

# INSTALLATION INSTRUCTIONS

## DRAG SPECIALTIES PYTHON 2-1 EXHAUST FOR SPORTSTERS P/N 1800-0089

**ATTENTION INSTALLER** (if other than owner): Please forward this Instruction Sheet to the purchaser of this product. These instructions contain valuable information necessary to the end user.

**INTRODUCTION:** These instructions describe the procedure for properly installing the Python 2-1 exhaust on the 2004-2005 XL Sportster.

Review instructions carefully before beginning, as they contain important information. Please retain for future reference.

Particularly important information is distinguished in these instructions by the following notations:

**NOTE:** A NOTE: provides key information to make procedures easier or clearer.

**CAUTION:** A CAUTION: Indicates special procedures that must be followed to avoid damage to the motorcycle and/or accessories.

**WARNING!:** A WARNING!: Indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

### PROCEDURE:

#### STOCK EXHAUST SYSTEM REMOVAL

1. Loosen the heat shield clamps on both the front and rear exhaust pipes. This allows easier access to the head pipe mounting nuts.
2. Remove the two head pipe mounting nuts from each flange, located at the cylinder head.
3. Remove the two bolts from each muffler body that attach the muffler bodies to the mounting bar.
4. Remove the clamp bolt which mounts the rear head pipe to the belt drive cover bracket and carefully remove both exhaust pipes from the motorcycle.
5. Remove the drive belt cover and take the bracket off the rear cover bolt, it will not be re-used.
6. Loosen the brake rod at the rear eyelet using a T30 Torx driver.
7. Remove the exhaust mounting bar, saving the three mounting bolts and washers for re-use.
8. Using snap-ring pliers, carefully remove the flanges and circlips from the stock exhaust system. Save for re-use.

**NOTE:** If circlips look bent or twisted replace them with new circlips.

#### PYTHON EXHAUST SYSTEM INSTALLATION

1. Check condition of stock exhaust gaskets. Replace if damaged or worn. We do not recommend the use of the OEM cone style gaskets. The recommended replacement exhaust port gasket is Drag Specialties part number DS-173220.

2. Install and tighten supplied mounting bracket (stamped 360-P) using stock bolts and washers (Figure 1). Torque to 30-33 ft.-lb.

**NOTE:** Support the rear of the bracket during tightening to insure it is aligned with the bottom edge of the frame.

3. Re-install drive belt cover. Torque 1" x 3/8" bolt to 30-33 ft.-lb. and 2" x 1/4" bolts to 80-120 in.-lbs.
  4. Re-install brake rod eyelet using blue thread locking compound (Loctite® 243). There is a 1/2" clearance hole in the bracket to allow access for tightening brake rod eyelet. Torque to 120/180 in.-lbs. (Figure 1).
  5. Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet. Using a felt tip pen, mark outside edge of each heat shield to show location of mounting clips where hose clamps will loop through (Figure 2).
  6. Install circlips and flanges from the stock system onto both new head pipes.
  7. Lay head pipes into heat shields and loosely install hose clamps by feeding tail end of clamp into heat shield clips (Figure 2). Take note of screw head direction (Figure 3). Screw heads should be accessible when system is installed on motorcycle for adjustment purposes.
  8. Using stock flange nuts, carefully install head pipes into exhaust ports (assistance may be required).
- NOTE:** Do not tighten at this time.
9. Install 5/16" x 1-1/4" bolt, washers and 5/16" lock nut onto collector heat shield (stamped A115HC), and loosely install collector heat shield onto the collector (Figure 4).
  10. Install the muffler body onto the collector, making sure it slides forward enough so the head pipe heat shields and the muffler body all butt against the collector heat shield evenly.
  11. Slide the nut plate inside the bracket that is welded to the backside of the muffler body and attach the muffler body to the mounting bracket using two 5/16" x 5/8" flange head bolts (supplied). Leave them loose at this time (Figure 5).
  12. Tighten cylinder port exhaust flange nuts on front and rear cylinders.
  13. Align head pipe heat shields so they butt evenly with the collector heat shield and tighten all of the hose clamps.
  14. Tighten the clamp on the collector heat shield, securing the muffler body. Be sure muffler body is rotated correctly so that the logo on the scallop end is facing up and the muffler sits level on the bike.
  15. Tighten flange bolts securing the muffler body to the bracket.

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16. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
17. After installation and before starting motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean, soft cloth that will not leave a residue.

**Note:** Any residue, oil, or fingerprints will stain the chrome when the metal heats up.

18. Be sure to tighten all hardware before starting motorcycle.

**CAUTION:** After installation is complete, be sure to completely clean the pipes and muffler with a cleaning solvent and clean soft cloth that will not leave a residue before starting the motorcycle.

**WARNING:** Before operating motorcycle, be sure all hardware is tight. Every effort is made for Python Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.

### RE-JETTING INSTRUCTIONS

Re-jetting the carburetors will result in realizing the "full" potential of this performance exhaust system.

Jet kits are available for most applications. For fuel injected models, we recommend the use of an adjustable fuel management system.

### HELPFUL HINTS TO AVOID DISCOLORATION

1. Follow owner's manual instructions regarding use of the choke (starter enrichener). If left on longer than recommended, discoloration may be accelerated.
2. Avoid long periods of idling.
3. Intake leaks can cause engine to run lean and overheat, thus turning the pipes blue.
4. Make sure there are no exhaust leaks at the junction of the exhaust pipe and cylinder head.
5. When installing a new set of chrome pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with a cleaning solvent that will leave no residue (glass cleaner, alcohol, ammonia, etc.) before starting the motorcycle.



Figure 1. Support the rear end of the bracket while tightening the mounting bolts. Please note the hole in the bracket to allow access to tighten brake rod eyelet.

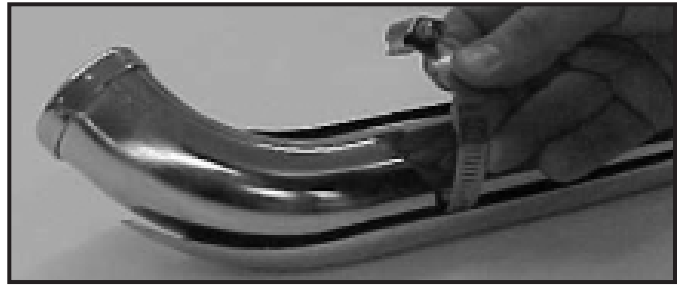


Figure 2. Mark the outside edge of the heat shield to show the location of the mounting clips where the hose clamps loop through.

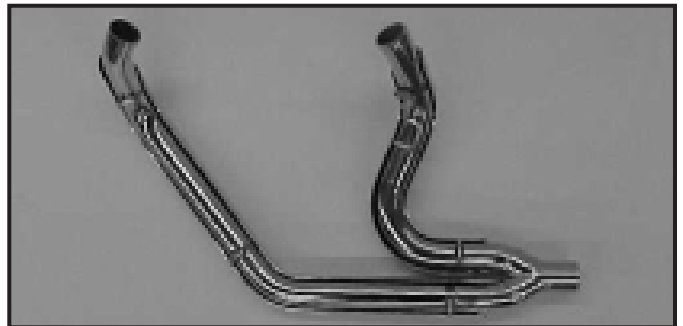


Figure 3. Install hose clamps so that the screw heads on the front heat shield point down and to the front. On the rear heat shield, the upper hose clamp screw head would point to the front, the middle screw head to the rear, and the lower screw head would point up.

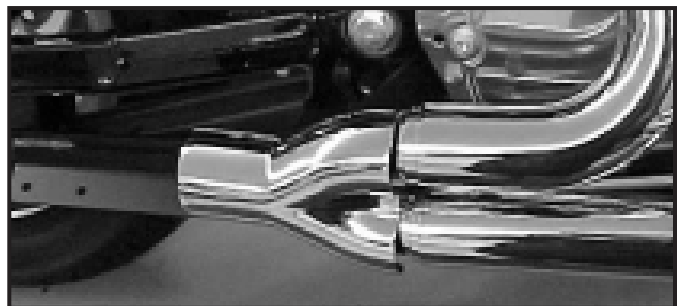


Figure 4. Installing the collector heat shield.



Figure 5. Installing the nut plate on the muffler body.

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