



Steering, Brake & Suspension Specialists

#CP3018, #CP3018 MCPV-C, #CP3018 MCPV Hydraulic Brake Assist System Instructions for 1962-1967 Chevrolet Nova

Note:

This system is intended for "off road use only"

Instructions:

1. Please carefully inspect the entire braking system thoroughly and replace any marginal items. Installation of braided steel, high performance brake lines is highly recommended, though not mandatory.
2. Please carefully inspect the entire power steering system thoroughly and replace any marginal items. This system will not function properly unless the power steering system operations are 100%
3. Removal of the driver's seat greatly increases ease of system installation and is therefore highly recommended!
4. Disconnect the battery.
5. Remove the existing high pressure power steering line and allow the system to drain.
6. Remove the master cylinder (to vacuum brake booster) attachment nuts and secure the master cylinder approximately 3-4 inches forward of existing vacuum booster if brake line routing / integrity permits. (9/16 or 15mm wrench)
7. Inspect the master cylinder at this time for any signs of brake fluid seepage at rear seal and check for any sludge accumulation in the fluid reservoirs. Replace the master cylinder if necessary.
8. Disconnect the brake lamp switch electrical connector.
9. Remove the brake pedal rod clevis clip and pin carefully. (needle nose pliers needed)
10. Disconnect the (3) power brake booster to firewall attachment nuts from inside vehicle. (9/16 deepwell socket, swivel, long extension needed)
11. Carefully separate the vacuum assist unit from the firewall. You may have to pry gently!
12. Remove the vacuum booster assembly from the vehicle.
13. Transfer the brake pedal rod clevis from the vacuum assist unit to the hydraulic assist unit, insuring proper thread engagement – 8 thread minimum.
14. Install the hydraulic brake booster carefully into the firewall with hydraulic fittings facing downward, accumulator to driver's side, while aligning brake pedal to clevis interface.
15. Using the 3 supplied replacement attachment nuts, securely fasten the hydraulic assist unit to the firewall. (9/16 deepwell socket, swivel, long extension needed)
16. Lubricate and install the clevis pin and retaining clip securely.
17. Connect the master cylinder to the hydraulic brake assist unit firmly, using the supplied replacement nuts. (17 mm wrench needed)
18. Adjust the brake pedal height approximately 1/2 inch lower than prior configuration, or to your liking. (7/16 and 9/16 wrench needed)
19. Double check for appropriate thread engagement at the clevis, then tighten the brake pedal rod to clevis jam nut. (9/16 wrench needed)
20. Adjust the brake pedal switch to match the revised pedal height if changed.
21. Connect the pressure line to the power steering pump fitting (3/8 flare 90 degree hose end) and then connect the other end of this hose to the inlet / driver's side fitting of the hydraulic assist unit (AN-6 90 degree hose end). (5/8 and 11/16 wrench needed)
22. Remove the plastic port plug, connect the second pressure line to the outlet / passenger side port of the assist unit (3/8 direct fit flare style fitting). (5/8 wrench needed)
23. Then route this line from the hydraulic assist unit, following the pressure line to pump, down to the rack and pinion inlet high pressure port / fitting.
24. Connect the power steering line to the rack and pinion pressure inlet AN –6 adapter. (11/16 and 3/4 wrench needed)
25. Cut the existing rubber power steering low pressure return line, install the supplied "T" fitting STRAIGHT INLINE. (You may also connect this line directly to an additional dedicated return line fitting installed into the ps reservoir for improved system performance if desired).
26. Connect the chromed "hosenut" end of the ps return line to the hose nipple on the assist unit. Route this return line along the path of the high pressure line set to ps reservoir.
27. Connect the return line to the "T" perpendicular nipple – trim hose to length as necessary.
28. Verify that all prior steps have been successfully completed!
29. Reconnect the battery, then reconnect the brake lamp switch connector and verify for proper brake lamp operation.
30. With engine off, fill the power steering reservoir with Valvoline Synpower / Genuine GM or equivalent high quality power steering fluid only. * Never use ATF because it foams in use causing noisy pump operation and erratic operation.
31. Disable the ignition system and crank the engine for five full seconds to initiate proper system priming.



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Hydraulic Brake Assist System Instructions (Continued)

32. Recheck the fluid level, top off as necessary, and crank the engine for five more seconds. With the front wheels off the ground, cycle the steering right to left slowly approximately 20-30 times. Repeat this procedure as necessary until the fluid level remains consistent.
33. Cap the fluid reservoir and restore the ignition system operations.
34. Start engine briefly, check for any signs of fluid leakage. Do not depress brake pedal yet.
35. Shut engine off and recheck fluid level, topping off as necessary. Pump brake pedal a few times to purge any air trapped in the nitrogen reserve tank. If fluid appears foamy and pump operation was noisy in prior run sequence, allow vehicle to sit for 15 – 20 minutes.
36. Start engine, allow to warm up to full operating temperature while idling.
37. With the engine warmed up and idling, check for proper power steering operations and any leakage by steering vehicle from lock to lock approximately 5 full sweeps.
38. If all prior steps have been performed successfully, apply moderate pressure to brake pedal slowly 5 – 6 times. Shut engine off and recheck fluid level.
39. Start engine, apply full pedal pressure 2 or 3 times to verify proper systems integrities.
40. Carefully road test the vehicle to verify proper operations and to get accustomed to the brake systems response.
41. Allow the vehicle to sit overnight. Next day, when the vehicle is still cold, recheck all connections and lines for proper torque, recheck fluid level and top off as necessary.
42. Congratulations! You are now ready to “Stop on a dime and get two nickels change!” And, as always, please drive carefully!

IMPORTANT! NEVER APPLY THE BRAKES WHILE THE MASTER CYLINDER IS REMOVED, OR YOU WILL DESTROY THE BRAKE ASSIST UNIT!

- Perform brake bleeding procedures with the engine off for best results.
- If supplied with the optional slip fit replaceable master cylinder pushrod, simply gently twist and pull the existing master cylinder pushrod out, then slip on the alternate rod by reversing the procedure. The longer rod will accommodate most 1969 and earlier “deep style” master cylinders, the shorter rod supplied standard will accommodate most 1970 and newer “shallow style” master cylinders.
- Please note: The high quality Aeroquip power steering linesets have adjustable end fittings! If the preset angles require adjustment, simply use two 11/16 wrenches to slightly change the fitting angles. The gap between the stationary hose nut on the line and the end fitting itself should not exceed more than the thickness of a penny, or leakage may occur.
- Please allow up to 500 miles of operation for the systems to fully “settle / break in”! Until all the air pockets and “micro bubbles” settle out of the assist unit and power steering system, operations may be initially noisy, accompanied by some “pedal kickback” upon braking, and “stiff / slow pedal return” caused by air in the systems.

PLEASE REFER TO OUR AEROQUIP LINE ASSEMBLY INSTRUCTIONS WHEN INSTALLING NEW LINE SETS.

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