## GRASS BOOKS

## Keeping a Healthy Animal

Many kart racers have already met tomorrow's racing engine, The Animal. The Animal isn't new, as it has been around for about six years, but with the face of our sport changing, a lot of racers are meeting this engine personally for the very first time. Horror stories about this engine have been around longer than the engine itself, but rest assured, many of these stories have been created by a lack of maintenance. Putting those tales to rest is the basis for this month's article.

The Animal is a lot different in many ways than the flathead engine. One of the key differences is the style of carburetor. The animal carburetor is a float bowl design that has a movable float and a float bowl. The carb requires immediate attention at the end of each day of racing in order to perform in the manner

that we as racers demand. I cannot tell you how many carbs have been replaced due to a racer leaving the alcohol (methanol) in the float bowl for extended periods of time. Problems can occur after short periods of time, so address this as soon as possible. Alcohol is corrosive, and leaving it in the aluminum float bowl will add up to big problems. Many times this requires the replacement of the carburetor. At best, it leaves the racer with the added work and aggravation at the racetrack.

My personal method of flushing the carb is quite simple. Remove the float bowl from the carb with the two small screws on the bottom, and empty the bowl. Next, remove the fuel line from the inlet on the fuel pump. Using LOW pressure compressed air, gently blow all the remaining fuel from the lines and through the carburetor. Then, continue to gently blow the underside of the carb, through the jet, around the float and inlet needle, until it is completely dry. Make sure to blow through the air inlet of the carb. The objective here is to completely remove all the alcohol. Be cautious that the small pin that holds the float and inlet needle does not move. We don't want them to fall out. The use of spray

earb cleaner is an added aid to remove the alcohol and dry everything.

Once you are satisfied everything is dry, take a spray can of WD-40, and spray a bit of lubricant on the inlet needle. This is the small needle hooked on the float on the underside of the carb. Move the float up and down a few times and make sure it is free.



While spraying, shoot a bit into the earb and lubricate the slide. Sometimes is is a good idea to remove the slide to properly lubricate it and keep it from sticking. Just unserew the eap on the very top of the earb, and lift the slide out. Lubricate it and the bore it rides in and replace. Pay attention when re-installing the slide, as it is possible to install wrong. The side with the open slot all the



way down faces the header side of the engine. Work the throttle a few times and you are set. If you like, a little WD-40 sprayed on and around the jets is ok, however, do not do it in excess. Place the float bowl o-ring in its groove, and re-install the float bowl.

Some engine builders and racers prefer to flush the carb with gasoline or other mixture. If this is the method you choose, just make sure you properly filter anything you introduce into your carb, and drain the remaining fuel from the bowl.

Get into the habit of replacing fuel filters on a regular basis. If you strain your fuel as you pour into the tank, you can get better life from a filter, however, it is a good idea to replace on



a regular basis. Use a quality filter that you can see through, this will help you know when replacement is needed. Occasionally it is advisable to remove the floor tank and clean it out as well. Just use a keen eye and good judgment here. Inspect your fuel lines as well, alcohol tends to dry and make them stiff, and sometimes this can lead to air leaks. Replace as needed. Always use a zip- tie at all connection points to keep the lines from disconnecting.

Hopefully this will help keep those troubles at the track to a minimum. Just remember to take your time and do a good job when cleaning or flushing your earb, an extra minute or two here can save a lot of minutes and headaches at the track, and can possibly save you a lot of money.



