INSTALLATION INSTRUCTIONS

DRAG SPECIALTIES PYTHON VENOM RADIUS P/N 1800-0740/1800-1234

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 Venom Radius exhaust on 86 – 11 Softail models.

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.



TOOLS REQUIRED:

Flat blade screwdriver
Snap ring pliers
5/16" Nut driver
1/2", 9/16" & 7/8" or 22mm Combination wrench
3/8" Ratchet, extensions
1/2" & 9/16" Sockets
3/16" & 5/16" Allen wrench
T45 & T50 Torx wrenches

PROCEDURE:

NOTE: Pre 2007 models will require O₂ sensor port plug kit PART# 1861-0464 (sold separately).

REMOVAL OF THE STOCK EXHAUST SYSTEM:

 Under the oil tank on the right hand side, locate the rear O₂ sensor connector. Unplug sensor and feed the end of the wire through the frame freeing it from motorcycle.

NOTE: Pay attention to wire routing for re-installation.

- 2. Open the plastic cover above the rectifier on front of the frame to gain access to the front O₂ sensor connector. Unplug sensor from harness. Remove cable tie holding wire to frame and feed the end of the wire through, freeing it from motorcycle.
- On FLSTC, FLSTF, FLSTN and FLSTSC models, remove the right hand floorboard mounting bolts to gain clearance for exhaust removal and installation.
- **4.** Loosen the heat shield clamps on both front and rear exhaust pipes.
- 5. Remove the two mounting nuts from each headpipe, located at the cylinder head.
- **6.** If equipped, unbolt the carriage bolt and clamp attached to the bracket under the right side transmission cover.

- Remove the nuts attaching the exhaust mount bracket to the frame.
- **8.** On FXSTD and FLSTF models, you will need to remove the right side passenger foot peg and hanger, as this is attached to the exhaust mount bracket. Replace the passenger foot peg assembly using the ³/₈" x 2¹/₂" Allen bolt (supplied).
- 9. Remove the entire exhaust system and set is aside.
- If equipped, remove the bracket from under the right side transmission cover.
- 11. Using a $^{7}/8$ " or 22mm wrench, carefully remove the O_2 sensors from the stock headpipes and save for re-use with the new system.
- 12. Remove the two lower mounting studs from the frame (Figure 1).



13. Carefully remove exhaust port flanges and circlips from the stock exhaust system using snap ring pliers.

NOTE: Replace bent or damaged circlips and check exhaust port gasket condition. Recommended replacement exhaust port gaskets are Drag Specialties p/n DS-174742.

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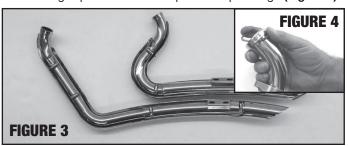
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INSTALLATION OF THE NEW PYTHON VENOM RADIUS EXHAUST SYSTEM:

1. Install mounting bracket 459-P using two 3/8" x 3/4" flange bolts (supplied) attaching exhaust bracket to the right side lower frame rail of motorcycle (Figure 2), do not tighten at this time.



2. Remove headpipes 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 that hose clamps will loop through (Figure 3).



- Install circlips and flanges from the stock system onto both new headpipes (Figure 4).
- 4. Lay headpipes into heat shields and loosely install hose clamps by feeding tail end of clamp into heat shield clips (Figure 3). Take note of screw head direction (Figure 5). Screw head should be accessible when system is installed on motorcycle for adjustment purposes. Use #20 hose clamps for head pipes areas and #28 hose clamps for muffler areas.

NOTE: Do not tighten at this time.

5. Apply a small amount of anti-seize compound to the threads of the O₂ sensors and install them into the headpipe.

NOTE: Be careful not to get anti-seize on sensor tip; it may affect sensor function.

Using stock flange nuts, carefully install headpipes onto motorcycle.

NOTE: Do not tighten at this time.

 Slide nut plates into brackets welded on backside of each muffler body (Figure 6). While holding nut plates in place, attach muffler bodies to

FIGURE 6

FIGURE 5



mounting bracket 459-P using four 5/16" x 5/8" flange head bolts (supplied). Leave them loose at this time.

- 8. Tighten exhaust port flange nuts, bracket bolts and bolts mounting pipes to bracket while making sure pipes are parallel.
- 9. Tighten all hose clamps while making sure that heat shields are aligned evenly (Figure 7).



- 10. Feed wire for the front O₂ sensor through the frame and into the plastic holder on the frame. Plug the sensor into the stock wiring connector. Snap the plastic holder closed to hold the connector in place.
- **11.** Install a new nylon cable tie (supplied) to hold the wire onto the frame in the original location.
- **12.** Feed connector for the rear O₂ sensor though the frame under the oil tank on the right-hand side. Plug the sensor into the stock wiring connector.
- **13.** Re-install the right floorboard mounting bolts on models so equipped. Using three 1" x ³/16" washers (supplied), one on each mounting bolt to space the floorboard away from the front heat shield.
- 14. Check for adequate clearance of all exhaust system components and motorcycle accessories prone to heat damage.
- Be sure to tighten all hardware before starting your motorcycle.
- 16. 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.

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:

For fuel injected models, we recommend the use of an adjustable fuel management system, which will result in realizing the "full" potential of this performance exhaust system.

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