

FOR COMPETITION USE ONLY per US EPA regulations

Factory Pipe
Bill of Materials
800 SX-R Dry Pipe

<u>Item#</u>	<u>Qty.</u>	<u>Part Number</u>	<u>Part Description</u>
1	1	COMCST0420	Kawasaki dry manifold (includes 1a – 1b)
1a	1	COMFTG0045	1/4" NPT x 1/2" 90 Degree fitting
1b	1	COMFTG0090	1/8" NPT pipe plug
2	1	COMASM0810	800 SX-R dry chamber assembly (includes 2a – 2i)
2a	1	COMFTG0020	1/8" NPT x 3/8" Hose fitting
2b	2	COMFTG0030	1/8" NPT x 3/8" 90 Deg hose fitting
2c	1	COMHOS0041	3/8" x 13" Waterline clear
2d	4	COMCLP0010	# 06 High torque SS hose clamp
2e	1	COMGAS0340	334 Buna N o-ring
2f	1	COMGAS0330	341 Buna N o-ring
2g	1	COMCRB0140	#150 Mikuni main jet
2h	1	COMHOS0052	3/8" x 3" Waterline clear
2i	1	COMFTG0036	Inline filter
-	1	COMASM0968	800 SX-R Hardware kit (includes items 3 - 22)
3	2	COMBRK0228	800 SX-R Head bracket
4	2	COMMNT0052	#J-11729-190 Lord mount
5	6	COMFAS0026	8mm x 1.25 x 40mm Socket head bolt
6	6	COMFAS0036	8mm Flat washer SS
7	2	COMFAS0090	3/8"-16 SS Nut
8	4	COMFAS0086	3/8" Flat washer w/ 1" OD SS
9	1	COMFTG0110	Side squirter (3/8" hose)
10	1	COMGAS0235	337 Buna N o-ring
11	2	COMFAS0100	3/8-16 x 3/4" Hex head bolt SS
12	4	COMFAS0070	3/8" Ext. tooth washer SS
13	1	COMTOL0002	6mm Allen wrench (long ball end)
14	1	COMHOS0065	3/8" x 36" Waterline
15	1	COMCLP0012	SS hose clamp (1/2")
16	5	COMCLP0010	#06 SS hose clamp
17	1	COMHOS0701	3-3/4" X 2" Silicone sleeve
18	1	COMHOS0094	2-1/2" Silicone coupler (2-1/2")
19	1	COMFTG0023	1/8" BSP x 3/8" Hose fgt strt
20	1	COMFTG0220	1/4" NPT x 3/8" 90 Deg hose fitting
21	1	COMIGN0016	SX-R Air temp bypass connector (for use on 2004 & up only)
22	1	COMFTG0050	3/8" x 3/8" hose mender (for use on 2004 & up models only)

- CHECK CONTENTS AGAINST BILL OF MATERIALS. REPORT ANY SHORTAGES WHERE YOU PURCHASED YOUR FACTORY PIPE. SAVE THIS PARTS LIST FOR FUTURE ORDERS OF REPLACEMENT PARTS.**
- READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.**
- CARBURETOR ADJUSTMENTS MUST BE DONE PRIOR TO RUNNING THE ENGINE WITH THIS EXHAUST SYSTEM.**
- THE RUBBER "TRUMPETS" ON EACH END OF THE AIR BOX MUST BE REMOVED OR USE AFTER MARKET FLAME ARRESTORS WITH THE SUPPLIED JETTING SPECIFICATIONS.**
- 2003 MODEL REQUIRES TIMING ADVANCE PLATE (6 DEGREE) WITH THIS EXHAUST SYSTEM ON STOCK ENGINES RUNNING 91 OCTANE PUMP GAS.**

Factory Pipe
Instructions
800 SX-R Dry Pipe

Notes: For installation on the SX-R you will need to remove the left fiberglass insert portion of your hood or install an after market hood.

This pipe requires the installation of a 6 degree timing advance plate for 2003 models only. This can be purchased from R&D Performance Products. 2004 & up models use item 21.

Disconnect the battery cables and the exhaust overheat sensor connector (white connector). Remove the stock exhaust system. Remove the stock inlet waterline and the six studs in the cylinder. If you are going to replace your stock waterbox do so now, if not, do not remove it. Replace the stock Kawasaki side squirter with the aluminum side squirter (item #9).

2003 model only: Cut a 10" piece of the supplied 3/8" waterline (item#14) and attach the waterline to the side squirter. Secure with a #6 clamp (item #16). The other end will be attached to the pipe later. The stock hose that previously attached to the side squirter can be removed.

Thoroughly clean all gasket sealant from cylinder and steel gaskets, retain for re-use. Apply sealant to the exhaust manifold gaskets and install on the cylinders using two of the 8mm x 40mm socket head bolts and 8mm flat washers (items #5 & 6). Use Loctite 242 and thread these bolts in about one-third into the bottom two inside bolt holes.

Note: If you are using ECWI with this system remove the 1/8" NPT pipe plug from the manifold and install the 1/8" NPT x 1/4" spray bar according to the ECWI instructions, and follow the instructions in the next paragraph.

Using the stock water-in line, attach it to the barbed fitting of the Factory Pipe exhaust manifold (item #1) and secure with a 1/2" SS hose clamp (item #15). Slip the manifold onto the bolts on the cylinder, align the gaskets, and secure with the four remaining 8mm x 40mm bolts (item #5). Use Loctite 242 and torque to 20 ft.-lb. where applicable. Tighten the bottom bolts using the supplied 6mm ball end Allen wrench (item #13).

Install the front and rear cylinder head brackets (item #3) using the four original head nuts, do not use washers. See figure 1 for proper orientation. Torque to 18 ft.-lb. Install the rear Lord mount (item #4) onto the top hole on the rear bracket using one 3/8" flat washer (item #8), one 3/8" tooth washer (item #12), and one 3/8"-16 nut (item #7).

Note: Never use Loctite on rubber mounts.

Remove the two water-out fittings on top of the cylinder head. Install the stock 90 degree fitting in the front water-out on the cylinder head. Install the supplied 1/8 BSP x 3/8" straight fitting (item #19) into

the rear water-out of the cylinder head. See Figure 1. You will not be using the stock tee fitting with the flush outlet. Remove, or zip tie off to the side, the 1/2" hose for flushing the engine. Cut a 15" piece of 3/8" waterline (item #14) from the supplied hose. Attach and secure to the 1/8 BSP x 3/8" straight fitting on top of the head using a #6 hose clamp (item #16).

2003 model only: Locate the black 1/4" hose that goes from the head to the heat sensor located on the bottom corner of the electrical box. Move the hose from the current location on the head and attach to the 90 degree fitting you just installed on the head. Cut this to a suitable length and secure it using a #6 hose clamp (item #16).

2004 & up models only: Attach the stock 1/4" water overboard line, to the front 3/8" 90 degree fitting on top of the front cylinder. Secure it using the original stock hose clamp.

Locate the 2 1/2" x 2 1/2" silicone coupler (item #18). Slide the hose all the way onto the inlet tube of the waterbox. Slide the retained stock hose clamps on the 2 1/2" x 2 1/2" coupler. Do NOT tighten at this time.

In order to install the chamber assembly you must remove all four engine mounting plate bolts and slide engine forward about one or two inches.

Slide the 3-3/4" x 2" silicone sleeve (item #17) over the coupler end of the chamber and leave loose. Smear Vaseline on the manifold coupler, chamber o-rings, and the 337 o-ring (item #10) then install this o-ring into the bottom groove on the coupler end of the chamber. The o-rings will snap into the grooves on the manifold when seated properly. **The chamber and manifold will not come completely together by design.**

Slide the 2 1/2" x 2 1/2" silicone hose (previously installed on the inlet tube of the waterbox) onto the end of the pipe. Secure and tighten both hose clamps. Now you are ready to install the chamber onto the exhaust manifold. Align the chamber coupler up to the exhaust manifold. Insert a rod into the front pipe bracket and the front head bracket. See Figure 2. Holding the engine straight, pull the rod forward, moving the engine back onto the chamber coupler until it is completely seated. Now install the front Lord mount (item #4) on the top hole of the front head bracket using one 3/8" flat washer (item #8), one 3/8" tooth washer (item #12), and one 3/8"-16 nut (item #7).

Rotate the chamber over the Lord mounts and secure with two of the 3/8"-16 hex head bolts, 3/8" flat washers, and 3/8" ext. tooth washers (item #11, 8, &12). Slide the 3-3/4" x 2" silicone sleeve over the connection to seal the gap.

Move engine back, making sure the spider coupler is aligned properly. Install and tighten the engine mounting plate bolts.

Slip the 2 1/2" x 2 1/2" silicone coupler on the waterbox inlet tube onto the chamber stinger end and secure the clamps on the coupler and waterbox inlet tube.

Attach the 3/8" x 15" waterline coming from the straight fitting on the head to the 3/8" fitting on the front of the chamber. Secure with a #6 hose clamp (item #16).

2003 model only: Attach the end of the 3/8" x 10" waterline coming from the side squirter to the fitting on the end of the chamber. Secure with a #6 hose clamp (item #16).

2004 & up models only: Locate the stock black 3/8" water-out line on the right side of the bulkhead. This will route to the 3/8" straight fitting on the end of the exhaust chamber. Attach the 3/8" x 3/8" hose mender to the end of the water-out line and secure it using a #6 hose clamp (item # 16). Attach one end of the supplied 3/8" blue waterline to the 3/8" x 3/8" hose mender and secure it using a #6 hose clamp (item #16). Route the 3/8" waterline to the front of the engine compartment and cut the hose to length so that it will attach to the 3/8" straight fitting on the end of the exhaust chamber. Secure using a #6 hose clamp (item #16).

Remove the ride plate. Disconnect the 3/8" hose from the 90 degree, water-in fitting on the right side of the pump. Install the 1/4" NPT x 3/8" 90 degree fitting (item #20). Reinstall the 3/8" water-in line, and secure the hose clamp. Reinstall the ride plate.

2004 & up models only: Disconnect the air temp sensor (**green connector**), and connect the supplied air temp sensor bypass connector (item #21). See Figure 4. This advances the timing 6 degrees. **Note:** Do not use the air temp sensor bypass connector in conjunction with a 6 degree advance plate. This would raise the timing 12 degrees and cause severe engine damage.

CUTTING THE HOOD

See Figure 3 before cutting the hood insert. This process can be done using a cutting wheel and die grinder. The fire extinguisher must be removed and relocated per U.S. Coast Guard regulations.

CARBURETOR ADJUSTMENTS

Your specific adjustments may vary depending on engine modifications, fuel, altitude and other variables. Please consult a qualified technician if you are not familiar with tuning your carburetors. No jetting recommendations are given for a limited or superstock applications as we cannot anticipate all the possible combinations and setups. Removing the choke plates can cause the engine to run lean, and engine damage can occur.

Main jet: 152.5 front, 152.5 rear

Pilot Jet: 80

High-speed screw: 1/2 turn out from closed

Low speeds screw: 1.0 turn out from closed

Needle: Stock

Spring: Stock

Note: Stock compression & timing

Remove the two rubber trumpets from the air box

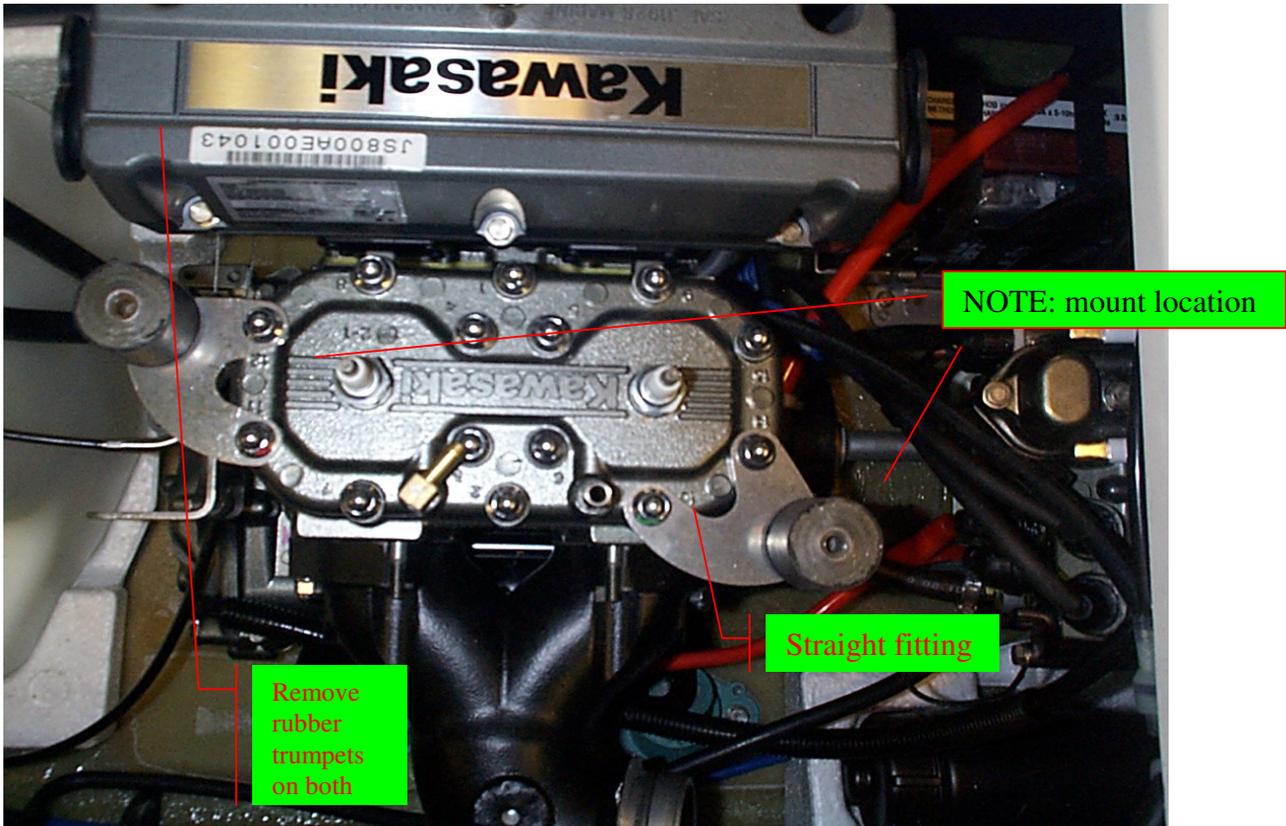


Figure 1↑, Figure 2↓

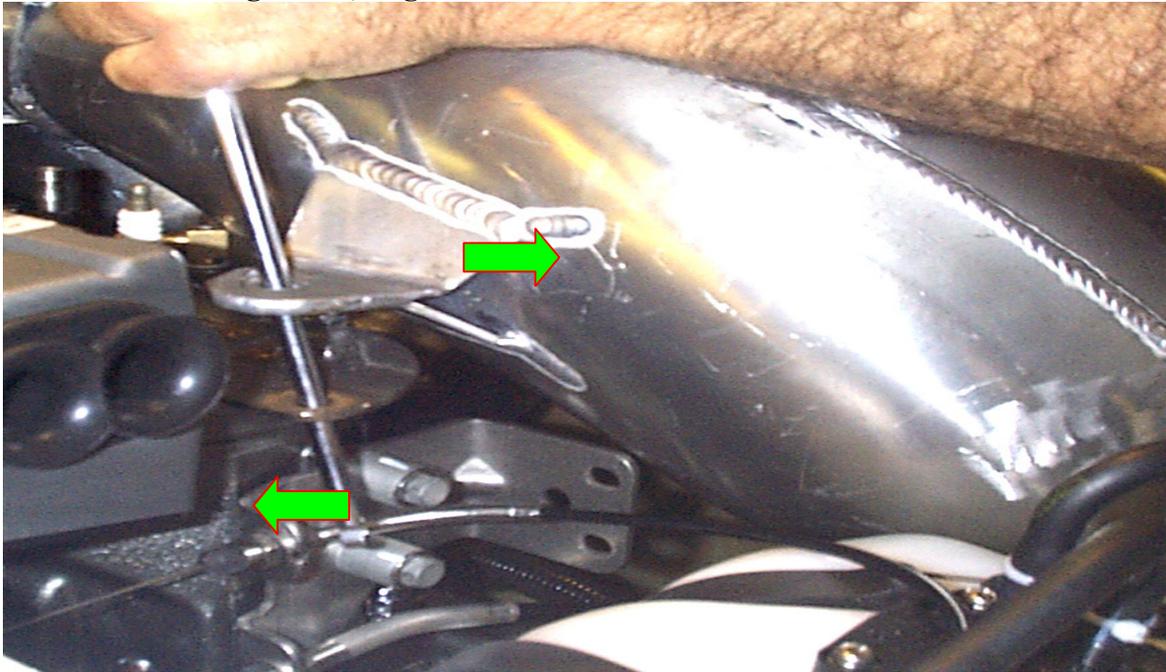


Figure 3



Figure 4

