

Tick Performance Adjustable Clutch Master Cylinder

Detailed Installation Instructions for C5 Corvette - Page One

- 1. Jack up the front of your Corvette and support it with jackstands.
- 2. Disconnect the factory line at the quick disconnect fitting by sliding the plastic ring inward.
- 3. Remove driver's side wheel.
- 4. Remove lower portion of inner fender to gain access to the existing master cylinder using a 7MM socket/ratchet.
- 5. Remove panel in the driver's foot compartment to gain access to the existing master cylinder and clutch pedal assembly. The courtesy light lens will snap out of its cover and remain in the car.
- 6. Remove the retaining clip that holds the master assembly rod to the pedal assembly. Remove the rod from the pedal.
- 7. Remove the "fourth pedal" (also known as the dead pedal) using a 10MM socket/ratchet.
- 8. Twist the original master assembly counter clockwise from fenderwell to release it from the firewall.
- 9. Remove the clips that hold the resevoir to the car.
- 10. Remove the master, line and resevoir assembly.
- 11. Remove the clutch pedal assembly by removing three 13MM nuts (a gear wrench works best). NOTE: the clutch pedal assembly is removed the brake & accelerator pedals will remain in the car.
- 12. Once the pedal assembly is removed from your Corvette, use our sticky template to determine where to drill two mounting holes. Drill with a 3/8" bit. *NOTE: there is a small hole in the pedal assembly that is used to reference the location of the template.*
- 13. Remove the spring from the clutch pedal and discard it. It will not be reinstalled.
- 14. With the pedal still out of the car, bolt the cylinder to the bracket using the supplied allen bolts. Do not install the resevoir, hose, line, or adapter yet.
- 15. Reinstall the pedal assembly with the new master cylinder into the car. The cylinder will slide through the existing hole in the firewall. Bolt the pedal assembly back into place using the three 13MM nuts you removed earlier.
- 16. If one is not already installed, thread the supplied 5/16x24 nut onto the master cylinder
- 17. Assemble the heim joint, locknut and turnbuckle and thread them into place onto the master cylinder rod. *NOTE: make sure the turnbuckle is completely threaded until it bottoms on the master cylinder rod as well as on the heim joint. This will be the rod's shortest point and adjustment will begin from this point later. Leave the assembly loose for now.*
- 18. Install the heim joint onto the pedal assembly and reinstall the factory retaining clip.
- 19. Going back into the fenderwell, install the supplied resevoir adapter and clamp. Leave the clamp loose until desired position is achieved.





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- 20. Reinstall the factory resevoir and hose previously removed with the factory master cylinder. You may want to wash it out with brake cleaner before reinstallation.
- 21. Attach the resevoir hose to the adapter, positioning it for the best fit. Tighten the clamp on the adapter. Use a zip tie to secure the hose to the adapter. *NOTE: the factory rubber boot or seal can be cut and places around the new master cylinder for a better seal to the firewall.*
- 22. Install the supplied -3 to -4 union to the master cylinder's outlet (the blue Earl's fitting) and tighten.
- 23. Install the supplied line to the master/union.
- 24. Route the line under the steering shaft and down to the location of the slave cylinder's connector.
- 25. (If you have a remote bleeder already installed, skip this step:)
 Fill the resevoir with the appropriate DOT 3 or 4 fluid. Have a friend go under the car, and with a phillip's head screwdriver, carefully press the check valve at the end on the new line inward. Fluid should run out. If it doesn't, simply pump the clutch pedal a few times to get the fluid flowing. Continue to hold the check valve open as fluid runs out. Make sure you don't let the resevoir run low during this procedure! After 20-30 seconds, release the check valve with the fluid level approximately halfway in the resevoir. Your system has now been gravity bled.
- 26. Connect the new line to the slave cylinder.
- 27. Check the pedal assembly for feel. If the pedal is soft, pump it gradually. You should begin to notice the loose travel of the pedal becoming shorter with each stroke. Only pump the loose travel until a full pedal is achieved. If after several pumps there is still no firm pedal, repeat step 26.
- 28. Use zip ties to distance the line away from headers and any other moving parts. At this point, start the car to test the system's release. Once bled properly, the pedal should feel slightly more firm than it was originally. Test the release by going from neutral into first gear. If it doesn't slip easily into gear, don't force it! Adjust the length of the master cylinder rod in 1 to 2 turn increments until proper release is achieved. NOTE: do not adjust the rod more than is necessary to achieve and adequate release. If you do, damage to the pressure plate may occur. Fine tuning the adjustment can be done during the test drive. Adjust the clutch to achieve proper release at the RPM you shift during aggressive driving or racing.
- 29. Reinstall inner fender and wheel.
- 30. Test drive the car to fine tune the adjustment. Once adjusted, tighten lock nuts against the turnbuckle and reinstall the trim panel.
- 31. Enjoy the improved feel and high RPM shifting capability of your Tick Performance Adjustable Clutch Master Cylinder!

