MI #1

Made in the U.S.A.

TOOLS NEEDED FOR INSTALLATION:
- Adjustable wrench or ratchet/socket set
- Hacksaw/power reciprocating saw
- Power drill (1/8" drill bit included in kit)
- Slotted-head screwdriver

PARTS INCLUDED IN KIT:
- GenSilencer® Generator Silencer
- Adapter
- 2 Flex Angle Brackets
- Threaded Rod
- Swivel Bracket
- Hardware kit
** IMPORTANT – CHECK THESE BEFORE INSTALLATION **

If any of these is not answered with a “YES”, immediately contact GenSilencer®, Inc.

✓ If your generator exhaust port has a heat shield, are you able to remove it, install the adapter, and then replace it? If you cannot re-install heat shield, **DO NOT** install GenSilencer®.

✓ Is there a flat surface in the 2.5” diameter area from the center of the exhaust vent/muffler on the generator? A flat surface is required for installation of GenSilencer® adapter.

✓ Is exhaust vent/muffler surface parallel with the frame of generator? It must be very close to parallel to mount correctly.

✓ Can you drill into the frame using the drill bit provided to mount the flex angle to the frame?

✓ If horizontal frame dimension is greater than 36” the silencer may not install correctly. Will the two flex angle brackets reach across your generator frame and overlap a minimum of 5 inches for mounting?

✓ Can you mount GenSilencer® parallel to the generator frame, but away from any plastic parts that can sustain heat damage? At least 4 inches of clearance is recommended.

✓ Can the flex angle be attached to the generator frame at least 5 inches above the exhaust opening? If not, call GenSilencer® before attempting to install silencer.
**GENSILENCER® INSTALLATION STEPS**

**STEP 1:** Determine how the silencer will fit to generator.

(A) GenSilencer® will mount horizontally across the face of generator. If generator exhaust opening is left of center line on the side of the generator, the silencer will run left to right. If exhaust tip is right of center on the facing side of the generator, the silencer will run right to left. If there is any plastic or other material that could melt on the generator, turn GenSilencer® the opposite way to prevent melting of plastic housing.

(B) Make sure adapter tip will fit through exhaust hole in heat shield. Place non-flange tip of adapter (small side) into exhaust hole on generator heat shield. The outside diameter of the GenSilencer® adapter is either 1-1/2” (Model GS-112) or 2-3/8” (Model GS-238). If it fits inside that area, then adapter should install properly. There may be a spark arrestor screen that will need to be removed to make adapter fit through hole. The silencer will replace the factory screen as a spark arrestor.
**STEP 2: Installing The Flex Angle Brackets.**

(A) The two flex angle pieces will be bolted to fit together and then be mounted to the generator frame. Once joined, the flex angle bracket will sit approximately 4 to 7 inches above intake pipe center once it is installed. It will sit parallel with the ground and flush with the generator frame on the exhaust side of the generator.

Determine the length of the bracket by measuring generator frame from outside edge to outside edge about 4 to 7 inches above level of exhaust center. Place the two pieces of flex angle together so that upper and lower sides are touching. Adjust the two brackets so that length is at least long enough to reach both sides of generator frame. Make minor length adjustments so that bolt holes line up.

(B) Connect the two flex angle pieces by using the two bolts, hex nuts and washers provided. Bolts should be as far apart as possible to have most secure installation. Place bolts in lower, horizontal surface and secure them from below with washers then hex nuts provided.

(C) Measure from the center of the exhaust outlet up approximately 4 to 7 inches on frame of generator.
(D) Adjust the connected flex angle left or right so that holes in the flex angle match up with the frame of the generator. Holding that position mark pilot holes for drilling in frame.

(E) Drill 1/8” pilot holes using a power drill and the drill bit provided.

(F) Hold assembled angle bracket against generator frame. Place one metal screw washer onto a metal screw, and screw the metal screw into pilot hole. Gently hand-tighten metal screw into pilot holes using a screw driver being sure not to over tighten. **DO NOT use a power drill as this will strip the screw.** Repeat process for other end of flex angle.
STEP 3: **Install threaded rod hanger.**

(A) Position GenSilencer® as it will be attached to generator (left to right, right to left). Adjust swivel bracket so that the flap is perpendicular to the generator (see photo below). Loosely attach swivel bracket to bolt at top of silencer top using hex nut and washer (silencer will be removed later to weld adapter). Then place one of the 5/16” hex nuts onto the long, straight (unbent) end of threaded rod. Screw it half-way down the threaded rod. Place small washer onto threaded rod above the hex nuts.

(B) Line up the GenSilencer® to the exhaust port and hold the threaded rod vertically to find which hole in flex angle to insert threaded rod. Insert threaded rod up into flex angle, and loosely secure with a washer and then a 5/16” hex nut onto threaded rod on top of flex angle. Move the hex nuts up or down the flex angle so that the silencer sits level with the exhaust outlet. The two hex nuts will eventually be tightened against each other to hold tightly to flex angle support after installing the adapter.
STEP 4: Measuring and Installing Adapter.

(A) Carefully remove heat shield on generator. Note position of all bolts and screws used to attach it as YOU MUST REATTACH HEAT SHIELD TO YOUR GENERATOR once you install exhaust adapter tip. **Tip:** take a photo of the heat shield to record and remember proper installation. Be sure to keep track of the screws that attach heat shield to the generator.

(B) Check that adapter will cover the exhaust opening. Once you remove the heat shield from generator, be sure that flanged end of the adapter will cover the entire exhaust port(s). Hold the large end of adapter over the exhaust. Check the following:

- Does it cover the entire exhaust area (some exhausts are a pattern of drilled holes)?
- Can you reinstall the heat shield while holding the adapter over the exhaust?
- Does the adapter sit flush with the muffler surface (no gaps under the adapter flange)?

*** If you answer “NO” to any of these questions stop installation and contact GenSilencer®, Inc. ***

(C) Adjust length of adapter. In most cases the adapter is too long and needs to be trimmed to the proper length to connect to the silencer. To determine that length, hold the adapter tube with flange end flush with generator muffler and also hold GenSilencer® intake tip near the adapter tube end. Be sure silencer is parallel to the generator and will slip straight onto the adapter. Mark the adapter where the intake tip meets it. Take mark made on adapter tip and make another mark 1-½” (1.5 inches) away from the muffler (making the adapter longer). This extra 1-½ ” will go inside the intake tip. ***DON’T CUT THIS PIECE TOO SHORT! MEASURE TWICE SO THAT ADAPTER WILL REACH INTAKE AND ALSO INSERT INTO IT BY THE ADDITIONAL 1-½” ***. Then cut the adapter tip off at this 2nd longer mark using a hacksaw or power saw with a metal cutting blade.
**STEP 4: Continued..**

**(D)** **Connect adapter tube to intake of GenSilencer®.** Once cut, insert adapter completely into GenSilencer® intake tube. If fit is too tight to fully insert by 1-½” then gently sand the outside of the intake to reduce its diameter. Sandpaper or an emery cloth will work well. The same can be done to the inside of the adapter.

Hold other end of adapter up to face of the muffler making sure it is flush against muffler face. GenSilencer® should be adjusted so that the silencer is hanging horizontally and threaded rod is positioned vertically. If either is not, loosen the hex nuts and retighten until the silencer and threaded rod are hanging properly.

**(E)** **Position adapter and drill muffler face.** Remove adapter from GenSilencer®. Re-position the gasket and adapter tip so that the flanged end covers the ENTIRE exhaust exit. If the exhaust is a tube, the gasket and adapter flange will fit over the tube end and onto the muffler surface. If the exhaust is a series of drilled holes, then the gasket and adapter flange must be attached so that ALL the holes are covered by the adapter. *Any exhaust leakage will reduce the performance of the silencer.* With adapter and gasket positioned properly, mark the 4 holes where the gasket and adapter will be attached to the muffler face. Remove gasket and adapter from muffler face. Using the included 1/8” drill bit, drill 4 holes in muffler face where muffler is marked.

**(F)** **Attach adapter and gasket to muffler face.** Place gasket on muffler face, then place adapter onto gasket lining up all holes. Insert grooved hex-head screw into hole and gently hand-tighten with 5/16” or 8mm socket. **DO NOT over-tighten or use power drill to tighten grooved hex-head screws.**

**(G)** **Lock screws in place.** Place the locking retainer onto the screw head positioning it so that the retainer will prevent the screw from counter-clockwise loosening due to vibration. The pointed end of the retainer will rest against or very near the adapter wall on the counter-clockwise side of retainer. Be sure it matches the photo below. Then slide the clip onto the screw head slot above the retainer. This will lock the system in place.

**(H)** **Re-install generator heat shield.** If there is a screen that covers the hole in heat shield where adapter will pass, it may be necessary to remove or trim the screen. Be sure it is secure like originally mounted. **DO NOT operate the generator without the original heat shield installed correctly.** See warnings at beginning of instructions.
STEP 4: Continued..

(I) **Adjust fit of adapter to GenSilencer®.** Place GenSilencer® back onto adapter. **Do not twist GenSilencer® to install as this will damage the intake attachment.** Install it by placing GenSilencer® in adapter and then lightly tapping the silencer’s 90° intake end until it goes into adapter 1-1/2”. Use a rubber mallet or a block of wood with a hammer so as not to damage paint. Don’t let the generator muffler take the force of the impact.

If fit of adapter to GenSilencer® is at all loose, then a metal screw will be inserted into the overlap between the two to strengthen the fit between them. Mark a spot that is ¾” from the tip of the GenSilencer® intake. Be sure the intake and adapter overlap at this point. Drill a 1/8” hole using the metal drill bit (included in installation kit) that penetrates only one sidewall of the intake and one adapter sidewall that lies inside it. **Do not** drill through both sides of the intake. Once hole is drilled take a ½” metal screw and install intake to the adapter through the common hole. Hand-tighten using a screw driver, not a power drill, as the drill will strip the screw.

GenSilencer® is now ready for use. Follow all important safety Precautions listed in your generator’s instructions.

**** IMPORTANT ****

**** READ WARNINGS AT END OF INSTALLATION INSTRUCTIONS ON NEXT PAGE****
*** WARNINGS ***

Read instructions carefully and understand proper operation of generator and GenSilencer® prior to installation and use. Be sure to heed ALL warnings and follow ALL instructions.

Despite the safe design of the GenSilencer®, operating this equipment imprudently, neglecting its maintenance or being careless can cause possible injury or death. Keep the generator and GenSilencer® properly maintained, dry, clean, and free of oil, mud and other foreign matter.

For fire safety, the generator must be operated and maintained properly. Operation must comply with applicable codes, standards, laws and regulations. Adhere strictly to local, state and national electrical and building codes. Comply with regulations the Occupational Safety and Health Administration (OSHA) has established. Also, ensure that the generator is operated in accordance with the manufacturer’s instructions and recommendations.

Potentially lethal voltages are created by generators. Ensure all steps are taken to render the machine safe before attempting to work on the generator. Disconnect the battery cables from the battery post indicated by a NEGATIVE, NEG or (-) first. Be sure to reconnect that cable last. To prevent accidental starting, always remove the spark plug or cable from the spark plug before installing GenSilencer®.

Be sure generator is not hot to the touch before installing GenSilencer®. Exercise extreme care near generators. To avoid burns, do not touch GenSilencer®, engine muffler or other engine or nearby generator surfaces which become hot during operation. Running engines produce heat during operation and are very hot long after they have been shut off. Severe burns can occur on contact. Allow equipment to completely cool before touching.

DO NOT leave heat shield off of generator if removed for installation. If heat shield cannot be reinstalled, DO NOT operate generator and do not install GenSilencer®.

GenSilencer® cannot anticipate every possible circumstance that may involve a hazard. The warnings in this manual and directly on GenSilencer® are not all-inclusive. If you use a procedure, work method or operating technique GenSilencer® does not specifically recommend, you must satisfy yourself that it is safe for you and others and does not render the generator unsafe.

If you have any questions please contact us by e-mail at info@gensilencer.com or call (866)-EXHAUST (866-394-2878) between 9 am and 5 pm eastern time Monday – Friday.