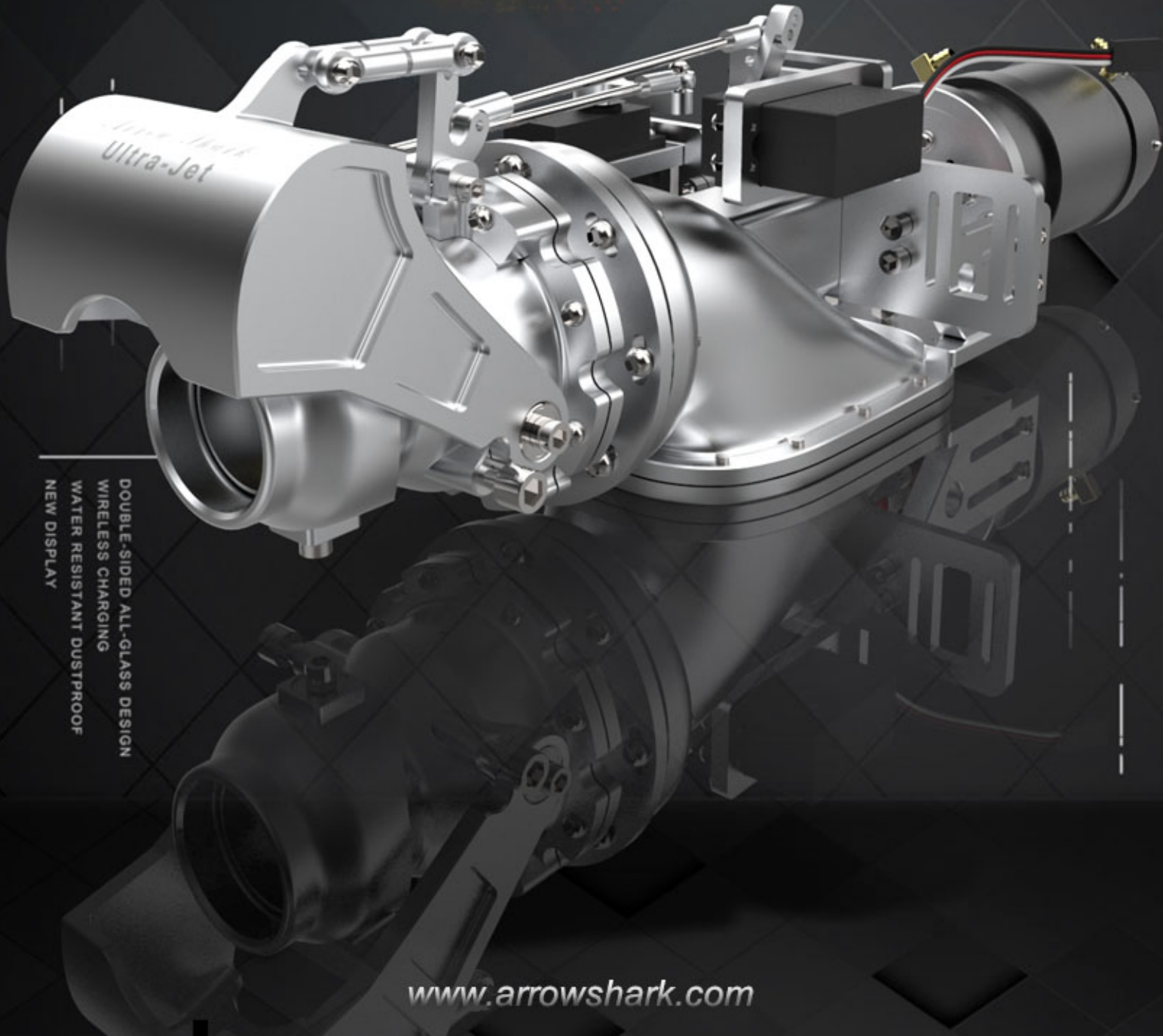


Arrow Shark **Ultra-Jet**

Owner Manual

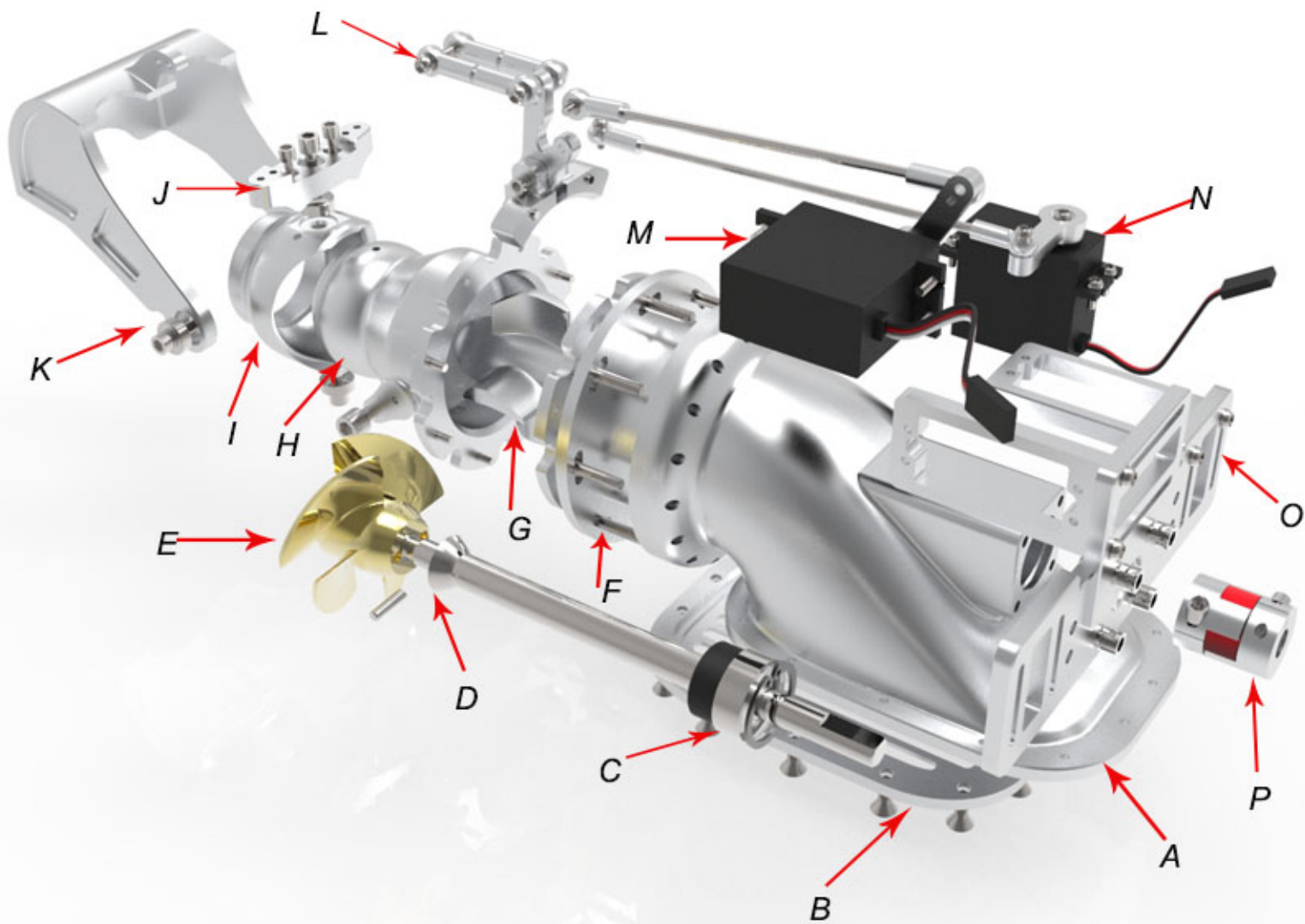


DOUBLE-SIDED ALL-GLASS DESIGN
WIRELESS CHARGING
WATER RESISTANT DUSTPROOF
NEW DISPLAY

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Ultra-Jet Exploded View



A: Billet Intake Main Body

B: Billet Intake Grate & Bolts

C: Drive shaft Rubber Seal, Bearing, Clip

D: Drive Shaft & Impeller Pin

E: Copper Polished Impeller

F: Billet Impeller Housing

G: Billet Stator Blade

H: Billet Stator Bowl

I: Billet Steering Nozzle

J: Steering Arm & Bearing

K: Billet Reverse Bucket & Bearing

L: Reverse Control Kit

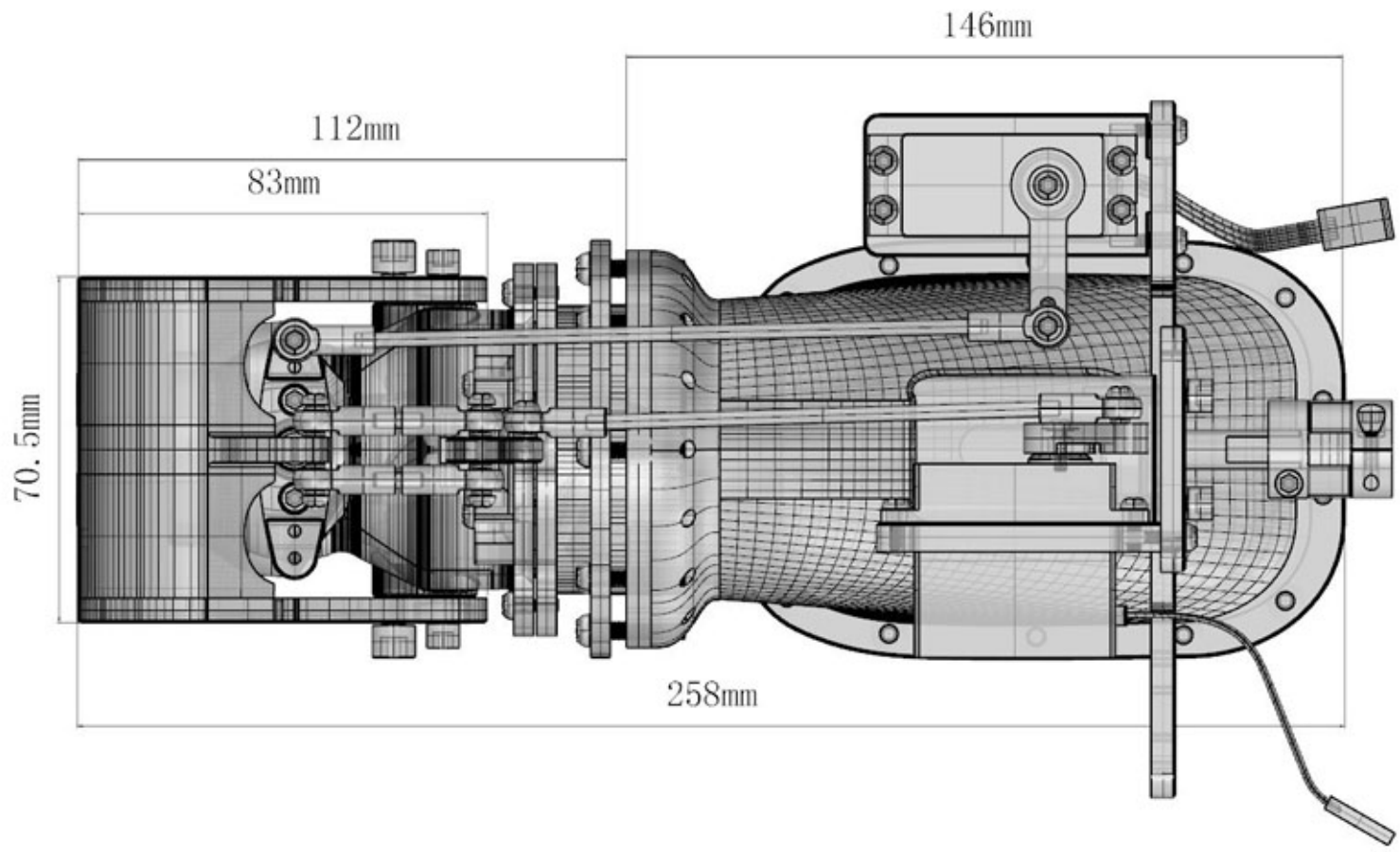
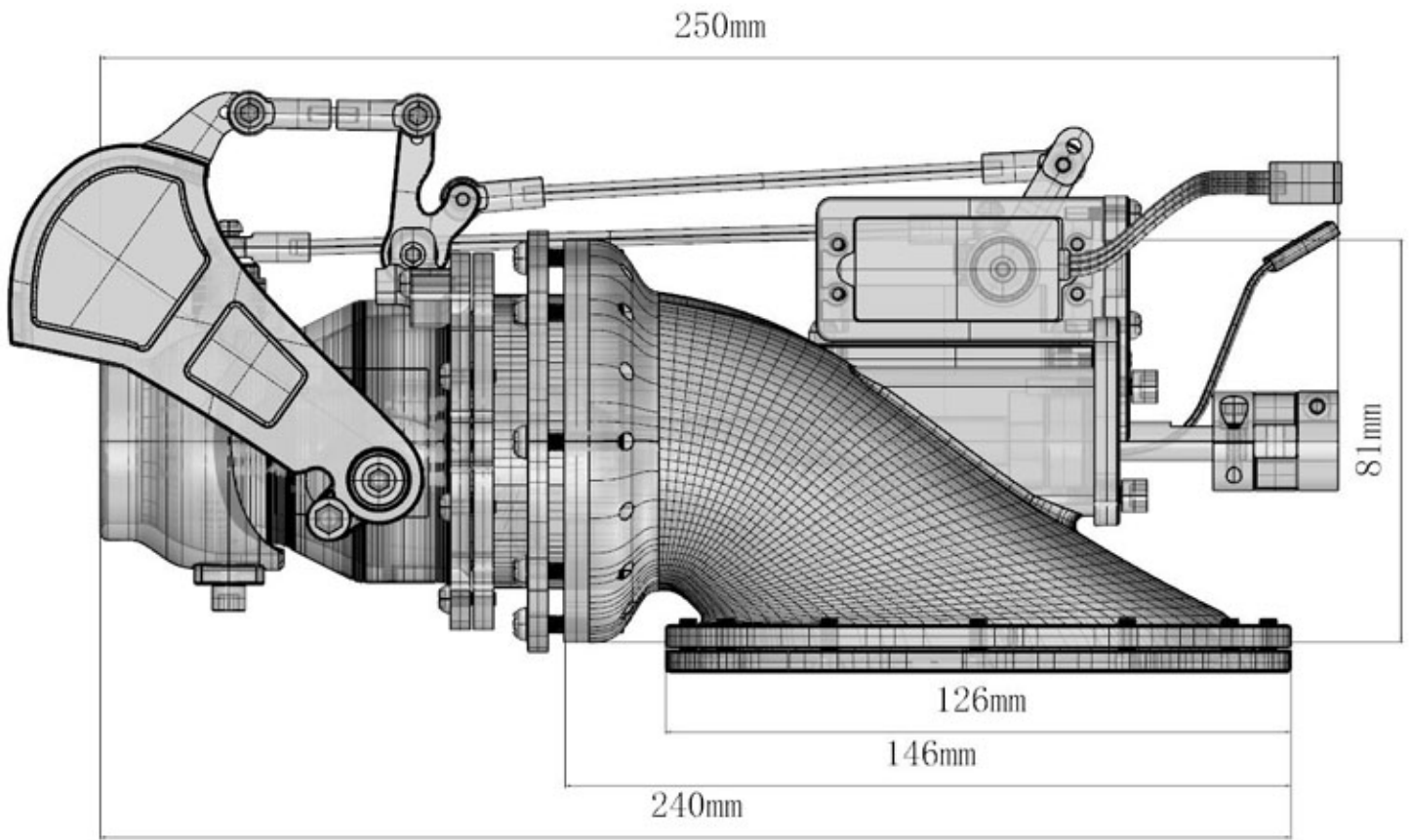
M: Reverse Control Servo Assembly

N: Steering Control Servo Assembly

O: Billet Servo Tray Assembly

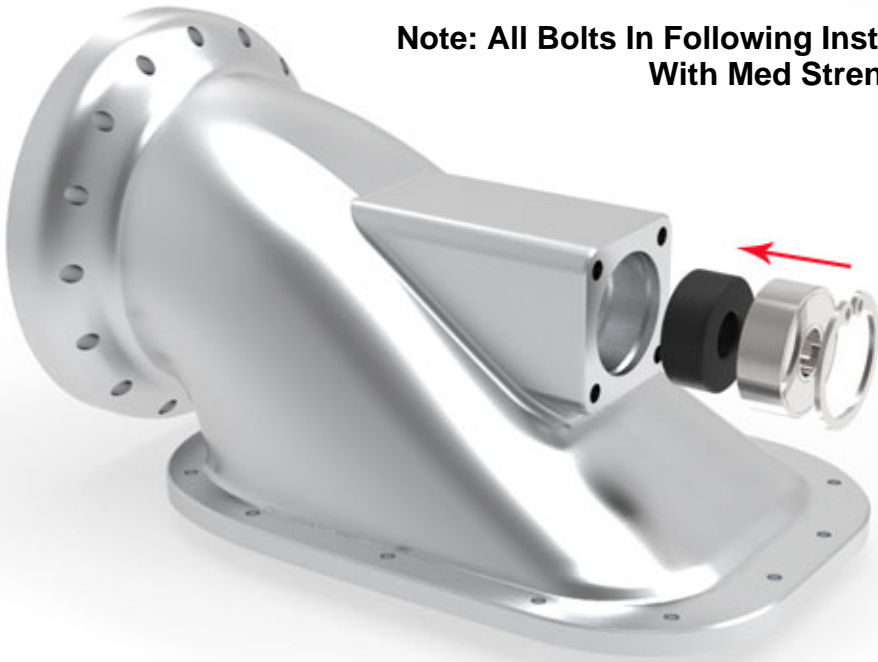
P: Drive Shaft Coupling

Dimension Guide

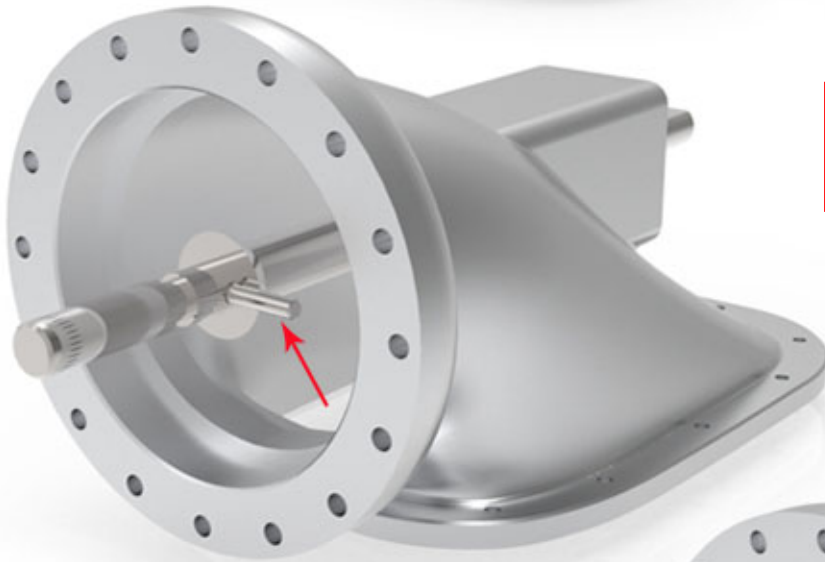


Ultra-Jet Assembly Procedure

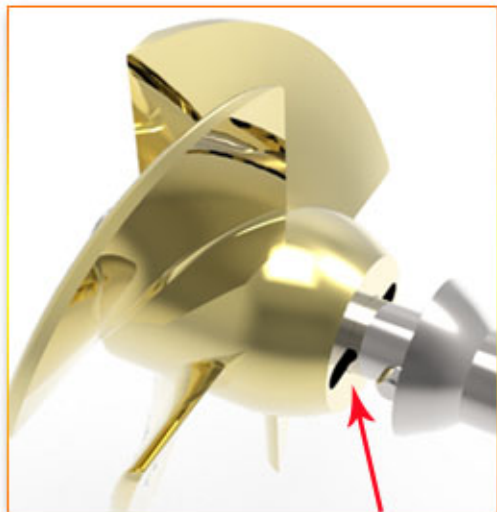
Note: All Bolts In Following Installation Must Be Applied With Med Strength Loctite.



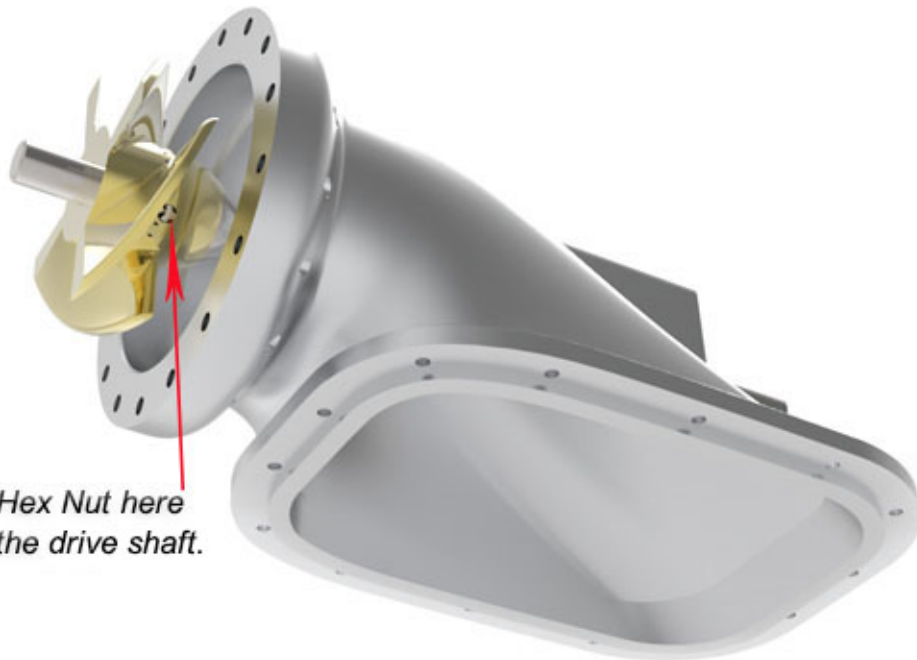
Install both water seal rubber and propshaft bearing into the water intake body, and secure it with the clip.



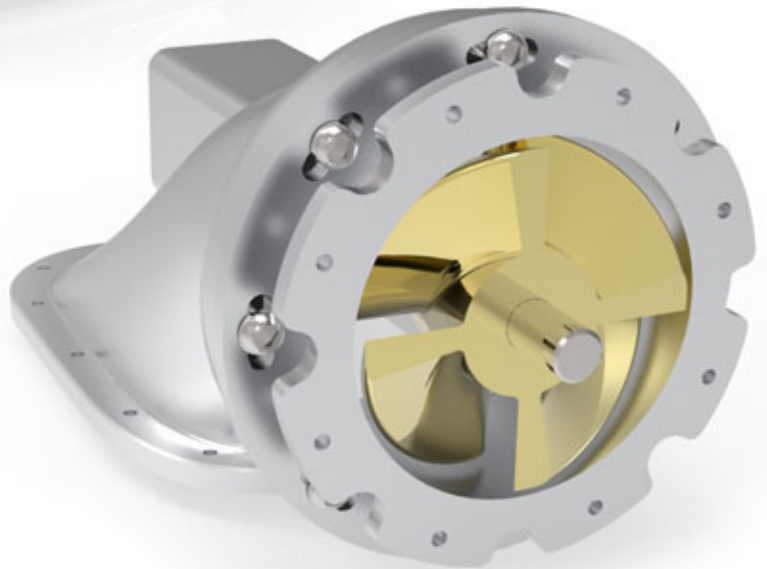
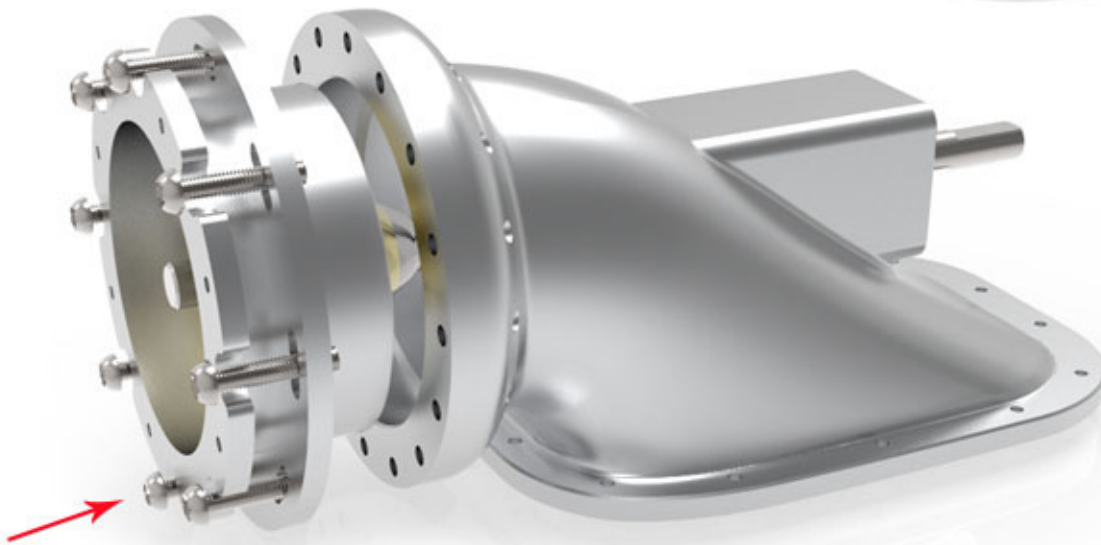
Insert the drive shaft into the water intake body via the rubber seal and bearing, install the impeller pin onto the drive shaft as shown in the picture.



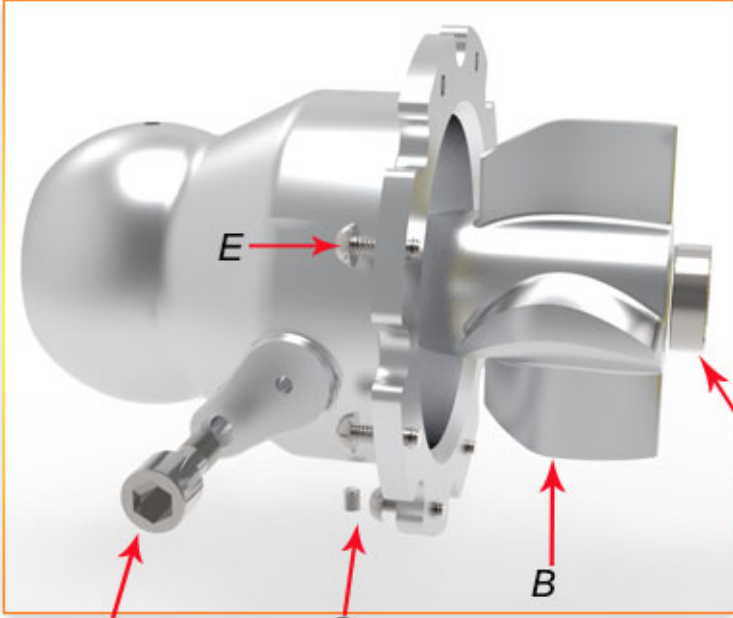
Match the copper impeller onto the drive shaft, and make sure the pin stuck into the slot on the impeller.



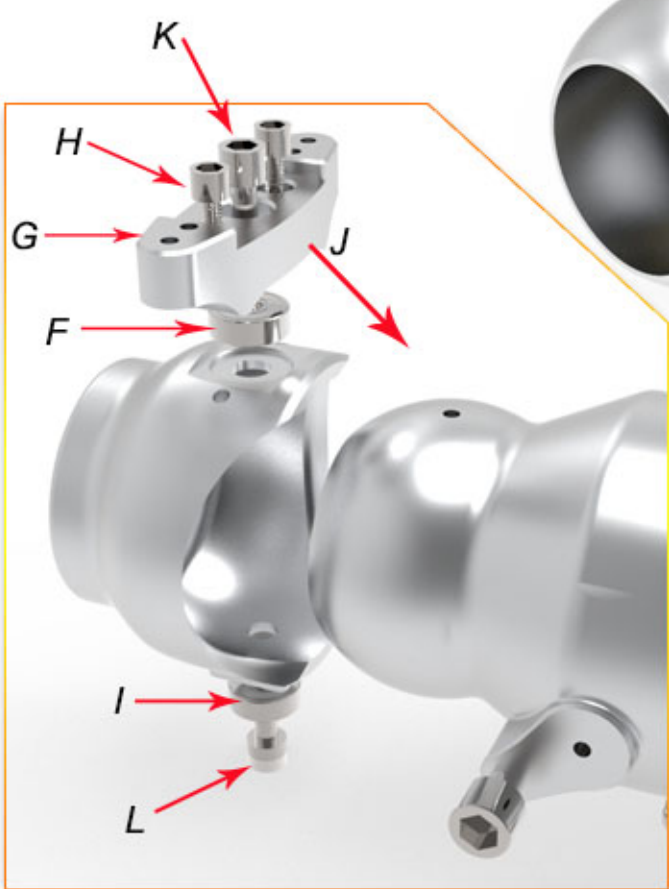
*Tighten the Hex Nut here
into the slot on the drive shaft.*



Note: There are total 16 thread holes on the main intake body for the impeller housing installation, however, only 8 thread holes are in use, the other 8 holes were designed for the angle adjustment which is only required by the twin Ultra-jet application, therefore, you will only need to drill 8 installation holes on your transom according to our drilling template that comes with the package.



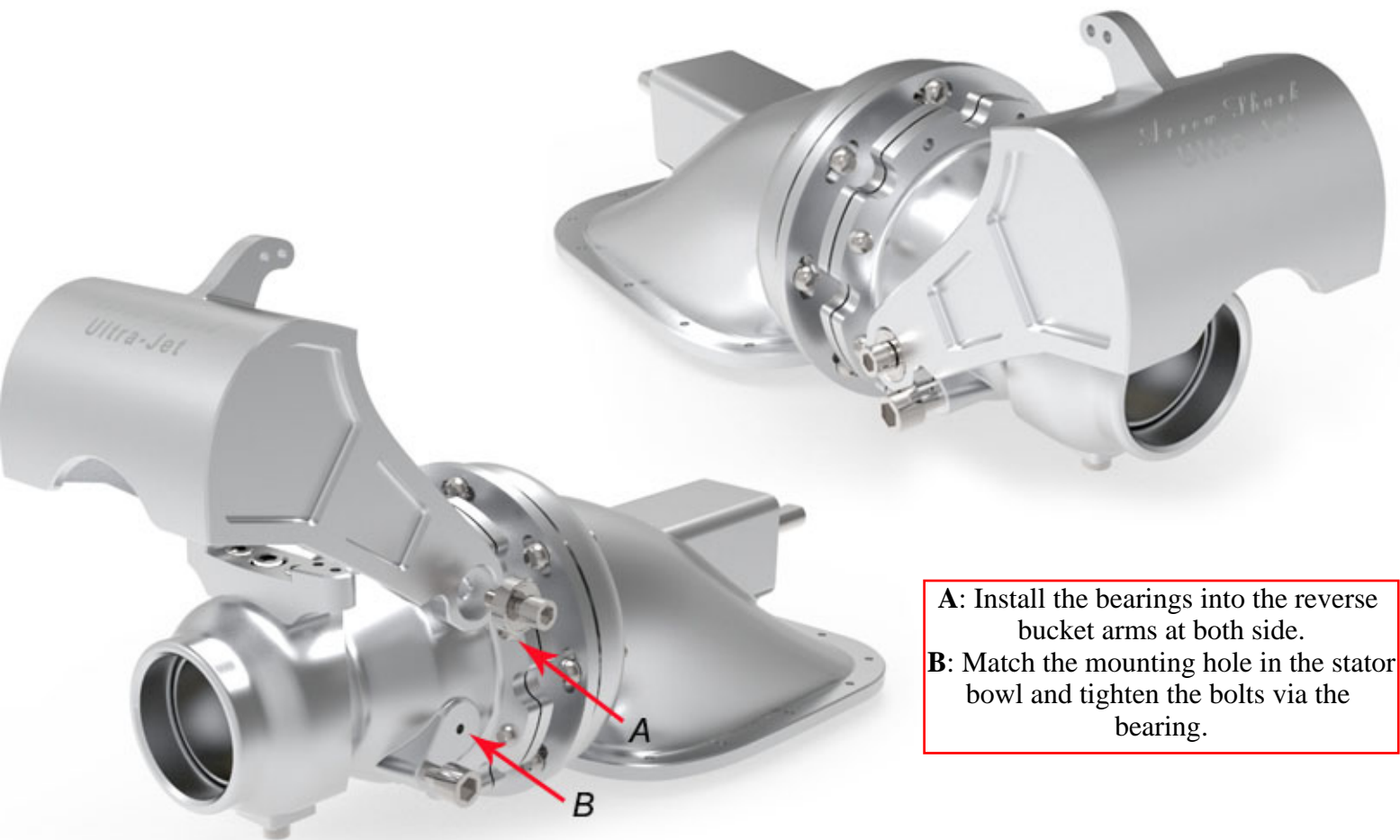
A: Install the ball bearing into center of stator blade.
B: Insert the stator blade into the stator bowl.
C: Tighten the M3 allen set screw from bottom of the stator bowl against one of stator blade in order to hold the stator blade firmly in place.
D: Screw this bolt into the stator bowl at both side for the reverse bucket limiting position support.
E: Match the mounting screw thread holes between stator bowl and impeller housing, and tighten then with the supplied bolts, the top two bolts will be leave vacancy at this time.



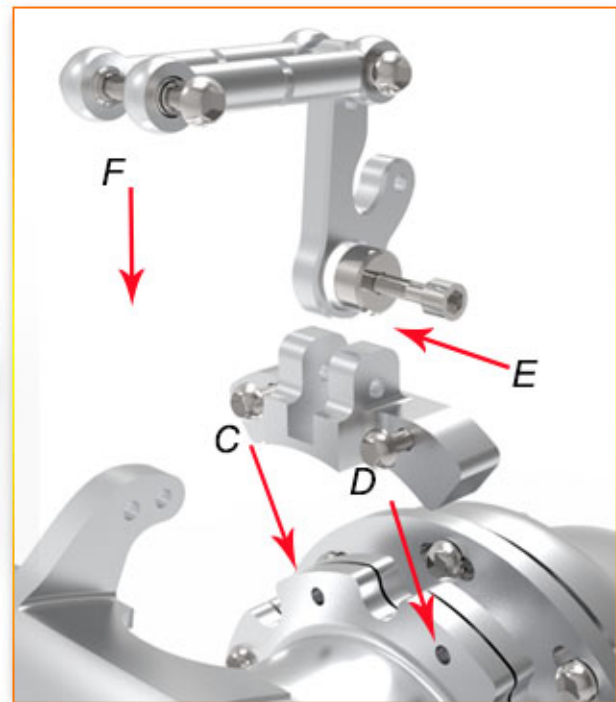
F: Install this steering bearing half into the top of steering nozzle.
G: Install the steering arm onto the steering nozzle, the other half of the bearing should be in the bottom of steering arm.
H: Tighten these two M3 bolts to secure the steering arm with steering nozzle.
I: Install the other steering bearing from bottom of the steering nozzle.



J: Match the steering nozzle assembly onto the stator bowl.
K: Tighten this center bolt via steering bearing and into the thread hole at the top of stator bowl.
L: Tighten this bolt via the bottom steering bearing into the thread hole at bottom of stator bowl.



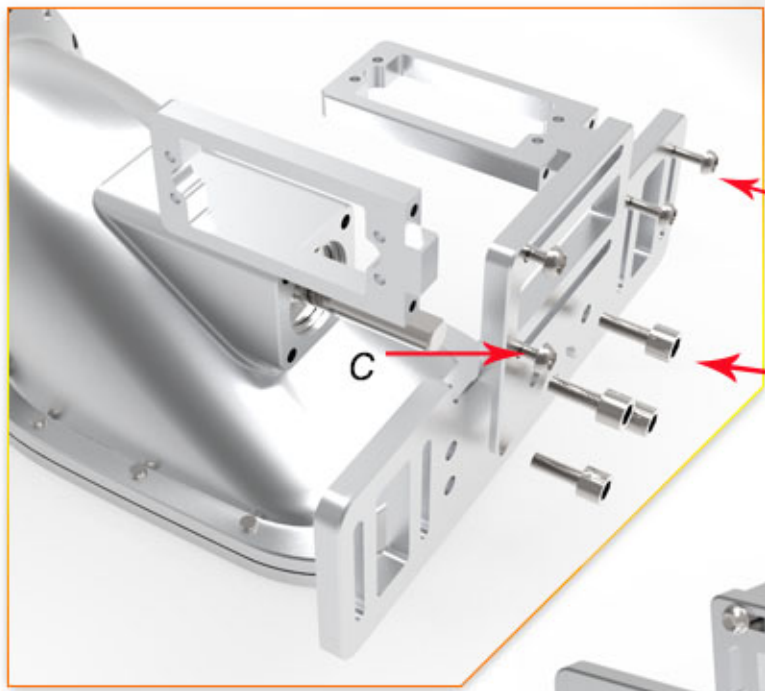
A: Install the bearings into the reverse bucket arms at both side.
B: Match the mounting hole in the stator bowl and tighten the bolts via the bearing.



C: Install the reverse control adaptor on the top of stator bowl.
D: Tighten these two M3 bolts into the earlier vacancy thread holes on the stator bowl, in order to hold the adaptor firmly in place.
E: Install this bearing into the reverse control arm, and match the arm into the slot in the adaptor, and tighten the supplied bolt.
F: These two set of ball joint tie-rod are the connection between reverse bucket and the reverse control arm, secure them with the bolts supplied.

Match the intake grate onto the bottom of intake main body, and tighten the supplied bolts.

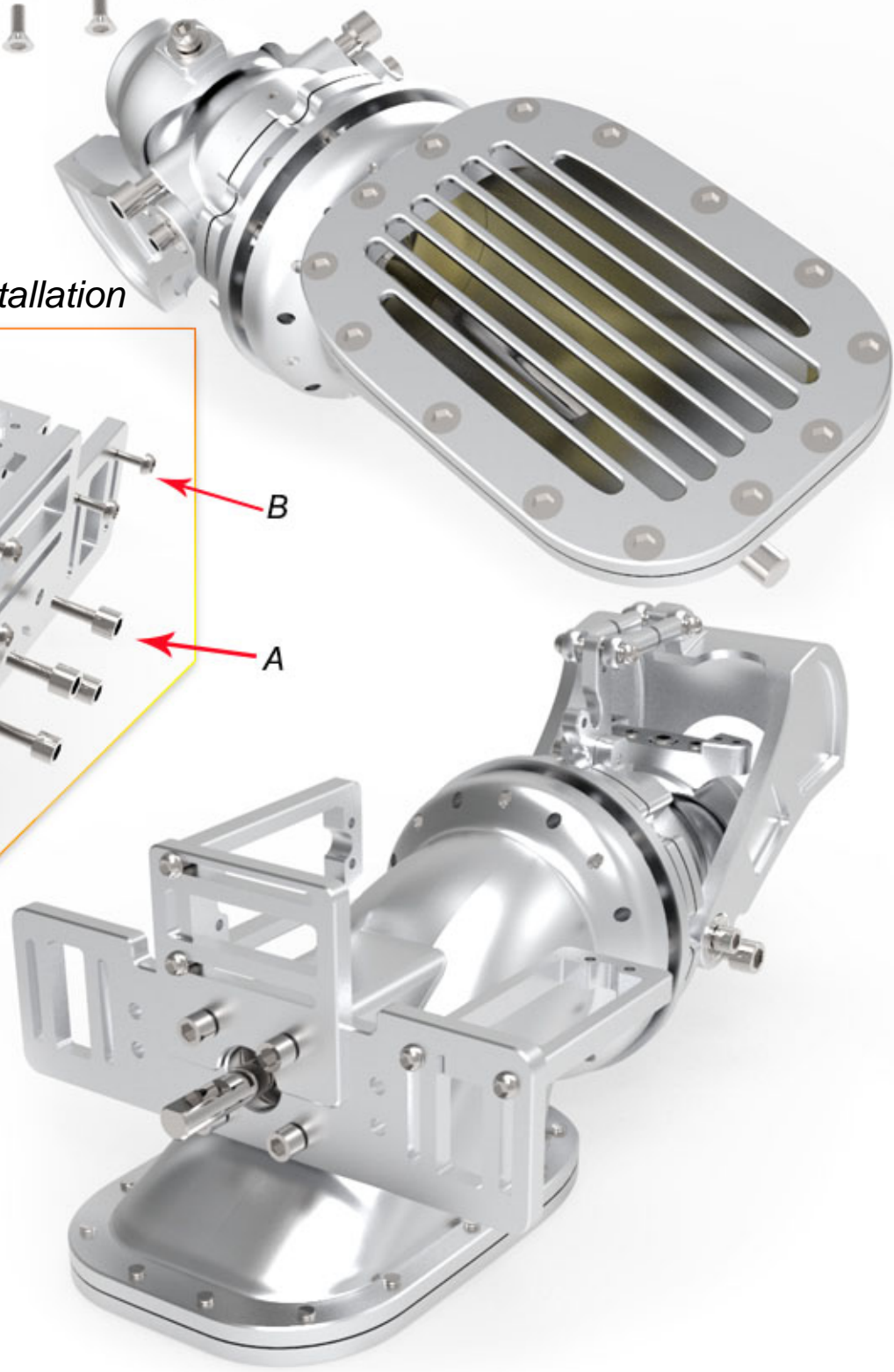
Servos Mounting Plate Installation



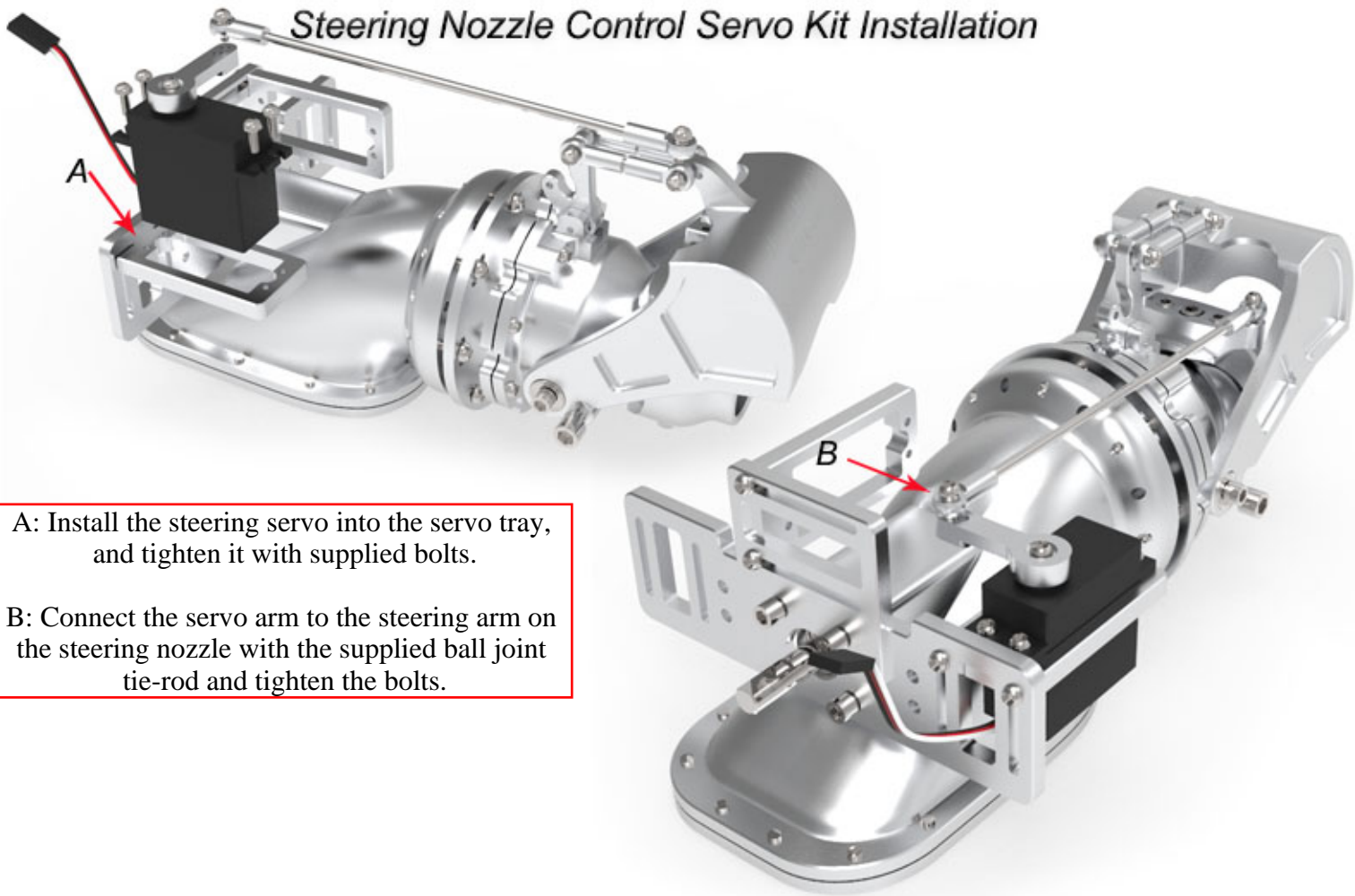
A: Tighten these four M4x16 bolts to secure the servos mounting plate assembly on the intake main body.

B: This two M3x10 bolts hold the reverse bucket control servo tray in place, loose these two bolts allowing horizontal adjustment for the servo.

C: This two M3x10 bolts hold the steering control servo tray in place, loose these two bolts allowing for the vertical adjustment for the servo.



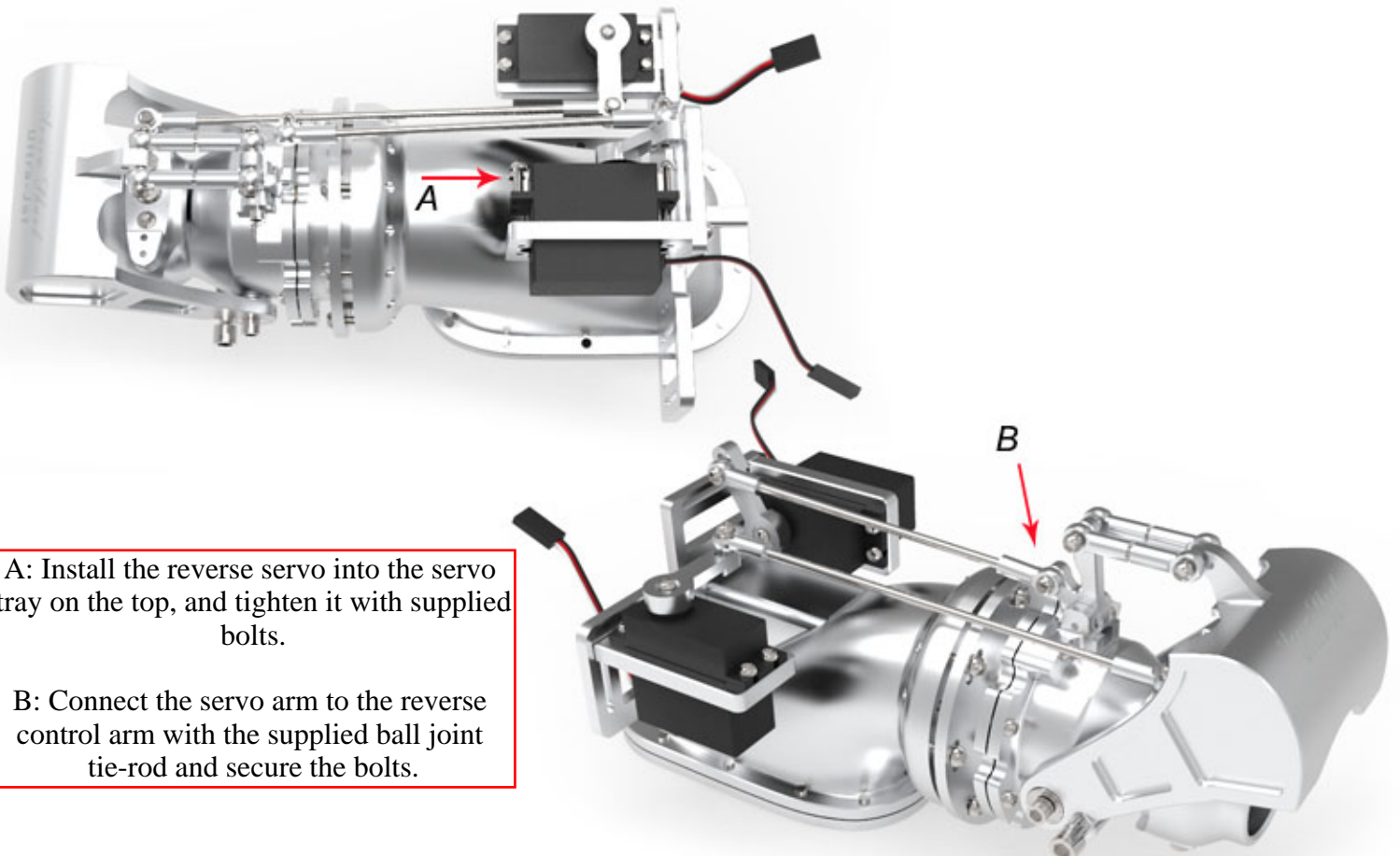
Steering Nozzle Control Servo Kit Installation



A: Install the steering servo into the servo tray, and tighten it with supplied bolts.

B: Connect the servo arm to the steering arm on the steering nozzle with the supplied ball joint tie-rod and tighten the bolts.

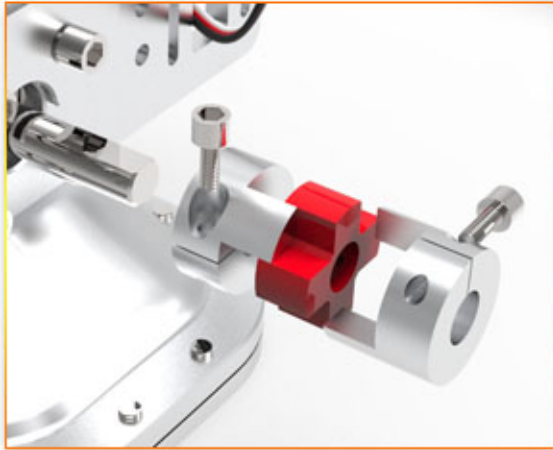
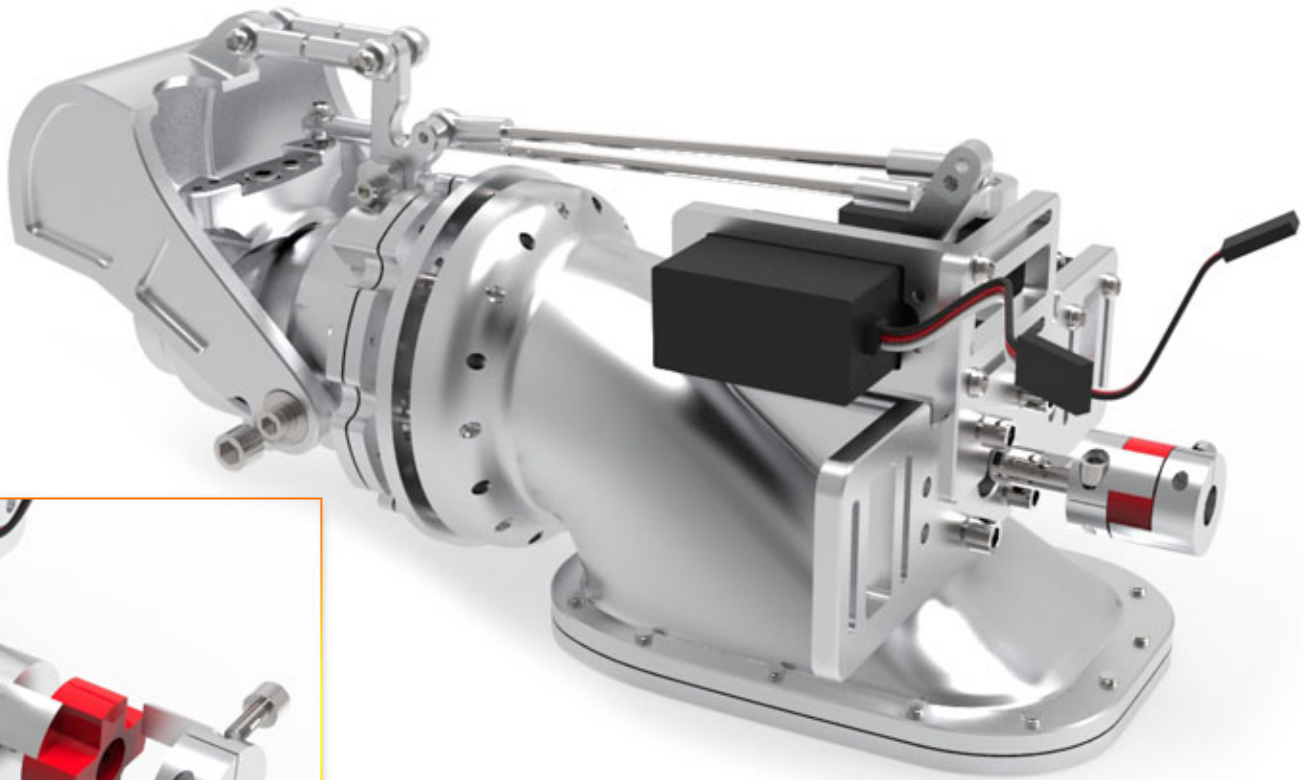
Reverse Bucket Control Servo Kit Installation



A: Install the reverse servo into the servo tray on the top, and tighten it with supplied bolts.

B: Connect the servo arm to the reverse control arm with the supplied ball joint tie-rod and secure the bolts.

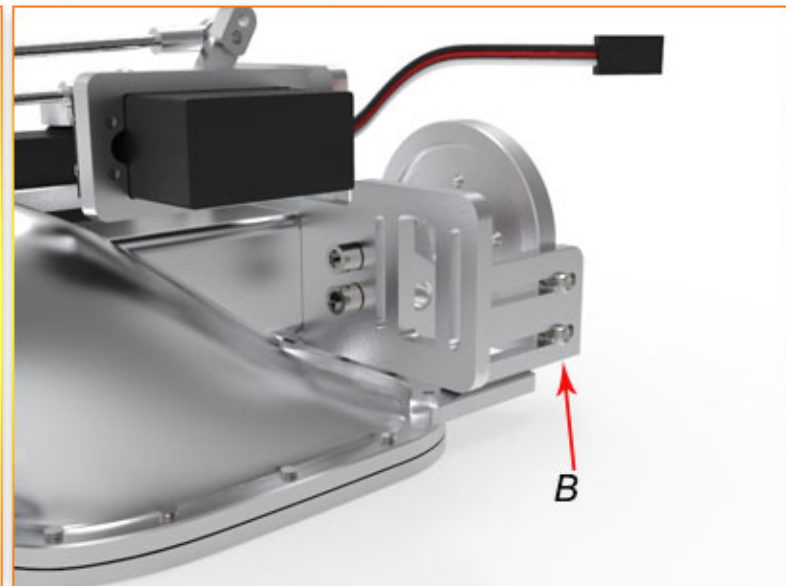
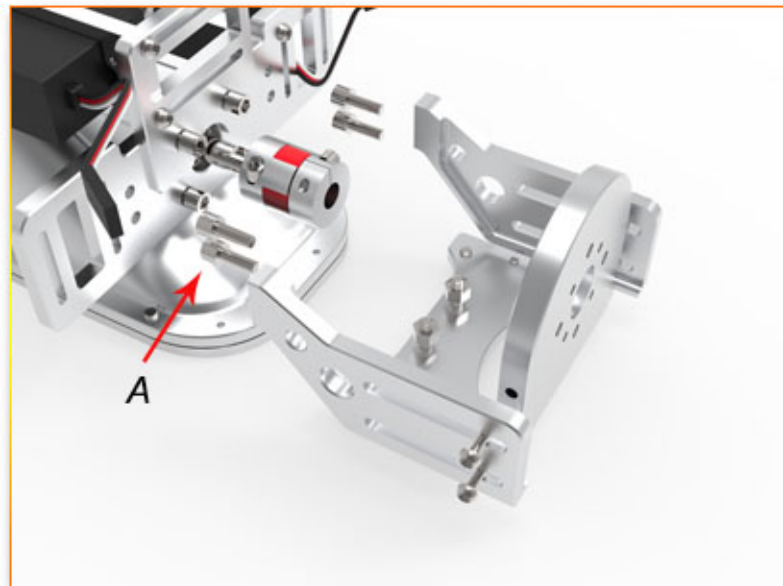
Note: The end point rate of the both steering servo and reverse bucket control servo must be properly adjusted, so, the degree of the servo arm movement will be identical with the turning movement range of both steering nozzle and reverse bucket.



Install the shaft coupling onto the drive shaft.

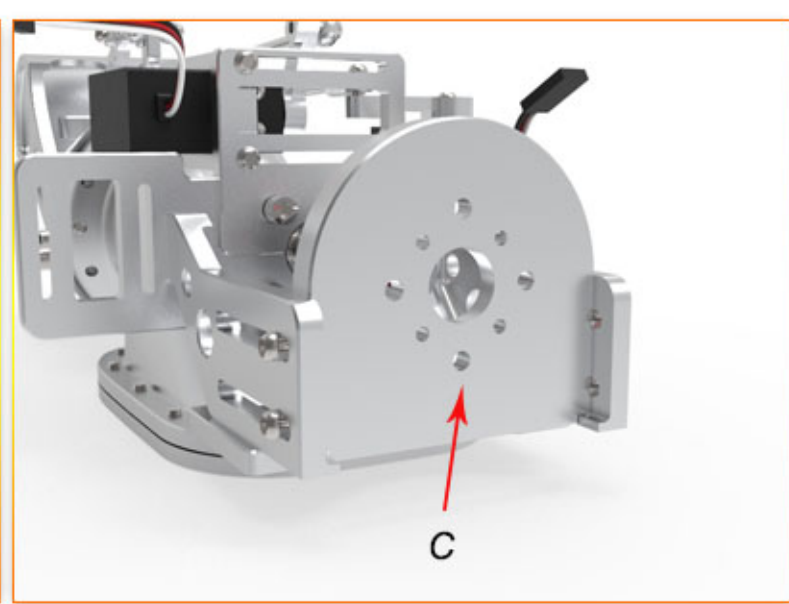
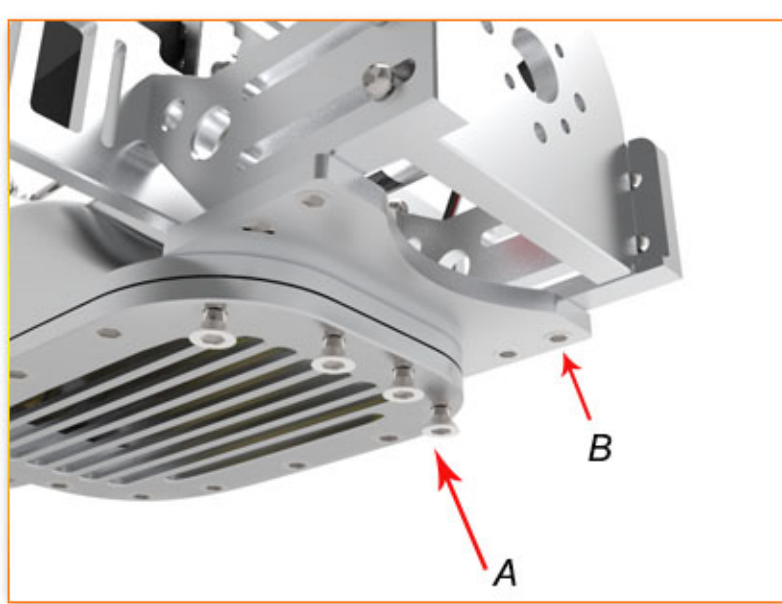
Note: There are two versions coupling available for the Ultra-Jet package, for the gas package, the coupling will be one end 8mm in diameter for the drive shaft, the other end 6.3mm for the flexible shaft, for the electric version package, the both end coupling will be 8mm.

Electric Motor Mounting Kit Installation

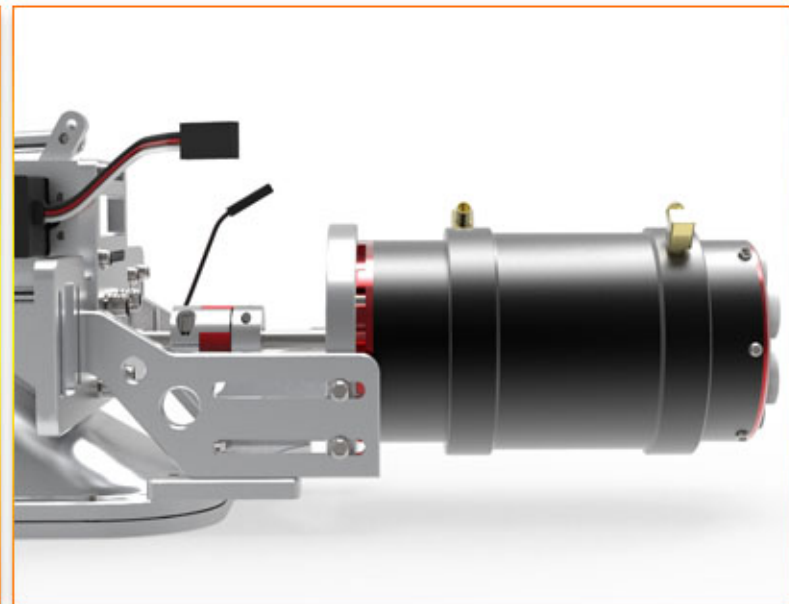
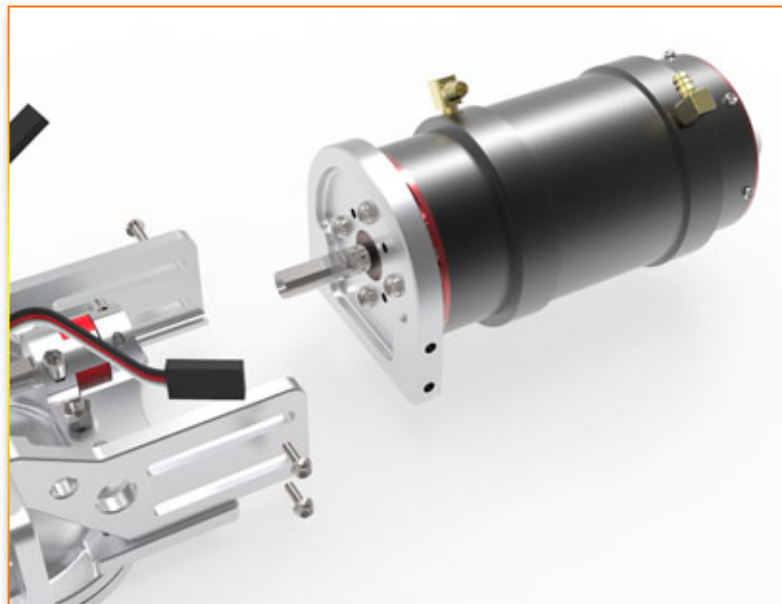


A: These two on each side of M4x12 bolts will be tighten from the servo mounting plate into the electric motor rails.

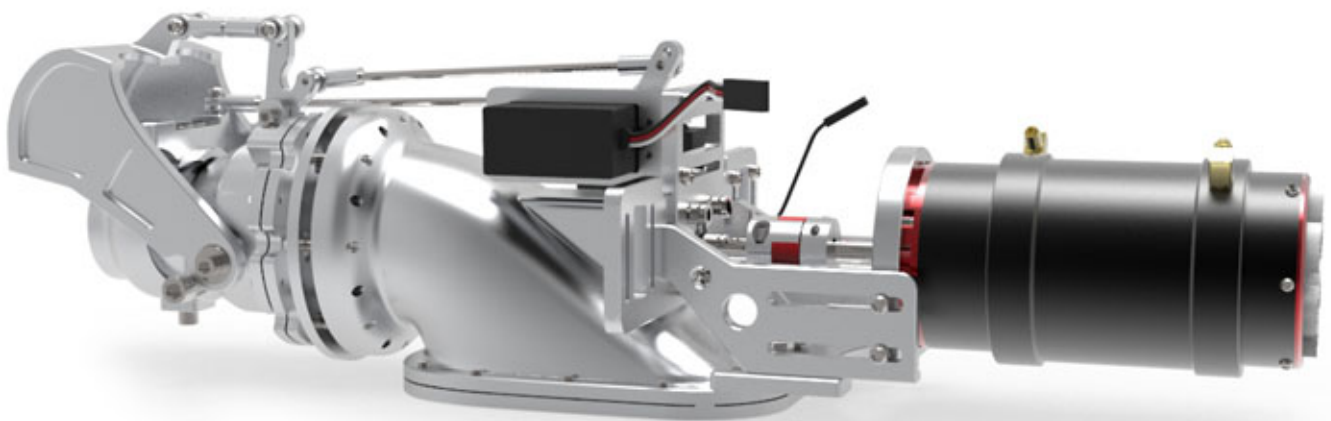
B: These two on each side of M4x10 bolts will be secure from electric motor rail into the electric motor mounting plate, loosing these bolts allow horizontal adjustment for the electric motor position.



A: When install the electric motor mounting kit, these four bolts will be replaced with longer bolts and nuts.
B: These four M3x10 countersunk head bolts will be tighten from the bottom plate into the electric motor rails.
C: There are two patterns of mounting holes available for the electric motor, the distant of 25mm and 30mm.

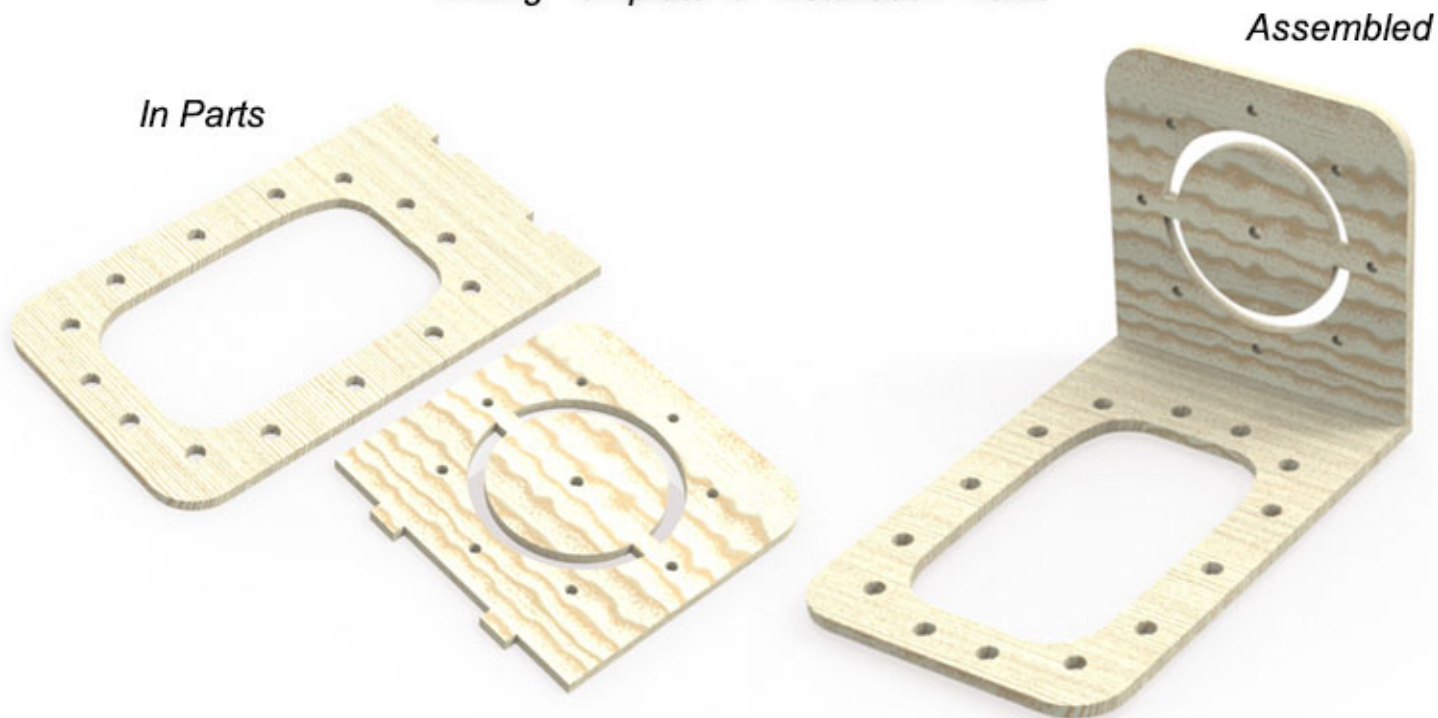


When install an electric motor, take out the mounting plate, and secure the electric motor on the plate first, then install it back into the motor rails, adjust the distance before tighten the side bolts.



Congratulations! the Ultra-Jet assembly is now completed!

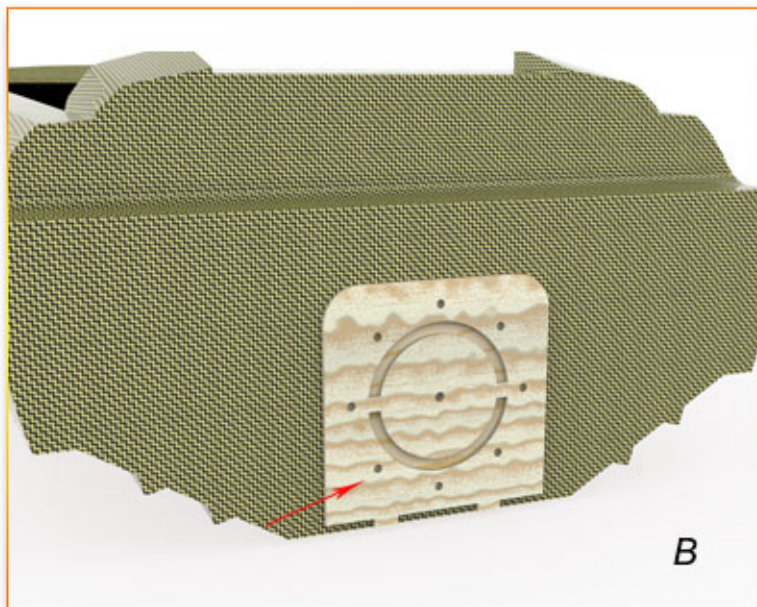
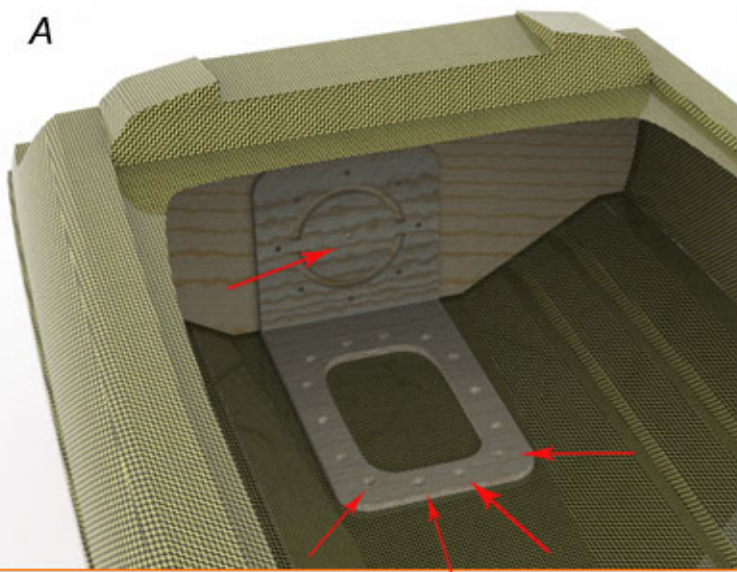
Install Ultra-Jet Into Your Hull Drilling Template for Installation Holes



Drilling the holes for the jet drive installation could be much challenger compare to any other scale drives, it might be difficult for most experience boaters, not to mention for the beginners, because there are too many holes to drill, if any one of them in wrong place, it could cause a lot of hassle work to make it right for the properly installation.

For the Ultra-Jet installation, we have make this challenge much easier to accomplished by providing a laser cut wooden template with full detail of instructions, just simply follow the instruction step by step, you will drill all holes in the correct spots for the installation.

There are many type of jet hulls available in the market, here we will illustrate with our RX55 jet hull in following instruction, but,the procedure will be similar when doing with other brand hulls.

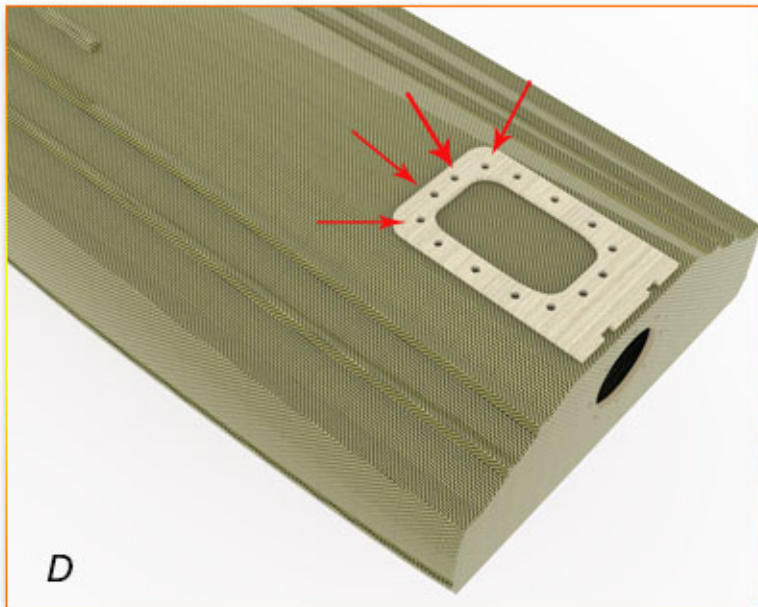


A: Simply assembly the template by giving couple drop of instant glue for holding them together to mark the holes on the transom, the template needs to be used individually later, first drill a 4mm hole on the center of transom, then drill four of 5mm holes on the hull bottom via the hull bottom template where the red arrows point to.
B: Separate the template and use the smaller one paste against the transom from outside of the hull, match the center hole you drilled earlier, now, you can drill the other 8 holes in diameter of 4.5mm for the Ultra-Jet installation.

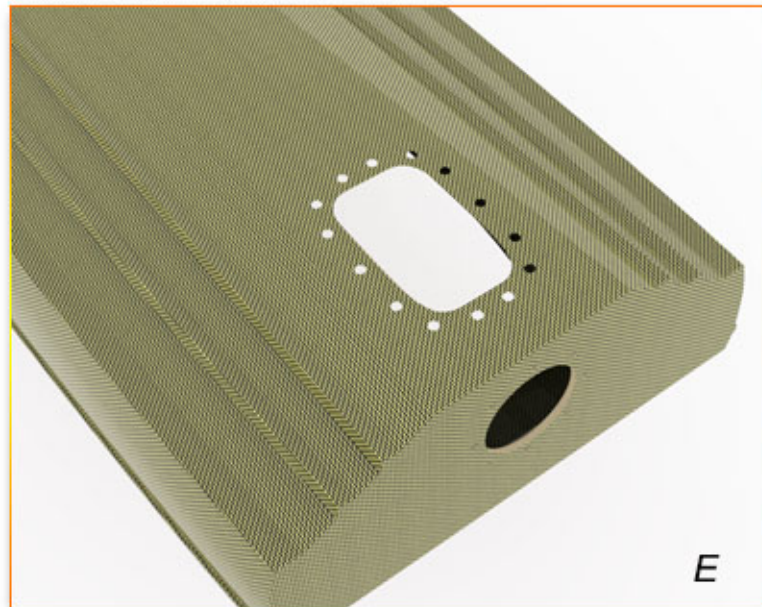


C: You will need a self-centering hole opener in diameter of 60mm attaching it to a electric driller, match the front drill of the 60mm hole opener via the 4mm center position hole you open earlier on the transom, slowly drill out this 60mm hole on the transom.

Reciprocating saw & Tiny Saw Blade

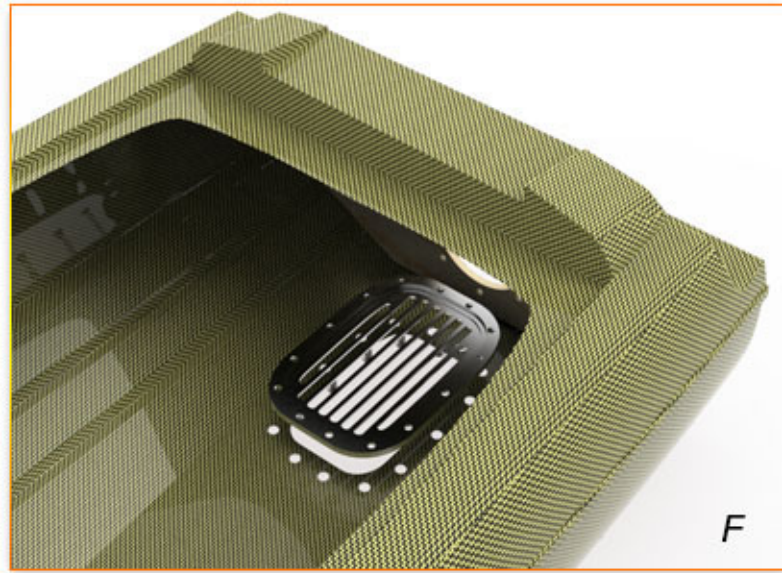


D: Place the larger template on the bottom of the hull, match the four of 5mm holes you drilled earlier as shown in the above picture where the red arrows point, use a marker pen to mark out the rest of the bolt holes and center oval shape hole.



E: Use 5mm drill bit to finish rest 10 holes on the hull bottom, and use an either electric power or air power reciprocating saw with tiny saw blade to open the center oval shape hole.

The reason why not to finish the cutting at first place from inside of the hull, it is because to cut this oval shape hole from inside will be much difficult compare cutting it from outside.



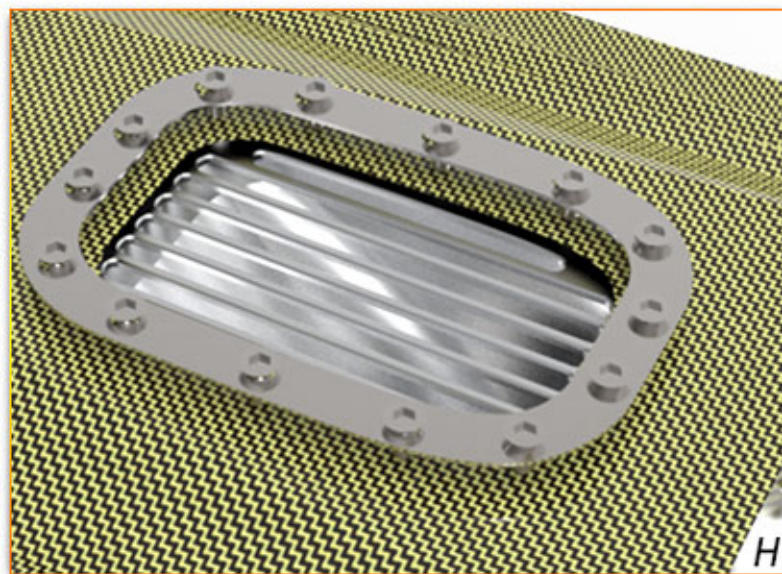
F

F: Apply some sealant around the bottom and the edge of the intake grate, and match the installation holes to the holes on the bottom of the hull, stick them together.



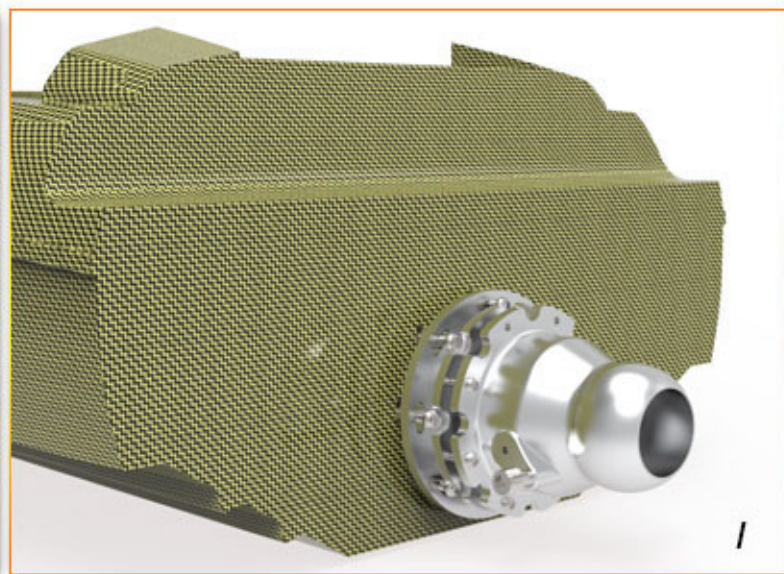
G

G: Apply some sealant at bottom of the intake main body where joints with the intake grate, then, match them together, make sure the seal is tight for no water leaking in.



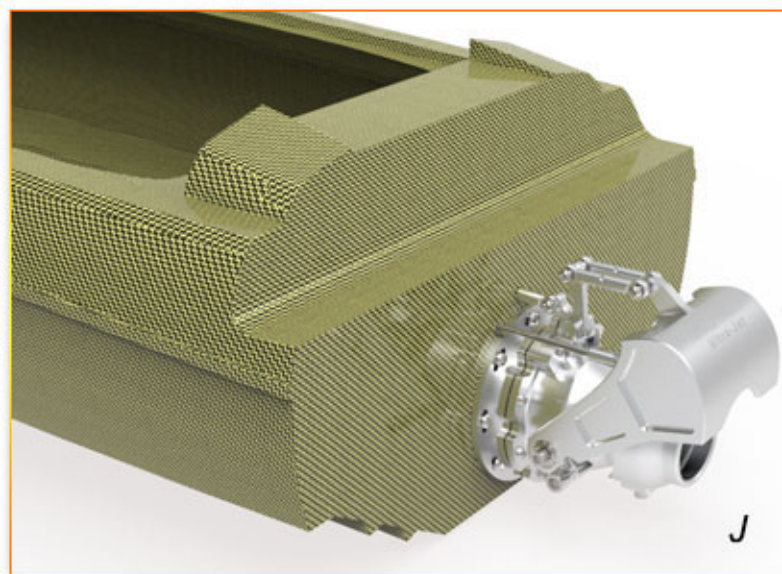
H

H: Secure the stainless steel hull bottom adaptor along with the intake grate and intake body from bottom of the hull with supplied bolts.



I

I: In sequence install impeller housing, drive shaft & impeller, stator blade & stator bowl assembly onto the transom, and tighten all bolts with loctite applied.



J

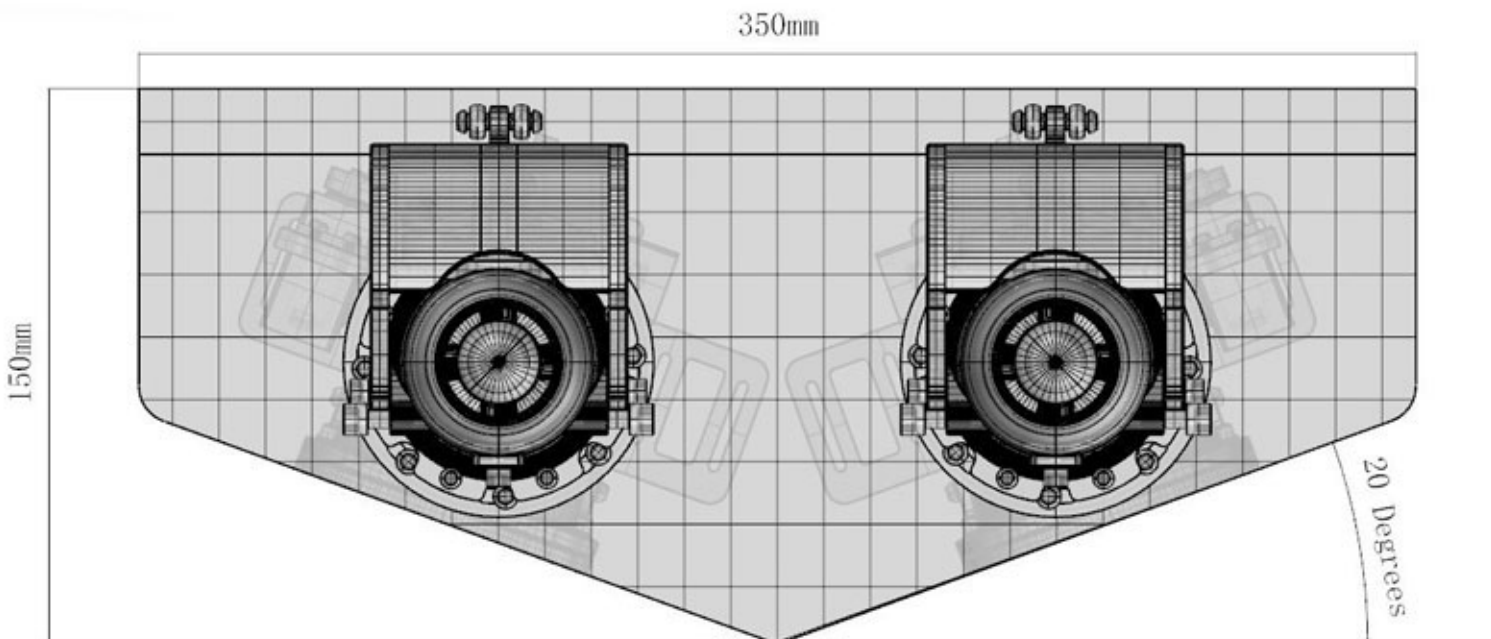
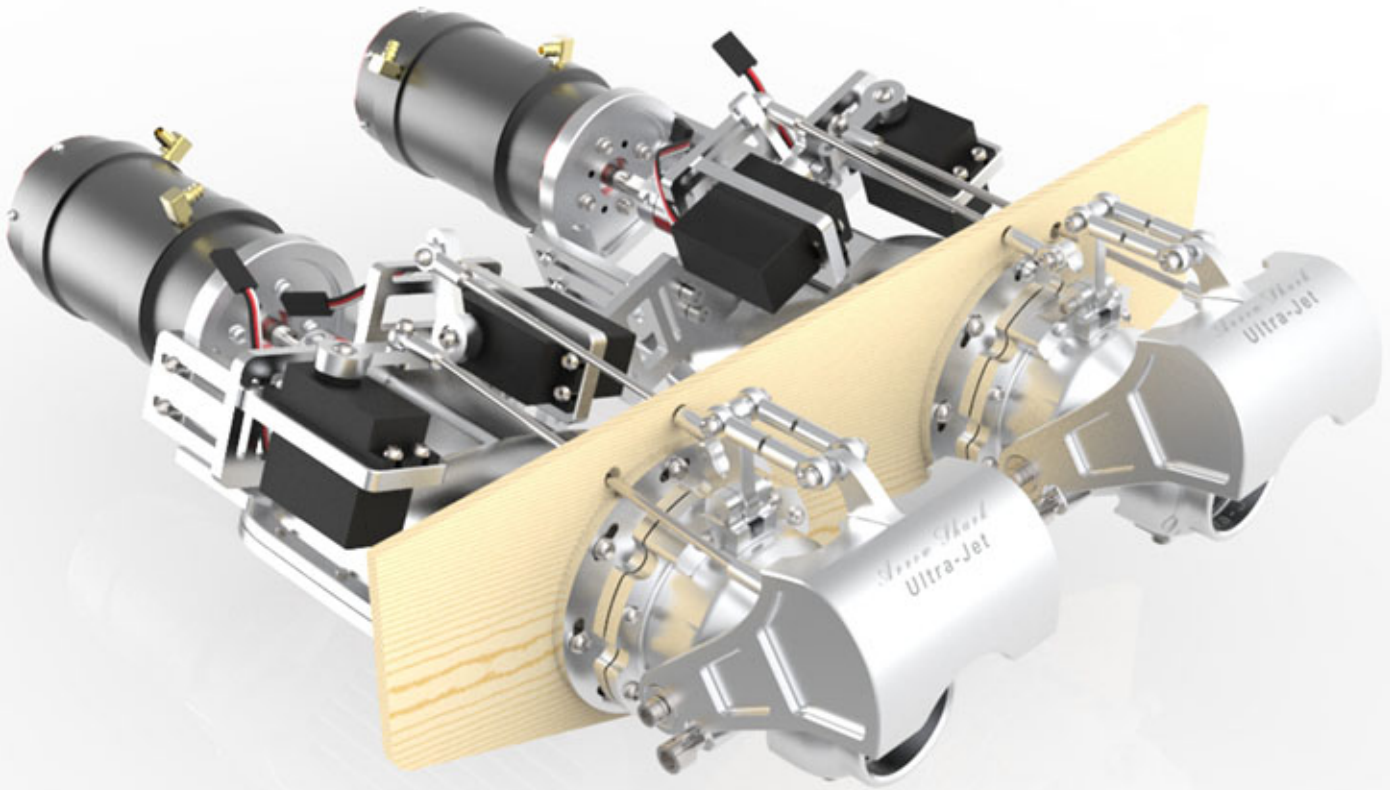
J: Install remaining components onto Ultra-Jet to finish the transom part installation.



K

K: Install the steering and reverse control servos from inside of the hull, and connect to either gas engine or electric motor power to finish the Ultra-Jet power part installation.

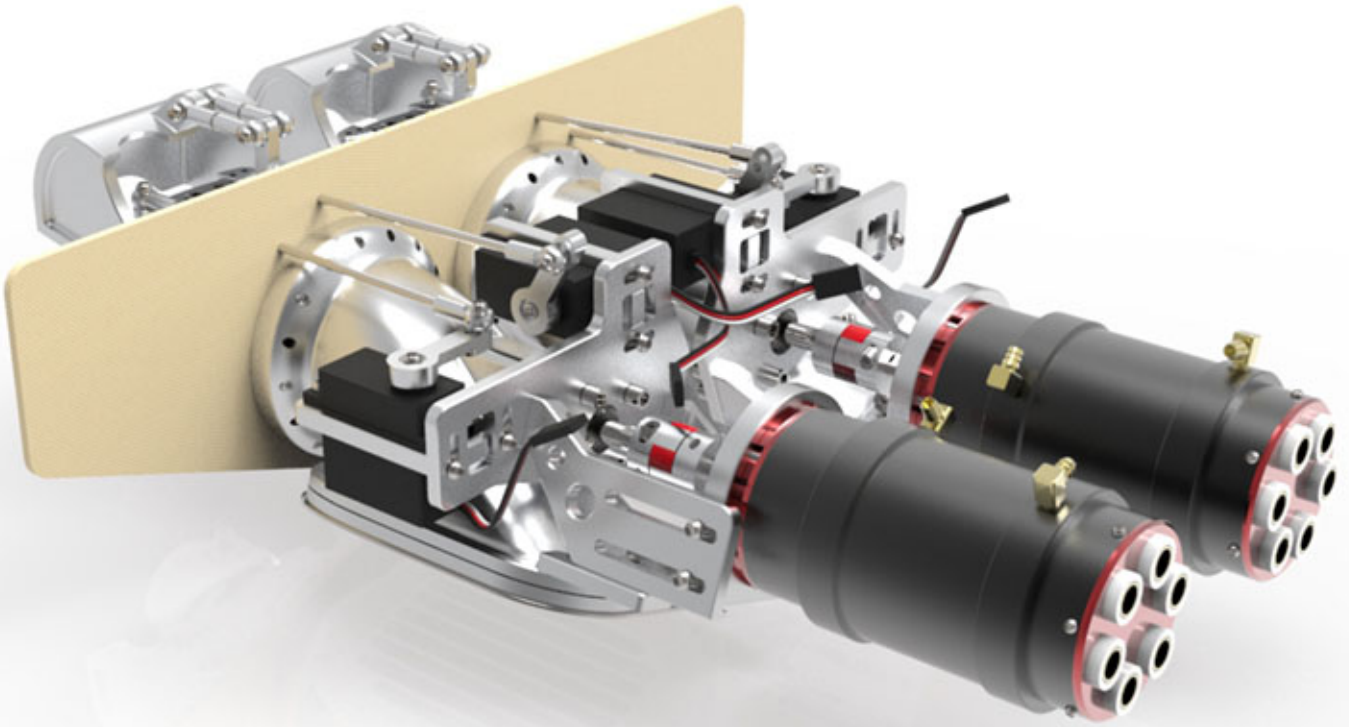
Twin Ultra-Jet Set Up Guide



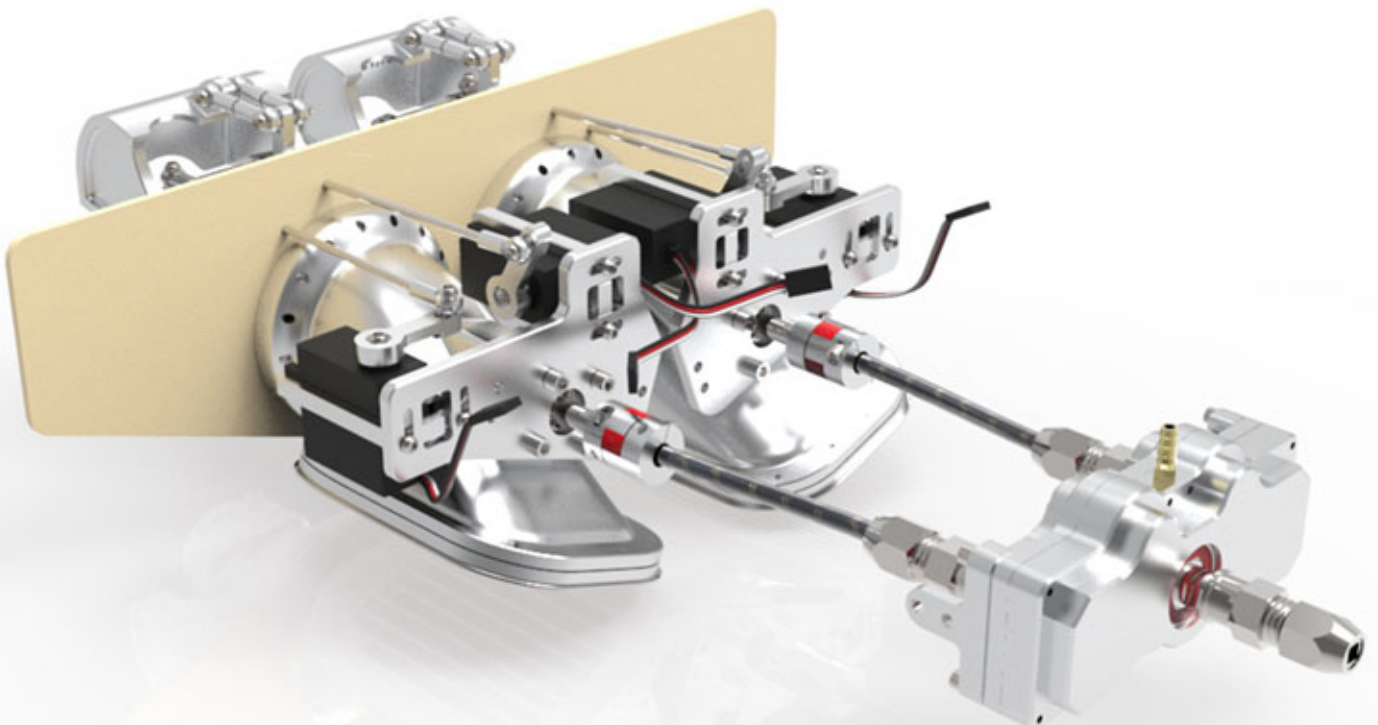
The bolting pattern design on the Ultra-Jet intake body allows you to set up twin Ultra-Jet in your boat, because the intake body capable to be rotated to any degree angle but still match to the components on the transom with standard position set up.

However, if you plan to work on the twin Ultra-Jet application, we recommend the hull size no less than 350mm in beam, 150mm in high, and the bottom angle degree no more than 20 degrees.

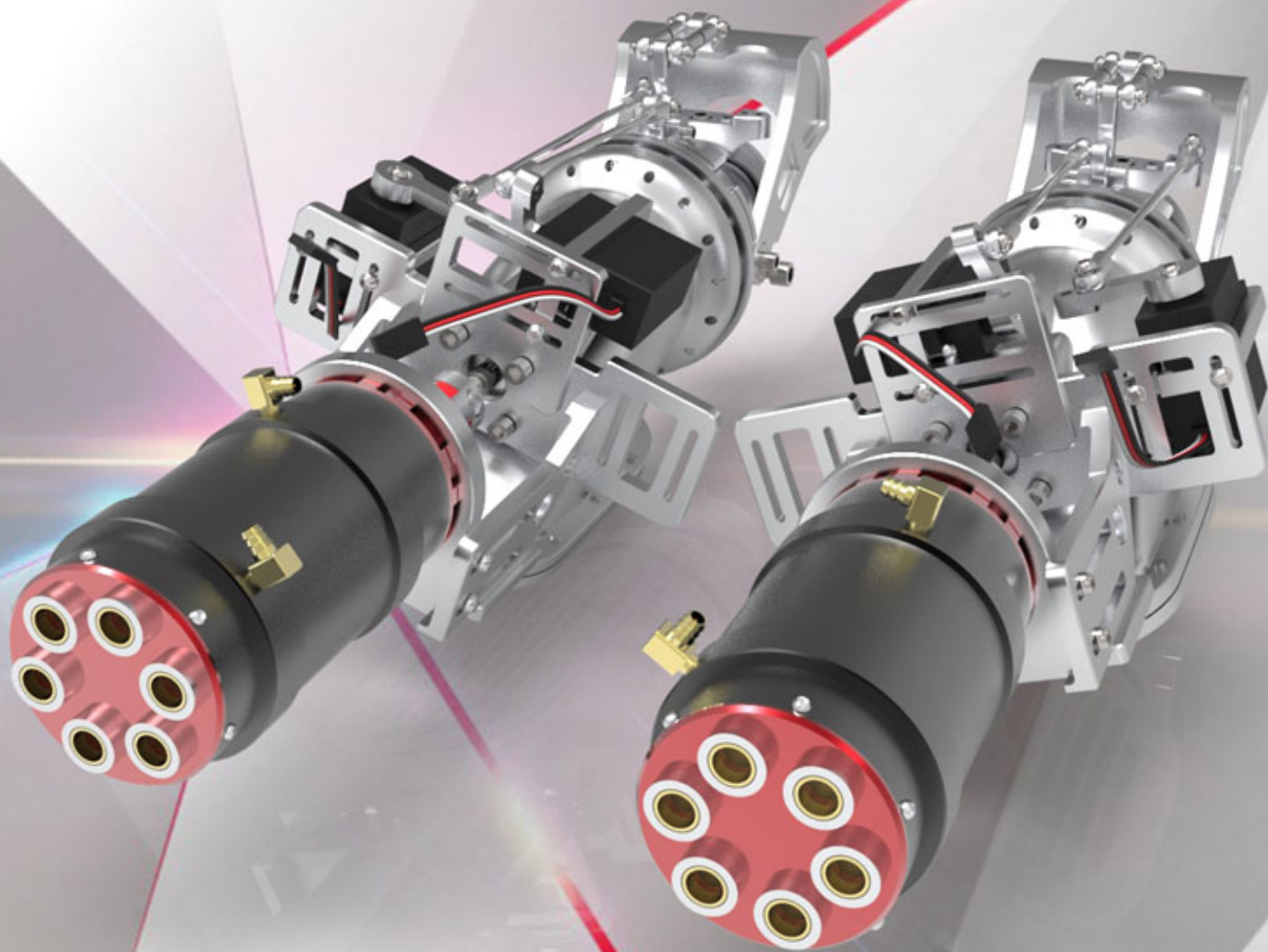
Twin-Jet Electric Version



Twin-Jet Gas Version



There is no Best, only Better!



Arrow Shark
RC Marine