
INSTALLATION INSTRUCTIONS

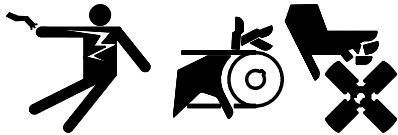
Original Issue Date: 1/97

Model: 750-2000 kW

Market: Industrial

Subject: **Battery Rack and Cables Kits PA-354132, PA-354132-SD,
PA-354133, PA-354133-SD**

The battery rack and cables kit provides a safe and convenient means of securing generator set batteries to the generator set skid. Battery cables supplied in the kit connect the batteries together. Observe the following safety precautions while installing the kit.

⚠ WARNING

Accidental starting.

Can cause severe injury or death.

Disconnect battery cables before working on generator set (disconnect negative lead first and reconnect it last).

Disabling generator set. Accidental starting can cause severe injury or death. Turn generator set 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 the generator set or connected equipment. The generator set can be started by an automatic transfer switch or remote start/stop switch unless these precautions are followed.

⚠ WARNING

Sulfuric acid in batteries.

Can cause severe injury or death.

Use protective goggles and clothes. Battery acid can cause permanent damage to eyes, burn skin, and eat holes in clothing.

⚠ WARNING



Explosion.

Can cause severe injury or death. Relays in battery charger cause arcs or sparks.

Locate battery in a well-ventilated area. Isolate battery charger from explosive fumes.

Battery acid. Sulfuric acid in batteries can cause severe injury or death. Sulfuric acid in battery can cause permanent damage to eyes, burn skin, and eat holes in clothing. Always wear splash-proof safety goggles when working near the battery. If battery acid is splashed in the eyes or on skin, immediately flush the affected area for 15 minutes with large quantities of clean water. Seek immediate medical aid in the case of eye contact. Never add acid to a battery after placing the battery in service, as this may result in hazardous spattering of battery acid.

Battery gases. Explosion can cause severe injury or death. 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 charging. Avoid touching terminals with tools, etc., to prevent burns and 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. Sparks could ignite battery gases or fuel vapors. Ventilate any compartment containing batteries to prevent accumulation of explosive gases. To avoid sparks, do not disturb battery charger connections while battery is being changed. Always turn battery charger off before disconnecting battery connections. Remove negative lead first and reconnect it last when disconnecting battery.

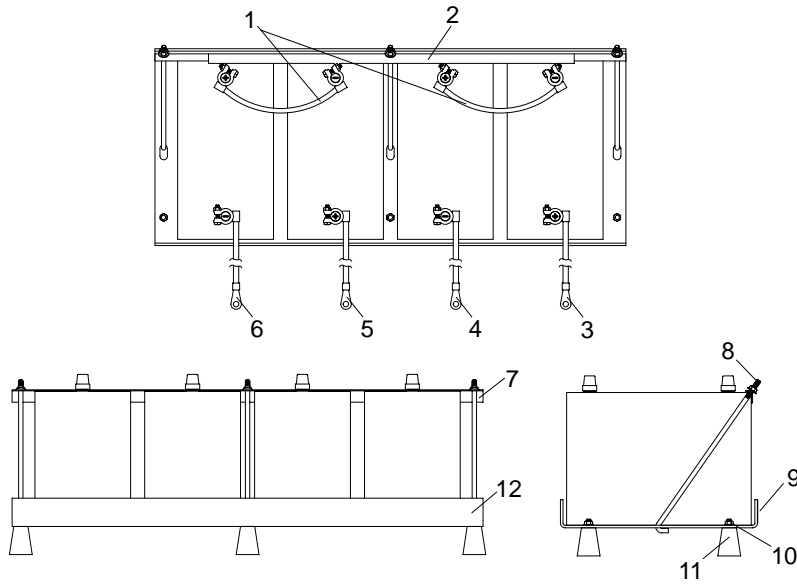
⚠ WARNING	
	
Hazardous voltage.	Moving rotor.
Can cause severe injury or death.	
Operate generator set only with all guards and electrical enclosures in place.	

Short circuits. Hazardous voltage can cause severe injury or death. Short circuits can cause bodily injury and/or equipment damage. Do not contact electrical connections with tools or jewelry while adjustments are made. Remove wristwatch, rings, and jewelry before servicing equipment.

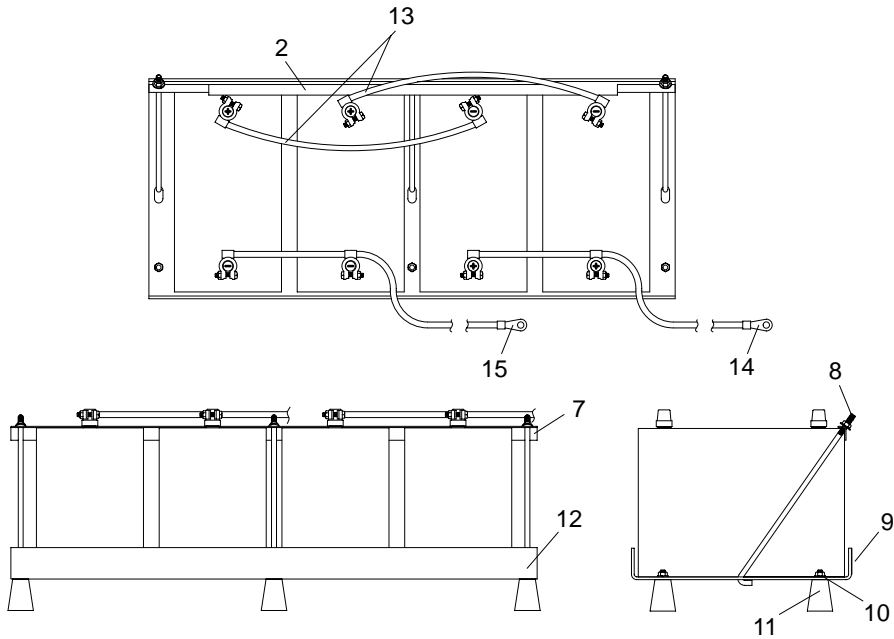
Installation

1. Place generator set master switch in OFF position.
2. Disconnect generator set engine starting battery, negative (-) lead first. Disconnect power to battery charger, if equipped.
3. Install vibromounts (238565) on battery rack(s) (354116) with spirallock nuts (X-6210-7). See Figure 1.
4. Place battery rack(s) in a convenient location near generator set. Battery cable length limits location options.
5. Install batteries (not supplied) as shown in Figure 1.
6. With surface clean and dry, apply warning decal (273780) onto battery rack in a highly visible position. See Figure 1 for recommended location.
7. Install U-channel (X-6047-11) on battery clamp (274570). Place battery clamp on batteries with U-channel resting on battery tops.
8. Secure battery clamp with angle bolts, washers, and nuts.
9. Install two battery cables (X-545-71 or 280133) as shown in Figure 1.
10. Check that generator set master switch is in OFF position.
11. Connect battery cable(s) (X-545-79 or X-545-17 and X-545-107) to positive (+) terminal of generator set starter motor. See Figure 1.
12. Connect battery cable(s) (X-545-80 or X-545-18 and X-545-106) to negative (-) connection of engine starter motor. See Figure 1.
13. Connect positive (+) battery cable(s) to battery positive (+) terminals.
14. Connect negative (-) battery cables(s) to battery negative (-) terminals.

PA-354133 and PA-354133-SD



PA-354132 and PA-354132-SD



KW-272000-

- | | |
|---|---|
| 1. Battery cables, black 8.5 in. (216 mm) | 9. Warning decal |
| 2. U-channel | 10. Spirallock nut |
| 3. Battery cable, red 50 in. (1270 mm) | 11. Vibromount |
| 4. Battery cable, black 50 in. (1270 mm) | 12. Battery rack |
| 5. Battery cable, red 80 in. (2032 mm) | 13. Battery cables, black 16 in. (406 mm) |
| 6. Battery cable, black 80 in. (2032 mm) | 14. Battery cable, red 66 in. (1676 mm) |
| 7. Battery clamp | 15. Battery cable, black 66 in. (1676 mm) |
| 8. Angle bolt, washer, nut | |

Figure 1. Battery Rack and Cables Installation

Battery Rack and Cables Kit

Parts List				
Kits: PA-354132, PA-354132-SD, PA-354133, PA-354133-SD			Unique Parts	
Qty.	Description	Common Parts	PA-354132 PA-354132-SD	PA-354133 PA-354133-SD
	Washer, plain		(18) X-25-85	(9) X-25-85
	Nut		(6) X-101-4	(3) X-101-4
1	Cable, battery red 50 in.			X-545-17
1	Cable, battery black 50 in.			X-545-18
4	Cable, battery black 16 in.		X-545-71	
2	Cable, battery red 66 in.		X-545-79	
2	Cable, battery black 66 in.		X-545-80	
1	Cable, battery black 80 in.			X-545-106
1	Cable, battery red 80 in.			X-545-107
	Channel, u		(2) X-6047-11	(1) X-6047-11
	Nut, spiralock		(12) X-6210-7	(6) X-6210-7
	Mount, vibro		(12) 238565	(6) 238565
	Decal, warning		(2) 273780	(1) 273780
	Clamp, battery		(2) 274570	(1) 274570
2	Cable, jumper			280133
	Bolt, angle		(6) 286316	(3) 286316
	Rack, battery		(2) 354116	(1) 354116