PERFORMANCE MACHINE LIMITED WARRANTY INFORMATION

Performance Machine warrants to the original purchaser that the parts to be free of manufacturing defects in materials and workmanship for a period of (1) year from the date of purchase. In the event warranty service is required, you must call Performance Machine immediately with a description of the problem.

If it is deemed necessary for Performance Machine to make an evaluation to determine whether the part is defective, a return authorization number will be given by Performance Machine. The parts must be packaged properly so as to not cause further damage and returned prepaid to Performance Machine with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem. If after the evaluation by Performance Machine the part was found defective it will be repaired or replaced at no cost to you. If we replace it, we may replace it with a reconditioned one of the same design.

Performance Machine shall not be held liable for any consequential damage resulting from the failure of a Performance Machine part. Performance Machine shall have no obligation if a part becomes defective as a result of improper installation or abuse.

IMPORTANT NOTICE

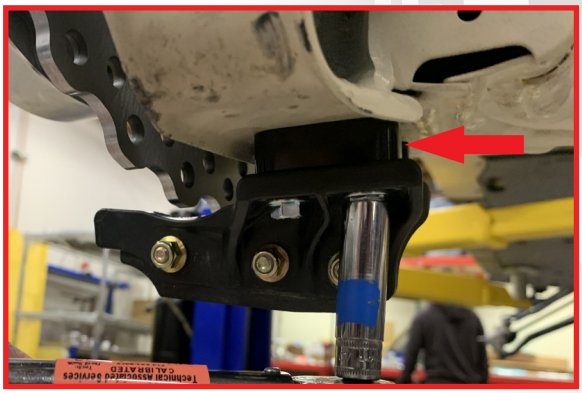
Before installing, read through these instructions completely; this will familiarize you with the way in which parts fit together and the tools needed to complete the job. This product involves alterations to your vehicle and may void your factory warranty. PM STRONGLY recommends this installation be done by an experienced mechanic.

DISCLAIMER

These Performance Machine parts are designed for high performance off road applications and are intended for the very experienced driver only. The installation of these Performance Machine parts may adversely effect or void your factory warranty.

INSTRUCTIONS

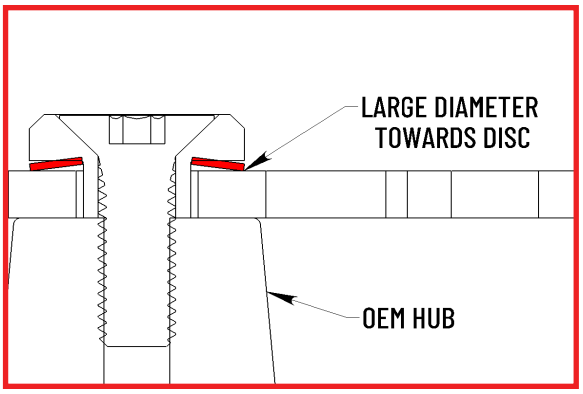
1. Place vehicle in park on a level surface or on a vehicle lift. You can either change all four discs and calipers at one time or remove and install one at a time on each corner of the vehicle.
2. Remove wheels from vehicle. Remove the caliper from the bearing carrier so that the OEM hub and disc assembly can be removed. At this point, you can depress the brake lever and keep it held in depressed position throughout the install, use a weight or wedge between brake lever and seat to hold in position during entire install. This will prevent all the brake fluid from draining once you remove the banjo bolt from the OEM caliper.
3. **Installing rock deflector spacer:**
   Before installing the rear discs to the vehicle, the rock deflector must be removed and reinstalled using the included spacer to provide clearance for the larger discs. Remove the 4 OEM bolts and discard, they will not be reused. Install the new spacer between the trailing arm and OEM rock deflector. Install using the new M6 x 30mm long flanged hex head bolts. Use medium strength loctite and torque to 8 ft-lbs.



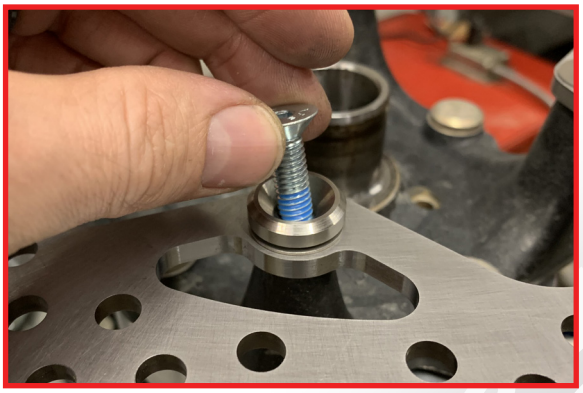
4. **Removing The Discs:**
   a. Remove the large axle nut using a 30mm socket after removing the cotter pin. You can now remove the OEM hub and disc assembly from the vehicle.
   b. Remove the OEM disc from the hub. These bolts have loctite from the factory and may be difficult to remove. Using a small torch to heat the bolt/hub may assist in removal of the OEM hardware.
   c. The front and rear discs are different front to rear on the PM CAN AM X3 brake kit.
   d. Front discs can be identified by the larger diameter and mounting holes with slot shape for the floating element installation. The rear rotor is a smaller diameter and has countersunk holes similar to OEM disc design.

5. **Front Disc Installation:**
   a. The front disc uses a floating sleeve and spring washer to hold the disc tightly while allowing for heat expansion during hard use without warping. To install you will need (4) M8 x 25mm long flat head screws, (4) spring washers, and (4) stainless steel floating spacers.

b. Place the disc on the OEM hub. Place the spring washer with the large diameter side touching the disc face as shown.

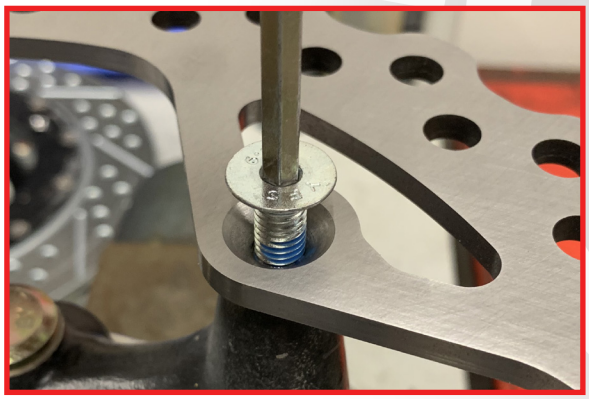


c. Install the floating spacer and longer M8 x 25mm bolts. Use medium strength loctite and torque the bolt to 20 ft-lbs with a torque wrench.



6. Rear Disc Installation:

a. The rear disc mounts the same as the OEM disc. Place the disc with countersink side facing up and mount using the shorter M8 x 20mm bolts. Use medium strength loctite and torque the bolt to 20 ft-lbs with a torque wrench.



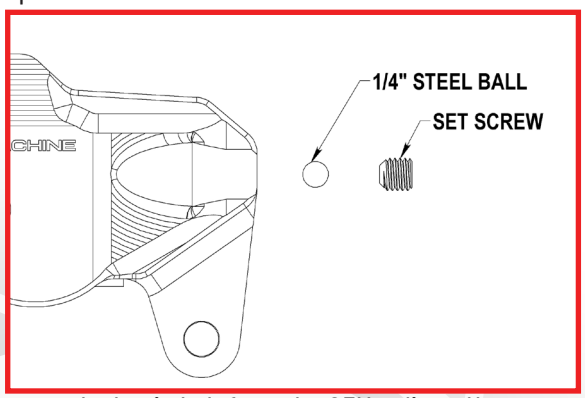
7. Reinstall the OEM hub with PM discs back onto the vehicle. Tighten the axle nut to 180 ft-lbs and install a new cotter pin.

8. Installing the Calipers

a. Identify the front vs. rear calipers. The front calipers have larger diameter pistons than the rear. Ensure the correct caliper is installed on the front and rear. The front calipers are engraved with "FRONT" and the rear with "REAR".

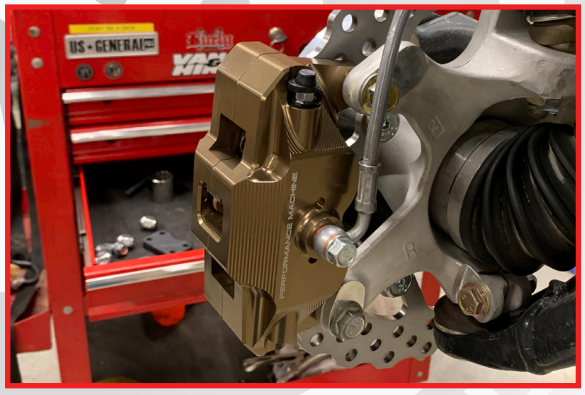
b. Ensure that once installed the bleeder screw is on the top side to ensure proper bleeding.

c. If bleeder needs to be relocated to the opposite side, remove bleeder along with set screw and 1/4" steel ball. Move to the correct side and reinstall, ensure steel ball is in place below set screw. Apply medium strength loctite to the set screw and torque to 9 ft-lbs.



d. Remove the banjo bolt from the OEM caliper. Use a rag to prevent brake fluid from getting on any other brake parts. If the brake lever has been held down only a small amount of fluid should leak out.

e. Using the OEM banjo bolt and new copper crush washers install the brake line to the new PM caliper oriented as shown. Torque to a minimum of 96 in-lbs and up to 120 in-lbs if any leaks are detected during testing.

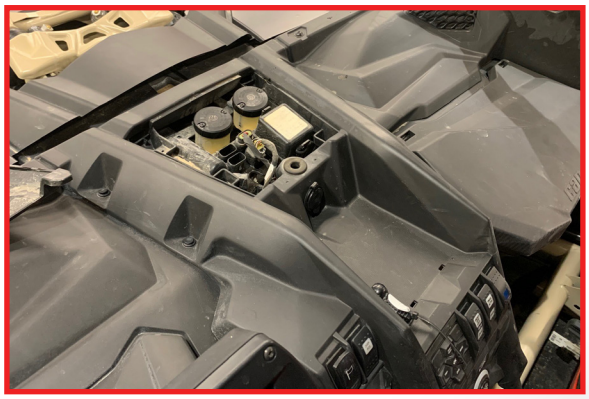


f. Reinstall caliper to the bearing carrier using OEM hardware, apply medium strength loctite and torque to 35 ft-lbs.

9. Bleeding the Brake System

a. Once all four calipers are installed to the vehicle you will need to bleed the brake system. If you held down the brake pedal during assembly you must release the lever back to the fully returned position.

b. Remove both caps from the brake reservoirs located under the plastic cover on the dash. One reservoir feeds the rear calipers and the other the front calipers. If the reservoir is low or empty top off with DOT 4 brake fluid.



c. Place a Pneumatic Brake Fluid Bleeder on the bleeder screw of each caliper, open the bleeder using an 8mm wrench to allow fluid to flow. Pull fluid through the system until you see fluid coming out of the caliper. Ensure the bleeder screw is fully closed before moving on to the next caliper. Do this on all four calipers. Ensure the reservoir always has fluid and refill as necessary. The brake lever does not need to be pumped during this process.

d. Once all calipers have fluid in them you can pump the brake pedal until some pressure is achieved. This may use a lot of fluid so ensure the reservoirs do not run low on fluid. If some brake pressure is felt you can move onto the next step, if no pressure is felt, pull more fluid from each caliper using the Pneumatic Brake Fluid Bleeder.

e. The final bleed will require two people. One person will sit in the vehicle and pump the brakes a couple times before holding light pressure. While holding pressure the second person will open the bleeder slightly. Do this at least twice per caliper or until no bubbles are seen when opening the bleeder.

f. Once sufficient pressure is felt in the pedal and no air bubbles are seen when bleeding you can top of the brake reservoirs and reinstall the reservoir caps.

g. Tighten bleeder screws tightly.

h. Install the wheels back onto the vehicle.

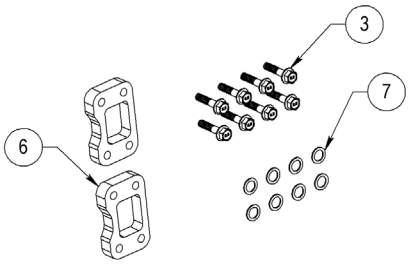
10. Break in Procedure

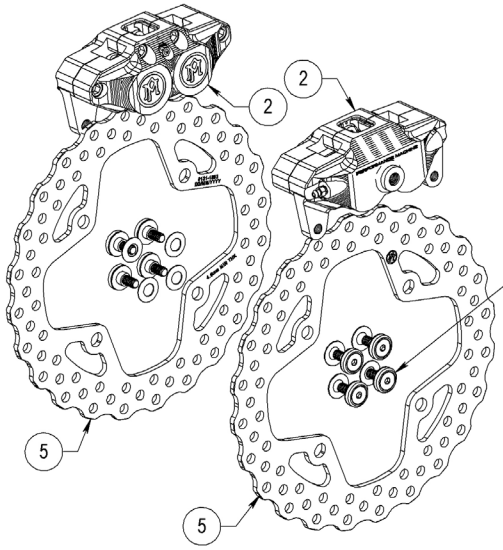
a. For best performance it is best to bed in your new brake pads to the new brake discs. To do this, perform a series of stops with increasing speed and stopping power. You will want to get up to the max speed you will be driving and brake hard just to the point of locking up the wheels at least 8 times.

b. Once you have done this, let the brakes cool down completely.

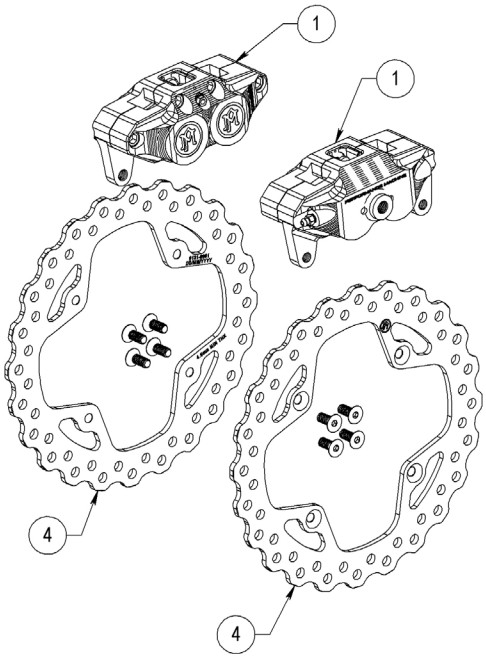
c. After this break in, check that there no leaks from the bleeder or banjo bolts. We recommend bleeding the brakes once more by hand to ensure that you do not see any air bubbles coming out with the fluid. Any air bubbles still trapped in the system will negatively affect the brake pedal feel and performance.

You are now ready to use your new PM brake system.





HARDWARE INCLUDED, BAGGED ON SKINBOARD WITH DISC



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	0052-2101	125 X 4 REAR CALIPER LT & RT, UTV CALIPER X3/ TALON	2
2	0053-2101	137 X 4 FRONT CALIPER LT & RT, UTV CALIPER CAN AM X3	2
3	0105-8030-ZN	HHCS M6 X 1.0 X 30, ZINC PLATE	8
4	0131-0901	DISC 10.8 X .20, 1 PC SS, REAR UTV DISC, CAN AM X3	2
5	0131-1593	DISC 11.5 X .20, 1 PC STAINLESS, FRONT UTV BRAKE DISC, CAN AM X3	2
6	0224-0001M	ROCK DEFLECTOR SPACER, CAN AM X3	2
7	2025-057	CRUSH WASHER, M10	8