



HARDWARE



BRACKETS

PACKER #: _____

**HARLEY SPORTSTER SHARP CURVE
RADIUS 2004-PRESENT**

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.
RIGHT SIDE PASSENGER PEG RELOCATOR SOLD SEPARATELY PART NUMBER AC00106

Please read and follow the installation instructions and do not hesitate to call us for any technical questions at (951)-898-4733



PART# HD00208



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EXHAUST SYSTEM REMOVAL STOCK

PACKAGING HD00254-HW (*) =ASSEMBLED

PART NUMBER	DESCRIPTION	QTY	PART NUMBER	DESCRIPTION	QTY
SP190-F1	FRONT HEAD PIPE	1	HWC0002	HOSE CLAMP # 24 STAINLESS STEEL	3
SP191-F1	REAR HEAD PIPE	1	HWC0003	HOSE CLAMP # 28 STAINLESS STEEL	4
SP190-F2	FRONT HEAT SHIELD	1	HWC0010	BARREL CLAMP # 62 STAINLESS STEEL	2
SP191-F2	REAR HEAT SHIELD	1	HWB0007	5/16-18 x 5/8" SERRATED FLANGE SCREW ZINC	4
MGS125-F5	FRONT RADIUS MUFFLER	1	HD00254-HW	HARDWARE BOX	1
MGS126-F5	REAR RADIUS MUFFLER	1	HD00254-INS	INSTRUCTION MANUAL	1
A115-O2-F14	M18 X 1.50 SENSOR BUNG PLUG	2		PLSTIC TIE DOWN 7" LONG BLACK	1
MBK-SP126-F4	MOUNTING BRACKET	1			
MBK-M115-F7	BACK PLATE BRACKET	2			

- Loosen all heat shield worm clamps on both the front and rear head pipes.
- If equipped unplug front oxygen sensor from harness. Carefully cut the cable tie holding the wiring.
- Repeat step two to remove the rear oxygen sensor connector, unplug the oxygen sensor from harness and guide the wiring out carefully. Make sure to remember the route of the cable for re-installation.
- Remove cylinder exhaust port flange nuts from each head pipe, positioned at the cylinder head and save for re-installation.
- If equipped, remove rear carriage screw and clamp holding the rear head pipe to the belt cover bracket.
- Remove screw that holds mufflers to the transmission mounting bracket.
- Remove complete exhaust system. Note: some assistance may be required.
- If equipped remove oxygen sensors from head pipes using a 7/8" or 22mm wrench and save for re-use on your new Freedom Performance exhaust system.
- Remove drive belt cover to gain access to remove stock mounting bar.
- Using a T30 torx driver, loosen the brake rod from the rear eyelet section.
- Now remove the stock mounting bar and set aside.

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.

12. Remove both circlips and flanges from stock exhaust system using snapping pliers. Inspect circlips prior to installation and they are damaged, replace them. Inspect gaskets if damaged or worn replace them. Exhaust port gaskets, Harley part number: 17048-98.

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. Install exhaust port flanges and circlips (from stock system) onto head pipes. (FREEDOM PERFORMANCE) recommends replacement of exhaust port gaskets if damaged or worn out.
3. If equipped Install O2 sensors (from stock) on head pipes using anti-seize compound apply it to the thread only. Be careful not to use too much or to make contact with the tip as it may affect its functionality. If not equipped with O2 sensors, plugs must be used instead to plug the sensor ports. The headers have an 18mm x 1.50 threads use plugs included in the kit to plug Oxygen sensor bungs
4. Install mounting bracket **MBK-SP126-F4** using 3/8" socket cap stock screws; now reinstall drive belt cover using the 1/4" socket caps crews from stock.
5. Reinstall the brake rod, it is recommended that some type of thread locking compound be used to hold it in place.
6. Inspect both gaskets on engine ports and replace if damaged or worn out.
7. Slide 1 Barrel clamp (# 62) in front of the slotted end of the muffler with the bolt facing down and towards transmission, engage front header (**SP190-F1**) to front muffler (**MGS125-F5**)
8. 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 using two 5/16-18 flange serrated bolts. Note: It may be necessary to rotate the inner muffler to align it with the holes on the mounting bracket. Install port flange nuts all the way but, **DO NOT TIGHTEN AT THIS TIME YET.**
9. Repeat step 8 with the rear header. (**SP191-F1**) rear pipe and (**MGS126-F5**) rear muffler. In this case slide the barrel clamp with the head bolt facing up.
10. Align both pipes, make sure the space between front and rear curved sections have an even gap and tighten to the mounting bracket screws first using a 1/2" wrench then tighten barrel band clamps. (These are the clamps that hold the inner muffler to the headers) now tighten the exhaust port flanges.
11. 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 to the edge of the heat shield where the clips are located (these are the clips inside the heat shield) now mark the center of the clip with a pen or marker. Slide the front shield (**SP190-F2**) over the front muffler and pipe and carefully align it. Now insert the worm clamps in a way that they can be accessed to be tightened. Use clamps as follow: (#24) over the header (#28) over the muffler.
12. Repeat step # 11 with the rear heat shield (**SP191-F2**) 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 shield.
13. Align heat shields and tighten clamps using a 5/16 nut driver.
14. Route oxygen sensors cables and engage harness, install a plastic zip-tight to hold sensor cables to frame and cut-off excess tail
15. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
16. 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.