



HARDWARE



BRACKETS

PACKER #: _____

EXHAUST SYSTEM # MY00082 SHARP CURVE RADIUS (2-2)

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.

Please read and follow the installation instructions and certainly do not hesitate to call us for any technical questions at (951) 898-4733 or visit us at: www.freedomperformexhaust.com

PACKAGING LIST: MY00082-HW

Y175-F1 FRONT HEADER	1	Y175-F3 FRONT SHIELD	1	MY145-F5 FRONT MUFFLER	1
Y176-F1 REAR HEADER	1	Y176-F3 REAR SHIELD	1	MY146-F5 REAR MUFFLER	1
MBK-Y135-F4 BRACKET	1	MBK-M115-F7	2	6MMX1.0MM NYLOCK NUT	1
WORM CLAMP # 24	2	6MMX1.0MMX20MM LONG ALLEN BOLT	1	BARREL-BOLT CLAMP # 62	2
WORM CLAMP # 20	1	5/16"-18X5/8" ZINC PLATED SERRATED FLANGE BOLT	4	MY00082-INS	1
WORM CLAMP # 28	4	10MMX1.5MMX30MM LONG ALLEN BOLT	2	10MMX1.5MM NYLOCK NUT	2
10MM O2 PLUG	2				

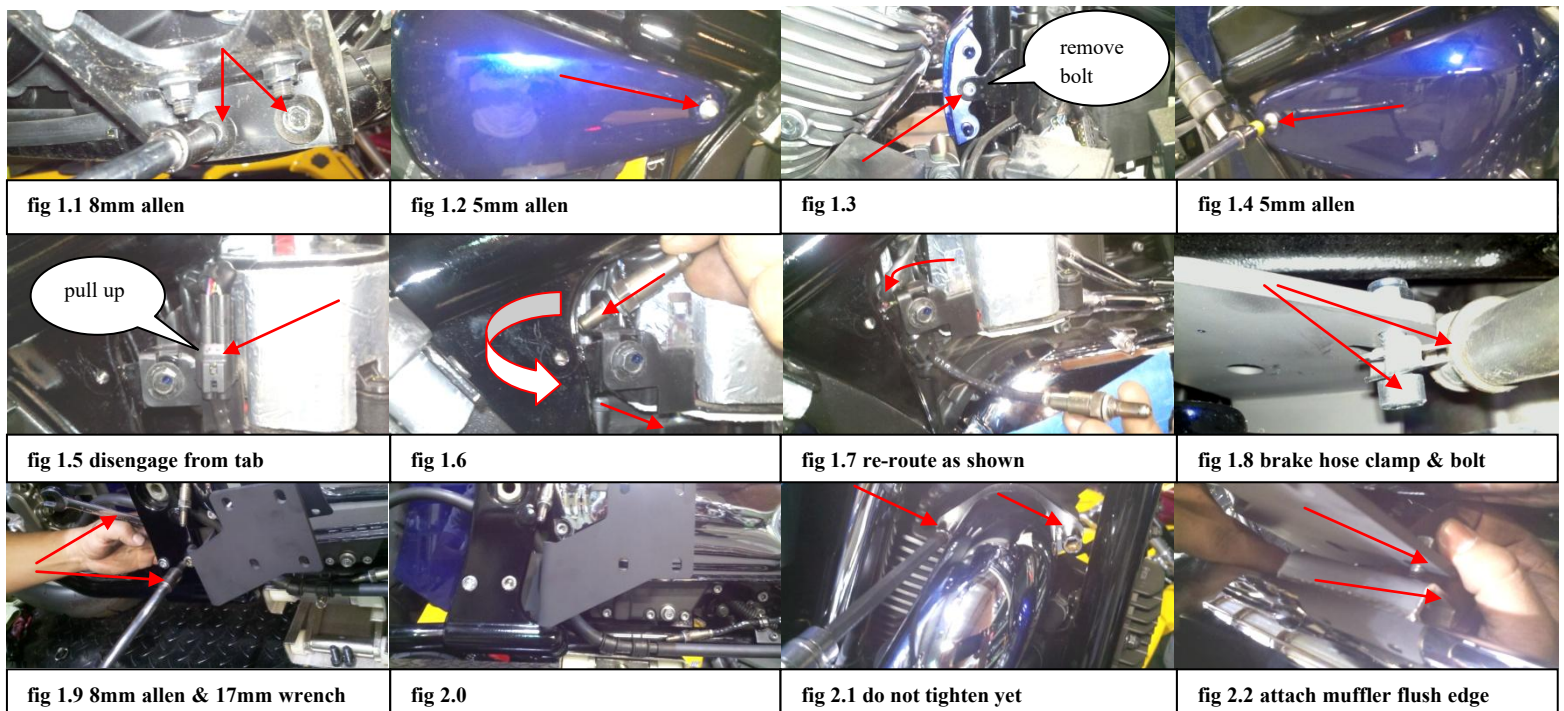
WARNING: When installing your new exhaust system always refer to owner's manual for torque specifications and follow safety precautions, make sure motorcycle is properly secure to prevent it from falling and that is not hot to prevent burning.



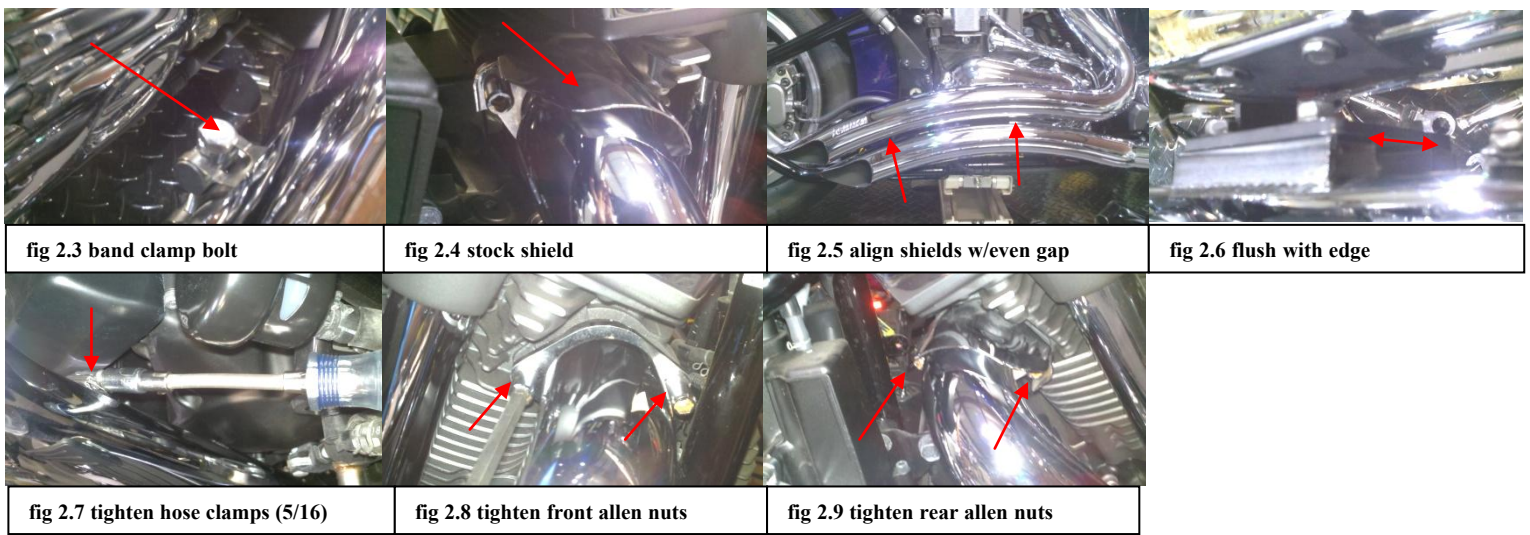
PART # MY00081



PART # MY00082



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.



STOCK EXHAUST SYSTEM REMOVAL

1. When removing or installing accessories there is always a chance to scratch motorcycle components, use painters tape on areas prone to scratches during the installation such frame, chrome or painted parts.
2. It is recommended to use penetrating oil on all nuts, bolts and slip joint to ease removal of stock exhaust system.
3. Using a 8mm allen wrench locate and loosen two bolts holding the right side floorboard to gain access and make the removal and installation easier. **See figure 1.1**
4. Models equipped with O2 sensors, follow step 5,6,7 and 8. Models without O2 sensors skip these steps.
5. Remove plastic side covers (left first then right) using a 5mm allen wrench remove allen flange bolt and save for re-use, carefully pull cover out. **See figure 1.2**
6. Remove bolt holding right side cover from frame using an 8mm socket or nut driver. (this bolt is visible once the left side cover has been removed. **See figure 1.3**
7. Now using the 5mm allen wrench remove right side cover and gently pull out. **See figure 1.4**
8. Locate rear O2 sensor disengage from tab and remove from stock assembly using a 14mm wrench. The rear sensor harness is located behind right side cover. this rear sensor is too short to reach the new exhaust system it will have to be re-routed to reach O2 bong on the new system. **See figure 1.5, 1.6 and 1.7** Disconnect Oxygen sensors from harness and save for re-use.
9. using a 8mm allen wrench locate and remove exhaust port allen nuts and save them as they will be re-used with your new exhaust system. **(Note: Inspect exhaust port Allen nuts and replace if damaged or worn)**
10. Remove allen bolts holding the rear muffler to the mounting bracket. Note: same assistance may be required.
11. Remove complete exhaust system first lift muffler up to release it from the locating hole of the mounting bracket. Note: same assistance may be required to prevent scratches or damages.
12. Inspect conditions of exhaust gaskets and replace them if worn or damaged.
13. Remove the two bolts that hold the stock mounting bracket in place to the frame using an 8mm allen wrench as this will be removed and replace with a new mounting bracket (supplied)
14. Remove the rear brake hose clamp from the exhaust mounting bracket.
15. **Note that the stock mounting bracket holds the rear brake hose with a looped wire welded to the mounting bracket. There are two ways to remove the stock bracket out. Step number (16) is easier and faster while steps (17, 18, 19 and 20) require that the brake system must be bled or the braking system will not work.**
16. With large wire cutters or wheel air grinder cut a section of the loop wire to slide the house out of the loop mounting bracket. If you decided to follow the long rout we recommend that the installer knows how to adjust the braking system or serious injuries or event death may occur. Refer to the manufacturer's user manual for proper bleeding of the braking system.
17. Remove the brake house banjo bolt from the rear caliper. (have some rags available as some brake fluid will spill out)
18. Slide the house out of the loop mounting bracket
19. Inspect conditions of sealing washers on the banjo bolt and replace if damaged or worn.
20. Now reconnect brake house to caliper, use manufacturer recommended guidelines for torque and bled the system according to manufacturer specifications.

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FREEDOM PERFORMANCE EXHAUST SYSTEM INSTALLATION

1. Remove exhaust system from protective packaging it has been pre-assembled for easy installation. 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. Attach brake hose clamp to new mounting bracket as shown in picture using the 6mm and lock nut supplied make sure it is tight.
See figure 1.8
3. Attach mounting bracket MBK-Y135-F4 using an 8mm allen wrench and a 17mm wrench to motorcycle frame using 10mm allen bolts and nuts supplied, apply a small amount of locking glue on threads of your choice. **See figure 1.9 and 2.0**
4. Models equipped with oxygen sensors Install oxygen sensor (from stock) apply a small amount of anti-seize compound to the threads of the O2 sensors and install it into the new system. NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor functionality. Models without O2 sensors, plug sensor bongs with supplied 10mm plugs.
5. Install front head pipe first into exhaust port by first and carefully aligning the bracket welded on the inner muffler to engage system to the mounting bracket. Note: It may be necessary to rotate the inner muffler to align it to the holes on the mounting bracket. Install port allen (from stock) all the way but, **DO NOT TIGHTEN AT THIS TIME YET. See figure 2.1**
6. Using two 5/16-18 flange serrated bolts and MBK-M115-F7 nut back plate, attach muffler to mounting bracket. First insert the back plate into bracket welded on muffler with the nuts facing towards the muffler then align back plate to engage bolts. NOTE: make sure that the front section of the welded bracket on the muffler is flush with the edge in the front of the mounting bracket.
See figure 2.2 and 2.6
7. **NOTE: the muffler in this system is engaged to the header, loosen the band clamp to allow adjustment forward, backwards and rotation until the nuts welded on the muffler bracket align with the slots in the mounting bracket. See figure 2.3**
8. Repeat step 5 with the rear header and re-use small cover shield removed from stock. **See figure 2.4** install it in the same way it was. **Note:** we recommend for you to cover the heat shield on top, right below where the rear pipe system is to be installed with a non-abrasive rag or painters tape to prevent scratches during installation of rear pipe.
9. Align both pipes, make sure the space between front and rear curved sections have an even gap, **see figure 2.5** and tighten to the mounting bracket bolts **first** using a 1/2" wrench **then** tighten barrel band clamps. (These are the clamps that hold the inner muffler to the headers) **see figure 2.3 now** tighten the exhaust port flanges. **See figures 2.8 & 2.9**
10. Align heat shields and tighten clamps using a 5/16 nut driver.
11. Re-connect O2 sensor harness, remember that the rear sensor has to be re-routed to reach sensor bong. refer to figure 1.6 & 1.7
12. Re-install right side panel first tighten bolt holding right side panel from frame, proceed to re-install left side panel
13. Tighten floorboard bolts. Note: some models have very large or after market floorboards that may be too close to the heat shield on your new system, if this is the case use some spacers and replace bolts. For example, if the stock bolt is 10mmx1.25mmx30mm long and a 10mm spacer is needed for more clearance, use a 40mm long bolt instead of the 30mm.
14. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
15. 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/jetting is strongly recommended by FREEDOM PERFORMANCE

There are accessories available for this exhaust system such as quiet baffles, contact us for more details.

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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