



Frostbite Electric Fan(s) & Shroud Kit Installation instructions (Economy & High Performance versions)

KIT INCLUDES THE FOLLOWING COMPONENTS:

- Fan Shroud
- Electric Fan(s)
- Installation Sheet

THE FOLLOWING ITEMS WILL BE REQUIRED TO COMPLETE YOUR INSTALLATION

- #10 (3/4") self-tapping sheet metal screws (6-8 depending on application)
- 10mm-24 bolts w/ lock washers & acorn nuts (for Econo Series kits) (4 or 8)
- 1/4"-20 bolts w/lock washers & acorn nuts (for HiPo Series kits) (4 or 8)
- 10mm wrench or 1/4" wrench

Please read and review all of the instructions prior to any temporary or permanent installation of these fan(s) and/or shroud.

NOTE: CAREFULLY PLAN YOUR PROJECT!

The components within this kit are essential to your vehicle's cooling system and should be handled with care. Please think through each step of the assembly to avoid damage to your shroud, fans, and radiator.

- 1) Take all components of your fan(s)/shroud kit out of packaging. Inspect contents to ensure all items are present. If any severe damage to packaging is evident, please contact your place of purchase for return.
- 2) Temporarily position the shroud on the engine side of the radiator while the radiator is in the vehicle. Several small clamps or vise grips are ideal for holding and positioning the shroud to the radiator to assist in determining any clearance issues with your desired mounting location.

NOTE: The shroud has been designed to be mounted to the radiator side channels located on the sides of the radiator (Down Flow Style Radiators) or at the top and bottom of the radiator (Cross Flow Radiator). If your radiator side channels are close, but do not match the width of the shroud, see step #3)

- 3) Place your radiator engine side up on your work surface. Place and re-align your finished fan shroud in its final mounting position on your radiator. Drill and secure your fan shroud permanently to the side channels of the radiator based on your previous marking. Using six (6) stainless steel machine screws and locking nuts or 6 self-tapping screws to secure your shroud to the radiator.

Extending the Range of the Mounting Flanges:

For radiators that are outside or inside the existing width of the shroud. Place the shroud and align it to the top of the radiator flange and mark the mounting hole positions on the top. Using the provided L tab extensions, place the tabs in location on the bottom of the radiator flange and bridging to the shroud mark these locations. Use the hardware included. Additionally, a pop rivet or weld may be used.

NOTE: In some applications the flange or side channel will have limited or no access to the back side. In order to secure the shroud in these cases pop rivets or self-tapping screws may offer the solution. Please remember **EXTREME CAUTION** should be exercised as outlined in the NOTE prior to Step #1.

WARNING: DO NOT mount your shroud to the radiator tanks, tubes or the radiator core as this may damage your radiator. Any attempt to drill, rivet or screw your fan shroud into a radiator tank or tube will cause the radiator to leak and become unusable.

NOTE: Most side channels fold out and away from the core. Some radiators have side channels which fold over the radiator core. If your side channel folds over the radiator core, extreme caution should be used when either drilling through the side channel of the radiator or permanently mounting the shroud to the radiator. Safety items like a “drill stop” may be necessary for this installation. If you are unable to drill through this “fold over” style channel, other mounting fabrication must be considered to mount the fan shroud to this type of radiator. We recommend you temporarily center the shroud on the radiator. Please note the location of the other engine mounted devices and drive belts as it’s necessary to find a location for the fan shroud which does not interfere with other components.

- 4) When you are satisfied that you have the fan shroud properly positioned, mark all of the mounting holes on each of the outer side channels or top and bottom mounting channels (depending on radiator style).
- 5) Remove your temporarily mounted fan shroud from the radiator and then remove your Frostbite Radiator from the vehicle.
- 6) With your fan shroud removed from the radiator and laying Engine side up on your work surface, take your electric fan(s) and place onto shroud carefully lining up mounting tabs on the fans with the corresponding (4) holes on the shroud for each fan. Attach electric fan(s) to fan shroud. Make sure all screws are firmly attached to the shroud.
- 7) Re-install your radiator and fan shroud (if able) as a complete assembly. Make sure you reconnect and replace **ALL** removed parts and hoses from your vehicle and refill your cooling system with the proper coolant.
- 8) Now you can proceed to the wiring of the electric fan(s) to your existing electrical system. Please refer to the installation and wiring instructions found in our **Frostbite Cooling Fan/Relay Kit Part # FB403** or similar product. If using another relay kit other than the Frostbite kit, please verify AMP capacity of the kit you are using. The Frostbite Fan/Relay kit is rated for a maximum 40AMP load. If your fan setup exceeds 40AMPS, you will need to use an additional Fan/Relay kit.
- 9) Once your Fan/Relay kit has been correctly installed per instructions, check all connections to make sure they are secured properly and ensure that all wiring/connections are not in the way of and moving engine parts.

The Frostbite Fan/Shroud Installation Instruction sheets cover the following listing of Fan/Shroud kits. Please refer to your part number to ensure these installation instructions are applicable.

P/N	Application Fitment	Fan Config.	P/N	Application Fitment	Fan Config.
FB500E	Econo Series FB168-FB170	1 x 16”	FB500H	HiPo Series FB168-FB170	1 x 16”
FB501E	Econo Series FB132-FB134	2 x 14”	FB501H	HiPo Series FB132-FB134	2 x 14”
FB502E	Econo Series FB162-FB164	2 x 12”	FB502H	HiPo Series FB162-FB164	2 x 12”
FB503E	Econo Series FB141-FB143	1 x 16”	FB503H	HiPo Series FB141-FB143	1 x 16”
FB504E	Econo Series FB173-FB175	1 x 16”	FB504H	HiPo Series FB173-FB175	1 x 16”
FB505E	Econo Series FB120-FB122	1 x 16”	FB505H	HiPo Series FB120-FB122	1 x 16”
FB506E	Econo Series FB112-FB114	2 x 12”	FB506H	HiPo Series FB112-FB114	2 x 12”
FB507E	Econo Series FB117-FB119	1 x 16”	FB507H	HiPo Series FB117-FB119	1 x 16”
FB508E	Econo Series FB123-FB125	2 x 12”	FB508H	HiPo Series FB123-FB125	2 x 12”
FB509E	Econo Series FB135-FB137 & FB 144-FB146	2 x 10”	FB509H	HiPo Series FB135-FB137 & FB 144-FB146	2 x 10”
FB510E	Econo Series FB150-FB152	2 x 12”	FB510H	HiPo Series FB150-FB152	2 x 12”
FB511E	Econo Series FB126-FB131	1 x 16”	FB511H	HiPo Series FB126-FB131	1 x 16”
FB512E	Econo Series FB153-FB155	2 x 14”	FB512H	HiPo Series FB153-FB155	2 x 14”
FB513E	Econo Series FB147-FB149	2 x 10”	FB513H	HiPo Series FB147-FB149	2 x 10”
FB514E	Econo Series FB156-FB158	2 x 12”	FB514H	HiPo Series FB156-FB158	2 x 12”
FB515E	Econo Series FB156-FB158	1 x 16”	FB515H	HiPo Series FB156-FB158	1 x 16”
FB516E	Econo Series FB159-FB161	2 x 12”	FB516H	HiPo Series FB159-FB161	2 x 12”
FB517E	Econo Series FB106-FB108	2 x 10”	FB517H	HiPo Series FB106-FB108	2 x 10”
FB518E	Econo Series FB106-FB108	1 x 16”	FB518H	HiPo Series FB106-FB108	1 x 16”
FB519E	Econo Series FB191-FB193	1 x 16”	FB519H	HiPo Series FB191-FB193	1 x 16”
FB520E	Econo Series FB103-FB105	1 x 16”	FB520H	HiPo Series FB103-FB105	1 x 16”
FB521E	Econo Series FB109-FB111	1 x 16”	FB521H	HiPo Series FB109-FB111	1 x 16”
FB522E	Econo Series FB165-FB167	2 x 14”	FB522H	HiPo Series FB165-FB167	2 x 14”
FB523E	Econo Series FB188-FB190	2 x 12”	FB523H	HiPo Series FB188-FB190	2 x 12”