

***** FOR COMPETITION USE ONLY per US EPA regulations *****

Factory Pipe
Bill of Materials
701 SuperJet Type 9

<u>Item</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
1	1	COMASM0964	701 SuperJet Type 9 chamber assy. (includes 1a-1f)
1a	3	COMFTG0030	1/8" NPT x 3/8" 90 deg. hose fitting
1b	1	COMHOS0093	3- " Silicone coupler (2-3/16")
1c	1	COMCLP0045	#400 High torque clamp (3-1/2")
1d	1	COMHOS0048	3/8" x 14" Waterline clear
1e	2	COMCLP0010	#06 SS hose clamp
1f	1	COMCRB0130	#120 Mikuni main jet
2	1	COMCST0400	701 SuperJet Dry manifold, black (includes 2a-2b)
2a	1	COMFTG0090	1/8" NPT pipe plug
2b	1	COMFTG0045	1/4" NPT x 1/2" 90 degree fitting
3	1	COMCLP0045	#400 High torque clamp (3-1/2")
4	6	COMCLP0010	#06 SS hose clamp
5	1	COMFAS0300	3/8"- 16 x 10mm x 1.25 SS Mount nut
6	2	COMMNT0052	# J-11729-190 Lord mount
7	3	COMFAS0086	3/8" Flat washer w/1" OD SS
8	3	COMFAS0070	3/8" Ext. tooth washer SS
9	2	COMFAS0100	3/8"-16 x 3/4" Hex head bolt SS
10	2	COMFTG0110	Side squirter (3/8" hose)
11	1	COMHOS0706	3/8" x 52" Waterline
12	1	COMHOS0054	3/8" x 16" Waterline
13	1	COMFTG0120	1/8" Vinyl cap
14	1	COMFAS0210	4" Plastic zip tie
15	1	COMGAS0235	#337 Buna N o-ring
16	1	COMGAS0050	701 Yamaha manifold gasket
17	1	COMHOS0025	3/8" x 9" Waterline
18	4	COMFAS0020	8mm x 1.25 x 20mm Flanged head bolt
20	1	COMBRK0223	STX-R/Ultra CTR front head bracket
21	1	COMFAS0090	3/8 x 16 SS Nut
22	2	COMCLP0021	#250 High torque SS hose camp (2")
23	1	COMHOS0081	2" Silicone coupler (4")
24	1	COMST70105	701 SuperJet Type 9 stinger
25	1	COMHOS0092	2-1/4" Silicone coupler (2-1/2")
26	1	COMCLP0012	SS hose clamp (1/2")

- < **CHECK CONTENTS AGAINST BILL OF MATERIALS. REPORT ANY SHORTAGES WHERE YOU PURCHASED YOUR FACTORY PIPE.**
- < **READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.**
- < **CARBURETOR ADJUSTMENTS MUST BE DONE PRIOR TO RUNNING THE ENGINE WITH THIS EXHAUST SYSTEM.**

Factory Pipe
Instructions
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Note: Installation of this system may require cutting the left rear rim of the engine compartment.

Disconnect the battery and turn the fuel valve to the off position. Remove the stock exhaust pipe and exhaust manifold. Retain the stock exhaust manifold bolts and the stock exhaust hose and clamps from the pipe to the waterbox. You can leave this hose and the fuel tank in the boat. If you are going to replace the stock waterbox do so now. Remove the two nuts, which secure the electrical box. Remove the electrical box and lay it outside the engine compartment.

WATERLINE ROUTING

The Type 9 SuperJet pipe system requires dual cooling (two water feed lines from the pump). If your boat is not already setup for this you will need to do so before running this exhaust system. A dual cooling kit can be purchased through Riva Yamaha part # RY1013-SJ, drill bit part # RY1013-D. Install the kit per the Riva instructions. After completing installation of the dual cooling kit follow the instructions below. Failure to run dual cooling can result in serious engine damage.

Remove the stock incoming waterline located next to the drive line coupler and retain the stock hose clamps. Install the 3/8" x 52" waterline (item #11) where the stock incoming waterline was located and secure using one of the retained stock hose clamps. Route this waterline underneath the engine in front of the flywheel cover. Slide the remaining retained stock hose clamp on this end and leave loose at this time. Install the 3/8" x 9" waterline (item #17) on the dual cooling tube that you previously installed through the hull. Secure this waterline on the tube using a #06 hose clamp (item #4). Leave the other end of this waterline loose at this time.

Remove the stock water bypass (side squirter) located on the front left side of the boat and replace with one of the supplied side squirters (item #10). Attach the 3/8" x 16" waterline (item #12) to the new side squirter and secure with a #06 hose clamp (item #4). Leave the waterline lay in the hull for now. You will attach the remaining end to the chamber assembly when it is in place. The remaining supplied side squirter will be used to bypass water from the stock 3/8" fitting on the cylinder head using the stock hose and clamps. We installed our second side squirter on the left side of the boat near the electrical box but this location may vary on individual setups. (Figure 3) (Note: the 3rd side squirter is not used in this application). Slip the 1/8" vinyl cap (item #13) over the 1/8" fitting on the stock head on the front cylinder. Secure using the 4" zip tie (item #14).

EXHAUST MANIFOLD INSTALLATION

Thoroughly clean the manifold mounting area on the cylinder being sure to remove any left over gasket material. If you plan to run water injection you will need to install the spray bar in the exhaust manifold at this time (refer to your water injection instructions). Slide a 1/2" hose clamp (item #26) over the loose end of the 3/8" x 52" waterline (item #11) that you previously installed

on the stock incoming cooling tube and attach the waterline to the 1/2" x 90 degree fitting on the manifold. **Note: Do not change the 1/2" fitting in the manifold, it is required for proper engine cooling. The 3/8" waterline will fit over the 1/2"x 90 degree fitting.** Heating the end of the hose may make this easier. If you are going to run ECWI the filter block will be installed on this waterline.

Insert two of the 8mm x 1.25 x 20mm flanged bolts (item #18) in the lower inside holes of the manifold gasket (item #16) and secure to cylinder. Turn these two bolts in until the manifold will just slide on without damaging the gasket. **Note: These two bolts are difficult to access once the manifold is installed so you only want to leave the minimum amount of space.** Slide the manifold (item #2) down onto these bolts and install the remaining two 8mm x 1.25 x 20mm flanged bolts (item #18) on the inside top bolt holes. Now use the retained stock manifold bolts in the remaining holes. Torque the bolts, which you can access, at 18 ft.-lbs. and match the others as best as possible with a box wrench.

Install the 3/8"-16 x 10 mm mount nut (item #5) into the front 10 mm mounting hole on the cylinder head. Use Loctite 242 and torque to 28 ft.-lbs. Install one of the 190 Lord mounts (item #6) onto the mounting nut and hand tighten. Remove the two head bolts on the rear of the engine. Install the head bracket (item #20) and torque to 22 ft.- lbs. Install one of the 190 Lord mounts (item #6) into the mounting hole on the head bracket. Secure and tighten the mount using one 3/8" flat washer (item #7), one 3/8 ext. tooth washer (item #8), and one 3/8" x 16 nut (item #21).

Remove all four motor mount bolts. Slide the engine forward about an inch. Make sure you keep track of the shims and their location.

CHAMBER ASSEMBLY INSTALLATION

Slide the #400 (3- 1/2") hose clamp (item # 3) over the 3- 1/2" silicone coupler and the existing hose clamp on the chamber assembly (item #1). Install the #337 o-ring (item #15) in the machined groove in the chamber assembly flange. **Note: Use a small amount of grease or Vaseline to help hold the o-ring in place during installation.** Spray the inside of the 3- 1/2" silicone coupler with glass cleaner or soapy water and install the chamber assembly. Push the coupler onto the manifold making sure it is seated tight against the machined surface of the manifold. Rotate the chamber over the mounts until the chamber mounting bracket lines up with the Lord mounts. Slide a 3/8" ext. tooth washer (item #8) and a 3/8" flat washer (item #7) onto each of the two 3/8"-16 x 3/4" hex head bolts (item #9) and insert them through the chamber bracket and into the Lord mounts. Leave bolts loose at this time. **Note: Never use Loctite on rubber mounts.** Make sure the chamber assembly is still fully seated against the machined surface of the manifold. Slide the loose #400 (3-1/2") hose clamp to the chamber side of the coupler (about 1/8" from edge of coupler) and secure. Now fully tighten the bolts into the Lord mounts. Slide the engine back until the drive coupler is fully seated. Reinstall the four bolts, making sure the shims are in their original position and tighten the bolts.

Spray glass cleaner or 409 onto the inside of the silicone hoses for easier installation of the stinger tube. Install the 2-1/4" x 2" long silicone hose (item #25) onto the inlet side of the waterbox and secure using the previous stock hose clamp. Install the other previous stock hose clamp onto the hose but do not tighten. Locate the 2" stinger tube (item #24). Slide the 2" x 4" long silicone hose (item #23) onto the 2" end of the stinger tube as far as it will go. Slide both of the 250 hose clamps (item #22) onto stinger tube but do not tighten. Now slide the 2-1/4" end of the stinger into the silicone hose on the waterbox. Align the 2" end of the stinger tube with the end of the chamber and slide the silicone hose up onto the chamber. Once both ends of the stinger are aligned, tighten all hose clamps. **Note: The two hoses on each end of the stinger tube may need to be "cut to length" for proper fit depending on tolerances between boats.**

Locate the 3/8" x 9" waterline, which you previously attached to the new dual cooling tube. Slide a #06 hose clamp (item #4) over the loose end and then attach to the 3/8" x 90 degree water-in fitting on the rear of the chamber assembly just behind the coupler. Secure the waterline with the hose clamp.

Locate the 3/8" x 16" waterline that you previously installed on the side squirter. Slide a #06 hose clamp (item #4) over the loose end and then attach to the water-out fitting on the tail cone end of the chamber assembly. Secure the waterline with the hose clamp. Reinstall the electrical box. Double check all hardware and hose clamps and reconnect the battery

CARBURETOR JETTING

These adjustments are for sea level on a complete stock engine with aftermarket flame arrestors using a minimum of 92-octane fuel. Your specific adjustments may vary depending on modifications, fuel, altitude, and other variables. Please consult a qualified technician if you are not familiar with tuning your carburetor.

1996-Up dual carb

Main Jet: 135 (stock)

Pilot Jet: 75 (stock)

High-speed screw: turn out from closed

Low speed screws: 1 turn out from closed

Needle & Seat: 1.5 (stock)

Spring: Stock

Comments: No jetting recommendations are given for a Limited or Superstock application, as we cannot anticipate all the possible combinations and setups.

ADDITIONAL COMMENTS

Factory Pipe also offers a high flow waterbox for 1996-Up SuperJet. This waterbox is **NOT** IJSBA legal for the Limited class. For Superstock and Recreational setups this waterbox can aid in achieving optimum performance of the Type 9 Exhaust System.

