



# Vantage Mobility International

## Pacifica OEM to VMI brake line routing

Document Number: TS-WI-0218

ASSEMBLY AREA	In the Field
MODEL	2017 Chrysler Pacifica

### RELEASE SIGNATURES

TITLE	SIGNATURE	DATE
WARRANTY MANAGER	David Hagstrom	
QUALITY MANAGER	Debbie Fanning	
MANUFACTURING ENGINEER	Dustin Cuprak	
SAFETY	Fred Proctor	
QUALITY	Gina Lockard	

### REVISION HISTORY

AUTHOR	DESCRIPTION OF CHANGE	REV	RELEASED	ECO#
Gina Lockard	Initial Release	A		

Document Number: TS-WI-0218

### SAFETY REQUIREMENTS

Safety Glasses	Safety gloves	Paint pen/marker
----------------	---------------	------------------

### TOOLS NEEDED



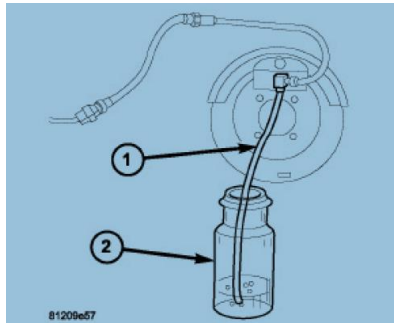
Dot 3 brake fluid



130 in-lb torque wrench with a 15mm crows foot



15 , 12 and 10 mm open end or line wrenches



Brake bleeding equipment



2 operators to assist in brake bleed



Lift



# Vantage Mobility International

## Pacifica OEM to VMI brake line routing

Document Number: TS-WI-0218

### SCOPE

This document provides detailed instructions for verification and routing of the hydraulic brake lines from the OEM ICU to the VMI rear brake lines should it be necessary.

#### Chrysler OEM - Brakes/05 - Brakes, ABS/Warning

##### WARNING

**WARNING:** All the operations should be carried out taking great care to avoid personal injury. The engine compartment contains many moving parts, components at high temperatures and live wires. Follow the warnings given below very carefully when working in the engine compartment: Turn off the engine and wait for it to cool down, do not smoke, do not use naked flames and ensure a fire extinguisher is available nearby. The use of special equipment is required for certain procedures. The use of these tools is vital for working safely. Follow the current workshop safety regulations. Where necessary, the Manual contains specific procedures to be followed to prevent dangerous situations from arising. When using chemical products, carefully follow the safety instructions on the safety card. The safety card must be provided to the consumer by the supplier. The electronic ignition system produces voltages of 20,000 V and above which could be very hazardous to people especially if they are suffering from a heart condition. Therefore, take great care when working on these systems or in the vicinity of their components.

##### CAUTION

**CAUTION:** All the operations should be carried out taking great care to avoid damaging components. To release parts that are sticking, tap gently using an aluminum or lead hammer if iron materials are involved; use a wooden or resin hammer for light alloy parts. When dismantling, check that components that should be marked have the appropriate references. When refitting, lubricate the parts, where necessary, to prevent seizing or binding during the initial operating period. When refitting it is vital to respect the adjustment nut tightening torques. Each time they are refitted, replace gaskets, oil seals, flexible washers, safety washers, self-locking nuts, pretreated screws, shear bolts and all parts that have deteriorated. Use adhesive paper or a clean cloth to suitably protect those parts of the engine which, if they remain uncovered after dismantling, will allow dust or foreign bodies to enter. Only genuine spare parts should be used to replace units or components that have been removed: this is the only way of ensuring the interchangeability and perfect operation of the various components.

Document Number: TS-WI-0218

### 05 - Brakes/05 - Brakes, Base/Hydraulic/Mechanical/FLUID/Specifications

#### SPECIFICATIONS

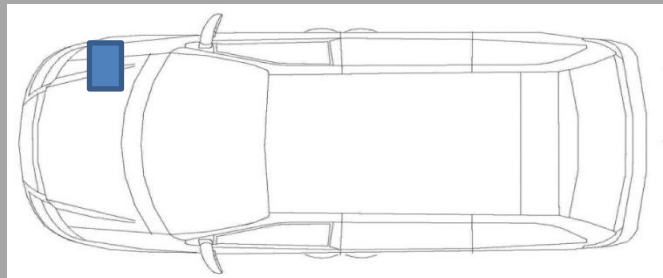
The brake fluid used in this vehicle must conform to DOT 3 specifications and SAE J1703 standards. No other type of brake fluid is recommended or approved for usage in the vehicle brake system. Use only Mopar® Brake Fluid DOT 3 Motor Vehicle or equivalent from a tightly sealed container.

**CAUTION:** Never use reclaimed brake fluid or fluid from a container which has been left open. An open container will absorb moisture from the air and contaminate the fluid.

**CAUTION:** Never use any type of a petroleum-based fluid in the brake hydraulic system. Use of such type fluids will result in seal damage of the vehicle brake hydraulic system causing a failure of the vehicle brake system. Petroleum based fluids would be items such as engine oil, transmission fluid, power steering fluid, etc.

#### CONTENTS

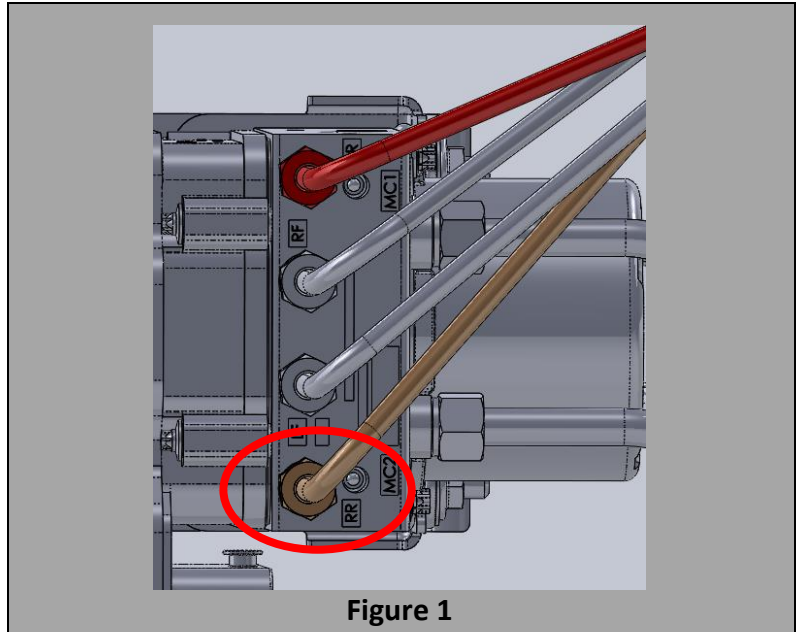
1. The first step is to identify the OEM brake line routing in the engine compartment. This is accomplished one of 2 ways.
2. Locate and uncover the ICU. There are markings stamped into the aluminum housing designating where each line should hook up (Figure 1).



ICU Location

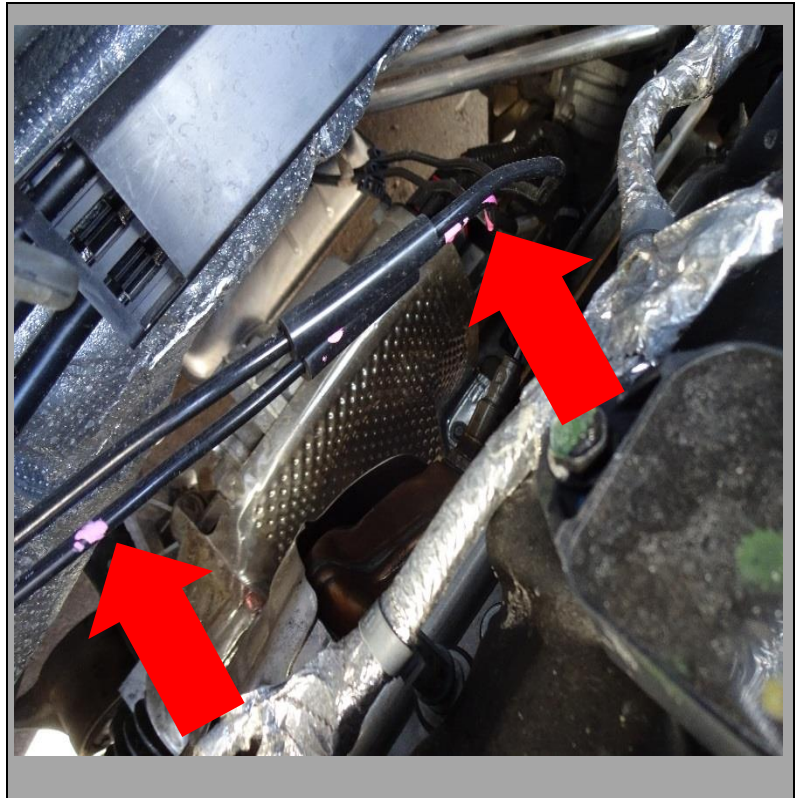
Document Number: TS-WI-0218

3. Locate the RR (Right Rear Wheel Brake line) and begin to follow the line physically along the firewall to the VMI connection point.



4. Follow the selected line around the apron and down the firewall. **MAKE SURE YOU MARK THE LINE with tape, marker or other device to ensure you continue to follow the RR line. (Marking the line is recommended regardless of the visibility of any OEM part numbers or tags).**

**IMPORTANT!** You will need to be able to see your marks when the van is in the air (or you are underneath it). Mark the line well enough for you to be able to differentiate it from the other line coming down the firewall.



Document Number: TS-WI-0218

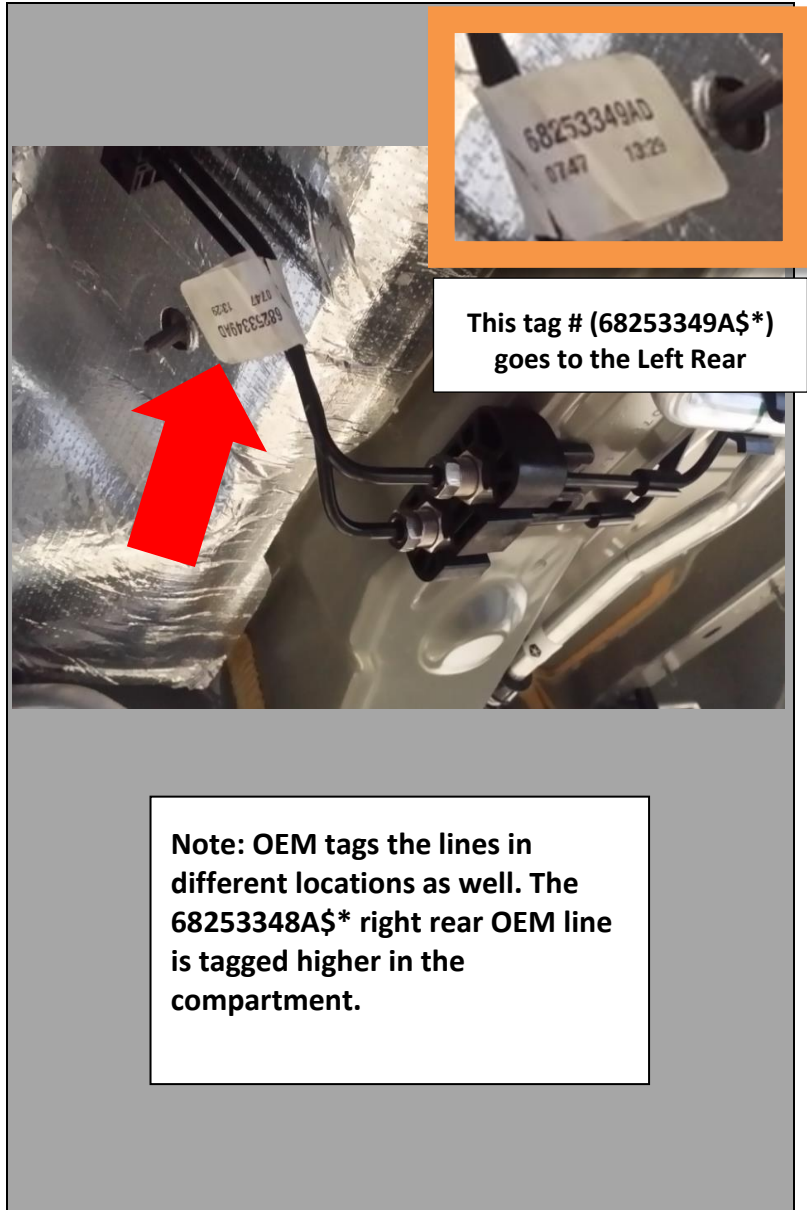
5. There is a second way to distinguish between the lines utilizing the OEM part numbers tagged on the lines. If the van is used or has higher mileage it may be hard to read the labels.

68253348A\$\* OEM line, when connected correctly, should attach to the right rear brake line.

68253349A\$ OEM line, when connected correctly, should attach to the left rear brake line.

**NOTE:** OEM tags the lines in different locations as well. The 68253348A\$ right rear OEM line is tagged higher in the compartment.

\* "\$" in the instructions represents a placeholder for the OEM revision of the p/n. In the picture the part is at revision 'D'. The letter on the actual vehicle being repaired may be different. The revision letter does not affect the recall



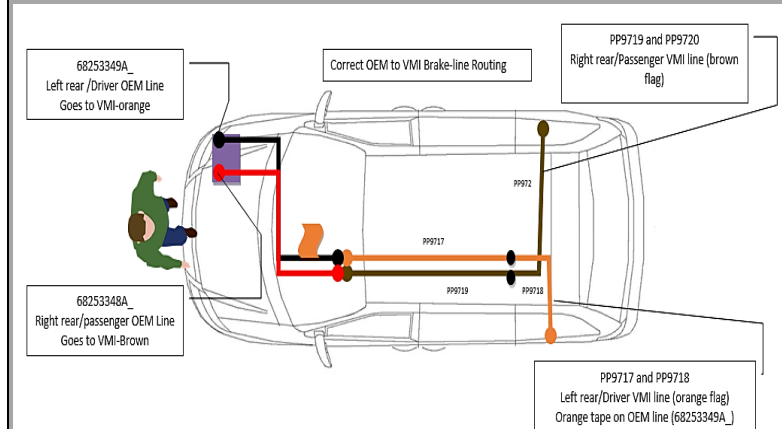
Document Number: TS-WI-0218

6. For ease of performance, You may want to safely put your van on a lift.



7. From under the van you will be looking for VMI brake line routing. The line that was traced and marked from the ICU should terminate at the RR wheel. (The VMI lines may have assembly flags still attached. The orange flagged line routes to the left rear wheel and the brown flagged line routes to the right rear wheel)

**IMPORTANT!** Verify your OEM brake line marking against the true physical routing.





Document Number: TS-WI-0218

8. If re-routing the lines to the correct wheels is required disconnect the 2 lines at the VMI-OEM junction in the engine compartment at the firewall lower.



9. Attach the RR line you marked from the ICU (68253348A\$ if tagged) to the VMI line which goes to the right rear wheel. (remember, it may still have a brown VMI assembly tag attached)

10. Attach LR OEM line (or 68253349A\$ if tagged) to the line which goes to the left rear wheel. (which may still have an orange VMI assembly tag attached)



11. After lines are routed to correct wheels, torque the union to 130 in·lb

**12. Verify line clips are still intact and separating lines.**

13. Adjust routing if necessary to keep lines from contacting each other



**130 in·lb torque wrench with a 15mm crows foot**

Document Number: TS-WI-0218

14. Bleed brakes according to the following OEM procedure.

See OEM screen snips for bleeding process

2017 - RU - CHRYSLER PACIFICA - 3.6L V6 24V VVT ENGINE

05 - Brakes/05 - Brakes, Base/Standard Procedure

### BASE BRAKE BLEEDING

**CAUTION:** Before removing the master cylinder reservoir cap, thoroughly clean the cap and master cylinder fluid reservoir to prevent dirt and other foreign matter from dropping into the master cylinder fluid reservoir.

**NOTE:** NOTE: The following wheel sequence should be used when bleeding the brake hydraulic system. The use of this wheel sequence will ensure adequate removal of all trapped air from the brake hydraulic system.

1. Left Rear Wheel
2. Right Front Wheel
3. Right Rear Wheel
4. Left Front Wheel

**NOTE:** When bleeding the brake system, some air may be trapped in the brake lines far upstream, as much as ten feet from the bleeder screw. Therefore, it is essential to have a fast flow of a large volume of brake fluid when bleeding the brakes to ensure all the air gets out.

Pressure bleeding the brakes is recommended.

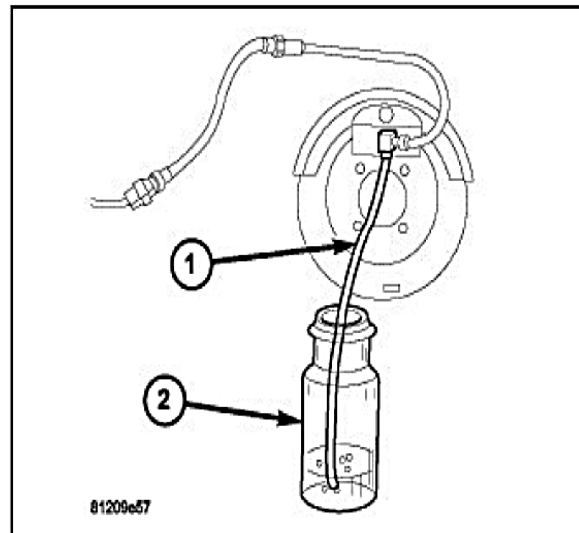
Document Number: TS-WI-0218

**NOTE:** To bleed the brakes manually, the aid of a helper will be required.

1. Attach, Bleed Tube 8358-1 (1) to the bleeder screw and feed the hose into a clear jar (2) containing enough fresh brake fluid to submerge the end of the hose.
2. Have a helper pump the brake pedal three or four times and hold it in the down position.
3. With the pedal in the down position, open the bleeder screw at least one full turn.
4. Once the brake pedal has dropped, close the bleeder screw. After the bleeder screw is closed, release the brake pedal.
5. Repeat the above steps until all trapped air is removed from that wheel circuit (usually four or five times).
6. Bleed the remaining wheel circuits in the same manner until all air is removed from the brake

system. Monitor the fluid level in the master cylinder reservoir to make sure it does not go dry.

7. Check and adjust brake fluid level to the FULL mark.
8. Check brake pedal travel and feel. If pedal travel is excessive or if the pedal feels excessively spongy, some air may still be trapped in the system. Re-bleed the brakes as necessary.
9. Test drive the vehicle to verify the brakes are operating properly and pedal feel is correct.





# Vantage Mobility International

## Pacifica OEM to VMI brake line routing

---

Document Number: TS-WI-0218

---

**Note:**

- *If you use a pressure bleeder, it is recommended you follow the manufacturer's instructions.*
- *OEM recommends 4-8 ounces of fluid bleeds through and verification of no air bubbles.*
- *Follow the procedure at the remaining bleeder screws.*
- *If tires were removed, remember to re-torque your lug nuts to 100 ft-lbs.*

**IMPORTANT**

**15. Test drive and verify brake line fittings do not leak and brakes are operating properly.**



# Vantage Mobility International

## Pacifica OEM to VMI brake line routing

---

**Document Number: TS-WI-0218**

---

This document may not be reproduced without permission. Check all hard copies against the current electronic version in the Document Control System before using. Destroy promptly thereafter.

Do not use draft, archived, or obsolete revisions.

*Last Edit Date: Wednesday, June 14, 2017*