

# CHASE'N RACE'N

## ILLUSTRATED

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### CRI Pro Kart Tour returns to 'Bama Schlager Too "Slick" for Competition



DynoCams Tri-State Series  
Wheel Crazy Kartway  
Johnsonville, SC

Robbie Moore Benefit  
Pineora Kartway  
Guyton, GA

GRASS ROOTS  
TECH BARN

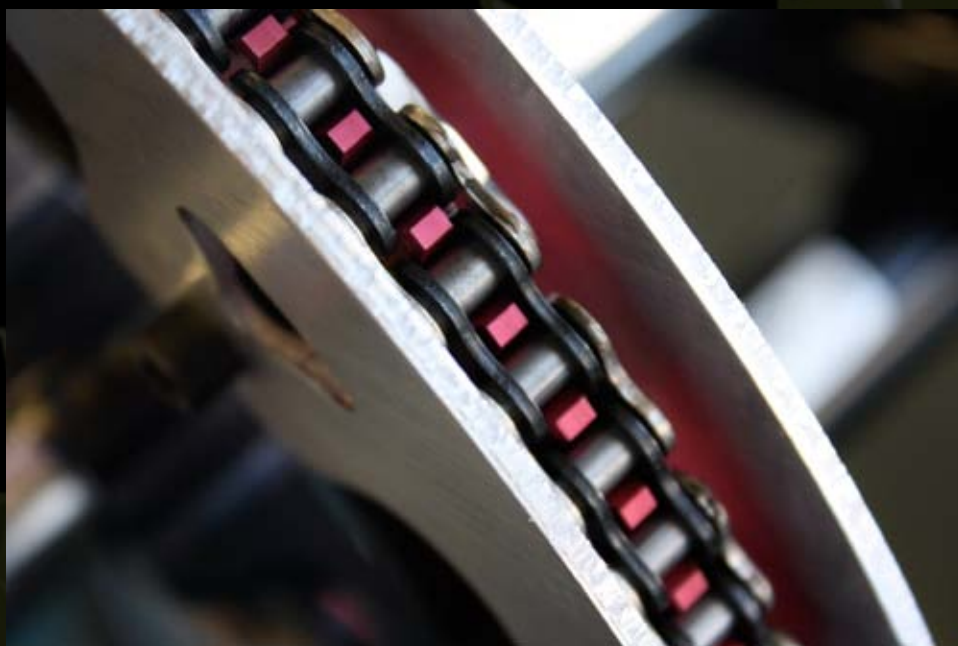
### Plus a whole lot more!!!

# GRASS ROOTS

## TECH BARN

*with Jimmy Rivers*

## So You Wanna Go Kart Racing... Part 2



In last month's edition of the "Grassroots Tech Barn", we took our Box Stock engine from the box and prepared it for competition. This month, we are going to expand upon that concept and get it mounted onto and hooked up to the kart and one step closer to getting on the track.

We will properly install our clutch, attach our throttle cable, and hook up our tach sensor, and thermo-

couple for our cylinder head temperature. We will plumb our fuel lines and install our fuel filter. We will also properly align our chain and get the correct tension.

Before mounting the engine, it is much easier to mount the clutch. Slide the clutch onto the crankshaft, making sure it slides on without forcing. If necessary, polish the crankshaft with a piece of sandpaper to remove any burrs. A minute of work here can save many frustrating minutes at the track if the clutch needs to be removed in a hurry. Insert the clutch key and tighten the retaining bolt. Once the bolt is tight, check the clutch for endplay on the crankshaft. The clutch needs to have a slight amount of movement. This keeps the clutch from binding and allows the bolt to tighten against the crank rather

than the clutch, this lessens the chance of the bolt loosening up. If the clutch does not have any endplay, a small thin washer under the retaining washer will provide the needed clearance.

Carrying on the tradition we established long ago, we want to check and double check our work before going any fur-



ther. Verify all components are properly installed and tight. Once satisfied, it's time to mount the engine onto the motor mount. Slide the engine onto the studs and tighten the



four nuts to hold the engine down. Slip the chain onto the clutch gear, then over the rear sprocket, and push the engine forward to set the chain tension. Proper tension will



allow about one inch of upward movement of the chain from its relaxed position. Securely tighten all the bolts on the clamps, making sure chain tension remains correct. Several attempts may be needed, sometimes this can be a bit tricky. Spin the axle several times to check the chain tracking. It is very important that the gear run in the center of the chain. Keep adjusting the gear hub until the chain has an equal amount of clearance on each side of the rear gear.

When it comes to running our cables and lines, I prefer to begin with the throttle cable. The throttle cable is the most rigid of the lines running to the engine, and hooking this up first allows us to tie all our other lines to



it. Attach the body of the compression fitting to the bracket at the front of the top plate on the engine, and then attach the fitting cap along with the cable. Run the inner cable through the fitting and attach the clevis. Pull the slack from the cable and attach the clevis to the throttle arm. Work the pedal to verify full throttle and adjust if needed. Use a couple zip ties to secure the cable to the frame. Run the leads for your My-Chron, being sure to allow for

engine movement, and tie them to the throttle cable.

Mount your fuel tank to the floor pan, being sure to use locking fasteners. Hook up your fuel line and attach to the inlet of the fuel pump. About halfway between the top of the engine and the frame, cut the tubing and insert a quality fuel filter. Pay close attention because most fuel filters are directional. Locating the filter in this location lessens the chance of impacting the frame or the ground during racing. Loosely tie the fuel line to the other cables, and zip tie all your connections.

There, we are one step closer to getting in the dirt and making laps. Take the needed time and double and triple check your work. Even the most simple and elementary of tasks are enough to derail a successful day at the track. Stay tuned, see ya next month!

