WolfKatz Do It Yourself Engine Lid Fan Installation Instructions:

Fans - Pic you fan type: Tripac / Hayden or Spal

For fan purchases, we recommend this site: www.racerspartswholesalers.com as they have great prices do to their high volume!

Tripac Link: http://www.racerpartswholesale.com/fan1.htm you want # TRI - 4110B1 Spal Link: http://www.racerpartswholesale.com/fan.htm you want # SPA00374

If you are in a hurry, Hayden fans are Tripac fans with a different sticker and are available at your local autoparts store.

Tripac / Hayden fans are reversible

Tripac 10" Reversible Fan: Part Number 14-4010B1

Hayden 10" Reversible Fan: Part Number 3670

Spal 10" Standard Pusher Fan: Part Number VA11-AP8/C-29S Fan (10")

Parts List - Buy hardware, Relay and Wire

For Tripac/Hayden fans, here is the parts list (I spent ~\$5 at my local hardware store for these parts)

- 8 10-32x 1 1/4" long Round Head Machine Screws
- 2 10-32x 3/8" long Round Head Machine Screws
- 10 10-32 nuts
- 10 #10 washers
- 10 #10 lock washers
- 30 amp 12 V relay (most autoparts stores have this if your hardware store does not)
- Misc. 14 gauge wire, plugs for relay

For Spal Fans

- 8 10-32 x 1 1/2" long Round Head Machine Screws
- 2 10-32x 3/8" long Round Head Machine Screws
- 10 10-32 nuts
- 10 #10 washers
- 10 #10 lock washers
- 8 1" long Nylon Spacers with hole large enough for the #10 screws
- 30 amp 12 V relay (most autoparts stores have this if your hardware store does not)
- Misc. 14 gauge wire, plugs for relay

Installation

Step 1:

Remove your old engine lid cover. Un-plug the air temp sensor on the stock engine lid and un-bolt it. There are a series of black Phillips head screws you will need to take out.

If you are not using a gas charged prop rod, be sure to brace the engine open with something else (I used a mag light) and remove the black screws and black engine lid cover. Save the screws as they will be used with your new plate. If you are still planning on using the stock prop rod, use a pair of needle nose pliers to remove it.

Step 2:

Mount your fans.

Tripac / Hayden Fans:

Take the fans and lay them on the back side of the engine lid plate to be sure you ordered the proper fans. Now, put the fan on the bench and drill 4 holes (1/4 inch or a bit larger) where shown in the picture below:



These holes will be used to hold the fans in. Now lay each fan as it will be mounted and use a punch or pen to mark the 4 holes for each fan.



Remove the punch and drill the holes. Use a smaller drill first as a "pilot drill" and then run a ½" bit in. Now, use the 8 1 ½" long 10-32 screws with washers, lockwashers, and nuts and mount the fans as shown above and you are done!

Spal Fans:

Be sure they are the right fans. Hang one side of the fan plate off the end of the bench and use you good ol' eyeballs to put the fan in the center of the cutout as shown below:



Hold the fan in place and mark the holes with a pen or a punch. Do this for both fans. Now, drill the 4 ¼" holes for each fan. Use a small pilot bit first to help you keep the holes from wandering when you start them. Now, using the spacers, long 10-32 screws, washers, lock washers, and nuts flip each fan over and screw it in place using the spacers to put it at the correct height.

The following pictures shows a Spal fan mounted on the left and a Tripac / Hayden on the right.



Step 3:

Complete Fan Mounting

Use the remaining screws and hardware to screw in your air temp sensor. Now sling this baby, fans and all up into place. Put all the black screws back in and all other screws you may have taken out. Congrats, the plate is in!

Step 4:

Wiring

Now, wire up your relay according to the diagram it came with. I opted to put a switch to turn the fans on and off in my dash, others run them all the time.

Hints:

- 1) There is a good constant 12V power source in the fuse box in the engine compartment. It has a bolt going to a few red cables and is hard to miss.
- 2) For your switched power source, come off the bottom of the EFI fuse on the same fuse box
- 3) Use #14 wire to each fan and to ground, any smaller will overheat the wire. Use #12 if you are paranoid.
- 4) You can use #20 or even #22 wire for the switching.
- 5) You may want to consider putting some connectors between your fans and the relay as you may want to be able to un-plug them in the future.

Final Notes:

You may decide you want to put washers under the engine lid plate to flatten it out. Two of the mounting holes near the center line just below the fans are good ones to start with if you want to try this. If you want to polish the plate, you can do it, but be prepared to spend some time. Start on the back side first in-case you decide to give up. It is 6061 AL. There are many compounds around and methods out there. Do some research before you start.

Good Luck!