

Instruction 106-5164  
5-4-09

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## Installation Instructions: S&S® Intake Kit, PN106-5012 For 2008 – Up Polaris® Ranger RZR® and RZR®

### DISCLAIMER:

S&S parts are designed for high performance, closed course, racing applications and are intended for the very experienced rider only. The installation of S&S parts may void or adversely affect your factory warranty. In addition such installation and use may violate certain federal, state, and local laws, rules and ordinances as well as other laws when used on motor vehicles used on public highways, especially in states where pollution laws may apply. Always check federal, state, and local laws before modifying your vehicle. It is the sole and exclusive responsibility of the user to determine the suitability of the product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other obligations, duties, and risks associated therewith.

The words Polaris®, Polaris RZR® and all Polaris part numbers and model designations are used in reference only.

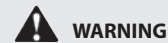
### SAFE INSTALLATION AND OPERATION RULES:

Before installing your new S&S part it is your responsibility to read and follow the installation and maintenance procedures in these instructions and follow the basic rules below for your personal safety.

- Gasoline is extremely flammable and explosive under certain conditions and toxic when breathed. Do not smoke. Perform installation in a well ventilated area away from open flames or sparks.
- If vehicle has been running, wait until engine and exhaust pipes have cooled down to avoid getting burned before performing any installation steps.
- Before performing any installation steps disconnect battery to eliminate potential sparks and inadvertent engagement of starter while working on electrical components.
- Read instructions thoroughly and carefully so all procedures are completely understood before performing any installation steps. Contact S&S with any questions you may have if any steps are unclear or any abnormalities occur during installation or operation of vehicle with a S&S part on it.
- Consult an appropriate service manual for your vehicle for correct disassembly and reassembly procedures for any parts that need to be removed to facilitate installation.
- Use good judgment when performing installation and operating vehicle. Good judgment begins with a clear head. Don't let alcohol, drugs or fatigue impair your judgment. Start installation when you are fresh.
- Be sure all federal, state and local laws are obeyed with the installation.
- For optimum performance and safety and to minimize potential damage to vehicle or other components, use all mounting hardware that is provided and follow all installation instructions.
- Engine exhaust fumes are toxic and poisonous and must not be breathed. Run vehicle in a well ventilated area where fumes can dissipate.

### IMPORTANT NOTICE:

Statements in this instruction sheet preceded by the following words are of special significance.



**WARNING**

**Means there is the possibility of injury to yourself or others.**



**CAUTION**

**Means there is the possibility of damage to the part or vehicle.**

**NOTE**

*Other information of particular importance has been placed in italic type.*

S&S recommends you take special notice of these items.

### WARRANTY:

All S&S parts are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of six months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at S&S's option if the parts are returned to us by the purchaser within the six month warranty period or within 10 days thereafter.

In the event warranty service is required, the original purchaser must call or write S&S immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action.

A part that is suspect of being defective must not be replaced by a Dealer without prior authorization from S&S. If it is deemed necessary for S&S to make an evaluation to determine whether the part was defective, a return authorization number must be obtained from S&S. The parts must be packaged properly so as to not cause further damage and be returned prepaid to S&S with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by S&S and the part was found to be defective, repair, replacement or refund will be granted.

### ADDITIONAL WARRANTY PROVISIONS:

- (1) S&S shall have no obligation in the event an S&S part is modified by any other person or organization.
- (2) S&S shall have no obligation if an S&S part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the S&S part.
- (3) S&S shall not be liable for any consequential or incidental damages resulting from the failure of an S&S part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or for any other breach of contract or duty between S&S and a customer.
- (4) S&S parts are designed exclusively for use in Polaris® RZR®. S&S shall have no warranty or liability obligation if an S&S part is used in any other application.

## TOOL REQUIREMENTS:

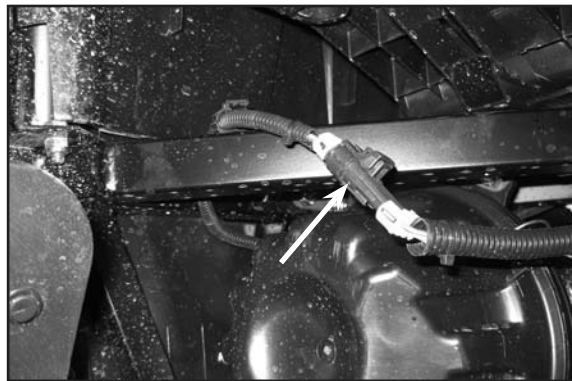
- T-27 Torx® drive socket
- 5/16" Flat blade screwdriver
- #3 Phillips screwdriver
- #2 Phillips screwdriver RZR models
- 1/2" Socket wrench
- 1/2" Combination wrenches
- 3/8" Combination wrench
- Pliers
- Saber saw with fine tooth scroll blade
- Masking tape
- Silicone sealer
- Scissors
- Thread sealer
- Tape measure
- Pencil

## WARNING

- **The safety of vehicle occupants is dependent on proper installation of this product. If you are not certain of your capabilities or do not have the correct tools for this installation, please consult a dealer to have it done. Improper installation of this product could result in injury or death to the rider.**
- **Be sure to disconnect the battery of your vehicle before starting on this procedure. Accidental starting of the vehicle could cause injury to you or others around you during the installation.**

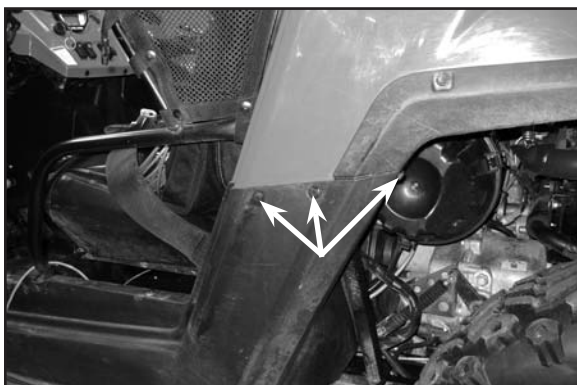
## BED REMOVAL: RZR AND RZRS

- 1- Remove seats from vehicle.
- 2- Remove rear main service panel (behind seats).
- 3- Disconnect the negative battery cable.
- 4- Disconnect the tail light wire. This is located right above the stock air box cover. **See Picture 1.**

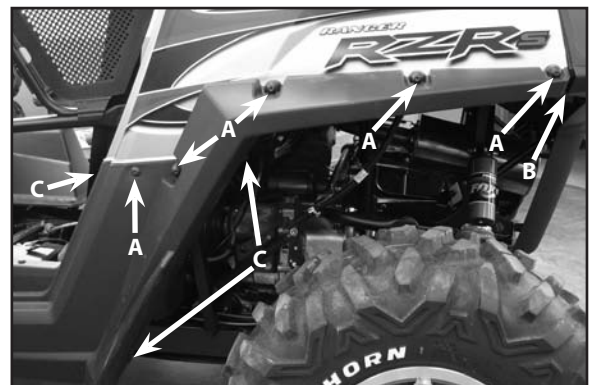


Picture 1

- 5- *Standard RZR models.* With multi function pliers supplied in your RZR tool kit remove 6 plastic push rivets. **See Picture 2.**  
*On RZR models* remove rear roll cage section by removing the eight bolts (1/2" hex and 1/4" hex key) that attach cage section. Next remove fender flares from bed by removing ten Torx® drive screws (A), two Phillips head screws (B) and six plastic push rivets (C). **See Picture 3.**

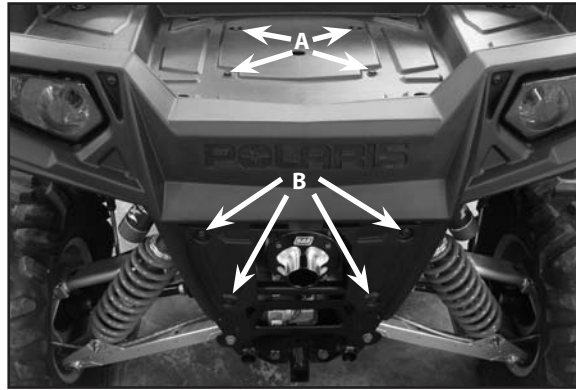


Picture 2



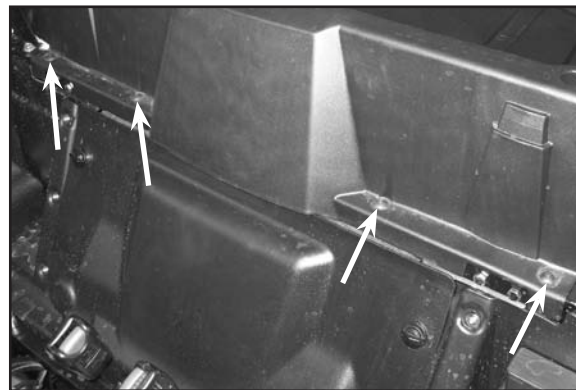
Picture 3

6- Remove four bolts (A) (1/2" hex) from bed and four screws (B) (T27 torx®) from the rear of the bed.



Picture 4

7- Remove four screws (T27 Torx®) from front of bed.



Picture 5

8- Remove bed from vehicle.

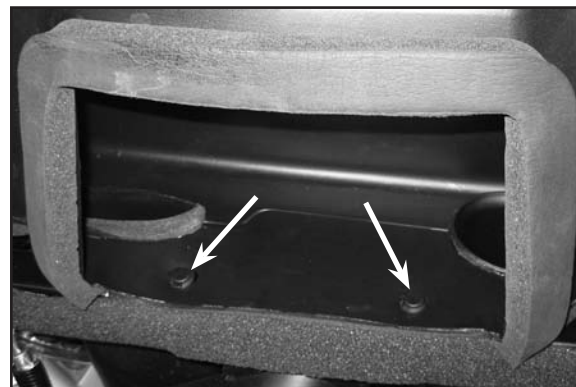
**NOTE:** This may require an assistant.

**STOCK AIR BOX CAN REMOVAL:**

**NOTE:** Before removing air intake box, cover belt intake duct with a rag or tape to avoid dropping something into the tube.

1- Remove two plastic push rivets that hold the air intake box to the frame. Remove air box can by gently pulling up around air intake duct.

**NOTE:** A newer model RZR may not have these rivets.



Picture 6

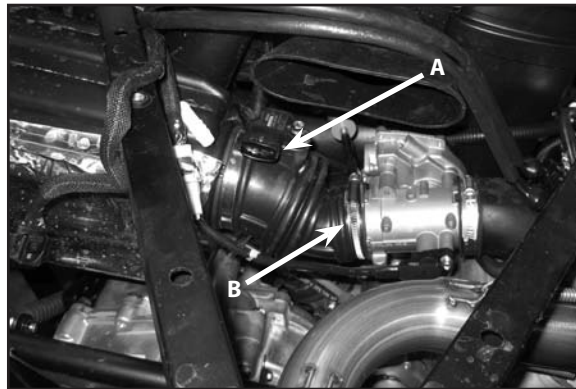
2- Remove engine breather hose at valve cover and air can. Save hose clamps as they will be reused.

**NOTE:** The stock breather hose has a slit in it put there by the factory to prevent cold weather freeze-ups. We feel this can be a place for dirt to enter the engine so this hose should be replaced with new hose supplied in kit. We have done testing down to -10 degrees Fahrenheit without the slit and noticed no adverse effects.



Picture 7

- 3- Disconnect wire from intake air temperature sensor. (A)
- 4- Loosen hose clamp that holds intake boot to throttle body. (B)



Picture 8

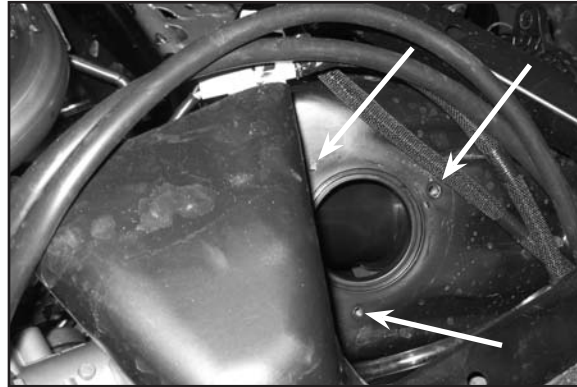
5- Remove two bolts (1/2" hex) that hold the air box can to the frame bracket.

**NOTE:** You can remove the bracket or leave it attached to the vehicle.



Picture 9

- 6- Remove air box can from vehicle. Gently pull air intake boot off of throttle body being careful not to damage rubber air intake manifold.
- 7- On RZR, remove the air intake duct (three number 2 Phillips screws).



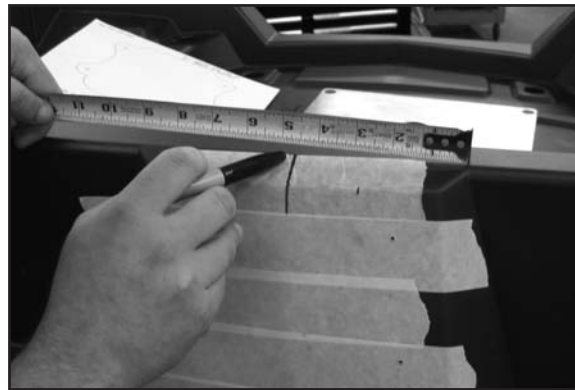
Picture 10

**BED PREPARATION:**

**Cutting Hole In Bed For Air Box**

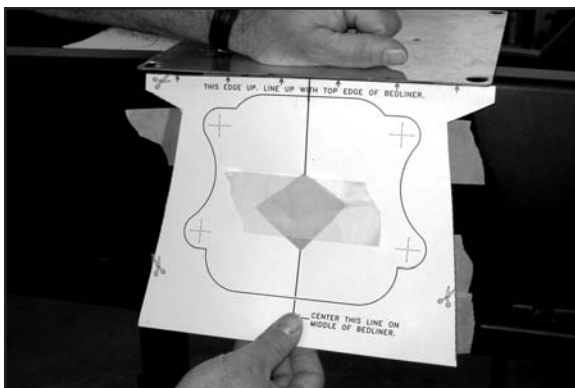
- 1- Clean bed area where template will be mounted.
- 2- Cut template where indicated by the scissors mark on the template.
- 3- Put masking tape over area where cutout will be made. Mark center line of bed with pencil.

**NOTE:** Be sure to measure from molded features on the bed not cut or trimmed edges.

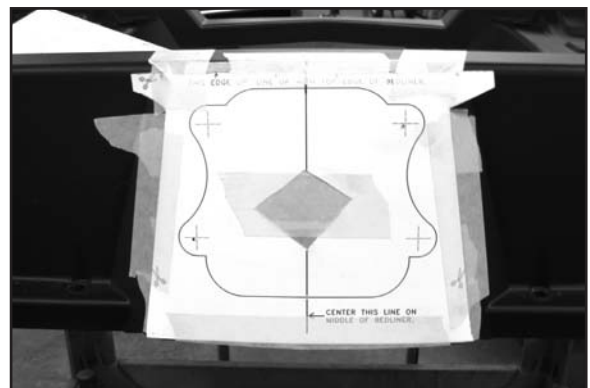


Picture 11

- 4- Using aluminum heat shield or similar flat object align top of template with top flat surface of bed. **See Picture 12.** Use good quality masking tape to tape template in position so you can cut a hole in the center area of the template. Tape over that area to help hold template in place before taping as shown in **Picture 12.** Tape pattern securely to bed. **See Picture 13.**

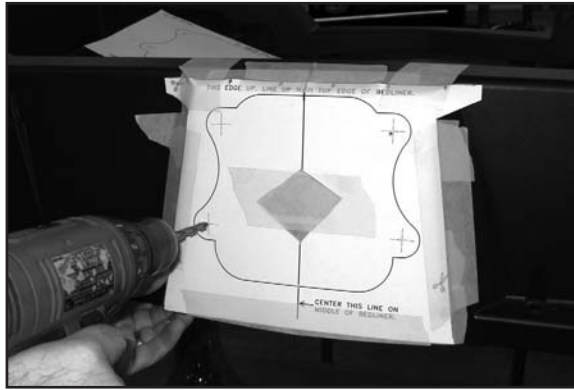


Picture 12



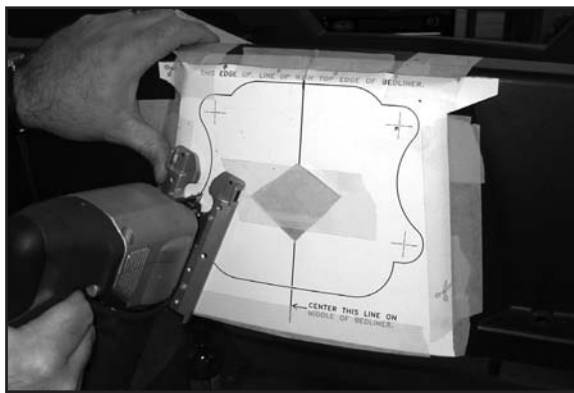
Picture 13

5- Drill hole in waste area of cutout to allow for a starting place for saber saw blade.



Picture 14

6- With a good fine tooth scrolling blade in the saw carefully cut out the access hole for the air box.



Picture 15

7- Remove pattern and tape. Deburr sawn edges of plastic.

#### INTAKE INSTALLATION:

- 1- Cut supplied tape strip into three 10" pieces and two 2½" pieces.
- 2- Install foam tape on primary air box as shown in **Pictures 16 and 17**. Make sure tape fully covers the two mounting holes on the bottom of the air box.



Picture 16



Picture 17

3- Install 90 degree hose fitting in intake runner. (A)

**NOTE:** Use a good quality thread sealer on fitting threads.

4- Remove air temperature sensor from stock intake boot with  $\frac{3}{8}$ " wrench and reinstall in intake runner. (B)

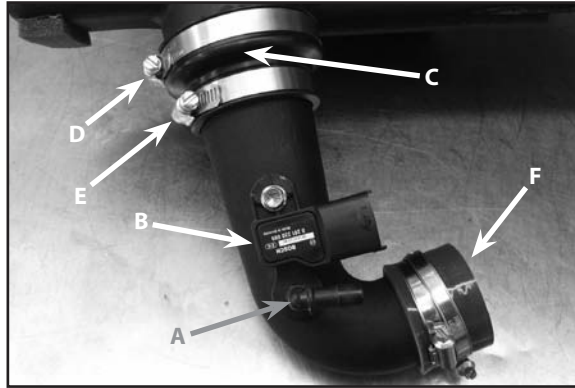
**NOTE:** Use dish soap or motor oil on o-ring so fitting will slide into runner easier.

5- Slide  $3\frac{1}{2}$ " x  $2\frac{1}{2}$ " intake adaptor boot (C) over intake runner. The hose clamps should be oriented as shown in **Picture 18**.

6- Install 2" throttle body boot (F) onto runner and tighten supplied hose clamp.

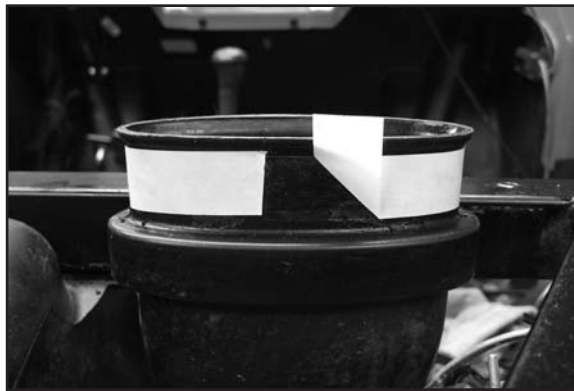
7- Slide assembled intake runner into primary air box make sure supplied  $3\frac{1}{4}$ " hose clamp is installed before putting tube into air box.

8- Slide boot onto primary air box collar and tighten hose clamp (D) around collar. Leave bottom  $2\frac{1}{2}$ " hose clamp (E) to intake tube loose. This will be the last clamp tightened.



**Picture 18**

9- Install double-sided tape over the inlet duct as shown in **Picture 19**. Make sure to start the peel-back liner but do not remove it at this time.



**Picture 19**

10- Install the oval-shaped gasket over the inlet duct as shown in **Picture 20**. Now, gently pull peel-back liner up while pressing gasket into place as you go. **See Picture 21**.



**Picture 20**



**Picture 21**

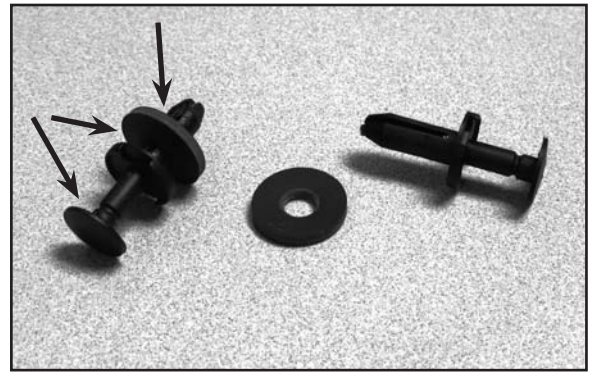
11- Insert intake runner down through the bed rail support so that it lines up with the throttle body. Route all wires to the front side of the intake runner away from the exhaust heat. Use the supplied wire ties to organize the wires.

12- Put a bead of silicone around the top of the oval gasket. **See Picture 22**. Carefully slide the box down over the oval gasket.

13- Align the rivet hole in the air box with the hole in the frame rail, a screwdriver works well for this. Put a little silicone on the rubber washers and under the head of the push pin as shown in **Picture 23**. Push down on the air box to compress the foam and install the plastic push rivets on the driver's side first.



**Picture 22**



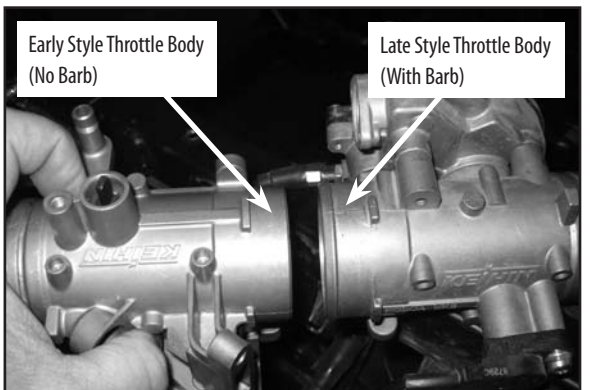
**Picture 23**

**NOTE:** It may be necessary to gently tap the rivet pin into place with a long rod or similar tool.

14- Install hose clamp onto new intake boot and slide boot onto throttle body making sure the flush side of the hose clamp is toward throttle body, as shown in **Picture 24**. Make sure hose clamp is fully on end of throttle body tighten hose clamp.



**Picture 24**



**Picture 25**

**NOTES:**

- You must reuse stock boot to throttle body hose clamp.
- Boots sliding off of stock RZR's not equipped with the barbed end on the throttle body has been an issue. If your vehicle has the barbless throttle body, installation of this hose clamp is critical to making sure the intake stays on the throttle body. We have chosen a silicone boot for this installation. Because of the sticky nature of the silicone it is much less apt to slide off of the throttle body. It is a good idea to frequently inspect these connections for tightness and to make sure everything stays attached. **See Picture 25** for difference between barbed and barbless.

14- Make sure intake runner is not bound up in intake adaptor boot. Slightly lift on the intake runner to relieve any pressure from the weight of the runner and remove tension from the intake manifold. Now tighten hose clamp on the adaptor boot to intake runner.

15- Install new supplied engine breather hose. Reuse stock spring clamps.

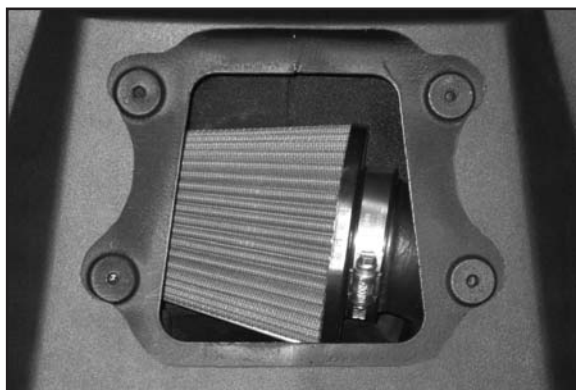
16- Plug in air temperature sensor.



**Picture 26**

**Reinstall bed:**

- 1- With an assistant, carefully slide bed over air box.
- 2- Reinstall four bolts in the bed and four Torx® head rivets along the front of the bed in the reverse order of removal.
- 3- After these four bolts and four screws are tightened down, check to see that the cutout in bed and the boss's on the primary air box clear. If not, make adjustments as necessary. After all is okay, install the remaining screws and push rivets.
- 4- Reinstall remaining hardware in the opposite order of removal.
- 5- Install air filter as shown in **Picture 27**.



**Picture 27**

6- Oil pre-filter foam. We recommend using a good 30 weight motor oil and ringing it out thoroughly.

- 7- Install prefilter and end cap on secondary air box with four 5/8" oval head #3 Phillips drive screws.
- 8- Peel backer off of primary to secondary air box seal and adhere to air box scoop.



Picture 28

- 9- Attach secondary air box to primary air box with four 1/4" 20 x 1" #3 Phillips panhead machine screws and four 1/4" x 5/8" washers provided. See **Picture 29**.



Picture 29



Picture 30

## REPLACEMENT PARTS FOR POLARIS® RANGER RZR® 800 AND RZRS® INTAKE

- |  |                 |   |                 |
|--|-----------------|---|-----------------|
| 1- Intake Kit, 2008-Up Polaris® Ranger RZR® 800.....                                       | <b>106-5012</b> | 5- Cover, Air Box, Packaged, Anodized, Billet, Aluminum, 2008-Up Polaris Ranger RZR 800 .....         | <b>106-5142</b> |
| 2- Filter Kit, 2008-Up Polaris Ranger RZR 800 .....  | <b>106-5137</b> | 6- Intake Boot, Kit, 2008-Up Polaris Ranger RZR 800 .....   | <b>106-5146</b> |
| Kit Contains:  |                 | Kit Contains:   |                 |
| 2a- Filter, Air, Tapered Oval, 2.50 Flange Dia. x 4.625 Length, 2008-Up Polaris Ranger RZR |                 | 6a- Hose, Intake Boot, 2"ID x 2.375"OD x 1.59"  |                 |
| 2b- Filter, Air, Pre Filter, Foam, 2008-Up Polaris Ranger RZR                              |                 | 6b- Adapter, Intake Boot, 3.25" x 2.5" x 1.80", Urethane  |                 |
| 3- Seal Kit, Air Box, 2008-Up Polaris Ranger RZR 800.....                                  | <b>106-5140</b> | 6c- Clamp, Hose, Smooth Band, 40-60mm x 9mm   |                 |
| Kit Contains:  |                 | 7- Intake, Air Box, Secondary, Packaged, 2008-Up Polaris Ranger RZR 800 .....                         | <b>106-5143</b> |
| 3a- Seal, Air Box to Runner, Closed Cell Foam, 2008-Up Polaris Ranger RZR                  |                 | Kit Contains:   |                 |
| 3b- Seal, Primary to Secondary Air Box, Closed Cell Foam, 2008-Up Polaris Ranger RZR       |                 | 7a- Induction, Air Box, Secondary, HDPE, Molded, 2008-up Polaris Ranger RZR                           |                 |
| 3c- Seal, Polyurethane Foam, Adhesive Backed, 3/8" x 1" x 36"                              |                 | 7b- Decal, Air Box, S&S® Logo, Domed, Brushed Aluminum, w/ Blue Lettering, 2008-Up Polaris Ranger RZR |                 |
| 4- Hardware Kit, 2008-Up Polaris Ranger RZR 800.....                                       | <b>106-5141</b> | 8- Tube, Intake Runner, Packaged, 2" Diameter, 2008-Up Polaris Ranger RZR 800 .....                   | <b>106-5145</b> |
| Kit Contains:  |                 | 9- Intake, Air Box, Primary, Packaged, 2008-Up Polaris Ranger RZR 800 .....                           | <b>106-5144</b> |
| 4a- Screw, Machine, Panhead, Phillips, 1/4-20 UNC x 1", Zinc Plated, Steel                 |                 | 10- Hose, Cut to Size, .375" x .625" x 13.25", Rubber .....   | <b>106-5310</b> |
| 4b- Screw, Oval Head, Phillips, 1/4-20 UNC x 5/8", Nickel Chrome Plated, Stainless Steel   |                 |   |                 |
| 4c- Fitting, 90°, 1/8-27 NPT x .375" Barb, Black, Nylon                                    |                 |   |                 |
| 4d- Washer, Flat - 1/4" x 5/8" x 1/16", Steel  |                 |   |                 |
| 4e- Retainer, Push Type, 5/16" x 1/2", Plastic   |                 |   |                 |
| 4f- Washer, Sealing, 5/16" x 7/8" x 1/8", Rubber   |                 |   |                 |

CONTINUED...REPLACEMENT PARTS FOR POLARIS® RANGER RZR® 800 AND RZR5® INTAKE

