

Hydroboost Brake Conversion Kit

“This changes everything!”

Ken Henderson declared, during a test drive of the brakes in a Hydroboost fitted GMC Motorhome with stock rear drums and stock front disks. The eleven other GMC owners that drove the coach at the Chippewa Falls rally fully agreed.

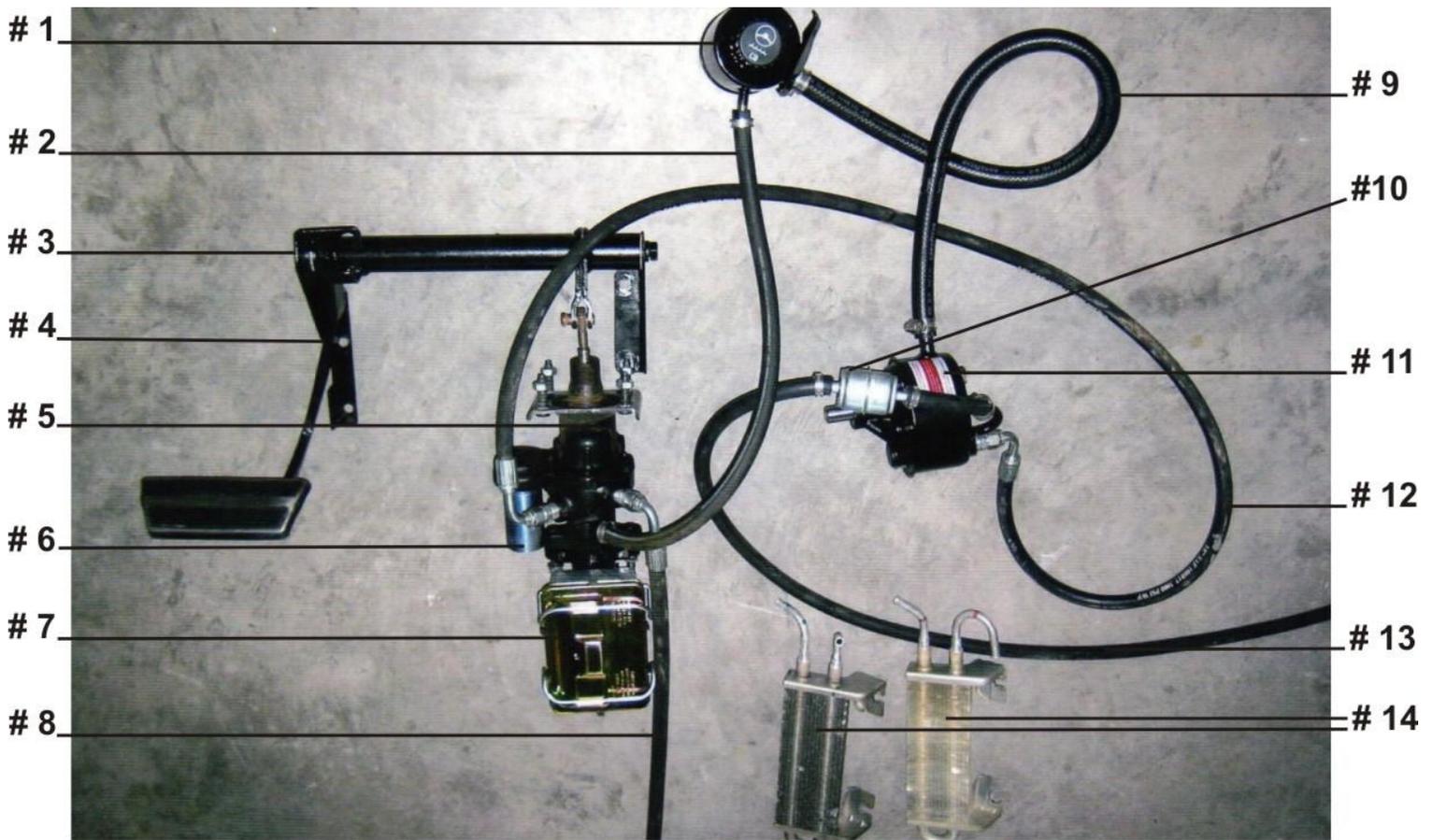
Hydroboost is a time-proven hydraulic braking system that was first installed on GM luxury cars and vans in the seventies and is used today, among various others, on late model Cadillac Escalades, heavy-duty GM vans and the Fleetwood Bounder Motorhomes. Increased force to the master cylinder is delivered by the hydraulic, Hydroboost brake booster, which replaces the standard vacuum booster. The resulting increased brake line pressure provides greatly improved braking. Basically, the higher the line pressure, the better the stopping power.

In a GMC Motorhome, brake line pressure with Hydroboost can reach 1,850 psi, compared to 900 – 1,000 psi with standard vacuum booster brakes.



Test gauge reading of 1,850 brake line psi.

The increased brake line pressure provides greatly improved stopping power



Hydroboost kit system showing how components are connected

1. Modified remote power steering reservoir from current full-sized GMC vans
2. Return line, Hydroboost to reservoir
3. Custom brake pedal brackets
4. Modified brake pedal adjuster for proper pedal height
5. Hydroboost power brake booster with custom push rod
6. High capacity (Blue) accumulator provides four brake applications without engine running
7. New P-30 master cylinder with 1 5/16 bore
8. Short high pressure hose from Hydroboost to steering box
9. Hose and clamp from reservoir to pump
10. Inline filter
11. Power steering pump as used on current full-sized GMC vans
12. High pressure hose from pump to Hydroboost
13. Return lines and bracket from power steering box to pump
14. Customized hydraulic fluid coolers – One selected based on either standard or electric wipers

Installation Steps

(See Hydroboost system picture for part number identification)

Remove grill and drive-side inner fender

Remove master cylinder and vacuum booster

Remove hoses and steel return line from back of radiator support, leave brackets

Remove power steering pump assembly

Enlarge four vacuum booster mounting holes in firewall to 10 MM to attach Hydroboost (*part 5*)

Attach pressure hose to remote reservoir (*parts 9 & 1*)

Install remote reservoir to firewall above upper radiator hose, make sure anchoring bolts are as low as possible so they will clear dash panel (*part 1*)

Install Hydroboost, master cylinder and pedal assembly (*parts 5, 7 & 4*)

Remove power steering pulley and bracket from pump, drill bracket to accommodate 10 MM bolts and reassemble

Reinstall pump assembly on motor (*part 11*)

Connect high pressure hose to Hydroboost. Determine best route to pump and fasten to original return tube brackets (*parts 9, 5 & 11*)

Bolt high pressure hose to radiator support brackets, hose should be relaxed (*parts 11 & 12*)

Install short high pressure hose from Hydroboost to steering box (*parts 8 & 5*)

Install return hose on pump through filter to front of frame rail (*parts 13, 11 & 10*)

Mount cooler, test for best location and drill two holes in A/C condenser mounting bracket (*part 14*)

Route return lines as best suited for your installation

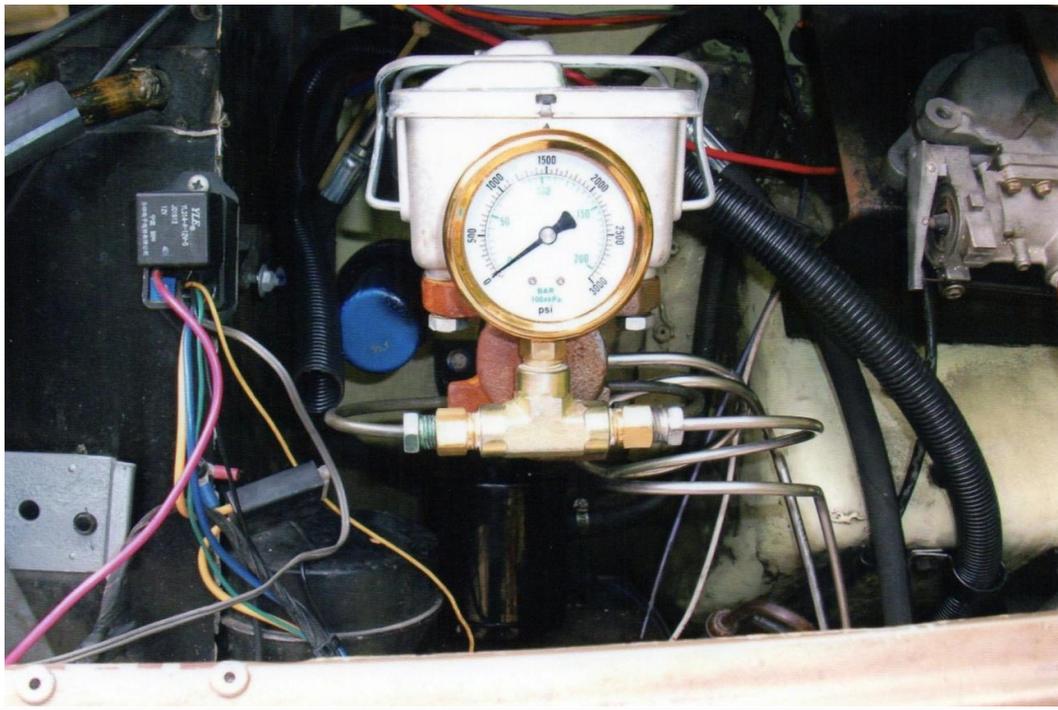
Route return line hose from Hydroboost to remote reservoir (*parts 2, 5 & 1*)

Remove existing wiper motor filter if not previously taken out



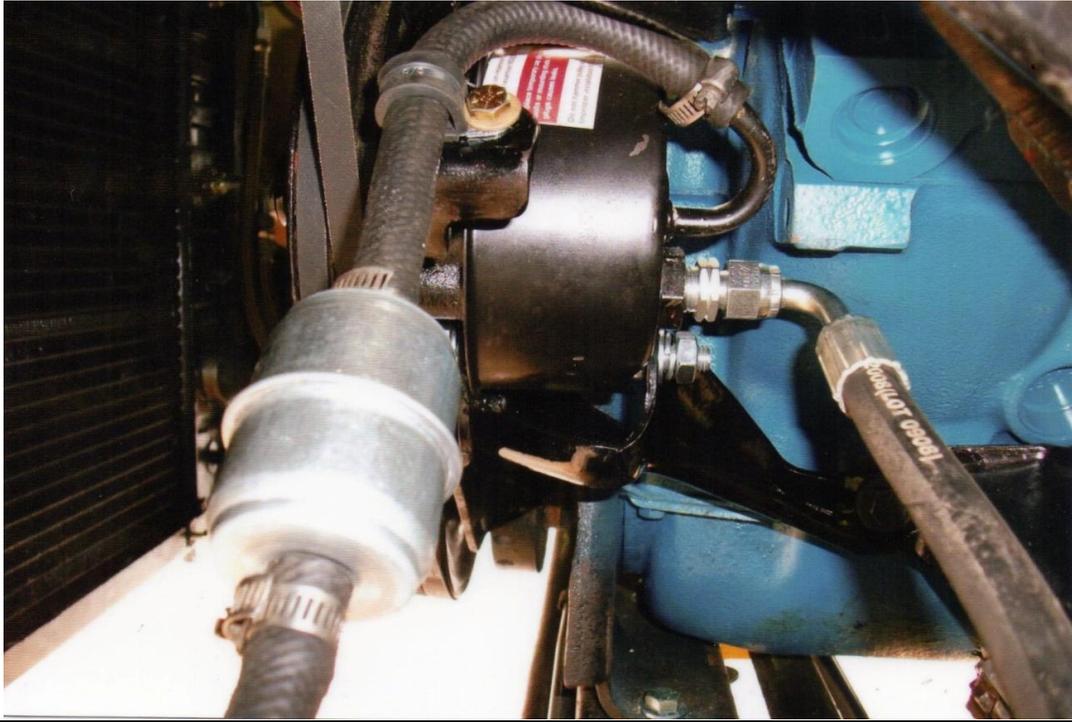
High capacity power steering pump - Hydraulic coolers
Modified power steering reservoir - Inline filter

Typical installation pictures follow

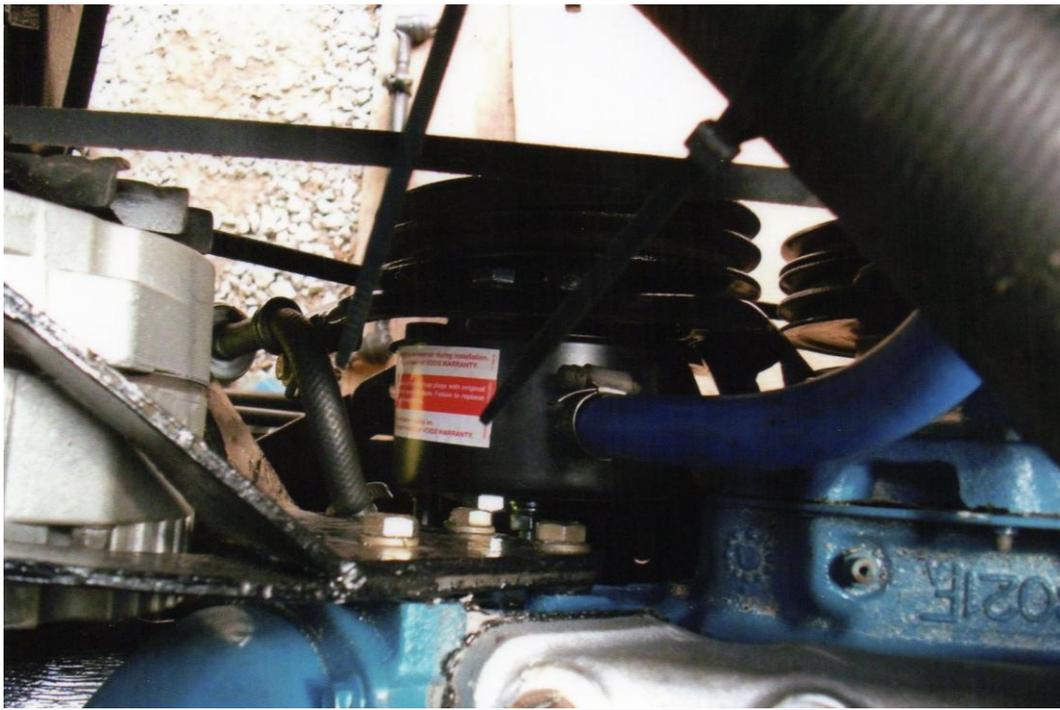


Hydroboost power brake booster with test pressure gauge

(Remote reservoir is mounted below unit)



Remote power steering pump and return line filter



Remote power steering pump from top



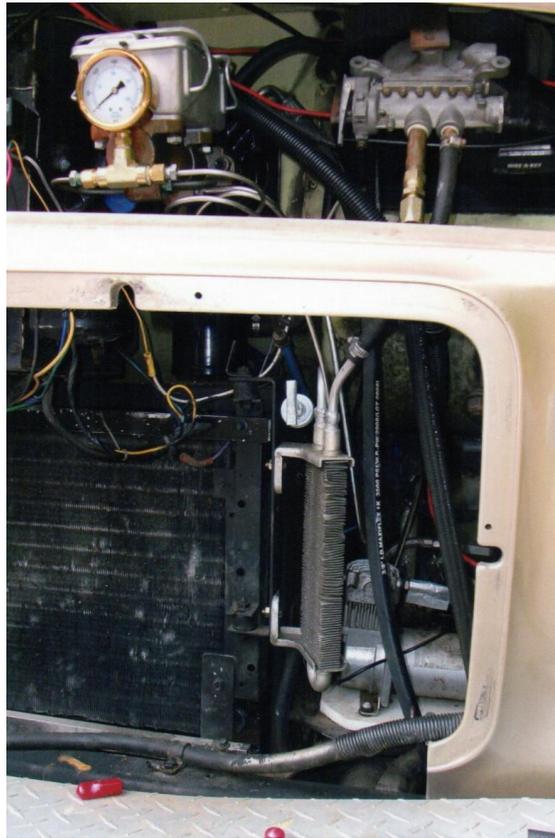
Inline filter, mounted pressure and return lines, remote reservoir

(Existing brackets on radiator frame support new high pressure line, pump to Hydroboost)
(Fan and fan shroud removed for picture)



Remote reservoir mounted on firewall with bleed-off line

(Bleed-off line averts the return line from going all the way back to the pump)



Remote reservoir mounted near lower radiator and over radiator hose

(Power Steering Cooler to accommodate both styles of wiper motors, original or electric)



**Shows relationship of complete push rod and limit of pedal travel on steering column
(Note fully depressed piston push rod centered in Hydroboost unit)**



Shows relaxed brake pedal in relation to gas pedal
(Note relaxed piston push rod centered in Hydroboost unit)

(Kit includes instructions & all necessary fasteners)

To Order:

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