

YAMAHA V-STAR 650 EXHAUST SYSTEM

Part #31501

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 fitting system.

REMOVING THE STOCK EXHAUST SYSTEM

- 1. Remove the right hand frame cover to avoid scratching it.
- 2. Remove the nuts that mount the rear header to the cylinder head.
- 3. Loosen the pinch clamp on the inlet end of the lower muffler.
- 4. Remove the two bolts that mount the mufflers to the muffler bracket, located between the two mufflers. Save the hardware for reuse.
- Pull the rear head pipe out of the exhaust port. Slide the muffler assembly with the rear head pipe attached, rearward, disconnecting it from the front head pipe. Set the assembly aside.
 Note: Keep the front head pipe attached to the motorcycle, it will integrated with the new exhaust system.
- 6. Remove the muffler mounting bracket from the frame and set it aside.

INSTALLING YOUR NEW VANCE & HINES EXHAUST SYSTEM

- 1. Install the V&H muffler mounting bracket (stamped 272) to the frame using the stock hardware and mounting location. Refer to figure 1
- 2. Slip the T-bolt band clamp (supplied) over the straight pipe that is welded to the front muffler.
- 3. Slip the front muffler assembly over the stock head pipe. Slide one dog bone shaped nut plate (supplied) under the bracket that is welded to the backside of the muffler. Attach the muffler to the mounting bracket using two of the 5/16" flange head bolts (supplied), but leave them loose at this time. Refer to figure 1.
- 4. Install the rear header assembly to the exhaust port using the stock 8mm nuts, but leave them loose at this time.
- 5. Slide one dog bone shaped nut plate (supplied) under the bracket that is welded to the backside of the rear muffler. Attach the muffler to the mounting bracket using two of the 5/16" flange head bolts (supplied), but leave them loose at this time. Refer to figure 1.
- 6. Unscrew all of the hose clamps (supplied) until they are completely loose. Mark the top edge of both heat shields with the location of the mounting clips that are welded to the backside. Position the front heat shield over the head pipe and feed the tail end of the hose clamps into the clips. Be sure that each hose clamp is engaged with both clips. Repeat this step with the rear heat shield. Note: The screw end of the hose clamp should be accessible, but not visible when pipe is mounted on the bike. Leave them loose at this time.
- 7. Align the mufflers so they are parallel when viewing from the right side of the bike, and tighten the 5/16" flange bolts on the back side of both mufflers.
- 8. Tighten the two header flange nuts on the rear head pipe.
- 9. Tighten the T-bolt clamp at the slip joint of the front muffler.
- 10. Rotate the hose clamps on both heat shields so they are accessible with a screw driver and tighten each of them evenly. **Note:** The edge of the heat shield should just cover the weld on the inlet of each muffler, if not, adjust the heat shield for correct alignment.

- 11. Be sure to remove any oil or finger prints before starting the motorcycle.
- 12. 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. Base line jetting information is available through our tech-line (562-926-5291) for most models.

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.

