



HARDWARE



BRACKETS

PACKER #: \_\_\_\_\_



**EXHAUST SYSTEM FOR MULTIPLE PART#  
INDIAN SCOUT 2-INTO-1 SHORTY**

Congratulations, you have acquired the finest aftermarket performance exhaust system available for your motorcycle. Your FREEDOM PERFORMANCE exhaust system was designed to perform fit and give the optimum sound and style at a very affordable price.

**WARNING: DUE TO THIS DESIGN SOME ACCESSORIES MAY INTERFERE WITH THIS EXHAUST SYSTEM SUCH AS SADDLE BAGS OR PASSENGER FOOT PEGS IN ORDER TO FIT PROPERLY IN SOME MODELS THEY HAVE TO BE RELOCATED.**

Please follow the installation instructions and please do not hesitate to call us for any technical questions at (310) 324-0415

REMOVING THE STOCK EXHAUST SYSTEM

1. If equipped remove saddle bags, refer to owner's manual.
2. Using a 13mm socket or wrench, remove two screw holding muffler together. They are located behind the mufflers. (See fig. 1.1 & 1.2)
3. Loosen muffler clamps (x2) using a 15mm socket or wrench loosen both clamps holding mufflers to header assembly. (See fig. 1.3)
4. Remove rear (top) muffler some lube may ease the removal. (See fig. 1.4)
5. Using a 12mm socket remove screw holding lower (front) muffler (See fig. 1.5)
6. Remove muffler and set it aside.
7. Remove seat, locate and disconnect rear Oxygen sensor harness, now, using a 14mm wrench remove sensor from head pipe. **NOTE:** make sure to rotate cable as you loosen sensor from sensor bung to prevent twisting the cables otherwise the cable may rupture. Do not pull the sensor out leave it hanging. (See fig. 1.6 & 1.7)
8. Using a 10mm socket or wrench, remove two screws holding radiator cover located at the bottom, one on each side of motorcycle. (See fig. 1.8 & 1.9) pay attention at the screw assembly, you will need it to reinstall it back in place the same way.
9. Remove plastic cover and set it aside. (See fig. 1.10)
10. Using an 8mm hex key wrench, remove both (right/left) forward controls and let them hang. (See fig. 1.11, 1.12, & 1.13)
11. Using a 10 socket, remove two screws holding radiator bracket located on each side. Pull radiator bracket down. (See fig. 1.4 & 1.15)
12. Softly pull radiator forward towards the front fender to have access to remove front Oxygen sensor. Do not overdue it.
13. Cut off the plastic zip tie holding sensor cable and disconnect sensor from harness. (See fig. 1.16, 1.17 & 1.18)
14. Remove rear flange nuts holding rear header using a 13mm socket or wrench. (See fig. 1.19)
15. Locate and loosen clamp holding rear and front header assembly using a 15mm socket or wrench. (See fig. 1.20)
16. Disengage rear assembly and set it aside. Using some type of lube will ease the removal. (See fig. 1.21 & 1.22)
17. Using a 13mm socket remove flange nuts holding front header assembly, remove and set it aside. (See fig. 1.23)
18. Now remove the stock mounting bracket using an 8mm hex key wrench and remove two lower screws, now, using a 24mm socket remove axle nut. Save screws and nut for your new bracket. (See fig. 1.24 & 1.25)



INDIAN SCOUT PART# IN00082

Note: use good and safe practices when removing and installing your new exhaust system to prevent injuries that includes but is not limited to such safety glasses and gloves. When installing make sure gloves are not abrasive or damage may occur like scratching parts. Always secure motorcycle before any work is done.

1. Remove exhaust system from protective packaging. Place them in a non-abrasive surface such as a blanket or carpet. By doing this you can avoid scratching the parts in the installation process. We recommend using painters tape to cover parts and accessories on areas where damage can occur during installation.
2. Refer to (Fig. 2.1) for hardware and part list to make sure you have all necessary components prior to installation.
3. Using a 14mm wrench install oxygen sensor on front head pipe **I125-F12**. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install it into the new head pipe. *NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor functionality.* (FREEDOM PERFORMANCE recommends replacement of exhaust port gaskets if damaged or worn out. (Fig. 2.2)
4. Using stock flange nuts and a 13mm socket install front header, bring nuts all the way but do not tighten at this time yet. (Fig. 2.3)
5. Install rear Oxygen sensor on **I126-F12** header. Turn the pipe not the sensor to prevent damage to the sensor cables there is plenty of play to maneuver with the rear pipe, now with a 14mm wrench tighten sensor. (Fig. 2.4)
6. Install rear header into rear engine port using stock flange nuts and a 13mm socket, bring all the way but do not tighten yet. (Fig. 2.5)
7. Attach mounting bracket **MBK-SC105-F4** using an 8mm hex key wrench use two stock screws previously removed from as well as a spacer **A109SP** provided in the kit. (Fig. 2.6)
8. Slide 1 Barrel clamp (# 60) in front of the slotted end of each header *NOTE: Screw head on rear header must face up and towards the engine, front headers faces down see picture for details. this is to make it easy when tightening the clamp after shields are in place.* (See figure 2.7)
9. Install muffler assembly, **MSC105-F6**, some assistance may be required. Insert rear header into muffler/header assembly first, do so as much as needed in order to line up front header, (See figure 2.8) now, insert front header into muffler/header assembly. (See figure 2.9) Align bracket welded on the muffler to mounting bracket. Use two 5/16-18 serrated screws and a back-plate bracket **MBK-M150-F7** provided in the hardware in the kit, engage system to mounting bracket DO NOT TIGHTEN AT THIS TIME YET. *NOTE: make sure back end of welded bracket on muffler is flush with mounting bracket to ensure head pipes have gone inside muffler/header assembly inlets just enough to prevent exhaust leaks.* (Fig. 2.10 and 2.11) head pipes go inside muffler inlet about 1-3/8"
10. Align entire system, tighten to mounting bracket using a 1/2" open wrench (2 screws) now tighten exhaust port flange nuts using a 1/2" socket. Do not tighten barrel clamps yet. (Fig. 2.12)
11. Tighten both front/rear header to engine ports using a 13mm socket. make sure clamps over the slotted nose of the muffler/header assembly are flush to the edge of the sleeve. If it is too far back it will not tighten the muffler/Header assembly.
12. Install heat shields. For these steps it is imperative to use caution, space is very tight and scratches may occur. We recommend to use painters tape, cut a small piece and tape it over the heat shield where the clips are located (these are the clips welded inside the heat shield) now mark the center of the clip with a pen or marker also mark an arrow pointing the direction of hose clamp insertion as seen of the picture. (See figure 2.13)
13. Place front shield **I125-F3** over the front pipe. (See figure 2.14) and carefully align it. Check that the heat shield does not make contact with the head of the barrel clamp, if so, rotate clamp to clear shield and tighten it using a long nose 5mm hex key wrench as shown in picture. (See figure 2.15) Repeat step with rear shield and clamp.
14. Re-place front shield over front pipe as shown. (See figure 2.14) Now insert the worm clamps in the direction of the arrow. (See figure 2.16) Use clamps as follow: (#24) for all pipe shields.
15. Repeat step with the rear heat shield **I126-F3** first place it just to clear barrel clamp, remove it and tighten barrel clamp then re-place shield and secure it with hose clamps. (See figure 2.17)
16. Install mid heat shield **I127-F3** and megaphone shield **HS130-F3** the same way as the other shields for the megaphone mufflers shield use the larger hose clamp at the back #56 and #40 at the front. Mid-section shield must be flush with front and rear shields. (See figure 2.18)
17. Align heat shields and tighten clamps using a 5/16 nut driver.
18. Install end cap, use 1/4"-20x1/2" button head screws and split washers to tighten and a 5/32" hex key wrench. Note that end cap can be rotated as desired if you want. If end caps are already installed, make sure they are properly tightened.
19. Route and engage Oxygen sensor harness, install a plastic zip-tight to hold front sensor cable to where it was originally and cut-off excess tail. Make sure cables do not make contact to any part of the exhaust to prevent heat damages.
20. Install radiator retainer bracket as it was before using 2 screws from stock and a 10mm socket or wrench. (Fig. 2.19 & 2.20)
21. Install both right/left forward controls using stock screws and an 8mm hex key wrench. (Fig. 2.21 & 2.22) *NOTE: IF NEEDED, SPACE OUT RIGTH SIDE PEG OR FLOORBOARD USING THE 2 SPACERS AND SCREWS PROVIDED IN THE KIT.*
22. Install radiator plastic cover refer to owner's manual for proper torque. (Fig. 2.23, 2.24, 2.25 & 2.26)
17. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
18. Clean exhaust system with some chrome cleaner and remove painters tape (if used during installation) before turning on engine. Failure to follow this procedure may result in damages to the chrome finish as oils burn out leaving permanent marks.

**Note: Be sure to tighten all hardware before starting your engine. Retighten after the first 100 miles.  
Re-mapping is strongly recommended by FREEDOM PERFORMANCE**

**Every attempt has been made to provide improved cornering Clearance. However, due to design and space boundaries on some motorcycle models, ground and cornering clearance may not be improved and in some cases may even be reduced.**

**WARNING!  
FREEDOM PERFORMANCE DOES NOT WARRANTY ANY CHROME OR BLACK FINISH PRODUCTS AGAINST DISCOLORATION.**

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Fig. 1.1 remove muffer screw



Fig. 1.2 remove bracket screw

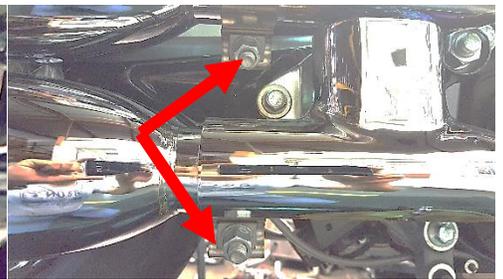


Fig. 1.3 loosen both muffer clamps



Fig. 1.4 remove top muffer

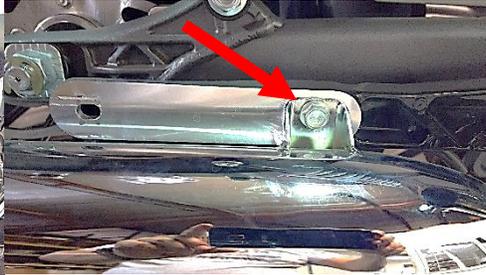


Fig. 1.5 remove screw



Fig. 1.6 disengage sensor harness



Fig. 1.7 let sensor hang



Fig. 2.8 remove screw right side



Fig. 1.9 remove screw left side

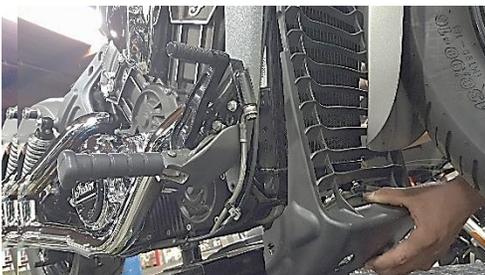


Fig. 1.10 remove plastic cover



Fig. 1.11 remove right side control



Fig. 1.12 remove left side control



Fig. 1.13 let controls hang

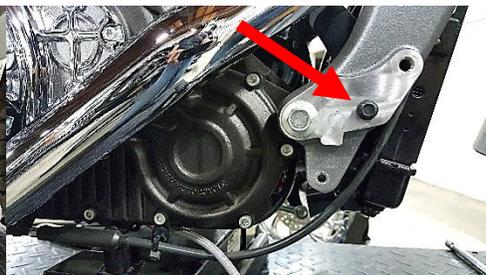


Fig. 1.14 remove screw right side

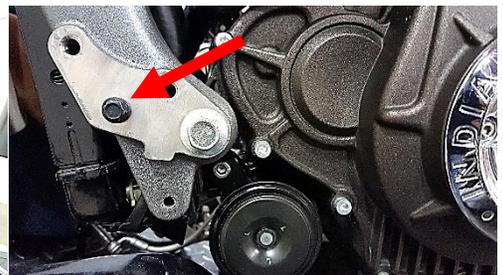


Fig. 1.15 remove screw left side

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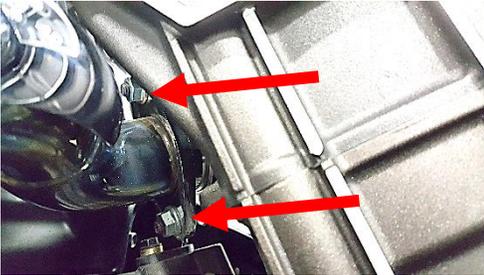
**Fig. 1.16 cut off plastic zip tie**



**Fig. 1.17 don't cut plastic bracket**



**Fig. 1.18 disengage from harness**



**Fig. 1.19 remove flange nuts**



**Fig. 1.20 loosen clamp**



**Fig. 1.21 disengage pipe assembly**



**Fig. 1.22 remove rear pipe assembly**



**Fig.2.23 remove flange screw nuts**



**Fig.1.24 remove mounting bracket**



**Fig.1.25 bracket removed**



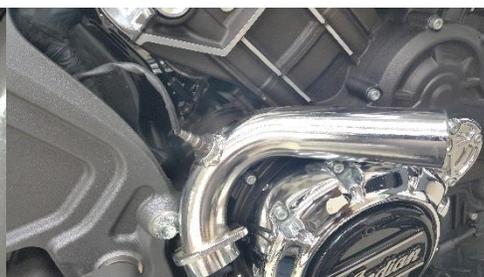
**Fig. 2.1 hardware on kit**



**Fig. 2.2 install O2 sensor front pipe**



**Fig. 2.3 install front pipe**



**Fig. 2.4 install rear O2 sensor**



**Fig. 2.5 install rear pipe**

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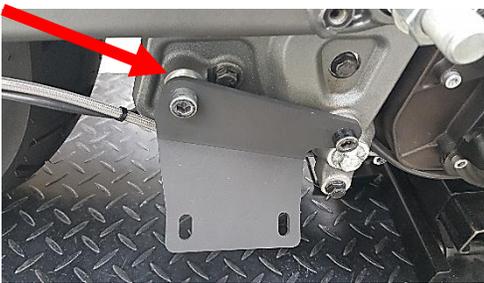


Fig. 2.6 attach mounting bracket with spacer as shown



Fig. 2.7 insert clamp over inlets flush to edge

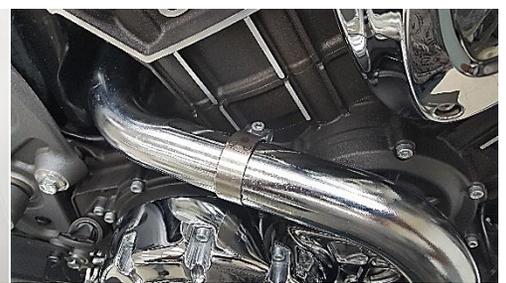


Fig. 2.8 insert rear pipe first



Fig. 2.9 insert front header second



Fig. 2.10 align brackets as shown

Fig. 2.11 back-plate shown



Fig. 2.12 align system and tighten

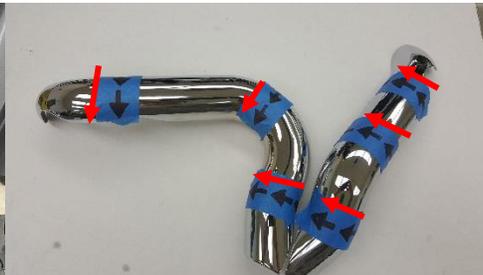


Fig. 2.13 mark arrows as shown



Fig. 2.14 place shield over pipe



Fig. 2.15 tighten barrel clamp away from heat shield.

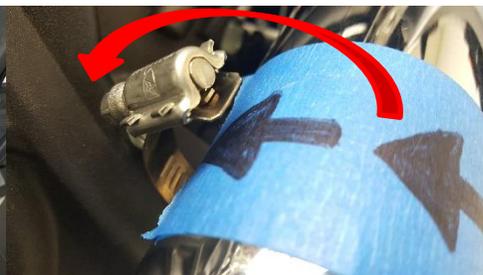


Fig. 2.16 install hose clamps



Fig. 2.17 install rear shield



Fig. 2.18 install mid shield and megaphone shield



Fig. 2.19 install radiator bracket

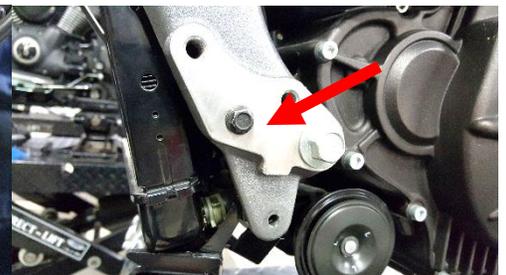


Fig. 2.20 install radiator bracket

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Fig. 2.21 install right control



Fig. 2.22 install left control



Fig. 2.23 ensure correct assembly



Fig. 2.24 install screw right side



Fig. 2.25 install screw left side



Fig. 2.26 cover installed

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