

EXAHUST SYSTEM # HD00400 INDEPENDENCE (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 follow the installation instructions and please do not hesitate to call us for any technical questions at (951) 898-4733

PART NUMBER	DESCRIPTION	QTY	PART NUMBER	DESCRIPTION	QTY
SP205-F1	FRONT HEAT HEAD PIPE	1	MBK-M115-F7	BACK PLATE BRACKET	2
SP206-F1	REAR HEAD PIPE	1	HWB0007	5/16"-18 X 5/8 SERRATED FLANGE HEX SCREW ZINC	4
SP205-F2	FRONT HEAT SHIELD	1	HWB0001	1/4"-20 X 3/8" BUTTON HEAD SCREW ZINC PLATED	2
SP206-F2	REAR HEAT SHIELD	1	HWW0003	¼" THIN SPLIT WASHER ZINC PLATED	2
A162-LCB-F8	SYSTEM BAFFLES	2	A125-O2-F14	18X1.50MM TO 12X1.25MM O2 ADAPTOR	2
A100ECA-F10	SYSTEM END CAP	2	HWC0002	HOSE CLAMP # 24 STAINLESS STEEL	3
MBK-SP170-F4	MOUNTING BRACKET (04-UP)	1	HWC0003	HOSE CLAMP # 28 STAINLESS STEEL	1
HD00400-HW	HARDWARE BOX	1	HWM0002	PLASTIC TIE DOWN 7" LONG BLACK	1
HD00400-INS	INSTRUCTION MANUAL	1			

REMOVING THE STOCK EXHAUST SYSTEM

- 1. Remove left side cover to access and disconnect rear Oxygen sensors from harness, (See fig. 1.5)
- 2. Repeat step one with front sensor. (See fig. 1.4)
- 3. Remove cylinder exhaust port flange nuts from each head pipe using a ½" socket positioned at the cylinder head and save for re-installation.
- 4. If equipped, remove rear carriage bolt, acorn nut and clamp holding the rear head pipe to the belt cover bracket using a 9/16" deep socket or wrench. (See fig. 1.7)
- 5. Remove bolts holding mufflers to the transmission mounting bracket using a ½" socket or wrench. (See fig. 1.2 and 1.3)
- 6. Loosen clamps in front of each muffler using a 9/16" socket or wrench. Remove mufflers and set them aside. (See fig. 1.1 and 1.6)
- 7. Remove entire system together as the headers is connected as one assembly. Note: some assistance may be required. (See fig. 1.8)
- 8. Remove oxygen sensors from head pipes use a 14mm open wrench and save for re-use on your new Freedom Performance exhaust system.
- 9. Remove drive belt cover to gain access to remove stock mounting bar. You will need two hex keys a 3/16" and a 5/16", remove the three screws 2 of them 1/4" with the 3/16" hex key and the last screw 3/8" with the 5/16" hex key wrench. (See fig. 1.10)
- 10. Remove retaining clip located on the brake rod pin (be careful not to lose the ring as this part is too small) now pull the pin out. Use two open wrenches to remove the rod from the brake system assembly a 9/16" and a ½". It may be necessary to remove peg assembly especially on mid control systems, if you decide to remove them use a 5/16" hex key wrench and remove the 2 screws holding assembly together this will make the installation way easier. (See fig. 1.9)
- 11. Remove the stock mounting bracket and set aside, using a 5/16" hex key wrench, remove screws holding stock mounting bracket to motorcycle.
- 12. Remove both retaining rings and flanges from stock exhaust system using snap ring pliers. Inspect retaining rings prior to installation and if they are damaged, replace them. Inspect gaskets if damaged or worn replace them.

FREEDOM PERFORMANCE EXHAUST SYSTEM INSTALLATION

- 1. Remove exhaust system from protective packaging, it has been pre-assembled for easy installation. Place it 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 painter's tape to cover parts and accessories on areas where damage can occur during installation.
- 2. Check that all the appropriate hardware is available on your hardware kit.
- 3. Install mounting bracket MBK-SP170-F4 using stock 3/8"-16 screws and a 5/16" hex key wrench. (See figure 2.1)
- **4.** Reinstall drive belt cover using socket head cap screws and a 5/16" and 3/16" hex key wrenches. (See figure 2.2) NOTE: If you need more room to install belt covers loosen up brake control assembly.
- 5. Install brake rod as it was prior to installation, use pin and retaining ring. (See figure 2.3)
- **6.** Use painter's tape as shown in the picture, stick a piece of about 5" long over the shield in the same direction where the heat shield clip is (the clip welded inside), now, with a sharpie, mark the center of each heat shield clip with arrows as shown in the picture. This will prevent scratches when installing hose clamps as well as show the location and direction of clamp insertion. (See figure 2.4)
- 7. Place front shield over front pipe and secure it with hose clamps # 20 for header section and #28 for muffler section. Note that the arrows on the picture indicate de direction of insertion of hose clamps.
- 8. Repeat step with rear pipe and shield.
- 9. Install front head pipe first into exhaust ports the secure it to head port using stock flange nuts, bring nuts all the way but do not tighten yet. Now secure muffler section to mounting bracket using a back-plate bracket and two 5/16"-18 serrated flange screws included in the kit. Insert back plate bracket into the welded bracket on muffler section with the flat surface facing towards the mounting bracket. (some assistance may be required) DO NOT TIGTHEN YET.
- **10.** Repeat step with rear pipe assembly be careful not to scratch front shield during installation, its recommended to place a microfiber rag over the front shield to prevent scratches.
- 11. Align both pipes and tighten to the mounting bracket screws first using a ½" wrench, then, tighten exhaust port flanges using a ½" socket.
- **12.** Adjust both front and rear heat shield, then tighten worm clamps.
- 13. Reconnect front and rear oxygen sensors to harness. In the front oxygen sensor wire attach to the frame using a cable tie
- **14.** Re-install left side cover.
- **15.** Now check for enough clearance between the exhaust system components and motorcycle accessories prone to heat damage.
- 16. It is vital when installing a new chrome exhaust system; please make sure that your hands are clean with no oil. Right after installation is done, in detail, clean your new exhaust system with a soft cloth (to prevent scratches) and you could use the following (chrome wax, glass cleaner, alcohol, or ammonia before starting the engine.

Note: Be sure to tighten all hardware before starting your engine. Retighten after the first 100 miles.

At freedom performance Inc. attempts have been made to provide enhanced concerning Clearances. However, due to some designs and space boundaries, 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 PAINTED PRODUCTS AGAINST DISCOLORATION.



Fig. 1.1 loosen muffler clamps



Fig. 1.2 remove bolts holding mufflers



Fig. 1.3 remove bolts holding mufflers



Fig. 1.4 disengage sensor harness



Fig. 1.5 disengage sensor harness



Fig. 1.6 loosen muffler clamps



Fig. 1.7 loosen muffler clamps



Fig. 1.8 system removed



Fig. 1.9 remove retaining ring and pin



Fig. 1.10 remove belt cover



Fig. 1.11 remove mounting bar/bracket



Figure 2.1 install mounting bracket



Figure 2.2 re-install belt cover



Figure 2.3 re-install brake rod using pin and retaining ring



Figure 2.4 mark center on heat shield clips over painter's tape



Figure 2.5 install front pipe assembly



Figure 2.6 install rear pipe assembly