



# SEADUCER BOATS

## GAS MONO

COME VISIT US ON THE WEB AT [WWW.SEADUCERBOATS.COM](http://WWW.SEADUCERBOATS.COM)

- 1 - Pkg. Of 440 push rod ends
- 1 - Pkg. of solder-on rod ends
- 2 -water outlet fitting
- 1 -1/4" prop nut
- 1 - .250" x 24" flex shaft
- 1 - 5/16" x 36" brass tubing
- 1 - 1/4 x 12" brass tubing
- 3 - 12" 440 push rods
- 1 - Pkg. of push rod seals
- 1 - Switch mount
- 1 - 4' of fuel line
- 1 - 1/4 " drive dog
- 1 prather 270 prop
- 4 - 8/32 screws and nuts
- 1 1/2 x 1/2 x 12" hardwood
- 6' length pipe insulation
- 1 -Sullivan 16 oz fuel tank

**HARDWARE:** We recommend the Seaducer Hardware Kit, which consists of Strut, Rubber shock absorbing Motor Mount, Rudder, & antenna mount & Pipe Mount. IF YOU Don't USE OUR HARDWARE THE BOAT WILL NOT RUN WELL AND YOU WON'T BE HAPPY WITH THE BOAT. . With our mount you can actually sit the engine against the bottom of the boat.

**RADIO BOX SETUP :** Use a Futaba / Hi Tec 1/4 scale servo for steering & a Futaba S-148 for throttle. To allow for proper steering servo height use Aeromarine 1/4 scale servo holder. Use 1/4 square wood between the mount

& the bottom of the radio box. Align the servo horn with the steering lever then mark the bottom of the radio box with a pencil where the wood will be attached. Mount the servo in the Aeromarine mount so the horn is close to the center of the box. Sand both spots with 80 grit paper then permanently attach both pieces of wood with good epoxy. Use self-tapping screws to attach the Aeromarine mount to the wood. To secure the radio box in the boat, at the center line of the radio box (from left to right) install 2 cup holders in the top of the stringer. Now stretch 2 rubber bands from hook to hook to hold radio box in place. With a 1/4 " drill bit go threw the hole in the transom for the rudder push rod & drill a hole threw the radio box in alignment with the top of the servo horn.

Install the throttle servo vertically to the port-side stern of the steering servo. Use wood to make a platform to install this servo. Then drill a 1/4" hole threw the front of the radio box in alignment with carburetor linkage & servo horn. use whatever push rod seals, you wish.

**THE NEW LITTLE HI-TEC TORQUE SERVO'S - DO NOT HAVE ENOUGH MASS TO MANEUVER THE BOAT. INITIALLY THEY WILL STEER THE BOAT, BUT AFTER A COUPLE OF GALLONS OF FUEL, THE WILL FAIL. SO, DON'T USE ONE, IT WILL GIVE YOU PROBLEMS LATER.**

**INSTALLATION OF FUEL TANK:** Run the brass tubes into the fuel tank, the fuel pick-up to the lower left front corner of the tank & the vent line to the top center of the tank. you also need a return line from the carb to the tank so use a short pieces for that. For the vent use a water outlet fitting and put it as high on the deck as possible and run the fuel tank vent to it. Place the fuel tank in the tank mount provided. **PUT THE TANK IN THE TRAY FIRST.** Secure the tank with tie-wraps across the tank. Mount the fuel tank 20" from the rear of the boat to the starting edge of the tank tray. To attach the tank assembly to the hull use polyester resin & the fiberglass provided or 2-hour epoxy. **DO NOT USE SILICONE CAULKING BECAUSE THE GAS WILL DISSOLVE IT, and YOU WILL END UP WITH A BIG MESS.** For the gas engine use 5/32 brass tubing in the tank. If you don't use 5/32 brass tubing your gas engine will lean-out.

**FLOTATION:** Be sure to add SOME TYPE OF FLOTATION! We suggest air conditioning pipe insulation, found in hardware stores, or use the pool floaties you can buy at any home /toy store

**MOTOR MOUNT INSTALLATION:** This boat will run "surface drive". Mount the engine on the Seaducer motor mount and attach the flex coupler to the engine. Insert a short piece of 1/4" material about 3" long into the flex coupler and position the mount between the stringers. Try to get the motor as low in the hull as possible. Tilt the engine so the 1/4" material touches the bottom of the hull and measure 13 1/2" from the inside of the transom to the center of the engine. **FOR THE ALLUMINUM PIPE and 14 3/4" FOR THE STEEL PIPE Make sure the engine is at the angle when measuring** With the piece of 1/4" material touching the hull, take a cut off pencil and mark the holes for the engine mount. Drill the holes in the stringer and bolt the motor in the boat using 8/32 screws and lock nuts. You may need to move the coil to the top of the motor I put my coil on top of the magneto. If you do not do this make sure the coil is not hitting the bottom of the boat.

**PROPELLER DRIVE SHAFT:** Drill a 1/2" hole in the back of the transom, 1/8" from the bottom to allow for up and down movement for the brass tubing for the shaft log. Now start to bend the brass tubing so that it will line up with the motor. Run the brass tubing all the way through the strut, so that it's even with the back. You may have to sand the brass tubing slightly to achieve a nice tight fit. Cut a piece of 1/4" wood to brace the brass where the brass starts to bend up. Fiberglass in the brass tubing with mat and polyester resin. Two pieces of mat is more than enough. **DO NOT GLASS IT ALL THE WAY BACK. IF YOU DO YOU CANNOT ADJUST THE STRUT UP AND DOWN!**

**TRANSOM :** See attached page.

**STRUT:** On the center line of the transom measure up from the bottom 7/16" and make a line . At this point either drill or rout a 1/2" hole. Install the strut bracket 5/8" down from the deck. This 5/8" will allow space for installation of a pipe mount.

FOR THE GAS MONO, YOU'LL NEED TO INSTALL A 3 DEGREE SHIM (thin side to PORT FROM LEFT TO RIGHT). THESE SHIMS ARE CALLED ENGINE MOUNT THRUST PLATES MANUFACTURED BY ERNST # 102, #103, #104.

**RUDDER:** With rudder in hand, you'll see a squared area at the top of the leading edge, FILE the square area to match the rest of the rudder. Draw a center line on your transom & measure to starboard 2 1/4". Install rudder assemble as high on the transom as possible. Make sure that you maintain a

perfect 2 1/8" from the center line of the transom to the leading edge of the rudder blade.

With the rudder installed put a straight edge against the bottom of the boat extending past the rudder. Make a mark on the rudder, then measure down 3 3/4" and make a mark. Cut the rudder off at this point. The rudder needs to be 2 1/4" from the transom to the leading edge of the rudder. Drill a 1/4" hole through the transom to accommodate the push rod.

**PIPE MOUNT:** Cut the pipe mount bracket so that it will fit between the strut & the deck lid. Use 1 screw to attach.

**TURN FIN:** Sharpen the leading edge of the provided turn fin. Install the turn fin 3/8" from the starboard side of the boat. Bend the turn fin tab 90 degrees so the tab points to the center of the boat. Notch the overlapping deck lip as much as possible so that the turn fin is as high on the transom as possible. If you don't notch the lip you will have a difficult time, thread-bolting, the turn fin. The turn fin must be mounted at a right angle to the bottom.

**FLEX SHAFT :** Install the prop on the hard part of the shaft, keeping 3/8" of threads exposed behind the prop. Slide the drive dog onto the 1/4" part of the shaft up against the front of the prop. Mark this position and remove the drive dog and prop. File a flat spot on the shaft where the set screw touches it. Reinstall the drive dog, using Lock-Tite, tighten the set screw. Cut 4 pieces of 1/4" brass tubing 3/8" to 1/2" long and 1 piece 1/4" long. Solder the 1/4" piece just before the weld on the flexible side. This technique is more efficient than using lead Teflon bearings, and lasts a lot longer.

**PROP INFO.** The prop you buy for the boat is very critical. Don't use any 3 blades they don't work very good. The bigger the prop does not mean faster!! The bigger the prop the more torque you have then the boat won't run as good. The prop suggestions I gave is all you will need

### **TROUBLE SHOOTING:**

- I -** Yes, we know the bottom has a HOOK in it. Leave it alone, it's there for a reason.
- 2.** If the boat stuffs You are running the boat to lose, you may need to put some weight under the motor to stop the boat

from stuffing but, If the boat is set up right you won't have to do this.

3. If the boat skips sideways, slow down a little!
4. The Strut should be straight with the bottom. Watch the attitude of the boat and trim to your driving skills.

**Try it are way first if you don't like it then do it your way!!**

IF YOU HAVE ANY QUESTIONS, PLEASE CALL US AT (954) 772-9002 fax / home 954 493-7387 OR E MAIL AT SEADUCERJ@CS.COM













