

# VT1100 SHADOW A.C.E. EXHAUST SYSTEM

Part #'s 18401, 18461,18471 & 19461

CONGRATULATIONS! You have purchased the finest exhaust system available for your motorcycle. Your VANCE & HINES exhaust system is designed for today's rider, a rider who needs maximum performance, great styling and a perfect fit. Please read the instructions thoroughly, and compare the parts list with the contents of the box before removing any parts from the motorcycle. 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.

## REMOVING THE STOCK EXHAUST SYSTEM

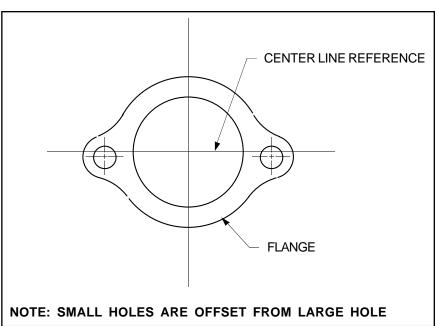
- 1. Remove the two header nuts from the exhaust port on both front and rear cylinders. Take care not to disturb the retainer that holds the spring washers to the nut, this assembly will be reused during installation.
- 2. Remove the three mounting bolts/nuts located below the lower muffler. Carefully remove the entire system and set it aside. **Note:** The system is heavy so have someone assist you.

# **INSTALLING YOUR NEW VANCE & HINES EXHAUST SYSTEM**

- 1. Check the stock exhaust gaskets to be sure they are in good shape. If you have any doubts as to their condition, replace them.
- 2. Slide one dog bone shaped nut plate under the bracket that is welded to each muffler.
- 3. Remove the bar bracket from the box. Hold the bar bracket in front of you with the four hole bracket positioned to the right hand side. Mount the muffler with the small end pointing to the right hand side of the bar bracket using the top two holes that are closest to the bar, install the two 5/16" bolts (supplied) and

leave them loose.

- 4. Mount the second muffler (facing the same direction) to the bracket on the left hand side of the bar using the two 5/16" bolts and leave them loose.
- 5. Slide a chrome muffler clamp (supplied) onto the inlet end of each muffler.
- 6. Slide a new flange onto each header tube. Note: The two smaller holes in the header flanges are offset from the large hole. If the small holes do not align with studs at the exhaust port, spin the flange on the pipe one half of a turn and try again. Refer to Figure 1.



7. Unscrew all of the hose clamps (supplied) until they are completely loose. Feed the tail end of the hose clamp into the clips on the inside of both heat shields. **Note**: The screw end of the hose clamp should be accessible, but not visible when pipe is mounted on the bike.

- 8. Place the head pipe into the heat shield, wrap the hose clamp around the head tube and give the screw three to four turns, leaving heat shield loose on the head pipe.
- 9. Mount the rear head pipe into the rear exhaust port using the two stock nuts with the spring washers attached. **Note:** Only finger tighten them at this time.
- 10. Slip the top muffler of the new muffler assembly over the rear head pipe while aligning two holes in the bar bracket with the two holes on the frame bracket. **Note: Be sure the bar bracket is mounted behind the frame bracket!**
- 11. Install the two stock mounting bolts into the frame bracket, install the stock nuts on the back side, but leave them loose for adjustment.
- 12. Slip the front head pipe into the lower muffler and pivot the pipe into the front exhaust port.
- 13. Install the two stock nuts with the spring washers attached, onto the front head pipe. Note: Finger tighten.
- 14. Tighten all hardware in the following order.
  - (a) Tighten the two bolts below the lower muffler.
  - (b) Tighten the two 5/16" bolts on each muffler, then tighten the clamp bolt on each muffler.
  - (c) Tighten the four nuts evenly at the exhaust ports.
  - (d) Tighten the heat shield clamps.
- 15. Check the gap between the heat shield and the muffler, it should be about a 1/16", if not, adjust the heat shield and/or muffler to gain the proper clearance.
- 16. Be sure to tighten all hardware before starting your motorcycle.

### **RE-JETTING INSTRUCTIONS**

Re-jetting the carburetors will result in realizing the "full" potential of this performance exhaust system. Vance & Hines offers jet kits for most applications.

**PLEASE NOTE**: Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, (center stand, oil filter, oil pan etc.) ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.

# WARNING! VANCE & HINES DOES NOT WARRANTY ANY CHROME PRODUCTS AGAINST DISCOLORATION.