
INSTALLATION INSTRUCTIONS

Heavy-Duty Air Cleaner Kits PA-279780 and PA-279780-SD 1500/1600 kW Models (Detroit Diesel Engine 16V-149TIB)

The heavy-duty air cleaner kit provides extended protection beyond the standard air cleaner. It is well suited for dusty/dirty environments. For determining the proper replacement cycle, the optional air cleaner restriction indicator is recommended.

NOTE

The heavy-duty air cleaners will require a minimum of 29.5 in. (749 mm) of clearance beyond the air cleaner assembly in order to service the air cleaner elements.



Accidental starting.

Can cause severe injury or death.

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

Accidental starting can cause severe injury or death.

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.

⚠ WARNING



Hot engine and exhaust system. Can cause severe injury or death.

Do not work on generator set until unit is allowed to cool.

Hot parts can cause severe injury or death. Do not touch hot engine parts. An engine gets hot while running and exhaust system components get extremely hot.

NOTE

Observe all applicable national, state and local electrical codes during installation.

Installation

1. Move generator master switch to OFF position. Disconnect battery of generator set, negative lead first.
2. Remove existing engine air cleaner, mounting bracket and piping, as applicable.
3. Install mounting brackets (279784 and 279785) and support brackets (279782 and 279783) from kit on sides of engine indicated on Figure 1. Use engine flywheel housing attaching bolts as noted on View A-A on Figure 1.
4. Attach two hose supports (279781) to engine using existing hardware.

Assemble two steel tubes (X-522-64), four hose humps (279720), and four hose clamps (279743) to engine. Use existing hardware and piping as shown in Figure 1. Do not tighten hose clamps at this time.
5. Install four air cleaner assemblies (A-279714) to mounting brackets using eight air cleaner brackets (279715). Do not tighten air cleaner brackets at this time.

Place mounting bracket support (279288) under mounting brackets and attach using existing hardware.
6. Install four rain caps (279722) on air cleaner inlets and tighten hose clamps.
7. After aligning air cleaner assemblies, final tighten air cleaner brackets (279715). Vertically align air cleaner inlets. Final tighten remaining hose clamps.
8. Check to make sure the generator master switch is in the OFF position. Reconnect the generator set battery, negative lead last.

Parts List		
Qty.	Description	Part No.
1	Bracket, mounting (RS)	279784
1	Bracket, mounting (LS)	279785
1	Bracket, support (RS)	279782
1	Bracket, support (LS)	279783
1	Support, mtg bracket	279288
2	Support, hose	279781
4	Air cleaner assy	A-279714
4	Element, primary	279738
4	Element, secondary	279739
8	Bracket, air cleaner	279715
4	Hose, hump	279720
2	Tube, steel	X-522-64
4	Clamp, hose	279743
4	Cap, rain	279722

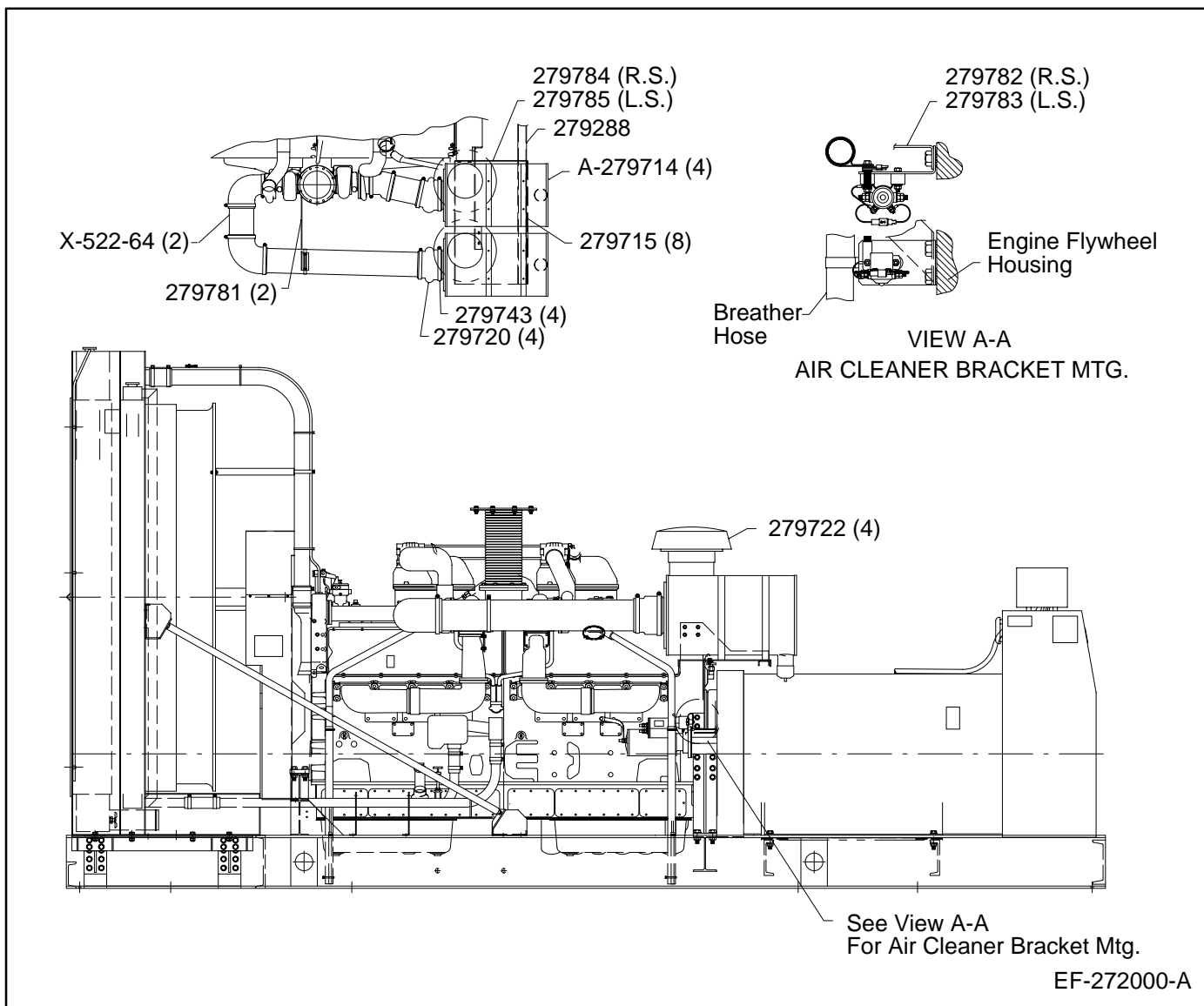


Figure 1. Heavy-Duty Air Cleaner Kit Installation.