

# **Corvette C5**

**Brake System Aging**

**Master Cylinder Reservoir Fatigue Cracks**

**By Mongoose**

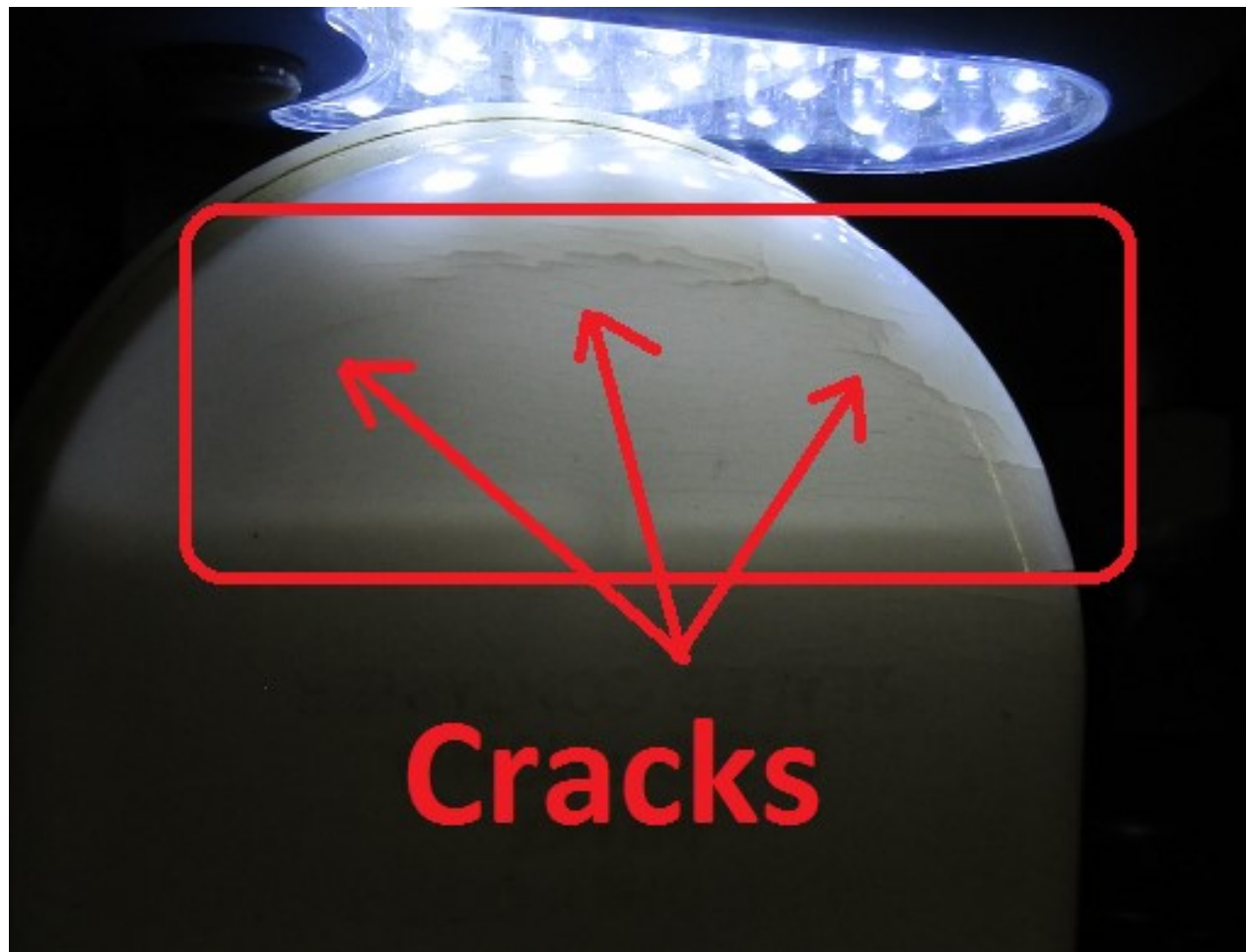
# Brake Master Cylinder

- Oil droplets/wetness on exterior surface of reservoir.



# Brake Master Cylinder

- Close inspection revealed fatigue cracks in reservoir.



# Brake Master Cylinder

- Repair Options, replace just to reservoir or replace the complete master cylinder assembly. If replacing just reservoir, MC will need to be removed to remove roll pins securing reservoir to cylinder.



# Brake Master Cylinder

- Oil removal prior to disconnecting brake lines from MC using Turkey Baster.



# Brake Master Cylinder

- 12x12 aluminum baking pan placed under the MC to catch fluid when lines disconnected from MC.



# Brake Master Cylinder

- Brake Master Cylinder removed.



# Brake Master Cylinder

- New MC prepped for “bench bleeding” prior to installation.





# Brake Master Cylinder

- Clamp MC in vise, service with oil and actuate the MC until there is NO air in the oil “bench bleeding”. It took me approx. 30 cycles to remove air.



# Brake Master Cylinder

- Prep for MC install> Clean brake line fitting threads. Install MC on the Brake Booster, DO NOT TIGHTEN THE MC TO THE BOOSTER.
- **Start brake line fittings in the MC by hand, tighten lines completely by hand. You may have to jiggle the MC to fully tighten lines by hand. By using this method, you will avoid cross-threading the brake line fittings in the MC.**

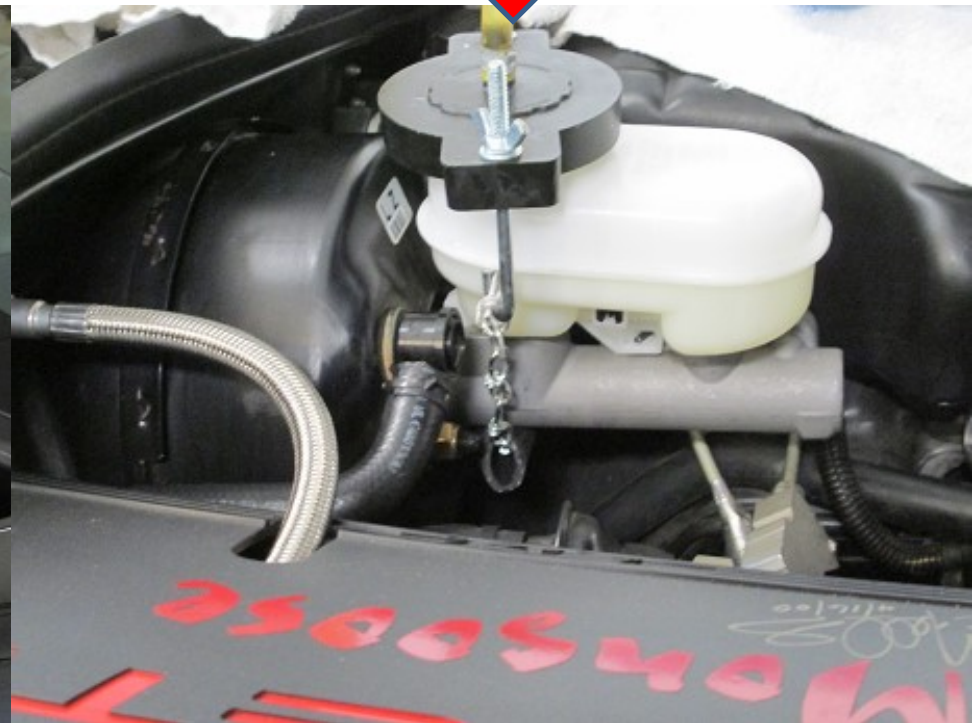
# Brake Master Cylinder

- Secure the MC to the booster, refer to your torque specs, snug up brake lines using line wrench.



# Brake Master Cylinder

- Pressure system bleeding using the Motive Bleeder. Motive bleeder pressurized to 10 PSI with NO oil to leak test the Motive MC adapter.



# Brake Master Cylinder

- Pressure system bleeding using the Motive Bleeder. Unit serviced with oil and pressurized to 10 PSI.

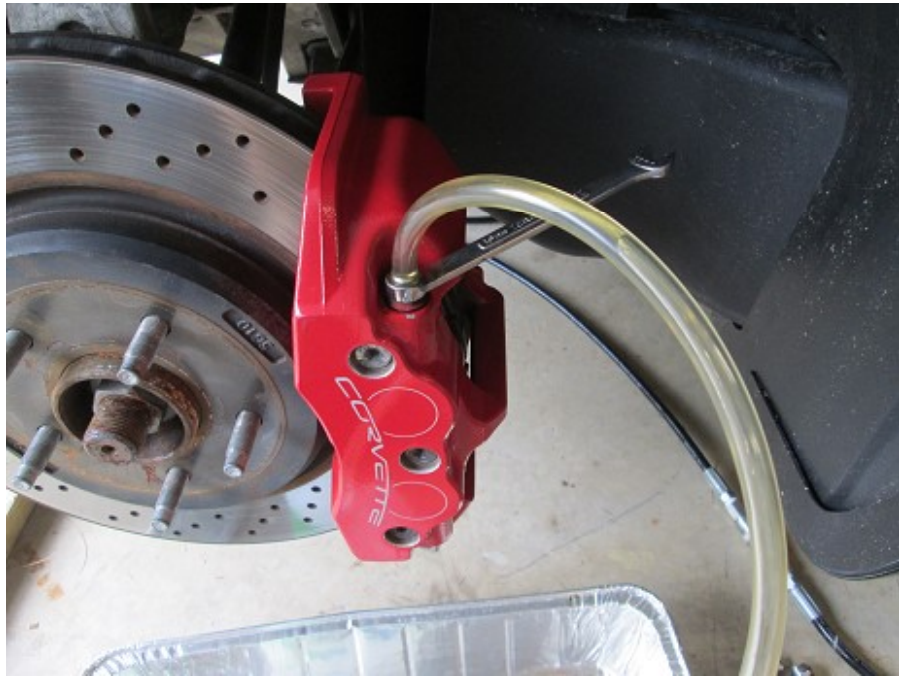


# Brake Master Cylinder

- Bleed brakes system starting at the caliper farthest away from the MC to remove air from the system.
- Repeat this step for the next farthest caliper to remove air from the system.
- Repeat process until all four caliper have been thoroughly bled.

# Brake Master Cylinder

- Brake system bleeding.



# Brake Master Cylinder

- All air and dirty brake fluid removed from system.





# Brake Master Cylinder

- Tips>
- If you have oil wetness on the exterior of the reservoir with NO cracks in the reservoir, replace the reservoir cap first as the rubber seal in the cap may be worn.