



**Performance
Machine · Inc**
DISC BRAKES AND WHEELS

Installation Instructions

CONTOUR HYDRAULIC CLUTCH HOUSING
1987 AND NEWER, 5 + 6 SPEED BIG TWIN S

ATTENTION

Statements in these instructions that are preceded by the following words are of special significance:

Warning

This means there is the possibility of injury to yourself or others.

Caution

This means there is the possibility of damage to the motorcycle.

Note

Information of particular importance has been placed in italics.

WARRANTY

Performance Machine Inc. warrants to the original purchaser that the parts of this Clutch Housing to be free of manufacturing defects in materials and workmanship for a period of one (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 to be 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 or incidental damages 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, modification or abuse.

This instruction sheet covers PM Clutch Housing part #s 0066-2000, 0066-2001 + 0066-2008

Important Notice

ⁿ Before installing a clutch housing, read through these instructions completely; this will familiarize you with the way in which the parts fit together and the tools needed to complete the job.

ⁿ In the course of installing this housing you will be replacing the stock cable clutch slave with a high performance unit. Please pay special attention to the section of the instructions dealing with the adjusting of the clutch.

ⁿ PM products are design to use both DOT 4 and DOT 5 brake fluid, please use the manufactures suggested brake fluid. Never reuse brake fluid, Never mix DOT 4 and DOT 5 brake fluid, don't use brake fluid that you are not sure is new and clean. This installation should only be attempted by a mechanic with a thorough understanding of and experience with motorcycle hydraulic systems.

ⁿ The PM Contour Clutch housing will require an appropriate length hydraulic line and is designed to work with the Performance Machine Contour Master Cylinder. PM can not guarantee the performance of this product if used with non-PM master cylinder.



Disclaimer

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

PM Contour Clutch Housing

Performance Machine's Contour Clutch Housing is engineered to fit 1987 and newer Big Twins with a 5 & 6 speed transmission. The housing is designed to work with a PM master cylinder. Before starting the installation of this clutch housing, make sure it is the correct one for your motorcycle. All applications will require a hydraulic line kit.

Special Installation Notes

This unit requires a master cylinder with at least an 11/16" bore for optimum performance. This instruction sheet assumes you have already installed the PM Master Cylinder and are comfortable working with motorcycle hydraulics. If not, please refer this installation to a qualified motorcycle technician.

To install a PM Clutch housing, you will be removing the stock clutch housing and will need to replenish any lost transmission oil, as well as install a new clutch housing gasket. You may need the service manual for your model motorcycle for more detailed instructions.

Note

In addition to standard tools, to complete this installation, you will need:

- 1) Hydraulic Line Kit
- 2) Transmission Gear Oil
- 3) Manufacturer's suggested brake fluid

Removing The Stock Clutch Housing

Some models may require the removal of the exhaust system to allow access to the clutch housing. Drain transmission oil.

Photo 1: Place a suitable oil catch pan under the bike and remove the stock clutch housing from transmission. After bolts are removed press clutch lever to help break cover free. Discard gasket.

Photo 2: Remove push rod actuation assembly (push rod should stay in transmission). Remove retaining ring, thrust washers and throw out bearing. Pry oil slinger off shaft and discard.

Photo 3: Re-install thrust washers, throw out bearing and retainer ring.



PM CONTOUR CLUTCH HOUSING . AVAILABLE IN SMOOTH AND FLUTED DESIGN .



PHOTO 1

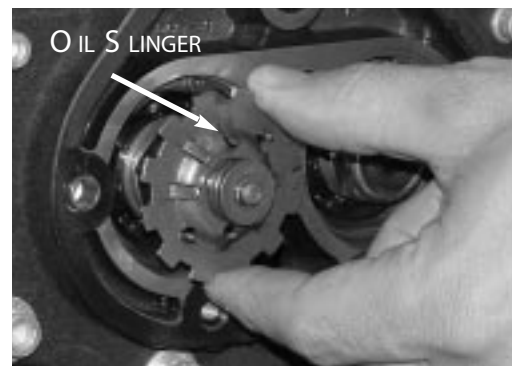


PHOTO 2



PHOTO 3

Installing PMClutch Housing



PHOTO 4

Photo 4: Re-install push rod actuation assembly.



PHOTO 5

Photo 5: Remove clutch cover (primary side of bike), loosen clutch jam nut and back out adjuster screw several turns. This will keep clutch from binding when new housing is installed.

Photo 6: Using a new gasket, install PMClutch Housing with supplied hardware. Place a drop of removable Threadlock on the threads of each bolt and tighten to 90 in-lb.

Caution

The two longer bolts will be used at the top of the housing on 5 speed.

Install hydraulic line and route to master cylinder. Loosen the bleeder screw to allow excess air to escape.

Return to primary side and screw in push rod adjuster to bottom out piston in PM clutch housing.

LONG BOLTS



PHOTO 6

Photo 7: Tighten bleeder screw (being careful not to overtighten). Fill master cylinder with manufacturer's suggested brake fluid to begin bleeding system. Attach a short length of rubber hose to the bleeder screw on the clutch housing, put the other end of the hose into a coffee can or other suitable catch can. Compress lever 5 times and hold to grip. Open bleeder screw and release air. Since you are starting with a completely new system it will take several repeats of this process to purge the system of air. Once completed, the lever will have a smooth, firm action.

Adjusting the Clutch



PHOTO 7

Photo 8: Back clutch adjuster screw out several turns to release tension on push rod. Turn back in until push rod bottoms out (you will feel light resistance, do not turn further, as clutch will begin to actuate). Now back out 1/2 to 1 turn and tighten lock nut.

Actuate clutch lever while watching clutch to confirm clutch is operating (a helper is handy at this point).



PHOTO 8

Re-install clutch cover and test ride bike.

PM strongly recommends you re-adjust after 1000 miles.

▬▬▬ Caution ▬▬▬

Failing to bleed all the air out of the hydraulic system will impede the performance of the clutch.



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