

EXHAUST SYSTEM # HD00258 SHARP CURVE RADIUS (2-2) WITH CROSSOVER

Feel the Power of Freedom

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 INTERFER WITH THIS EXHAUST SYSTEM SUCH AS SATTLE BAGS OR PASSENGENR FOOT PEGS IN ORDER TO FIT PROPERLY IN SOME MODELS THEY HAVE TO BE RELOCATED.

PACKAGING HD00258-HW (*) = ASSEMBLED

PART NUMBER	DESCRIPTION	QTY	PART NUMBER	DESCRIPTION	QTY
D275-F1	FRONT HEAD PIPE*	1	HWC0002	HOSE CLAMP # 24 STAINLESS STEEL	3
D277-F2	FRONT HEAT SHIELD*	1	HWC0003	HOSE CLAMP # 28 STAINLESS STEEL	4
D276-F1	REAR HEAD PIPE*	1	HWC0011	BARREL CLAMP # 60 STAINLESS STEEL	2
D278-F2	REAR HEAT SHIELD*	1	HWB0007	5/16"-18 X 5/8" SERRATED FLANGE SCREW ZINC	4
MGS160-F5	MUFFLER ASSEMBLY*	1	HWB0017	5/16"-18 X 1-1/2" HEX SCREW ZINC PLATED	3
MBK-D130-F4	TRANSMISION MOUNTING	1	HWW0005	5/16" FLAT WASHER ZINC PLATED	3
MBK-M115-F14	BACK PLATE BRACKET	2	HD00258-HW	HARDWARE BOX	1
			HD00258-INS	INSTRUCTION MANUAL	1

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

- Loosen all heat shield worm clamps on both the front and rear head pipes.
- **2.**Remove cylinder exhaust port flange nuts from each head pipe, positioned at the cylinder head and save for re-installation.
- **3.**If equipped, remove front carriage bolt and clamp holding the front head pipe
- **4.**Remove bolt that holds mufflers to the transmission mounting bracket.
- **5.**Remove complete exhaust system. Note: some assistance may be required.
- **6.** Now remove the stock mounting bar (bracket) and set aside.
- **7.**If equipped remove the front bracket that was holding the clamp on the front head pipe.
- **8.**Remove the two lower and left bolts from the transmission cover to allow the installation of the new mounting bracket.
- 9.Remove both circlips and flanges from stock exhaust system using snapring pliers. Inspect sirclips prior to installation and they are damaged, replace them. Inspect gaskets if damaged or worn replace them.







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 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 in installation process. We recommend using painters tape to cover parts and accessories on areas where damage can occur during installation.
- Install exhaust port flanges and retaining rings (from stock system) onto head pipes. (See figure 2.1) (FREEDOM PERFORMANCE recommends replacement of exhaust port gaskets if damaged or worn out.
- 3. Attach mounting bracket MBK-D130-F4 (See figure 2.2) using a ½" open wrench, install mounting bracket to motorcycle frame use 5/16"-18 hex screws (supplied)
- 4. Slide 1 Barrel clamp (# 60) in front of the slotted end of each muffler NOTE: the screw head on the top muffler must face up and towards transmission, the lower muffler must have clamp screw head face down, this is to make it easy when tightening the clamp after shields are in place. (See figure 2.3)
- 5. Install front head pipe first, D275-F1 bring stock flange nuts all the way but do not tighten at this time yet, use a ½" socket or drive screw.
- Repeat step with rear head pipe D276-F1. (See figure 2.4)
- 7. Install twin muffler, MGS160-F5, align muffler inlets with both front and rear headers and slide muffler over pipes. Align brackets welded on the mufflers to engage system to mounting bracket using four 5/16-18 flange serrated bolts. DO NOT TIGHTEN AT THIS TIME YET. (See figure 2.5) NOTE: make sure back end of both brackets are flush with mounting bracket to ensure that head pipes have gone inside muffler inlet just enough to prevent exhaust leaks.
- 8. Align both pipes, tighten to mounting bracket using a ½" open wrench (4 screws) now tighten exhaust port flange nuts using a ½" socket. **Do** not tighten barrel clamps yet. (See figure 2.6)
- 9. 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 2.7)
- 10. Slide the front shield (D277-F2) over the front muffler and pipe. (See figure 2.8) and carefully align it. Now insert the worm clamps in the direction of the arrow. (See figure 2.9) Use clamps as follow: (#24) over the header (#28) over the muffler.
- 11. Repeat step with the rear heat shield (D278-F2) Note: we recommend for you to cover front 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 shield. (See figure 2.10)
- **12.** Align heat shields and tighten clamps using a 5/16 nut driver.
- 13. Tighten both barrel band clamps using a 5mm hex key wrench,
- 14. Install end caps using two screws 1/4"-20 and two split washers with a 5/32" hex key wrench. You can rotate end cap in the direction of your choice it has multiple holes for different rotation.
- 15. as 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.
- 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.

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.







Fig. 2.1 Install both flanges and retaining Fig. 2.2 Install mounting bracket

Fig. 2.3 Insert barrel band clamps over the muffler inlets as shown



Fig. 2.4 Install front and rear headers

Fig. 2.5 Install muffler as shown

Fig. 2.6 bracket shown with muffler







clamp insertion

Fig. 2.7 Arrows indicate direction of hose Fig.2.8 Install front shield as shown

Fig.2.9 Hose clamp insertion sample



Fig.2.10 Install rear heat shield

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.