

# Installation Manual

## 18056 KIT

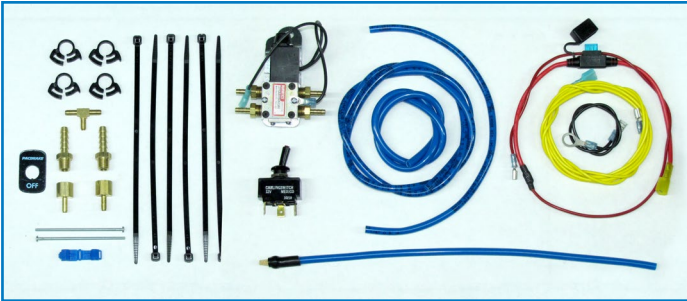
**4WD 2 Wheel Low Kit** 1994-2002 Dodge Ram (4WD)\*

*Allows the vehicle operator to engage the transfer case into 4WD low range without engaging the front wheel drive, allowing the vehicle to maneuver a trailer into a tight area without the wheel hop associated with a 4 wheel operation*

## Getting Started

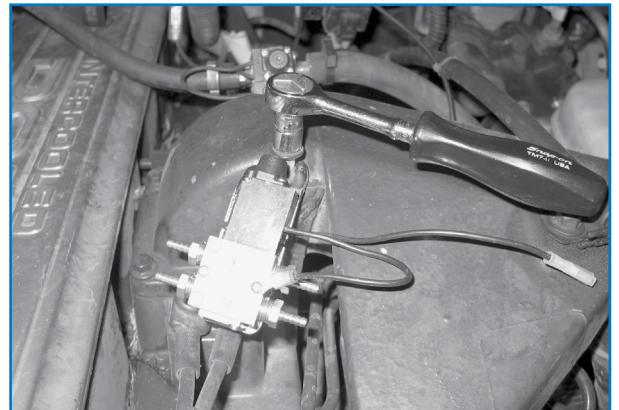
Thank you and congratulations on your purchase of a 4WD 2 Wheel Low Kit.

- 1 Before starting, check that the kit contains everything shown in the photo.

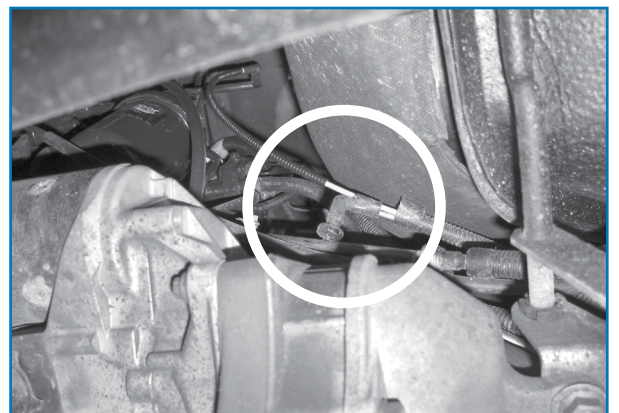


- 2 Install the solenoid assembly on the rear air intake horn using the existing capscrew.

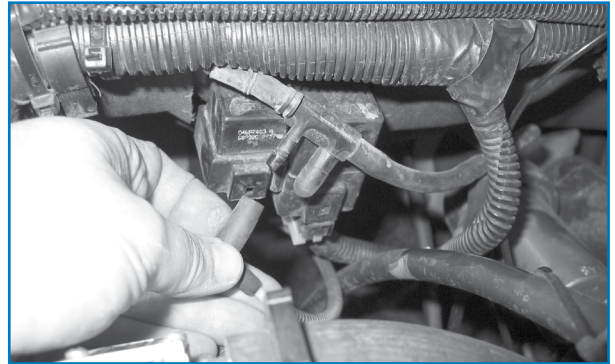
If there is a previously installed solenoid assembly for your exhaust brake located on the rear capscrew, it is permissible to install this assembly on the opposite side capscrew.



- 3 Locate transfer case vacuum lines adjacent to transmission above starter on driver's side of vehicle (green line = vacuum vent / white line = vacuum source)



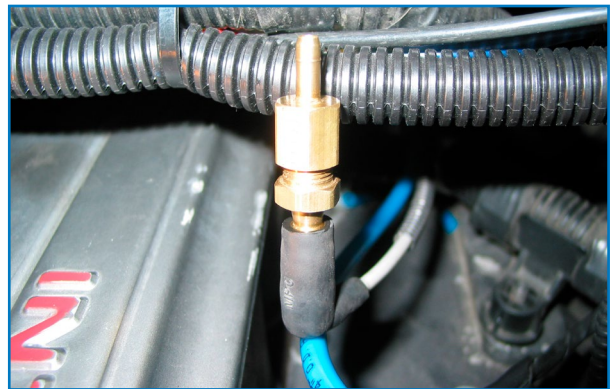
- 4** Locate the main vacuum source. This connection varies between model years. Follow the WHITE line beside the starter up to the firewall cowl to locate the main vacuum source.



- 5** Locate the two supplied 1/4" barbed male brass fittings and the two supplied 1/8" female brass fittings. Thread the male and female fittings together using Teflon tape or thread sealant and tighten.



- 6** Locate one of the two brass fittings assembled in step 5. Connect the white vacuum line removed in step 5 to the barbed end. Locate the short blue nylon line supplied and connect to the other end of the fitting. Connect the blue nylon line to the solenoid port #2.

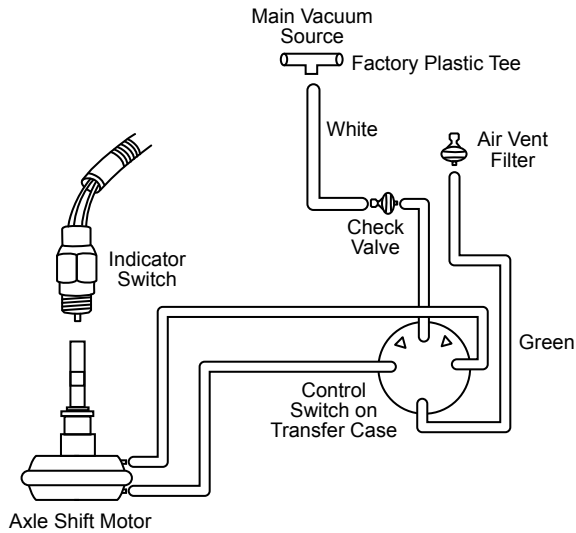


- 7** Using the short hose with breather vent installed, connect to port #3 of the solenoid valve. Route this breather to a location free from water and dirt.

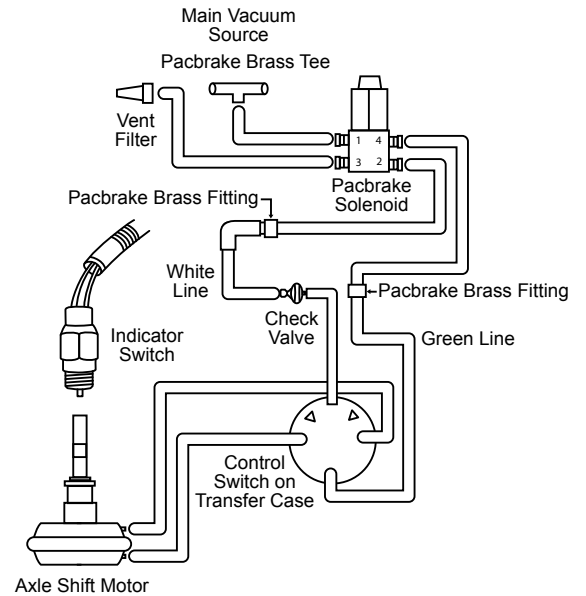


## 4 Wheel Drive Vacuum Control System

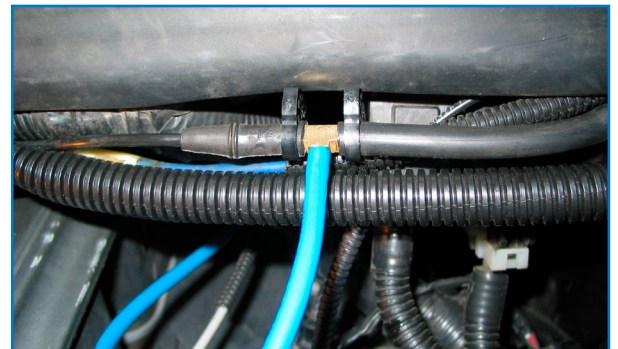
### BEFORE KIT INSTALLED



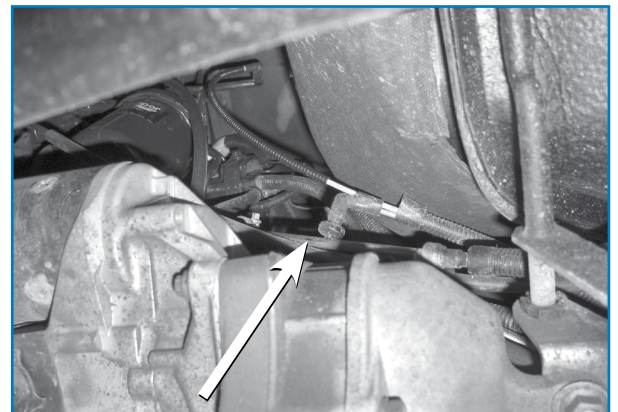
### AFTER KIT INSTALLED



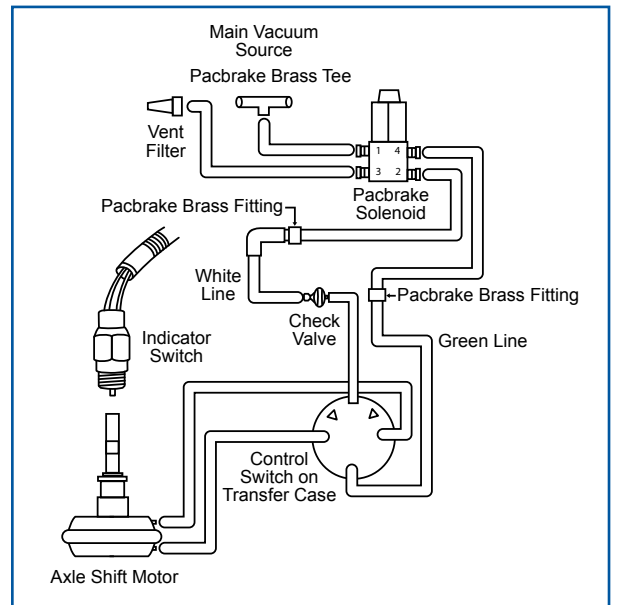
- 8 Attach the other short blue nylon line supplied to the middle port of the supplied brass tee fitting. Remove the existing plastic tee fitting from the main vacuum source line and replace with supplied brass tee fitting and line. Secure with supplied nylon hose clamps as needed. Connect this blue line to port #1 of the vacuum solenoid.



- 9 Remove air vent filter from 90° rubber elbow at the end of the green vacuum line.



- 10** Connect the long, blue nylon, line to port #4 of the solenoid and route the other end to the elbow on the existing green line. Using the other 1/4 x 1/8 (male/female) fitting assembled in step 5, insert the larger 1/4" barbed side into the rubber 90° hose end. Connect the smaller side to the blue nylon hose from port 4 of the solenoid. Secure all hoses with tie straps provided.

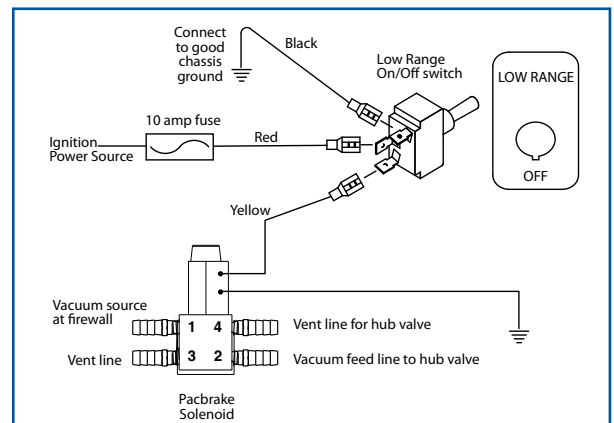


### Dash Switch and Wiring Installation

- 11** Consult with the vehicle owner for their preference on the location of the ON/OFF switch. Drill a 1/2" hole to accommodate the switch. Connect the wires to the dash switch (as shown in the schematic at step 11) and install the switch.



- 12** Locate a 12 volt ignition power source with a 14 to 16 gage wire diameter and connect the "T" tap terminal. Insert the male terminal of the RED wire into the "T" tap. Connect the black to a good chassis ground. Route the yellow wire of the harness through the firewall boot into the engine compartment. Recover this wire and route it and connect to the solenoid. Secure with tie-straps provided.



## Check Operation

Start the vehicle, engage the transfer case into 4-low and slowly start moving the vehicle forward turning the wheel hard in one direction. The 4WD light should come on and you should feel the front end hop as normal.

Stop the vehicle, turn the front wheels straight and engage the 4WD 2 Wheel Low switch, the light should come on in the dash switch. Wait until the 4WD light on the dash goes out, this indicates 2WD. Now slowly start moving the vehicle forward turning the wheel hard in one direction. You should not feel front wheel hop as before.

## Important

When the low range system is engaged the 4WD light will NOT be on in the dash panel, only the RED light in the low range dash switch will be on. Remember to disengage both the 4WD 2 Wheel Low switch and the 4WD switch or lever to 2WD before driving away. This system is designed for low speed maneuvering when high torque is necessary only.

## Pacbrake's 4WD 2 Wheel Low Kits & Performance Override Switch Kits

# Warranty

### PACBRAKE LIMITED WARRANTY

This Pacbrake warranty applies to all 4WD 2 Wheel Low Kits and Performance Override Switch Kits delivered on or after March 1<sup>st</sup>, 2007.

The 4WD 2 Wheel Low Kits and the Performance Override Switch Kits are products of Pacbrake Company and is warranted to be free of defects in construction and operation under normal use and service for the Warranty Coverage periods set forth. The warranty is non-transferable to next vehicle owner or another vehicle. There are no representations or warranties, which extend beyond the terms hereof.

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING NO WARRANTY OF MERCHANTABILITY AND NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

### PRODUCT WARRANTED

Warranty Coverage applies to ALL PACBRAKE 4WD 2 WHEEL LOW KITS & PERFORMANCE OVERRIDE SWITCH KITS.

### WARRANTY COVERAGE

6 months against workmanship issues and manufacturing material defects.

### Labor charges:

Labor charges associated with repair or replacement of this product is the sole responsibility of the vehicle owner.

### LIMITED WARRANTY

Under these limited warranties, Pacbrake will repair or replace without charge, any part returned to us, freight prepaid, which our examination discloses to our satisfaction to have been defective within the warranty coverage period measured from the date of delivery of the product in question to the original user.

This warranty will not apply to any part or parts which have been altered or repaired, or to parts which have been subjected to misuse, abuse, neglect, off-road, racing ("Racing" is used in its broadest sense and for example, without regard to formalities in relation to prizes, competition, etc.) or accident, cosmetic and or finishing issues, or to parts which have been improperly applied, or installed. Improper installation, application, or substitution of parts not manufactured or approved by us shall void this warranty.

PACBRAKE'S SOLE LIABILITY AND YOUR EXCLUSIVE REMEDY IS LIMITED TO THE OBLIGATIONS SET FORTH HEREIN AND PACBRAKE SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES.

If the product should become defective within the warranty coverage period an authorized Pacbrake distributor shall be notified by you within ninety (90) days of your having notice of a defect. If a Pacbrake Distributor is unable to correct the problem or if you have any questions regarding this warranty, write to the following address providing full details of the problem including **proof of purchase** and the model number of the product involved.

**USA:** Pacbrake Company  
1670 Grant Avenue  
Blaine, WA 98230-5161

**Canada:** Pacbrake Company  
19594 - 96th Ave.  
Surrey, BC V4N 4C3

**Warranty registrations must be completed either online or via mail using the provided warranty card in your Pacbrake product kit. All warranty registrations must be submitted within 30 days of the installation date.**