



OWNER'S MANUAL FOR Co2 SHIFTER KITS --ELECTRIC OVER AIR SHIFTING--

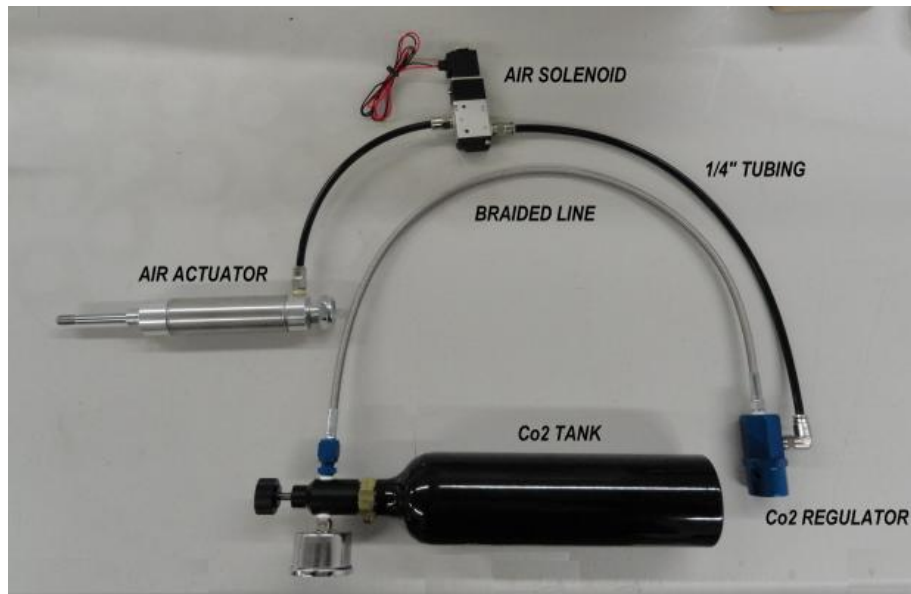
The Dynotune Co2 shifter kit will let you to make lightning quick shifts at the push of a button. This kit can be used as is for a full auto transmission on drag bikes, if you have a normal street transmission you will need an ignition kill to cut the spark when shifting. You can use any make shift kill, electronic or a "T" shift kill. Check DynoTune's webpage for their ignition Kill devices. This is a universal kit and professional installation is recommended. Fabrication will be required for final fitment. Liquid Co2 will burn your skin so wear gloves and eye protection during installation!

DANGER: Do not attempt to shift the bike using the Co2 shifter without the bike moving! If the bike is not moving and riding you can damage the shift forks, the shift shaft and or transmission parts!

Please read all the instructions before starting installation.

Kit: Parts





Step 1:
Mount the Co2 tank. Most folks mount the Co2 tank under the rear tail section or near the swing arm. Keep all tubing and wires away from moving gears, tires, sprockets, chains etc. Keep the valve outlet a little higher than the body of the tank.

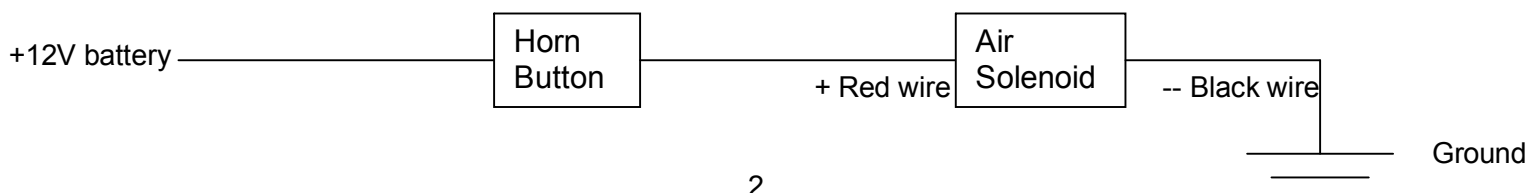
Step 2:
Mount the Co2 actuator to the bike. The actuator can be configured to “push” or “pull the Air actuator rod.



Use the clevis or custom make a bracket to mount the shifter. Attach one end to the shift lever etc.

- Notes:
- 1) Always make sure the rod is in the center of the stroke so you have the maximum travel for both up and down shifting.
 - 2) Make sure the actuator is not solidly bolted to anything, it should freely move and pivot slightly so the actuator shaft does not bind when shifting.
 - 3) Test shift the transmission BY HAND (while not running) to see if it shifts smooth up and down.

Step 2:
Mount the Air solenoid close to the Air actuator for best performance (typically 18 inches or closer). Wire the Air Solenoid as per the schematic below. If you are using an ignition kill, use the directions for wiring for the kill device you purchased. Some horn buttons send out a ground signal so just reverse the +12V and the Ground wires on the wiring below.



Step 3:

Install the fittings into the tank, solenoid, Air actuator tank etc... They are 1/8" NPT pipe fittings. Use silicone RTV on the threads if there is no pre-applied sealant...adding a bit more will not hurt. The fittings will get tight after a few turns in, this is normal as pipe threads have a taper to them so as you screw it in it will get tighter and tighter. Do not cross thread the fittings!



Step 4:

Run the braided line from the tank to the bottom port on the Co2 regulator. Run the 1/4" Tubing from the regulator to the air solenoid Port "P". Run the 1/4" tubing from the air solenoid Port "A" to the air actuator. The port labeled "EA" is the exhaust and this port is left open.

Notes: Cut the tubing square, with simple scissors. To insert the tubing into the fittings simply push the tubing in until it stops. To remove the tubing, push in on the tubing while pressing in on the outer ring, hold the ring in and then pull the tubing out. Keep all the tubing away from moving parts or anything that can cause issues while operating the bike!



Step 5:

If you need or have an engine kill, hook that up now. Follow the directions that come with the engine kill device.

Step 6:

You are ready to test the Co2 shifter. Fill the Co2 tank with about 600-1000 PSI Co2 pressure. Check for leaks with soapy water. Fix any leaks, double check hoses and make sure nothing interferes with the driving of the bike etc. Make sure your engine kill if installed is working properly before you test your Co2 shifter! Failure to do so might cause transmission damage!

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