

2019+ CRF 125 Manifold Install

Removal of oem manifold

1. Remove side plastics and seat. LH side 3 8mm bolts and one plastic push pin. RH side 2 8mm bolts and one plastic push pin
2. Remove gas tank by three 12mm bolts, fuel line and electrical connector. Note: there is a small tab on the fuel line connector that gets pushed towards the white then clip is pushed down (do not remove white plastic clip as it is hard to re-install)
3. Remove Exhaust held on by 4 12mm bolts/nuts.
4. Remove chain master link and let it be loose.
5. Remove foot peg brackets with 4 9mm Allen's.
6. On LH engine case there is a ground wire and wire cable bracket, remove each 8mm bolt holding those on.
7. Loosen clamp on rubber boot coming from airbox with a #2 Phillips screwdriver.
8. Remove rear upper engine mount bolt with 14mm socket.
9. Loosen but do not remove rear lower engine mount bolt.
10. Remove three 14mm front engine mount bolts and tilt engine forward.
11. Remove throttle cable cover with two #2 Phillips holding it on.
12. With a 10mm wrench loosen and remove throttle cables. The cables will most likely need to be re-routed near the steering stem through the hole in the frame above the current cable holder.
13. Disconnect two connectors on throttle body, one connector on engine cylinder, and one connector on the pressure sensor mounted to the manifold.

14. Remove two 10mm nuts holding manifold on and remove manifold.
15. Remove OEM manifold spacer.

Airbox Modification

1. Remove airbox snorkel on top of airbox.
2. Remove screen behind air filter.
3. Remove stock clamp on intake boot and install clamp provided with RAD billet manifold kit if installing a 26mm or bigger throttle body.
4. Cut restriction out of intake boot to match throttle body size.

Swap components from OEM manifold to RAD manifold

1. Remove two 4mm Allen head bolts holding throttle cable bracket and install provided CNC bracket.
2. Remove main throttle cable bracket with a #2 Philips screw and install on upgraded throttle body.
3. Remove throttle body from OEM manifold with 2 8mm bolts and set aside these will not be used.
4. Remove fuel injector with 2 10mm screws holding it down and install onto billet manifold making sure that black rubber seal stays on injector.
5. Remove pressure sensor from OEM manifold and loosely install onto billet manifold. (This will get tightened down all the way when putting bike back together).
6. Install new throttle body onto billet manifold with 2 included 8mm bolts making sure to open throttle to line up manifold and throttle body.
7. Remove O-rings from OEM manifold and spacer and install onto new manifold and spacer.

Install Manifold Assembly

1. Slide new spacer onto cylinder head studs with O-ring facing engine.
2. Install manifold assembly onto engine with two 10mm nuts.
3. Install throttle cables. Make sure to adjust cable at the throttle on handlebar.
4. Install black plastic cover with two #2 Philips screws over throttle cables.
5. Connect pressure sensor and tighten bracket down all the way.
6. Connect the two throttle body connectors and the oil temp sensor connector on engine.
7. Tilt engine back into place and install all 14mm engine mount bolts. Torque to 41 FT/LBS
8. Install foot peg mounting brackets with 9mm Allen's. TQ to 29 FT/LBS
9. Install Intake boot onto throttle body and tighten down clamp. This can be a little tricky, but you can do it!
10. Install two 8mm bolts in ground wire and electrical cable bracket.
11. Install master link in chain.
12. Install exhaust with 4 12mm bolts/nuts.
13. Connect fuel line and fuel pump then install gas tank with three 12mm bolts.
14. Install side plastics but leave the seat off so you can take the ecu out to get tuned.

Warning: not having a properly calibrated ecu can cause the engine to run extremely lean, contact us at tuning@radspeedanddesign.com to help you get back on the track!