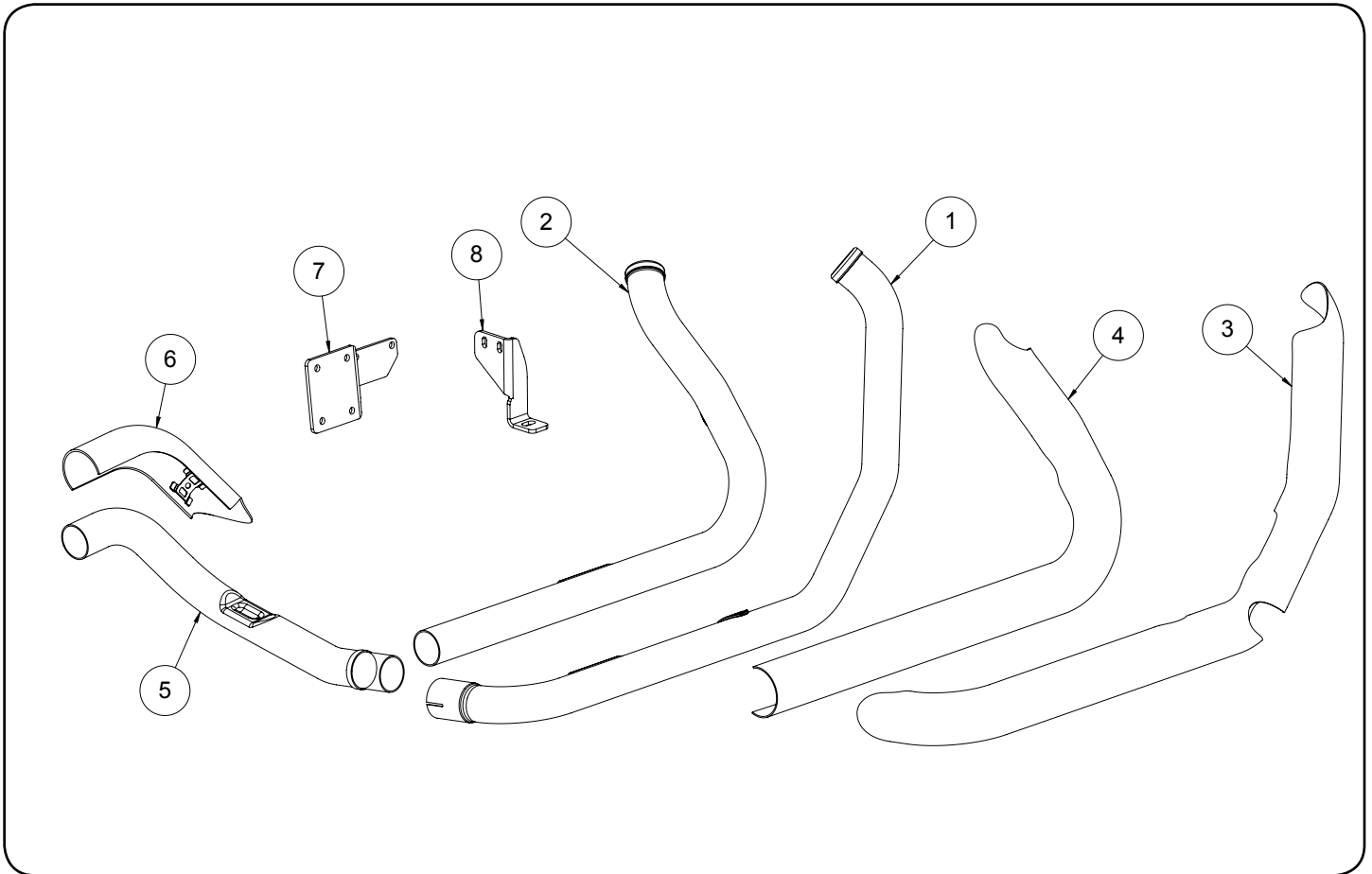


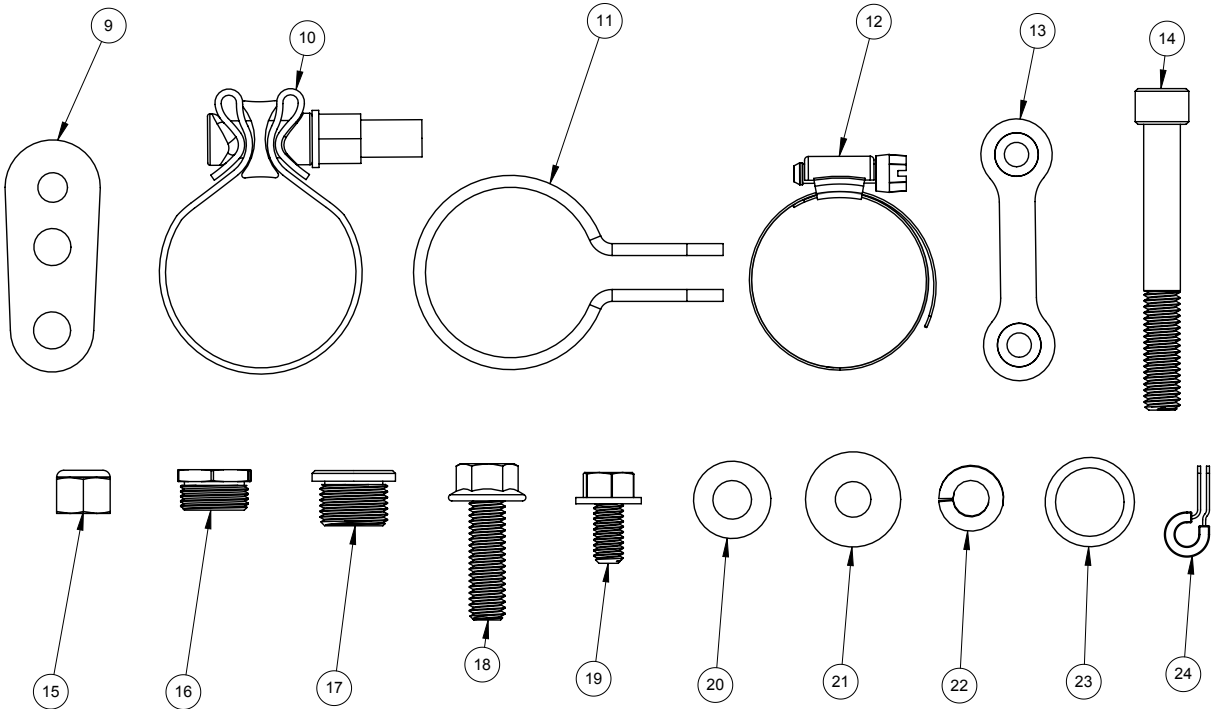
Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your Vance & Hines exhaust is designed and crafted for performance, quality, and style.



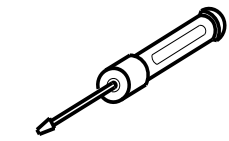
PARTS LIST

NO.	Description	Qty.			
1	Front Head Pipe	1	12	Dog Bone Nut Plate	2
2	Rear Head Pipe	1	14	3/8-16 x 3 SHCS	1
3	Front Heat Shield	1	15	3/8-16 Lock nut	1
4	Rear Heat Shield	1	16	18-12mm O2 Adaptor	2
5	Rear Crossover Header	1	17	18mm Zinc Plug	2
6	Rear Crossover Heatshield	1	18	3/8-16 x 1.25 Flange Bolt	1
7	Mount Bracket	1	19	FHS 5/16-18 x 5/8	4
8	Crossover Bracket	1	20	3/8 Flat Washer	1
9	Floor Board Spacer	1	21	3/8 x 1 x 3/16 Washer	2
10	Torca Band Clamp	1	22	3/8 Lock Washer	1
11	Header Tube Clamp	1	23	18mm Copper Crush Washer	2
12	Hose Clamp	9	24	1/4 Clamp Loop	1

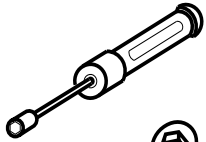
HARDWARE



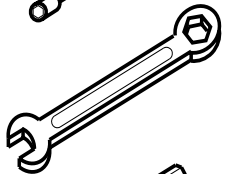
TOOLS REQUIRED



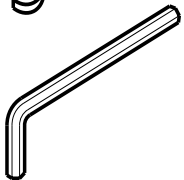
Flat blade screwdriver



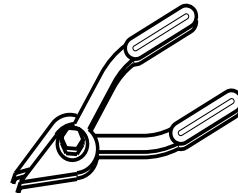
5/16" Nutdriver



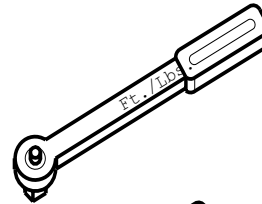
1/2", 9/16" & 14mm
Combination wrenches



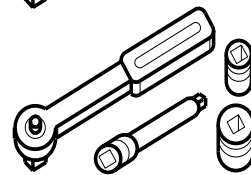
1/4", 3/16"
& 5/16" Allen wrench



Snapping pliers



Ft./Lb. Torque wrench



3/8" Ratchet &
Extensions, 1/2", 3/4" Socket,
1/2", 9/16" & 5/8" deep sockets,

STOCK EXHAUST SYSTEM REMOVAL

1. Remove both left and right saddlebags and set them aside.
2. Loosen the bolt from the pinch clamp on the front end of muffler(s). **NOTE:** On OE two into one right side only exhaust systems, there is no left side removal of mufflers required.
3. Remove the two 5/16" bolts and washers that mount the muffler(s) to the saddlebag supports. Save these for re-use.
4. Remove the stock muffler(s) and set aside. **NOTE:** It may be necessary to use a penetrating lubricant to loosen muffler(s) from the head pipe.
5. Locate and unplug the O2 sensor wires from the wiring harness (Grey and Black connectors located behind right side panel) and remove cable ties holding wires to frame. Feed the end of the wires through the frame so they are free from the motorcycle. **NOTE:** Pay attention to wire routing for re-installation.
6. Remove the right hand floor board.
7. Remove the right hand passenger floor board.
8. Loosen head pipe clamp connecting the left side muffler to the header and the mount
9. Remove the mount clamp located behind the oil pan, set the 1/4"-20 x 3/4" screws aside for reuse.
10. Loosen the nut and carriage bolt holding the front head pipe to the bracket on the transmission housing.
11. Loosen the heat shield clamps on both front and rear exhaust pipes.
12. Remove the two flange mounting nuts from each head pipe, located at the cylinder head. Carefully remove the head pipes and set aside.
13. Using a 14mm wrench, carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
14. Carefully remove the exhaust port flanges and circlips from the stock exhaust system using snapping pliers. **NOTE:** If circlips look bent or twisted, replace them.

VANCE & HINES EXHAUST INSTALLATION

1. Remove the stock exhaust gaskets and replace them with the supplied gaskets.
2. Install the crosspipe support bracket (stamped 564-P) (supplied) at the stock location behind the oil pan with the stock 1/4"-20 x 3/4" screws (Figure 1) **NOTE:** Do not fully tighten at this time.
3. Replace the bracket on the transmission housing with new bracket (stamped 514-P) (supplied) and torque to 13-16 ft. lbs. (Figure 2).
4. Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as 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.
5. Lay head pipes into heat shields and loosely install the #20 hose clamps (supplied) into mounting clips (Figure 5). **NOTE:** Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes (Figure 5). Do not tighten at this time.

VANCE & HINES EXHAUST INSTALLATION CONTINUED

6. Apply a small amount of anti-seize compound to the threads of the oxygen sensors and install them into the new head pipe. Note: 2009 models or models using 18mm wideband sensors install sensor directly into the head pipe. 2010 and later models install the supplied 18mm to 12mm oxygen sensor adapter then install the 12mm oxygen sensors (Grey connector into the front head pipe, black connector into the rear head pipe.) All models not using oxygen sensors install 18mm plug with the supplied copper crush washer. Remove one right rear nut securing transmission top cover. Re-install it with the supplied wire fastener capturing the rear O2 wire, securing the wire away from exhaust pipes (Figure 6).
7. Install circlips and flanges from stock system onto both new head pipes.
8. Using stock flange nuts, carefully install head pipes onto motorcycle. Do not tighten at this time.
9. Install the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the pipes to the bracket 514-P. Do not tighten at this time.
10. Install Torca Band Clamp (supplied), with the nut facing down, on the short side expanded end of the front head pipe (D804FC). Do Not tighten clamp at this time.
11. Align pipes on motorcycle so the gap between the two heat shields is parallel where they run together. Tighten the exhaust port flange nuts and the 5/16" x 5/8" flange head bolts on main bracket.
12. Referring to Figure 3 - Fasten the crossover pipe to the crossover bracket using supplied hardware. First place the crossover bracket between the arms of the header clamp. Next insert the 3/8"-16 x 1.5 flange head bolt through the header clamp, crossover bracket, heavy 3/8" washer and once again the arm of the header clamp. Lastly install a 3/8" thin flat washer and 3/8"-16 lock nut. **NOTE:** Do not tighten at this time.
13. Loosely attach the heat shield (D557HC) to crossover header (D558FC) and slip it into the front head pipe.
14. Tighten the stock 1/4"-20 screws securing the bracket to the oil pan, then rotate crossover head pipe (D558FC) to proper position for muffler being used. Next tighten flange head bolt and locknut securing the crosspipe clamp (A223CC) to the rear transmission bracket.
15. Install mufflers of your choice onto both head pipes and secure to saddlebag supports with the stock 5/16" bolts and lock washers. On bike equipped with OE 2 into 1 systems, Vance and Hines Left Side Mount Kit #16933 may be required to complete installation.
16. Tighten the Torca band clamp securing the crosspipe to the head pipe.
17. Route O2 sensor wires away from hot areas of the motorcycle. Use the nylon cable ties (supplied) to secure the O2 sensor wires to the frame. Plug the O2 sensor wires back into the wiring harness, grey into grey, black into black. Re-install the right side panel.
18. Install Spacer (593-P), on floor board support plate. Remove the left 3/8" socket cap screw only and place the spacer onto floor board support plate aligning the holes in the spacer with those on the support plate. Re-install the 3/8" socket cap screw into the original hole capturing spacer. **NOTE:** You may use the 3/8" stock socket cap screw to temporarily hold spacer alignment while tightening the 3/8" socket cap screw.
19. Install a 3/8" lock washer (supplied) on the 3/8"-16 x 3" socket cap screw (supplied) Using this bolt re-install the floor board with one 1" spacing washer (supplied) on the forward (right) mount. (Figure 4) **NOTE:** Spacing washer are located between the floor board supports and floor board mount plate. On 2010-11CVO Models, a 3/8"-16 x 1-1/2" socket cap screw (not supplied) should be used from the inside on the right mount rather than the 3/8"-16 x 3" provided bolt.
20. Re-install the right side passenger floor board.
21. Re-install the saddlebags.

VANCE & HINES EXHAUST INSTALLATION CONTINUED

21. Be sure to tighten all hardware before starting your motorcycle.
22. After installation and before starting the motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave residue.
NOTE: Any residue, oil, or fingerprints will stain the chrome when the metal heats up.

FIGURE 1

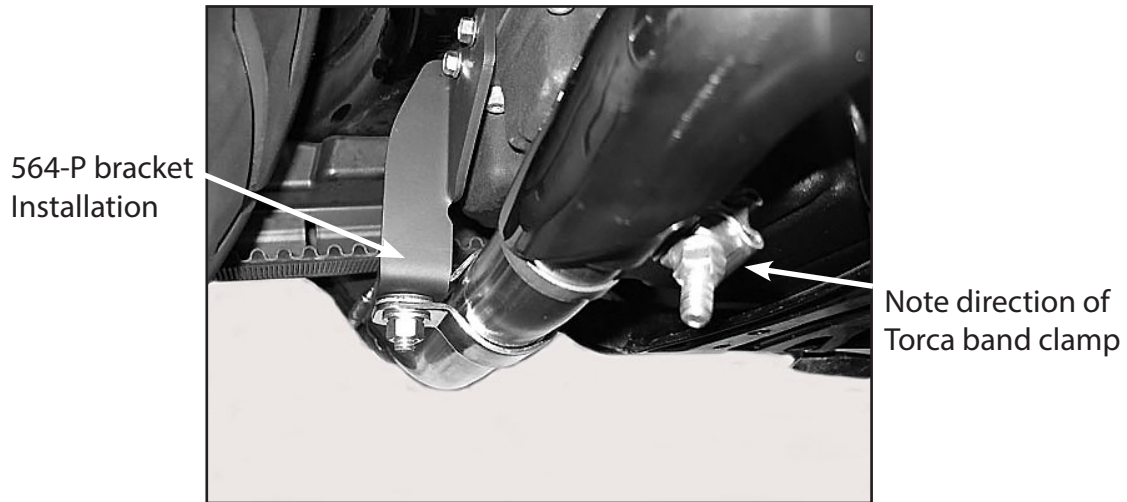


FIGURE 2

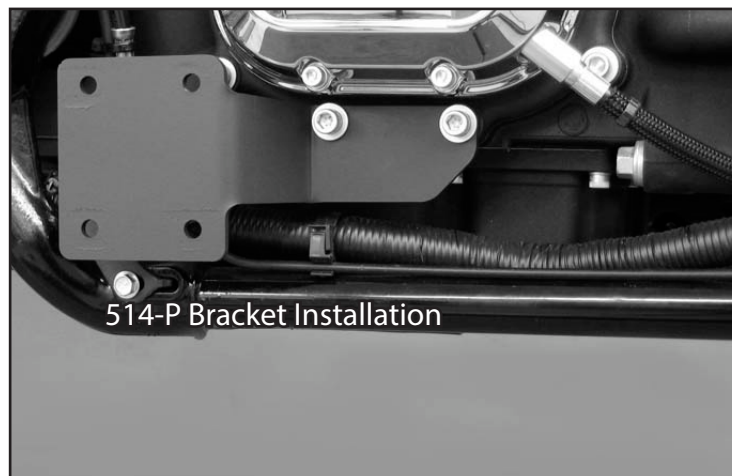


FIGURE 3

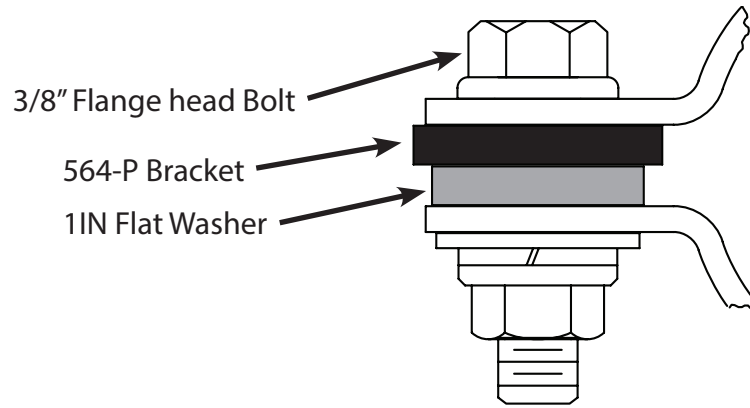


FIGURE 4

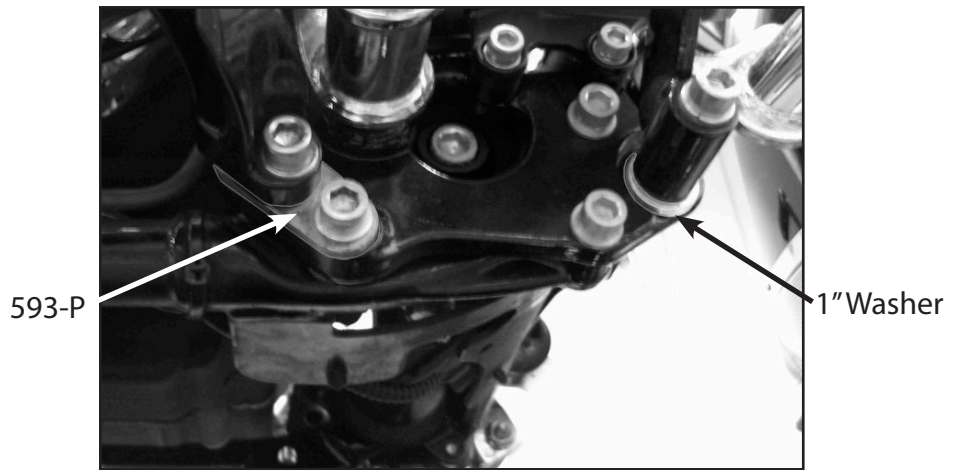


FIGURE 5

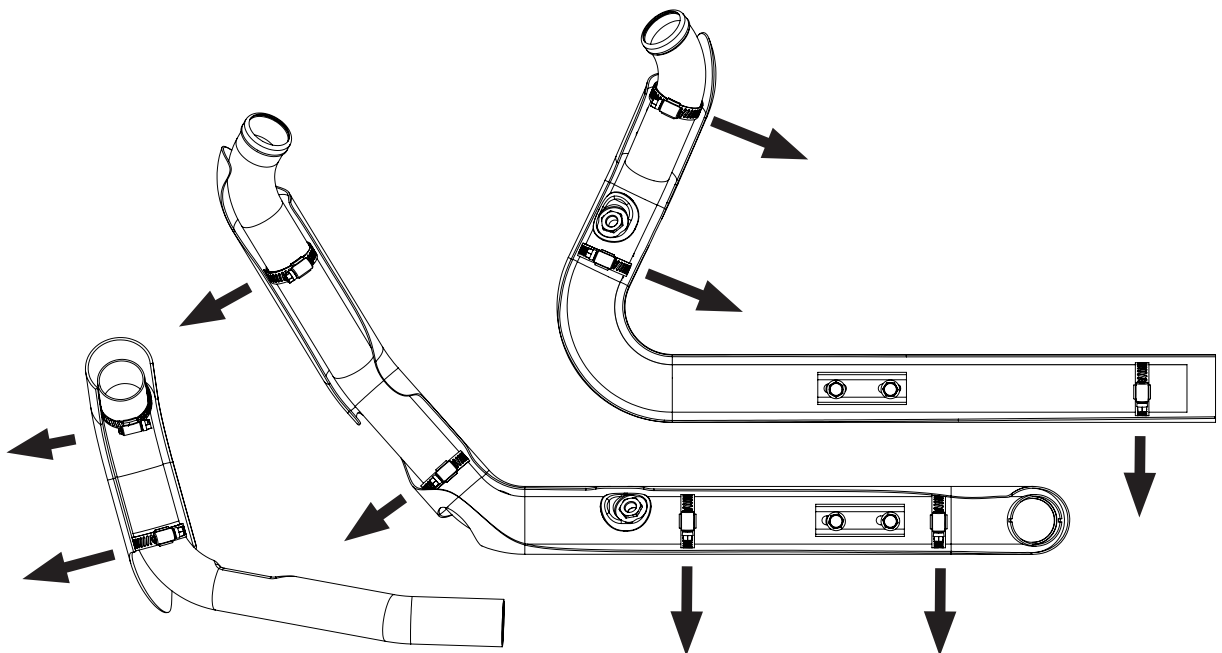
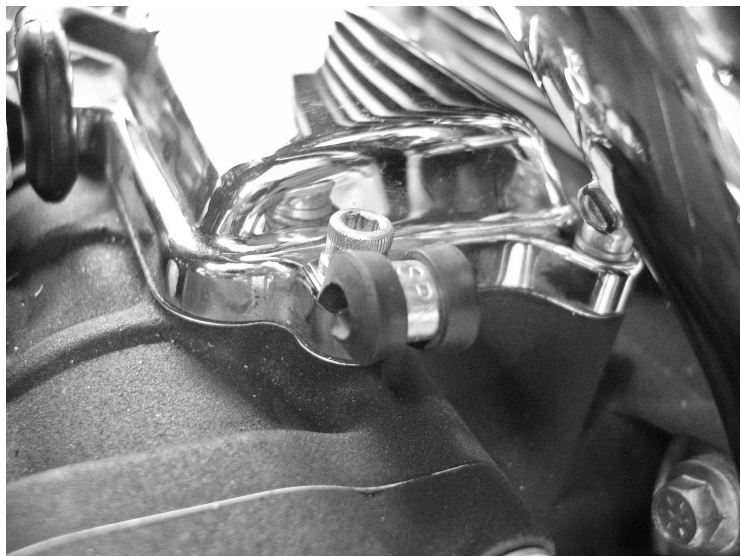


FIGURE 6



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