### <u>Factory Pipe</u> <u>Bill Of Materials</u> Yamaha XL1200 Limited Triple Pipes

Item	Qty	Part Number	Part Description
1	3	COMASM0690	Yam GP 800/XL1200 flange Assy.
2	1	COMASM0824	XL1200 Rear Collector Assy.
3	1	COMASM0821	XL1200 Mag Chamber Assy.
4	1	COMASM0822	XL1200 Center Chamber Assy.
5	1	COMASM0823	XL1200 PTO Chamber Assy.
6	1	COMCH12008-B	Mag Stinger Tailpipe (long S-bend)
7	1	COMCH12008-C	Center Stinger Tailpipe (45 deg. Bend)
8	1	COMCH12008-D	PTO Stinger Tailpipe (short S-Bend)
9	1	COMASM0825	XL1200 Mag Bracket-Mount Assy.
10	1	COMASM0826	XL1200 PTO Upper Bracket-Mount Assy.
11	1	COMASM0827	XL1200 PTO Lower Bracket-Mount Assy.
12	1	COMASM0828	XL1200 Filter Block Assy.
13	1	COMASM0829	XL1200 Water Exit Manifold Assy.
14	1	COMASM0830	XL1200 Cylinder Head Exit Waterlines
15	1	COMASM0832	XL1200 Hardware Kit (Consisting of Parts #16-29)
16*	6	COMASM0790	Stainless Steel Exhaust Springs (with clear hose cover)
17*	12	COMFAS0050	10mm X 40mm Hex Head Bolts
18*	6	COMFAS0002	10mm Stainless Steel Spring Hook
19*	9	COMCLP0020	#32 Stainless Steel Hose Clamp
20*	3	COMHOS00703	1-3/4" X 2-1/2" Silicone Coupler
21*	2	COMHOS00702	1-3/4" X 4" Silicone Coupler
22*	13	COMCLP0010	#6 S.S. Steel Hose Clamp
23*	7	COMFAS0086	3/8" S.S. Flat Washers
24*	6	COMFAS0046	10mm X 30mm Flange Head Bolt
25*	1	COMFAS0280	3/8"-16 X 1" S.S. Hex Head Bolt
26*	5	COMFAS0100	3/8"-16 X 3/4" S.S. Hex Head Bolt
27*	6	COMFAS0040	10mm S.S. Lock Washer
28*	1	COMBRK0214	XL1200 Center Chamber to Mag Case Bracket
29*	3	COMGAS0150	7-1/2" long Graphite/Kevlar Sealing Ring

\* Part of Hardware Kit

**Required Parts Not Included in Kit**: Aftermarket Rev Limiter/Ignition Module, Aftermarket Flamearrestors and Aftermarket Top Loader Intake Pump Grate and Ride Plate!

## • CHECK CONTENTS AGAINST BILL OF MATERIALS. REPORT ANY SHORTAGES WHERE YOU PURCHASED YOUR FACTORY PIPE.

• READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

• DO NOT USE THE STOCK IGNITION MODULE, ENGINE DAMAGE WILL OCCUR IF THE STOCK IGNITION TIMING CURVE IS USED.

• AN AFTERMARKET INTAKE GRATE AND/OR RIDE PLATE MUST BE USED WITH THIS EXHAUST SYSTEM! INCREASED SPEEDS WILL RESULT IN DANGEROUS HANDLING WITHOUT THESE CHANGES!!

### Factory Pipe <u>Instructions</u> Yamaha XL1200 Limited Triple Pipes

Disconnect the battery and remove the power valve servo, cables with the bracket. Completely remove the stock exhaust/catalic converter system up to the waterbox. Remove the two studs on the center cylinder. Retain the stock waterbox rubber hose coupler, the stock 3/8" waterlines attached to the side squirters and the stock front engine case bracket. Remove the stock front air silencer and carburetor flame arrestors. Retain one of the rubber mounts and bolt.

Install an aftermarket top loader intake grate and ignition system (or rev limiter/CDI module) as per the manufacturers instructions.

Install the flanges (Item# 1) with the 10mm x 40mm bolts (Item #17) and spring hooks (Item #18). Face the hooks outward at a 45 degree angle (Fig. #1). Torque all flange bolts to 30ft. lbs. Install the three graphite/kevlar sealing rings (Item #29) into the flanges. Install the filter block assy. (Item #12) on the right side below the carburetors and route the waterlines to the exhaust side. **Note: When routing waterlines under engine be sure that they stay clear of the carb linkage. Use a zip tie or other means to secure waterlines and keep them clear of this area.** Connect the front three non-filtered waterlines on the filter block assy. to the fittings on the exhaust flanges and secure with #6 hose clamps (Item #22). Disconnect the stock "Y" from the 3/8" inlet waterline and move the line through the right side firewall hole where the  $\frac{1}{2}$ " outlet line is located. Then move the  $\frac{1}{2}$ " outlet line to the firewall hole where the pump inlet line was removed. Reattach the "Y" with the red flush line so that it crosses over the drive shaft cover (Fig.#2&3).

Remove the rubber mount from the center chamber bracket (this will be reinstalled later). Install the Mag and Center chambers (item #3, 4) in the boat together. Start with the pipes vertical and then rotate down and in. Slip them into the flanges (figure #4, 5) then secure the chambers with the exhaust springs (item #16). Note: A small amount of grease on the O-rings will allow them to slide in easy.

Install the Mag bracket (item #9) using two 10mm X 30mm bolts (item #24). Torque bolts to 30ft.lbs. Attach Mag chamber to bracket using the 3/8" X 1" bolt (item #25) and 3/8" flat washer (item #23) on the exhaust side mount and a 3/8" X 3/4" bolt (item #26) and washers on the carburetor side mount. **Note: Install the 3/8" X 1" bolt on the chamber first.** Install the lord mount that was removed from the Mag chamber onto the Mag case bracket (item #28) then install the retained stock rubber mount into the other end of the Mag case bracket. Make sure the steel collar is on the Mag side of the bracket. Install on the Center chamber lower mount and Mag cover using the previously removed 3/8" nylock nut and washer and the stock 8mm bolt/washer and tighten (fig. #6). Install a 3/8" X 3/4" bolt (item #26) and washer (item #23) on the upper mount of the Center chamber into the lord mount and tighten.

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Attach the front two filtered waterlines (the larger diameter of the filter block is the filtered side) to the fittings on the Mag and Center chambers below the flanges. Install the rear collector assy. (Item #2) into the waterbox coupler and rotate so that the bottom tube is  $\frac{1}{2}$ " above hull and secure clamp (Fig.#7).

# Note: Water box should be pushed forward so the rubber coupler is in line with the back of the firewall.

Note: Do not use grease or oil on silicone couplers. Use only glass cleaner or water with dish soap if required. Slip a #32 hose clamp (Item #19) over each silicone coupler on the rear collector and leave loose. Install the Mag stinger tailpipe (Item #6) into the lower silicone coupler on the rear collector. Then attach the 1 3/4" X 4"silicone coupler (Item #20) between the Mag chamber and Mag tailpipe and secure with #32 hose clamps. Install the center stinger tailpipe (Item #7) into the upper silicone coupler on the rear collector. Attach the 1-3/4"X 2-1/2"silicone coupler (Item #20) between the center chamber and tailpipe and secure with #32 hose clamps.

Install the lower PTO bracket (Item #11) using two 10mm x 30mm bolts (Item #24) onto the left rear engine case and torque to 30ft. lbs.. Install the PTO chamber (Item #5) into the flange and secure with exhaust springs (Item #16). Install a 3/8" X 3/4" bolt and washer (Item #25,23) through the PTO chamber into the lower mount bracket. Install the PTO upper bracket (Item #10) onto the cylinder head with the remaining two 10mm x 30mm bolts (Item #24) and torque to 30ft. lbs. Install a 3/8" X 3/4" bolt and washer (Item #25,23) through the PTO and washer (Item #25,23) through the PTO chamber into the upper mount bracket (Fig.#9). Install the PTO stinger tailpipe (Item #8) into the upper rear collector tube coupler and attach the 1-3/4"X 2-1/2" silicone coupler (Item #20) between the chamber and tailpipe and secure with hose clamps.

Attach the remaining waterline from the filter block assy. to the fitting on the PTO chamber and secure with a #6 hose clamp. Attach the water exit manifold (Item #13) onto the stock  $\frac{1}{2}$ " bypass hose and secure with the stock clamp. Attach the three  $\frac{3}{8}$ " waterlines to the outlet fitting on the end of each of the chambers and secure with #6 hose clamps.

### Note: You can also use 3 individual side squirters to bypass the exit water from the chambers.

Attach the cylinder head exit waterlines (Item #14) to the fittings on the head and the two retained stock waterlines and side squirters at the front of the boat and secure with #6 hose clamps (Fig.#10). Reinstall power valve cables and bracket and check all hose clamps and bolts.

Remove the stock carburetors and drill the caps to gain access to the high and low speed screws (Fig.#11) before (Fig.#12) after. The best method is to use 3mm drill bit and then an "easy-out" to pull the cap. Note: Be careful not to apply too much pressure drilling out the caps as the adjustment screws are just below the caps! Set the high speed screws at 2 turns out from closed and reinstall the carburetors.

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### **IMPORTANT NOTES**

You must run fuel with a minimum octane rating of 92 (premium pump fuel). Running a lower octane fuel can cause detonation and serious engine damage.
Always warm up the engine prior to full throttle/high speed operation.

### **CARBURETOR ADJUSTMENTS**

These carburetor recommendations are for 730 feet above sea level. Factory Pipe testing was performed on a stock engine with aftermarket flame arrestors. No claims are made by Factory Pipe for the performance, reliability or function of this exhaust system on a modified engine. Carburetor adjustments will vary depending on engine modifications, fuel, altitude and other variables. PLEASE CONSULT A QUALIFIED TECHNICIAN IF YOU ARE NOT FAMILLAR WITH TUNING YOUR CARBURETOR(S). These carburetor adjustments MUST be done prior to running the engine with this exhaust system. High performance engines require precise jetting and damage can occur if the carburetors are not tuned properly.

Main Jets:(stock) Pilot Jets:(stock), High Speed Screws:2-1/2 turns out, Mag, Ctr & PTO Low speed screws:(Adjust for smoothest idle) Needle & Seats:(stock) Springs:(stock)

















Fig.6





Fig.8











Fig.12



RPM