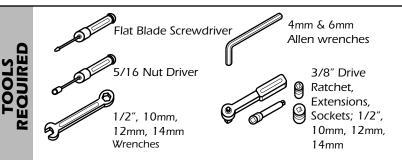


Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any questions, please call our technical support line at (562) 926-5291.

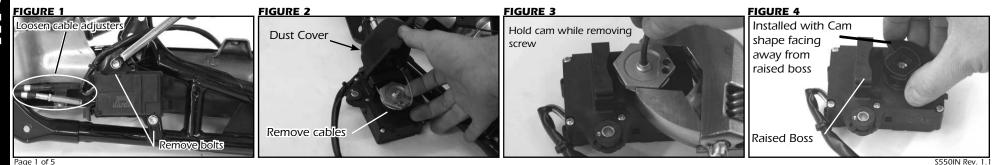
Attention installer (if other than owner), please forward this instruction sheet to the owner of this product. These instructions contain valuable information to the end user.



## READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

- Please consult the appropriate Suzuki shop manual for detailed instructions on removing the stock exhaust system.
- 2. Remove the cover plate on top of the exhaust system by first removing the small button head screw using a 4mm Allen wrench, then slide the cover forward and up to free the cover. This will expose the exhaust clamp bolts for the upper muffler body.
- 3. Remove the two flange hex bolts connecting the muffler bodies together. Loosen the two exhaust clamp bolts and remove the upper muffler body and set it aside.
- Remove the seat, right side plastic and chrome covers. 4.
- 5. Trace the harness coming from the servo motor and disconnect the EXUP servo motor from the main wire harness by unplugging the black 3 wire, and the white 2 wire connectors.
- 6. Remove the four socket headed capscrews securing the exhaust system to the cylinder heads.

- 7. While supporting the exhaust system remove the locknut and the two Hex head bolts securing the exhaust assembly to the motorcycle and remove the exhaust system (assistance may be required). NOTE: Set hardware aside, it will be reused on the new svstem.
- Remove the EXUP servo motor from the exhaust assembly bracket. Place the exhaust system on a non-abrasive surface such as a blanket or carpet. Loosen the cable adjusters and remove the two hex head bolts securing the EXUP servo motor to the bracket (Figure 1). Pull the servo motor away, lift the dust cover and disconnect the cables from the servo motor (Figure 2).
- 9. Remove the servo cam from the motor. Using a suitable wrench, hold the servo cam and remove the socket head capscrew (Set the capscrew aside it will be reused on the new system). NOTE: It is vital the you <u>NOT</u> allow the cam to move when you remove the capscrew or damage to the servo motor will result (Figure 3).



- 7. Install heat shields onto the header assembly beginning with the Front heat shield (stamped S365HC). NOTE: Front heat shield S365HC must be angled forward and down between the front and rear head pipes then rotated into place (Figure 9). Finish with the remaining heat shields but do not install the muffler heat shields at this time.
- 8. Install each hose clamp by feeding tail ends of clamps into the heat shield clips. take note of the clamp screw head direction (Figure 10). Screw heads must be accessible when system is installed on motorcycle for adjustment purposes. Use #20 hose clamps (supplied) on the head pipes and the #44 hose clamps (supplied) on the muffler heat shields.
- 9. Install the exhaust system into the exhaust ports using the longer 8mm capscrews (supplied). Do not fully tighten at this time.
- 10. Attach exhaust system to bracket using the four 5/16" x 5/8" flange hex bolts (supplied) and two nut plates (supplied). Slide the nut plates into each of the brackets that are welded the back of the muffler bodies and secure to bracket using the four flange hex bolts (Figure 11). NOTE: Do not fully tighten at this time.
- Full tighten the exhaust port capscrews first, then the 5/16" x 5/8" hex flange bolts.

- Place the servo adaptor cam (supplied) onto the servo motor shaft. The adaptor cam is installed with the welded boss facing up and the semi-circular edge facing away from the raised boss (Figure 4). Secure the servo adaptor cam on the servo motor shaft using the stock capscrew and a 5mm washer (supplied). NOTE: Use a suitable wrench on the welded boss to prevent the adaptor cam from moving while tightening the capscrew or damage to the servo motor will result (Figure 6).
- 2. Install the Servo motor onto the new bracket. Place the 6mm hex flange bolts (supplied) through the bracket (Stamped 441-P), slide a spacer and a 6mm washer (supplied) over each hex flange bolt (Figure 5).
- 3. Place the servo motor on the bracket, slipping the rubber grommets over the hex flange bolts (Figure 5). NOTE: The cam must face away from the bracket and the wire harness coming from the servo motor must face toward the rear (Figure 6).
- 4. Secure the servo motor on the bracket with a 6mm washer and a 6mm lock nut (supplied) on each hex flange bolt (Figure 5 & 6).
- 5. Using the stock hardware install the bracket on the motorcycle (Figure 7). Connect the servo motor connectors back into the main wiring harness. NOTE: Route the servo motor harness away from any moving parts.
- 6. Remove header and heat shields from their protective packaging. Place each shield on a non-abrasive surface such as a blanket or carpet. Using a felt tip pen, mark the outside edge of each heat

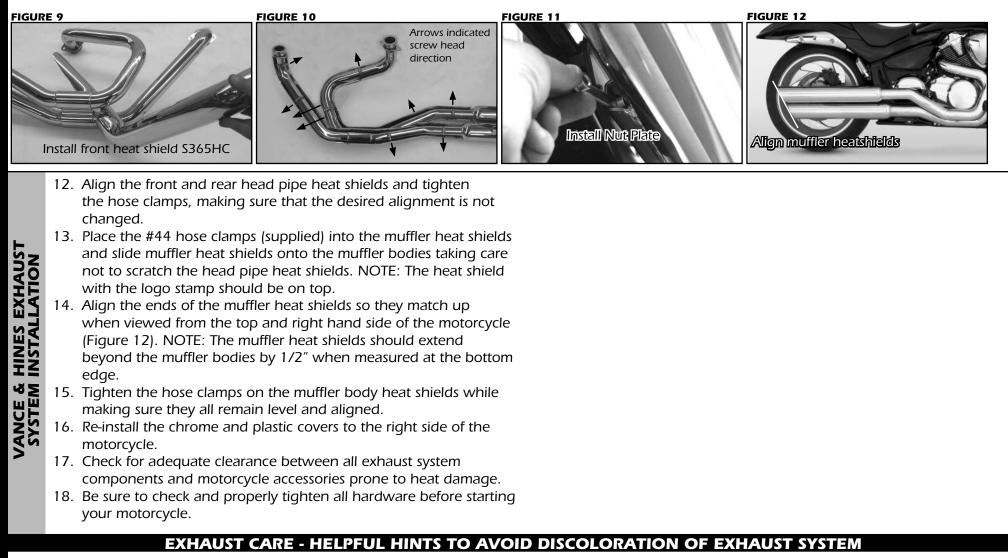
## VANCE & HINES OPTIONAL ACCESSORIES



FUEL MANAGEMENT: Take the guess work out of fuel injection with the new Fuelpak Fuel Management System, P/N 62001. Contact your local dealer or call (562) 921-7461 to order. Visit vanceandhines.com for more information.

Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

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, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.



- 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 soft cloth and cleaning solvent that will leave no residue (chrome wax / polish, glass cleaner, alcohol, ammonia, etc...) before starting the motorcycle.
- 2. Avoid long periods of idling as this can cause discoloration.
- 3. Intake leaks can cause the engine to run lean and overheat, this could lead to discoloration.
- Make sure there are no exhaust leaks at the junction of the exhaust pipes and cylinder head. We recommend replacing gaskets if they are worn.

# VANCE & HINES OPTIONAL ACCESSORIES



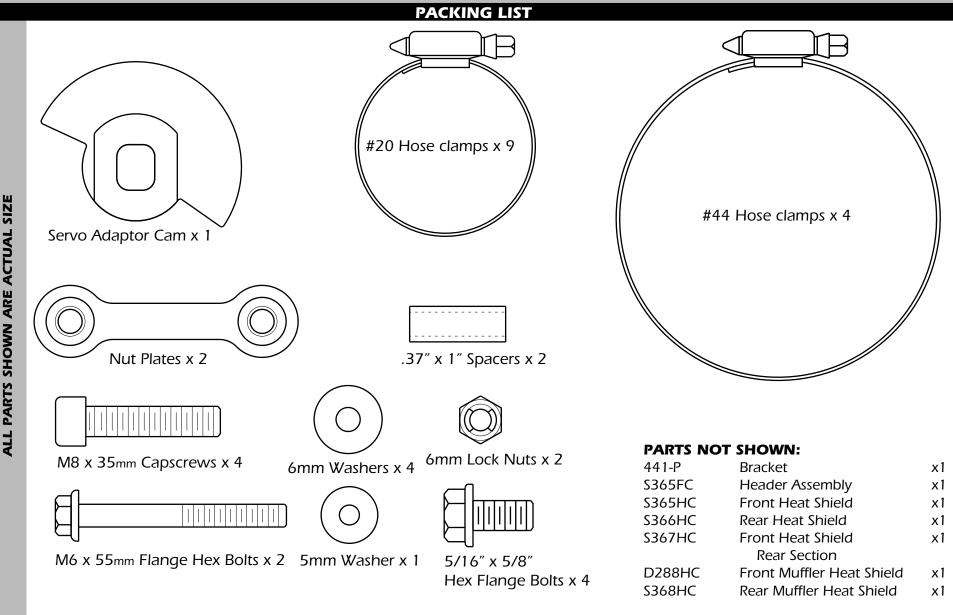
## FUEL MANAGEMENT:

Take the guess work out of fuel injection with Fuelpak Fuel Management. Contact your local dealer or call (562) 921-0071 to order. Visit fuelpakfi.com for more information. Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

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#### SUZUKI M109R BIG SHOTS INSTALLATION INSTRUCTIONS PART# 18287





## WARRANTY

Vance & Hines exhaust systems are warranted against defects in material and workmanship for a period of 90 days from the date of purchase from an authorized dealer. This warranty does not cover discoloration of chrome finishes. This warranty is limited to the repair or replacement of a product proven to be defective from normal use. Vance & Hines exhaust systems are designed to fit and operate on OEM motor and chassis. This warranty does not cover any product subject to abuse, misuse, improper installation or modification.

## FUEL MANAGEMENT

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Your fuel injected Harley-Davidson® is equipped with an ECU (electronic control unit) that's programmed to deliver fuel to the motor based on an air/fuel ratio for a stock air filter and stock exhaust system. When you install a performance exhaust system, your airflow changes, so you need a fuel management system that adjusts your air/fuel ratio to match the changes. That fuel management system is Fuelpak. Fuelpak adds and takes away fuel, allowing for a more precise range of refinement in your air/fuel ratio. Get the perfect fuel management combination with your Vance & Hines exhaust system, get Fuelpak. For more information visit the tuning center at fuelpakfi.com

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