

## Why is air filter maintenance so important?

- The maintenance of your ATV's air filter has a direct effect on your engines performance and reliability. Air is a vital factor in determining the amount of horsepower your engine can make. A dirty air filter can inhibit air intake, which in turn will hamper your engines performance.
- Secondly, and most critical, if your engines air filter is not cleaned, correctly oiled, and changed on a regular basis, your engine will undoubtedly suffer premature internal engine wear and an untimely loss of performance.
- Proper air filter maintenance is especially critical on modern day 2-Stroke ATV engines. If
  dirt, sand or any foreign debris pass through the air filter and into the air duct system it then
  has a clear shot through the carburetor and reed cage to the piston. Any foreign debris
  attacking your piston and its related components can greatly accelerate the wear process in
  your engine.

## Recommended Air Filter Maintenance for K&N and Foam Filters

- Remove dirty air filter from machine. Never try to wash a dirty filter on the machine.
- Lightly spray filter with 409 or similar type solution to start breaking down the oil on the filter. You can also use a mild parts cleaning solvent to help break down the old filter oil.
- Fill a bucket (minimum one gallon in size) with HOT soapy water (use a strong detergent like Tide). Submerge filter into bucket of hot water, and let soak for 10-15 minutes.
- WASH: After filter has soaked thoroughly, clean filter. For K&N filters use a soft bristled brush, to clean dirt and grime from all the pleats. Be especially careful not to damage the gauze type inner material or bend the outer wire mesh. For Foam filters wash the filter out by hand, be mindful not to tear or rip the filter.
- RINSE: After filter has been washed extensively, it must be rinsed thoroughly. Filters should be rinsed from the inside out. A garden hose (or equivalent) works well. During the rinse process inspect filter for any dirt or grime. Specifically check the ends where pleated edges (K&N) end. If any signs of dirt are still apparent, repeat the washing process. K&N filters should be an off white color when clean and dry, foam filters will be back to their original new color.
- DRYING: K&N filters should be set in a non dusty, well ventilated area to air dry for a minimum of 24 hours or until filter is completely dry. Foam Filters should be compressed to remove any excess water (do not ring-out filter, this may tear or rip filter) then wiped



with paper towels. After wiping down filter let air-dry in a non-dusty, ventilated area for a minimum of 24 hours. The reason the drying process is so important, is because a filter that is still damp inside will not allow the filter oil to adhere properly to the air filter.

OILING: K&N filters should be oiled with K&N aerosol oil. From approximately 6 inches away spray oil evenly up and down each pleat, then in a circular motion spray around the ends. Let filter sit for approximately 1 hour and repeat initial oiling step. Inspect after second coat of oil, color should be a solid red with no light or pink spots. If you see any light spots add oil. For best results let filter sit over night before installing.

Before installing filter wipe off over spray of oil on clamping flange. Failure to clean the air cleaner flange can allow filter to slip off when clamped on.

- OILING: Foam filters should be oiled with MAXIMA Foam Filter Treatment. For the easiest oiling method, get a large zip lock bag. Fold filter like a taco and pour a generous amount of oil onto filter. Then insert filter into bag and with your hands on the outside massage oil through out the filter. Look for filter to turn an equal shade of color over entire filter. Light shades will mean low oil content, dark shades will mean heavy oil content, and an even color throughout is desired. For best results let filter sit overnight before installing. If filter is clamp-on type wipe off any oil that got on rubber flange (clamping area). For filters that do not clamp-on put seat against the air box, apply a moderate coat of MAXIMA Water Proof Grease to the mating surface before installation. This is necessary to prevent dirt from passing around air filter and into engine.
- The cleaning process usually takes 2-3 days from start to finish. It is advisable to have a collection of 3-5 air filters that are in good condition. It is much easier and time efficient to service filters in a group and store in zip lock bags, so they are ready when needed.
- AIRBOX: The maintenance of the air box is almost as important as the air filter itself. The box should be wiped out during each filter change. The box should be washed before each race event or weekend of riding. The ideal method of cleaning the air box and air boot is to remove from machine. Wash inside and out with hot soapy water, rinse clean. Box must be dry before reinstallation. Be aware that if there is dirt in the air box when clean filter is installed, the filter will start to get dirty prematurely.
- FILTER CHANGE: You should inspect filter before each ride. As a general rule you should change the filter before each practice or race. For recreational riders filter should be changed every day of riding.

## **SPECIAL NOTES**

Your air filter is only as good as the care it is given by its owner. It is a proven fact that
ATV users that practice proper care and maintenance with their air filters have superior
results in terms of performance and reliability.



- Filters should be well protected from unnecessary damage when being removed from machine when dirty. It is best to store dirty filters in a protective container or box.
- Air filter abuse will cause you to spend unnecessary extra money on your machine. Keeping this in mind, your air filter should always be one of your top priorities.
- Proper attention should always be paid that each and every air filter is installed properly into the air box. Unfortunately a large number of air filter failures are the result of human error, caused by incorrect air filter installation.
- Honda TRX 250R models can have air box failure if filter is over tightened on air box flange. The flange will collapse and wrinkle allowing dirt to pass. If this occurs it will be necessary to install an aluminum air box ring to improve the support of the flange.
- Yamaha Banshee models must have the plastic molded support tabs removed, when installing a Pro Design Pro Flow Flange and a K&N Filter. The removal of the tabs is necessary to allow the K&N filter to be installed all the way onto to the Pro Flow flange (especially on the underneath side).
- Suzuki LT 250/500 models must have proper tension put on the metal air filter lid (K&N) models to ensure a proper seal between the filter and the air box. On foam filters there is no large metal sealing lid, there is either a metal washer or rubber sealing type plug. Be sure that there is always something to ensure a dirt free seal. If you just have a hole punched in the foam chances are dirt will leak in that area.
- Clean and check all associated air box components when cleaning and servicing air box. Snorkel, air ducting boots, air box lid etc. should always be inspected and kept clean.