INSTALLATION INSTRUCTIONS

DODGE

#450

PRE-INSTALLATION INSTRUCTIONS

These instructions have been designed for unaltered vehicles. Before you start, check for any variations. Each vehicle may dictate it's own control mount and cable routing. Therefore, you will need to study the pictures and use your good judgement or seek professional help. Lift kits may govern how and where the cable is routed. **Always keep the cable away from heat (exhaust) and rough or sharp edges.** If you are concerned about lower cable damage or abrasion, we recommend cutting a length (about 3 feet) of 5/8" ID plastic or rubber hose (garden or heater) to be slid over the cable before assembly. Please keep in mind, **the warranty is void** on heat damaged or abused cables. Before drilling, check for any electrical wires, hoses, etc.

LIMITED WARRANTY

4x4 Posi-Lok company warrants to the original retail purchaser that the 4x4 Posi-Lok is free from defects in material and/or workmanship for one (1) year from the purchase date when used under normal operating conditions on light trucks and SUV's. The warranty does not apply to 4x4 Posi-Lok Products that have been improperly engaged or installed. The consumer will be responsible for removing from the vehicle and returning to 4x4 Posi-Lok any defective item(s) with shipping costs prepaid. A copy of the original sales receipt is required for all warranty claims. The consumer must contact 4x4 Posi-Lok at (517) 278-7453 in order to receive a Returned Goods Authorization prior to shipping.

LIMITATION OF WARRANTIES

The loss of use of the product or vehicle, loss of time, inconvenience, commercial loss or consequential damages are not covered. 4x4 Posi-Lok reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or allows the exclusion or limitation of incidental or consequential damages, the above limitation or exclusion may not apply to you.

There are no warranties, expressed or implied, including any implied warranties of merchantability and fitness, which extend beyond the face hereof. Seller disclaims implied warranty of merchantability.

LIMITATION OF LIABILITY

4x4 Posi-Lok's liability hereunder shall not exceed the purchase price of the product. 4x4 Posi-Lok shall not be liable for any incidental or consequential damages, whether direct or indirect, including, but not limited to, personal injury, property damage, economic loss, loss of profit, or the like. 4x4 Posi-Lok shall not be liable for any damages or defects of any kind whatsoever after installation of the 4x4 Posi-Lok, unless the purchaser has complied with any and all installation instructions. The limitation of liability as set forth above shall apply even to claims of negligence or strict liability against 4x4 Posi-Lok.

OPERATING INSTRUCTIONS

Engagement: Relax the throttle - no acceleration or deceleration. Shift the transfer case to desired 4x4 mode. Press the button and pull the cable into full engaged position. (Light on-off throttle action while pulling on the handle will help align gears for smooth engagement.) Release the button.

Disengagement: Place transfer case in 2WD mode. Press the button, push the cable into full disengaged position, and release the button. If moving, light on-off throttle action will help to relax the drive train. Disengagement may be easier with some models if the vehicle is stopped and put into reverse for a few inches while pushing the cable in.

Notes:

2WD Lo-range–Place the transfer case in 4WD Lo range, but do not engage the 4x4 Posi-Lok system. **Warning: Do not apply excessive torque in this mode.**

If a differential gear locker is used in the front axle, the driver can manually unlock the front axle to make very tight right turns on hard ground, then re-lock to continue.

Save these instructions and place with owner's manual.

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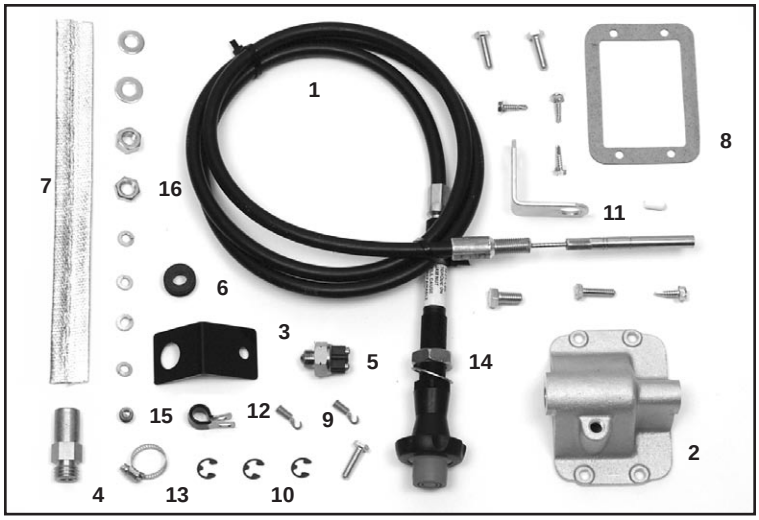


PARTS

1. Cable
2. CAD Housing
3. Dash Bracket
4. Switch Adapter
5. Light Switch
6. Firewall Grommet
7. Heat Shield
8. Housing Gasket
9. Wiring Fittings
10. E-Clips
11. L Bracket
12. C-Clamp
13. Vent Hose Clamp
14. Cable Nut & Washer
15. Vent Plug
16. Jam Nut

SPECIAL TOOLS

- RTV silicone sealant
- Unibit (unibit #3 recommended) or 11/16” drill bit

VACUUM

Vacuum source location may vary. Use provided cap to seal the source. Fig. 1.

SPECIAL TOOLS

Inspect fork pad wear and replace with Dana #621059 or Mopar #4137731, if necessary.

INSTALLATION

1. Remove the four screws mounting the hood release under the dash.
2. Move hood release assembly 3/4” toward the passenger side of the vehicle and re-mount using the three #10 self-tapping screws provided. **Note: The larger hole in the dash mount will not be reused.** (Fig. 2)
3. Place the supplied dash bracket between the hood latch and the emergency brake release. Bend the dash bracket so it is parallel to the firewall (Fig. 2). The amount of bend may vary. **Note: to protect the finish, place the bracket between two small blocks of wood in a vice and tap down with a soft face hammer or lift with non-marring tool.**
4. Install the dash bracket by placing it against the hood release bracket and attach using 1/4” self-tapping screws provided.
5. Cut a 1” square section (Fig. 3-A) out of the insulation 2” above the hood latch cable at the firewall (Fig. 3-B).
6. Check firewall before drilling for wires, hoses, etc. Mark spot 2” above the hood latch cable at the firewall and drill an 11/16” hole (Fig. 3)
7. Remove the nut and washer from Posi-Lok cable (Parts List #14). Start the cable through the dash bracket. Place a nut and washer over the end of the cable and continue through the hole drilled in the firewall.
8. Fasten the cable to the dash bracket loosely.
9. Cut the grommet on one side to form a “C” and install the grommet in the firewall (Fig. 4)
10. **Under the hood:** Route the cable around the steering shaft (Fig. 5) and along the starter cable (probably red).
11. **Jacking:** Support the vehicle frame with the front wheels off the ground, with wheels at full travel. Use jack stands and all safety precautions.

FIG. 1

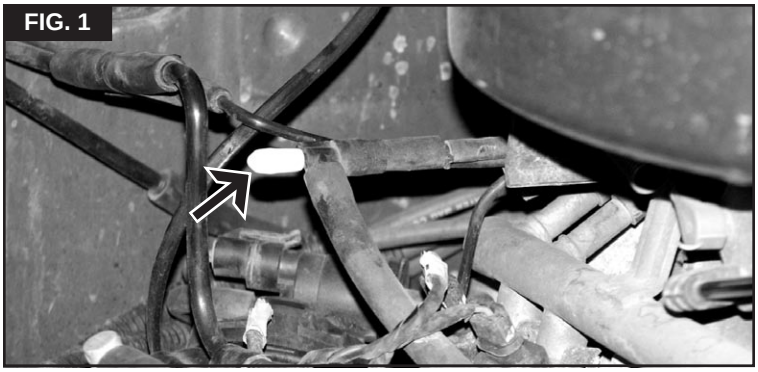


FIG. 2

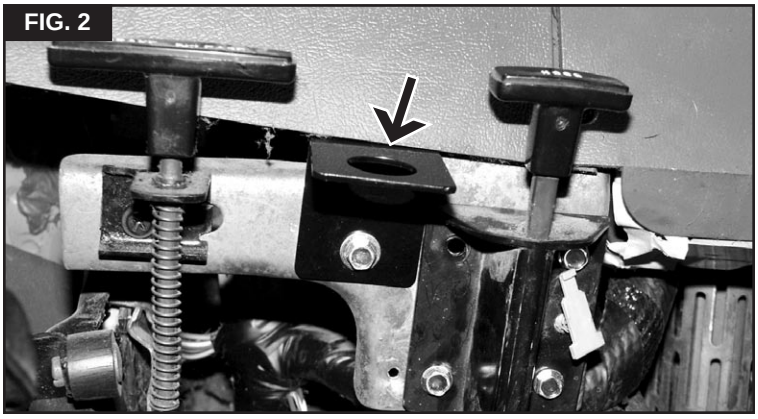


FIG. 3

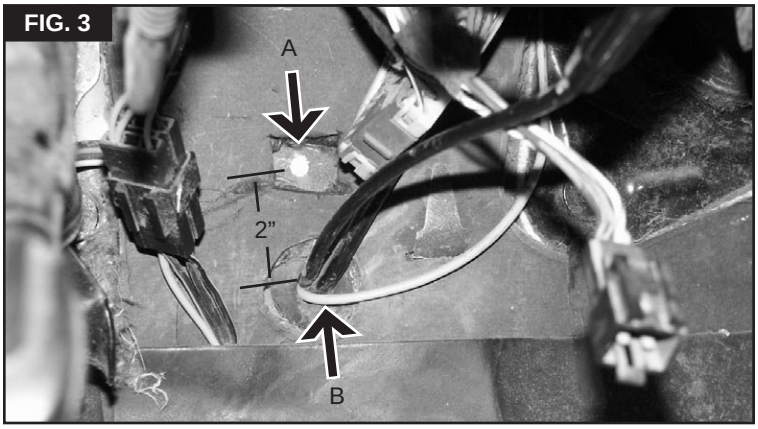
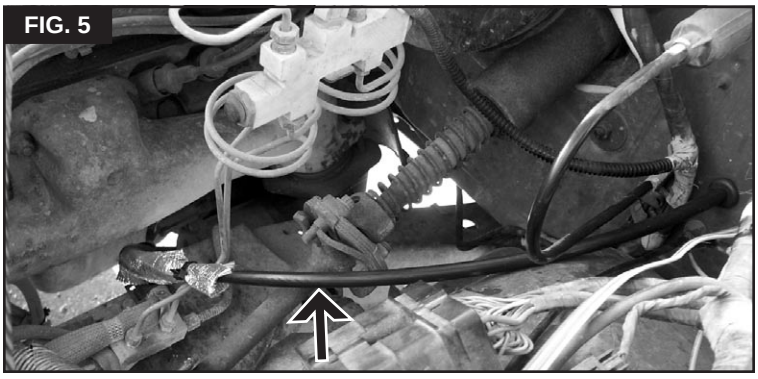


FIG. 4

FIG. 5



UNDER THE VEHICLE

12. Locate the CAD housing (Fig. 6) and remove the vacuum line from the housing. **Note: Pliers are needed to remove the clamps around the vacuum line.**
13. Remove the electrical plug from the CAD housing (Fig. 7)
14. Remove the axle vent hose. Remove the vent fitting from the CAD housing. The vent fitting will be reused (Fig. 8) **Note: A replacement hose clamp is provided (Parts List #13).**
15. Remove the CAD housing and place a clean rag in the axle to eliminate the chance of debris falling in the axle.
16. Remove the old gasket from axle. Use a putty knife to clean the surface under the gasket.
17. Remove the three E-clips from the OE diaphragm shaft inside the CAD housing. (Fig. 9)
18. Remove the fork from vacuum actuator. (Fig. 10) Disassemble the OE CAD housing. **Note: Force may be required.**
19. Install the light switch adapter to the new CAD housing (Parts List #4) using RTV sealant. (Fig. 10)
20. Screw the light switch on to the adapter (Parts List #5) using RTV sealant.
21. Reinstall the axle vent tube in CAD housing provided. If your vehicle was not equipped with a vent tube on the CAD, plug the hole in the supplied housing with the supplied pipe plug. (Fig. 12) (Parts List #15)
22. Place the heat shield on the Posi-Lok cable and secure next to the manifold with provided zip ties. (Fig. 13)
23. Thread a 7/16” jam nut on to the end of the cable. (Parts List #16)
24. Insert the cable into the housing. (Fig. 9)
25. Slide the fork over the rod with offset facing the cable side of the CAD housing. (Fig. 14)

FIG. 6

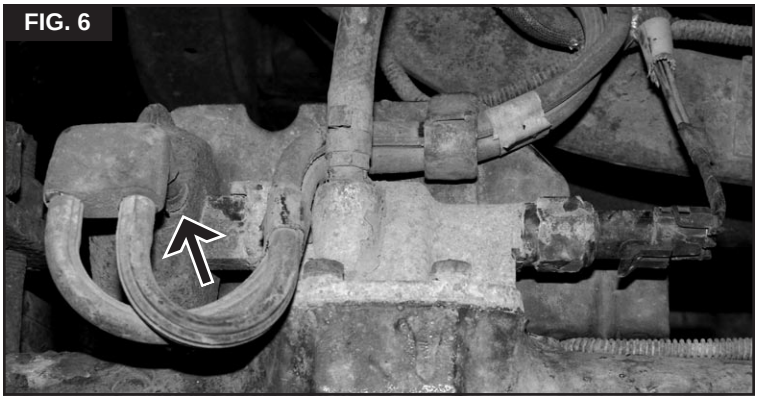


FIG. 7

FIG. 8

FIG. 9

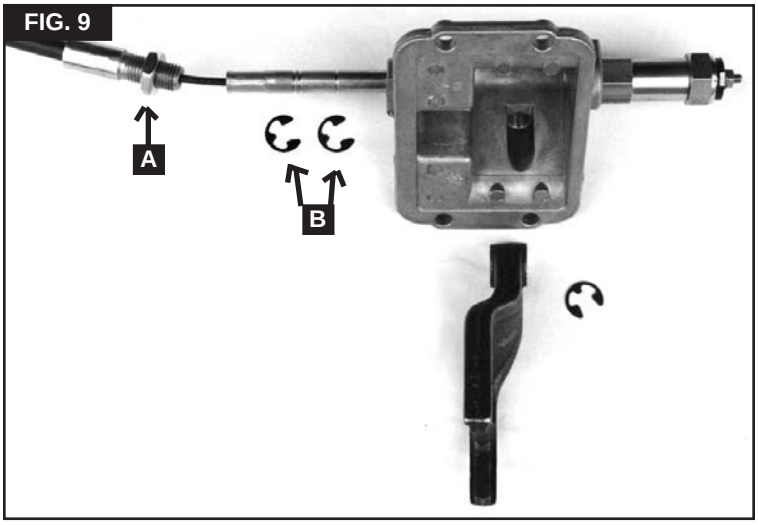


FIG. 10

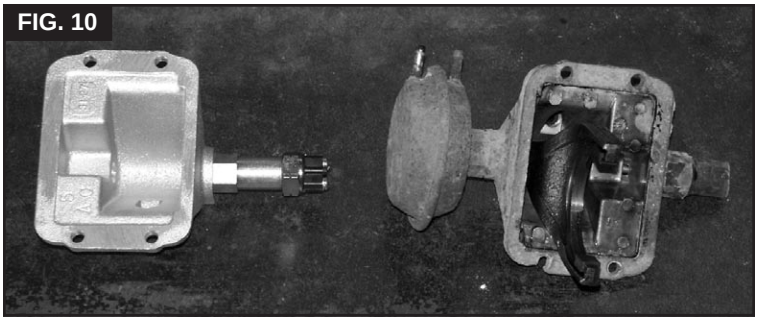
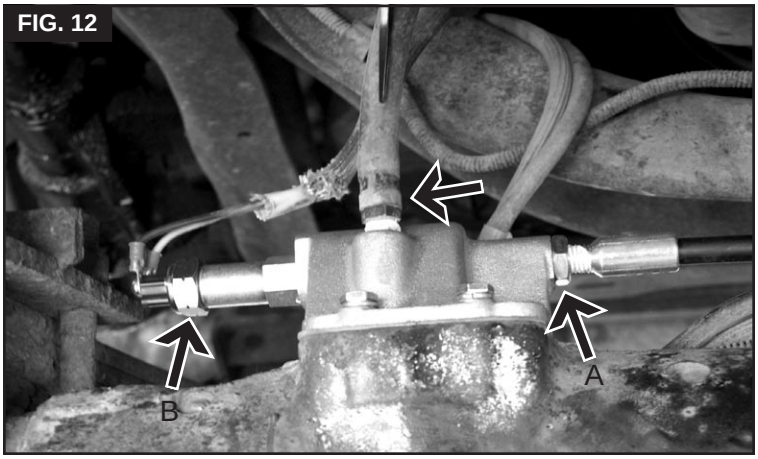


FIG. 11

FIG. 12



26. Thread the cable into the housing about 1/2” and use RTV sealant. Depress the button and push into full disengaged position. (Fig. 15)
27. Install three E-clips. Start with the cable side. (Fig. 9)
28. Depress the button and pull the cable approximately 1” to the full engaged position. Check to see that the stop E-clip is resting against the housing. **Note: the CAD housing must be removed from the axle in order to adjust the fork travel. If the E-clip does not contact the housing, thread the cable out until it does.**
29. Secure the cable by screwing the jam nut against the CAD housing. (Fig. 16A)
30. Modify the switch wiring. (Fig. 16B)
31. Place RTV silicone sealant on the gasket and place on CAD housing.
32. Install the CAD housing on the axle, making sure the fork is slid over the collar (Fig. 17). Torque the four bolts to OE specifications.
33. Install the 1/4”-20 x 1” bolt and lock washers provided.
34. Install the provided bracket (Part List #11) on to the bell housing using the existing bolt (Fig. 17).
35. Insert the cable into the provided C-clamp and attach to the bell housing bracket.
36. Be sure to leave enough slack in the cable for suspension travel.
37. Secure the retaining nut on the dash bracket (Parts List #14)
38. Lower the vehicle and test the 4x4 dash light operation by turning ignition key on and engaging the transfer case. (Fig. 16B, 18)
39. Check the gear lube level. Check the cable routing. Read the operating instruction and road test.

FIG. 13

FIG. 14

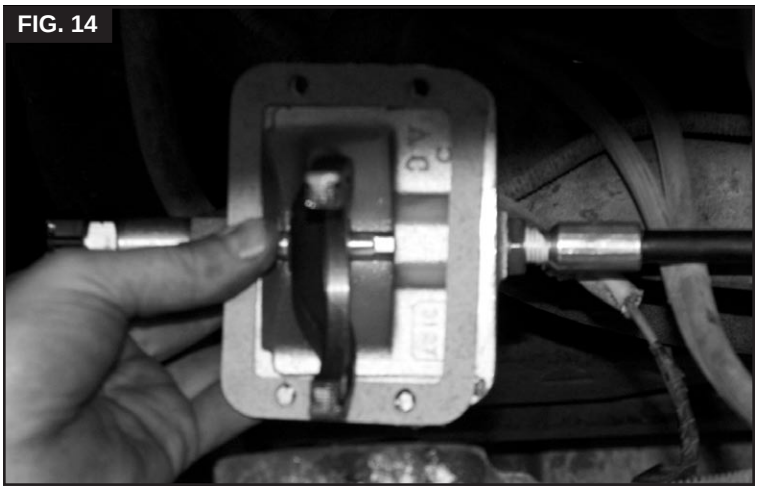


FIG. 15

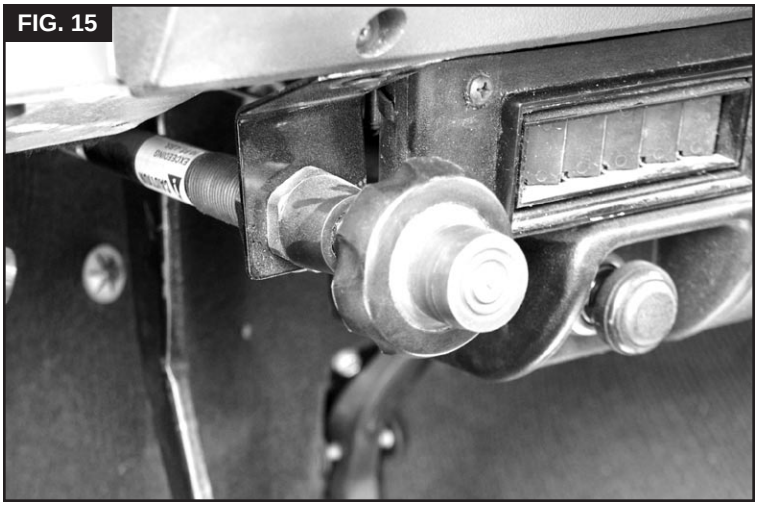


FIG. 16

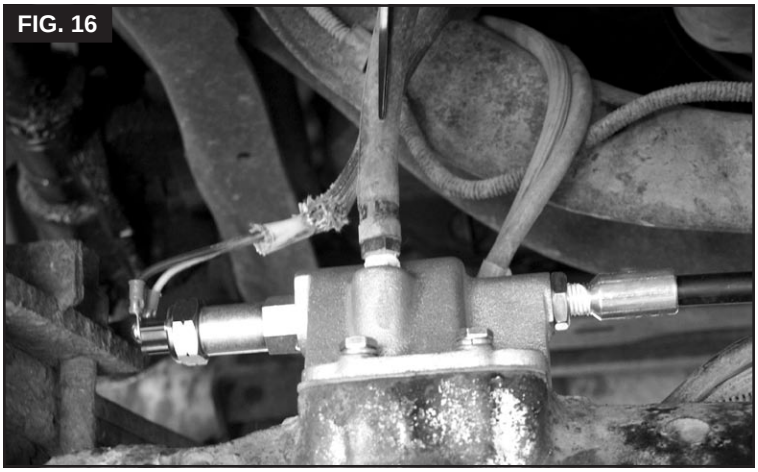
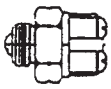


FIG. 17

FIG. 18

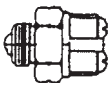
IF THERE IS NO ELECTRICAL SWITCH ON THE ORIGINAL COVER:



Make up 5” lead with #8 wire (supplied) and 1/4” lug terminals and connect to upper cover mounting bolt (ground)

Route another line up to OEM vacuum switch; cut and splice to OEM wire with butt splice provided.

WITH ELECTRICAL SWITCH ON ORIGINAL COVER



Cut off OEM terminal end, add #8 terminals to wires; OE wires, either wire to either terminal