

## **DR650 TM40 Installation Instructions**

Be safe – no smoking or open flame. Don't get gasoline on your skin. Wear eye protection.

## Installation

- 1. Remove side covers, seat and fuel tank.
- 2. Drain stock carburetor.
- 3. Loosen intake clamp and remove air boot clamp.
- 4. Remove throttle cables from stock carburetor.
- 5. Remove choke & cable from stock carburetor.
- 6. Remove secondary air filter & hose from stock carburetor and discard.
- 7. Remove carburetor from bike.
- 8. Remove fuel hose and vacuum hose and set these aside.
- 9. Remove bolt from rear brake reservoir and move the reservoir out of the way.
- 10. With a razor knife trim the 'locator nubs' off of the intake rubber. This is so the TM40 can fully seat into the rubber.
- 11. Remove three bolts holding airbox and slide back as far as it will go (1/4 inch or so, it helps!).
- 12. Install TM40 front-first into intake (WD40 can help slide it in easier if needed).
- 13. Pull airbox boot around rear of carburetor.
- 14. Replace the airbox boot clamp the screw should be on the side with the head pointing up.
- 15. Getting the airbox boot onto the carburetor can be tricky you may have to tighten the clamp slightly, then push the boot into place (WD40 can help slide it in easier).
- 16. Tighten both carburetor clamps.
- 17. Route the vent hoses behind engine case and down in front of swingarm.
- 18. You have the option of using the stock handlebar mounted choke or the knob choke that comes with the TM40.
- 19. If using the knob choke installed on the TM40, remove the stock choke cable from the bike.
- 20. Remove original throttle cables pay attention to cable routing!
- 21. Install new throttle cables into throttle housing and feed down to the TM40. Follow the stock cable route.
- 22. One nut goes on either side of the cable stay on the carburetor.
- 23. Check for pulling or binding turn bars lock to lock.
- 24. Adjust cable free-play to a minimum and make sure throttle will snap closed by itself with no sticking.
- 25. If still running the stock petcock, remove the block-off tube on the front RH side of the TM40 and attach the fuel valve vacuum hose there. Connect other end to fuel petcock.
- 26. Replace rear brake reservoir, then fuel tank.
- 27. Connect fuel hose to carburetor and petcock (fuel spigot on carburetor can be rotated to best position).
- 28. Turn petcock to prime and start bike.
- 29. Adjust idle mixture as outlined in the Mikuni manual, then adjust idle speed.
- 30. Replace seat and side panels.
- 31. Test ride. Modify jetting if necessary. ENJOY!

## **Tuning**

Before making any jetting changes, check the outside of the box to see exactly how your TM40 is already set up. Suggested jetting for **aftermarket exhaust and modified airbox** (per attached template): 150 Main Jet, 22.5 Pilot Jet, Needle Clip in 3<sup>rd</sup> position from top.

Suggested jetting for **stock and GSXR exhaust with modified airbox** (per attached template): 145 Main Jet, 22.5 Pilot Jet, Needle Clip in 2<sup>nd</sup> position from top.

Suggested jetting for **aftermarket exhaust and stock airbox**: 140 Main Jet, 22.5 Pilot Jet, Needle Clip in 2<sup>nd</sup> position from top.

Suggested jetting for **stock exhaust and stock airbox**: 135 Main Jet, 22.5 Pilot Jet, Needle in top position.

Riders looking for more fuel economy can move the needle clip up a position without losing much performance. We have included a wide selection of jets to accommodate a wide range of modifications and conditions.

We have also included the Mikuni HS40 (same carb as the TM40) tuning manual. Although the HS40 is aimed at Harley-Davidson applications, the manual is clear and useful for tuning your TM40 on your DR650.

**Important:** All appropriate safety equipment and gear must be used during the installation of this or any ProCycle product including any time you work on a vehicle. ProCycle accepts no responsibility for injuries or damage incurred during the installation of any products.



## **DR650 Airbox Top Cutout Template**

