



## **TriangleATV – SNORKIT HN450**

### **Installation Instructions** (Revision 3.0)



1. Remove seat for access to airbox and factory snorkel.
2. Remove the factory snorkel (See picture 01) from the airbox by loosening the clamp. The upper part of the factory snorkel snaps onto the frame. It might be necessary to remove the plastic rivets from the rear area of the fuel tank for removal clearance.
3. Remove the left inner fender to allow for trimming. Take notice of new Snorkit routing location before removal (See pictures 02 & 03).
4. Trim left inner fender to allow for Snorkit pipe (See picture 04). Careful trimming should allow for a snug fit with minimal gaps. Use a sharp thin blade knife (such as a paring knife). Start with a small hole and work it larger, using the Snorkit pipe as a gauge to achieve best fit. *(Fear not! If something goes wrong a new inner fender can be purchased for \$3.91 from Ronnies.com)*
5. Install Snorkit mounting bracket to front rack at location shown (See picture 05).
6. Using the bracket as a guide, carefully mark the upper fender for location of the Snorkit penetration through the fender (See picture 06) and then remove bracket. *Be careful to double and triple check size and location.*
7. Cut a hole in the upper fender as shown to allow Snorkit penetration. The hole must be large enough for the pipe to penetrate past the threaded end. A hole saw or a sharp thin knife may be used (See picture 07). When using a knife, starting small and working outward works best. If a hole saw is used, simply mark the center of the hole for the pilot drill. *Note: This is the most critical step in the procedure and care must be taken!* (See picture 08 for finished hole)
8. Install Snorkit angle pipe (See picture 09) by sliding the small end through the inner fender well penetration from front to back (See picture 10) and pushing larger (threaded) end up through the fender penetration.
9. Thread Snorkit mounting bracket onto the large (threaded) end of the angle pipe where it is coming up through the fender. *Teflon tape or thread compound may be used to ensure a good seal although it is not necessary.* Orient the bracket squarely (welded side up) and U-bolt the bracket to the rack (See picture 11). The sloping bracket compensates for the slope of the rack creating a vertical riser pipe orientation.
10. Install riser pipe (interchangeable short & long riser pipes provided) by threading the riser into the bracket until it is snug and then rotate the elbow to the orientation desired. *The elbow is left unglued purposely to allow variation in orientation and to be used with either riser height. No gluing is necessary. Teflon tape or thread compound may be used on the threaded connection to ensure a good seal although it is not necessary.*
11. Trim the left mud flap to allow clearance for Snorkit pipe as required (See picture 02).
12. Install the heavy duty rubber coupling (provided) on the end of the pipe as it comes through the mud flap (See picture 12). *TIP: Before moving to the next step, pull the rubber spark plug cap and fill with **Di-Electric grease** (provided). Reattach the spark plug cap securely to the spark plug.*
13. Install the Snorkit inlet pipe by sliding the small end under the plastic and into the airbox as far as it will go. This should allow the larger end to clear the Snorkit rubber coupling which allows insertion into it. Insert the pipe into the Snorkit rubber coupling about one inch.

14. Rotate the inlet pipe as required to provide adequate clearance around the engine and exhaust pipe (See picture 13). Tighten the clamps on the Snorkit rubber coupling and tighten the clamp at the inlet to the airbox.

## Vent Connections

There are five vents that must be routed to the Snorkit angle pipe. Fittings are provided for connections into the pipe as well as a petcock to allow easy draining of the system (See picture 15). The existing five vents can be found inserted into the frame of the Foreman adjacent to the steering shaft. The front vents are vented to the left side of the frame and the rear vents are on the right side along with the cooling fan motor vent line.

1. Disconnect the front brakes vent line and the front differential vent line from the frame and connect each of them to one of the fittings on the Snorkit. (The lines may be cut near the plastic frame connector fitting if desired)
2. Disconnect the rear brake and the rear differential vents from the frame and connect them together using the tee fitting (provided). Run a single tube (provided) from the tee and connect it to one of the fittings on the Snorkit.
3. Disconnect the cooling fan motor vent from the frame. Install the tubing coupler (provided) and run tubing (provided) to the Snorkit.

## Carburetor Adjustment

The Snorkit allows slightly more air flow than the factory air inlet. In order to provide the correct air/fuel mixture you will need to change your needle setting on your carburetor. (**Note:** These instructions are the results of testing on a stock Foreman set-up. Modified bikes could require some trial and error testing to achieve correct air/fuel mixture.)

1. Remove the seat and the rubber flap over your carburetor.
2. Remove the cover off of the top of the carb (4 phillips screws).
3. Pull the black slide and spring out of the carb.
4. Insert a phillips screw driver down into the slide and rotate the plastic keeper to the left to remove it with the needle and spring.
5. Raise the needle up as high as it will go by putting the clip on the lowest notch (towards the pointed end See picture 14).
6. It will probably run fine set like this but sometimes you need to add another little washer under the clip to raise the needle a little higher. A small washer is provided with the kit. Sometimes it is necessary to file off the large end of the needle to allow it to “float” in the slide (See picture 14).
7. Put it all back together. Be careful to get the cover back on correctly. It has to go a certain way!



**Picture 01**



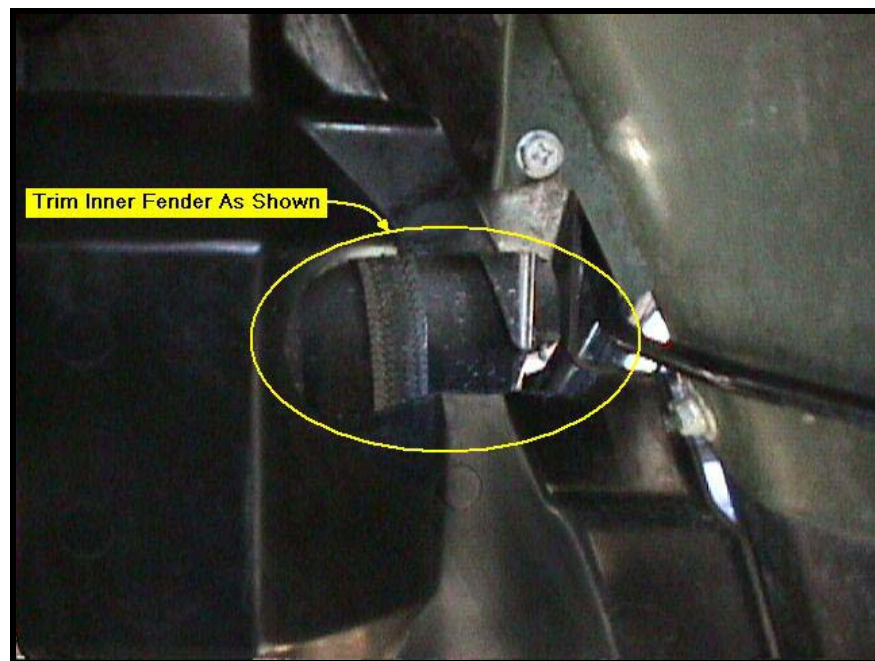
**Picture 02**



**Picture 03**



**Picture 04**





Picture 05



Picture 06



Picture 07



Picture 08





**Picture 09**



**Picture 10**



**Picture 11**



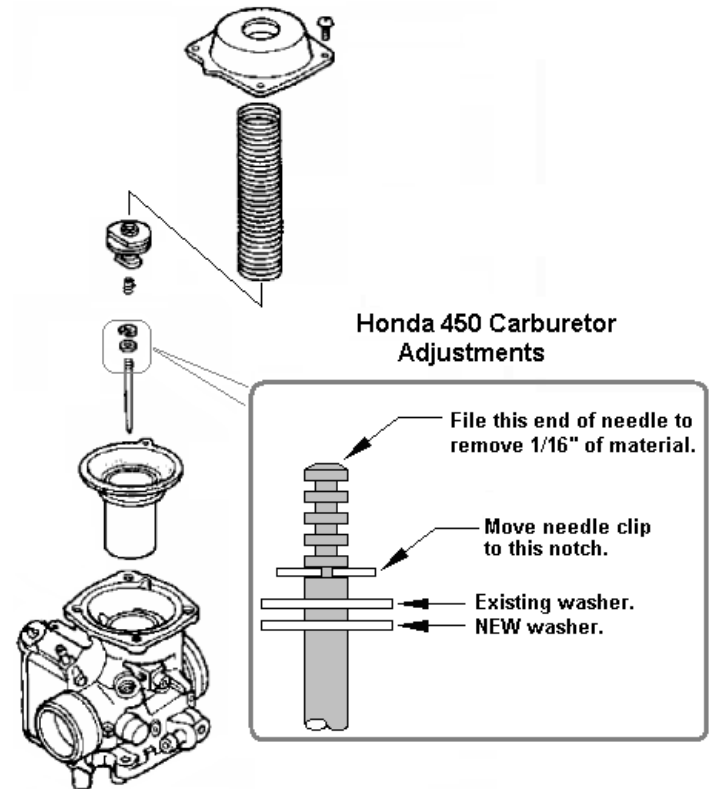
**Picture 12**



Picture 13



Picture 14



Picture 15

### Snorkit Petcock Drain Operation



Drain is Closed  
in down Position.



Drain is Open  
in up Postion.