



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