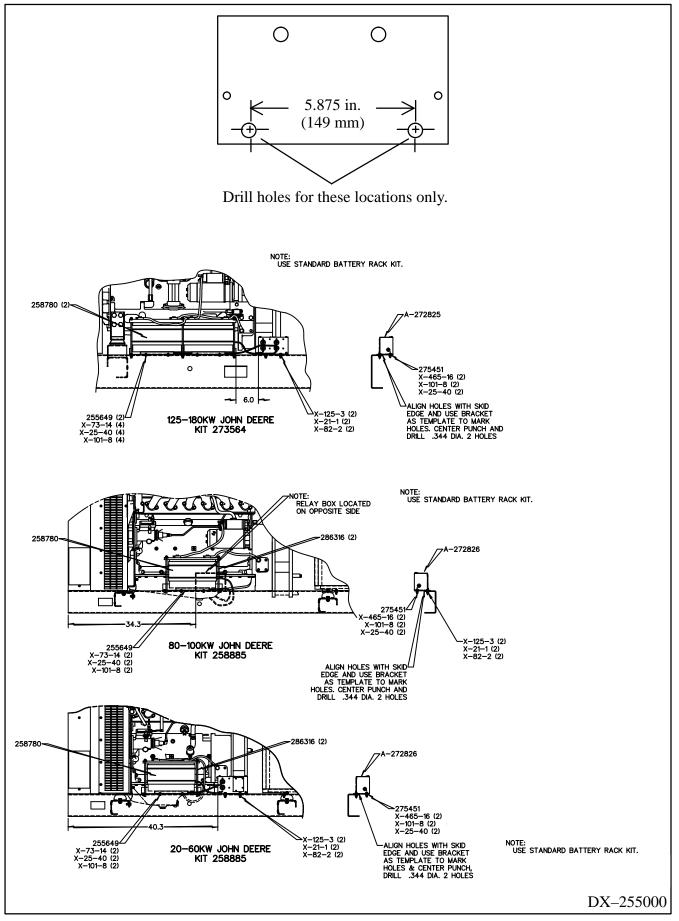


Figure 1a. Installing Battery Heater

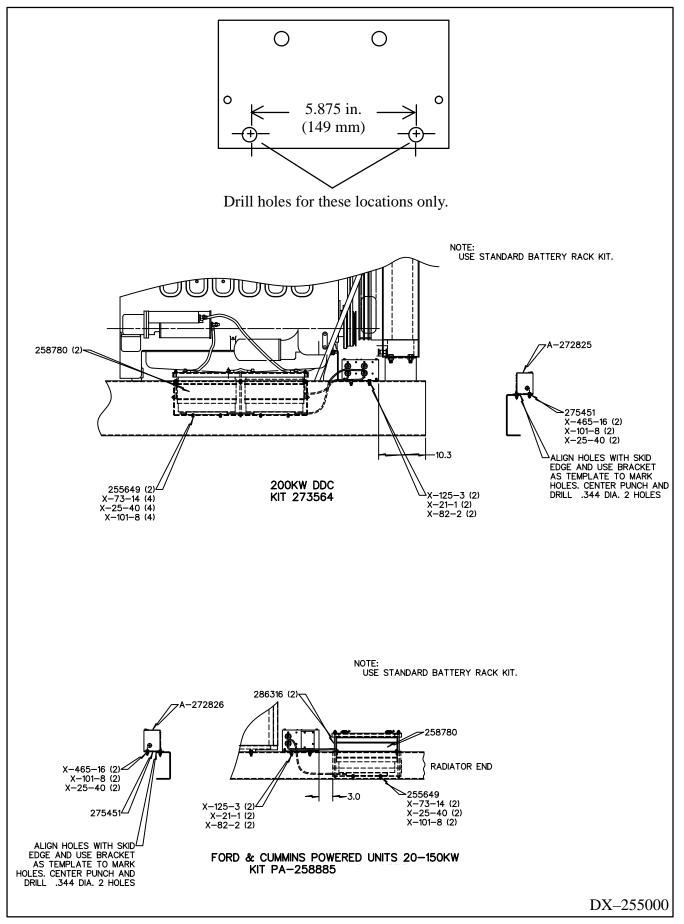


Figure 1b. Installing Battery Heater

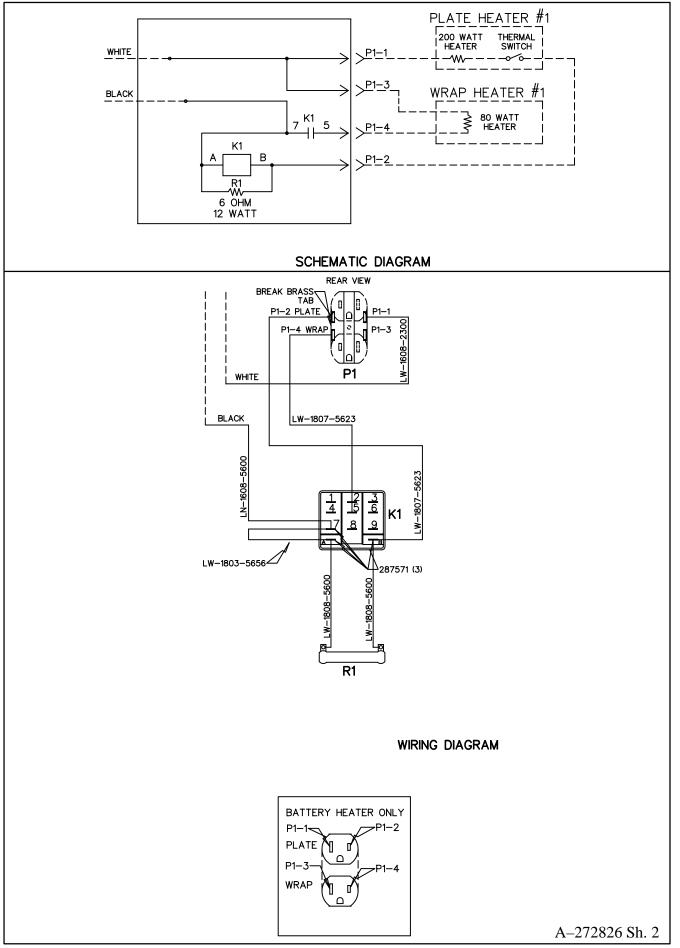


Figure 2a. Battery Heater Kit Electrical Connections (Kit PA-258885)

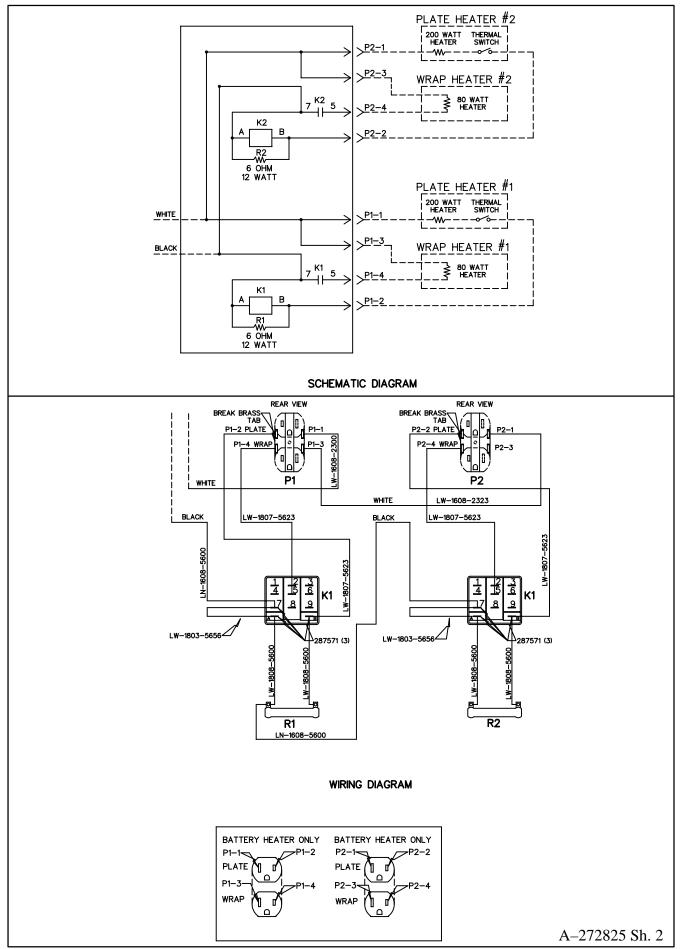


Figure 2b. Battery Heater Kit Electrical Connections (Kit PA-272825)

Parts Listing

		PA-258885 Kit	PA-273564 Kit
Description	Qty.	Part No.	Part No.
Box assembly, relay	1	A-272826	A-272825
Leads	_	(7)(see Fig. 2)	(14)(see Fig. 2)
Washer, #6 split lock	4	X-18-1	X-18-1
Washer, #8 split lock	4	X-18-2	X-18-2
Washer, 3/16 x 7/16 x 3/64 plain	_	(2) X-25-48	(4) X-25-48
Washer, 5/32 x 3/8 x 3/64 plain	_	(4) X-25-9	(8) X-25-9
Screw, 6–32 x 3/8	_	(2) X-49-2	(8) X-49-2
Screw, 6–32 x 1/2	4	X-49-26	_
Screw, 8–32 x 1/2	4	X-51-15	X-51-15
Screw,	4	X-6216-1	X-6216-1
Nut, 6–32	_	(6) X-71-2	(8) X-71-2
Nut, 8–32	4	X-72-4	X-72-4
Receptacle	_	(1) 238581	(2) 238581
Box, relay	1	272820	272820
Plate, cover	1	273822	_
Cover, silkscreen	1	272824	272823
Adapter, tab	_	(3) 287571	(6) 287571
Resistor	_	(1) 292915	(2) 292915
Relay	_	(1) 292916	(2) 292916
Nut, 1/4–20 elastic stop	_	(4) X-101-8	(6) X-101-8
Screw, 5/16–18 x 3/4	2	X-125-3	X-125-3
Washer, 5/16 split lock	2	X-21-1	X-21-1
Washer, 9/32 x 5/8 x 1/16 plain	_	(4) X-25-40	(6) X-25-40
Screw, 1/4–20 x 3/4	2	X-465-16	X-465-16
Screw, 1/4–20 x 5/8	_	(2) X-73-14	(4) X-73-14
Nut, 5/16–18	2	X-82-2	X-82-2
Warmer, battery	_	(1) 255649	(2) 255649
Heater, battery	_	(1) 258780	(2) 258780
Bracket, box	1	275451	275451
Bolt, angle	2	286316	_