Arrow Shark

M8-Classics Version

Owner Manual

Stylish Appearance & Outstanding Performance!

www.arrowshark.com

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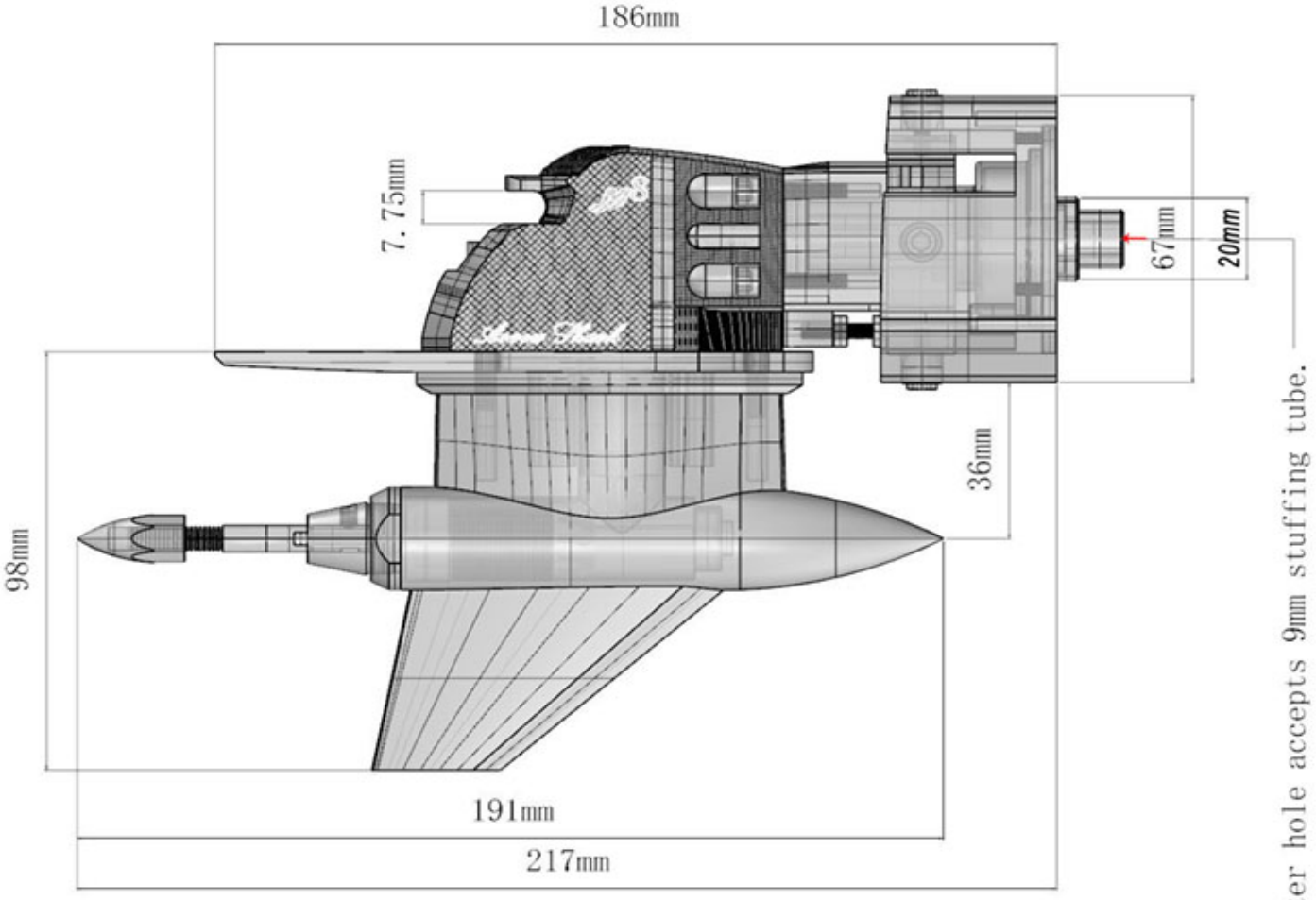

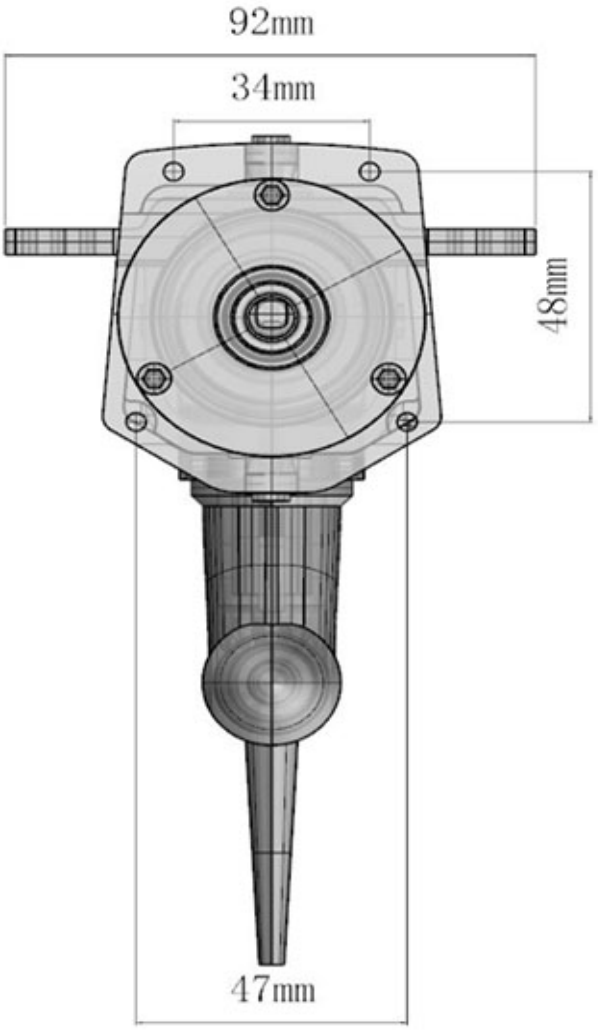

M8-CLASSICS PART LIST

M8#0001	Billet Lower Unit	M8#0010	Rubber Seal Cover Plate
M8#0002	Billet Steering Arm Housing	M8#0011	Bushingx4
M8#0003	Billet Steering Arm	M8#0012	M4x12mm Bolts x7
M8#0004	Billet Upper Front Unit	M8#0013	M4x8mm Bolts x1
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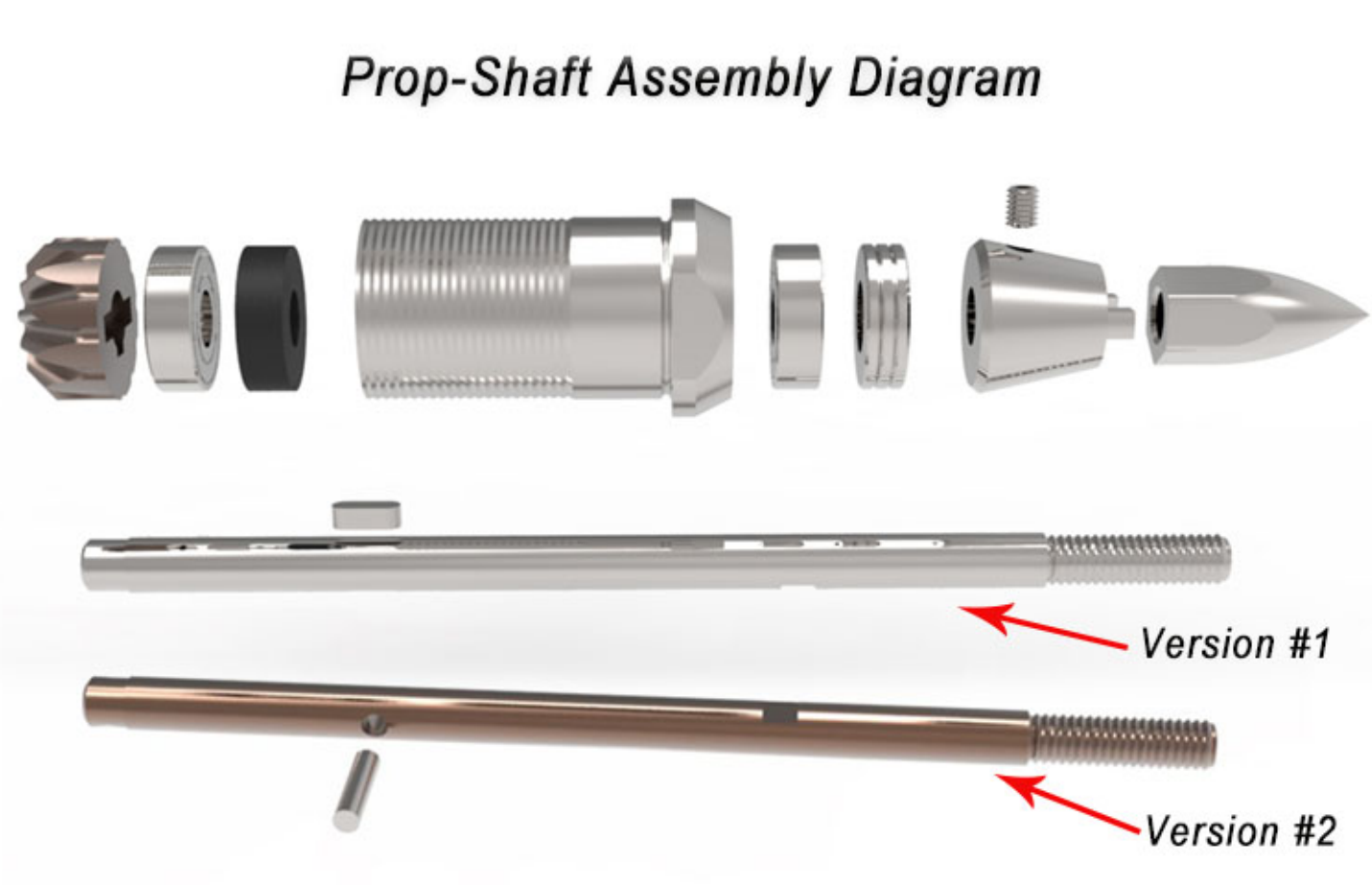
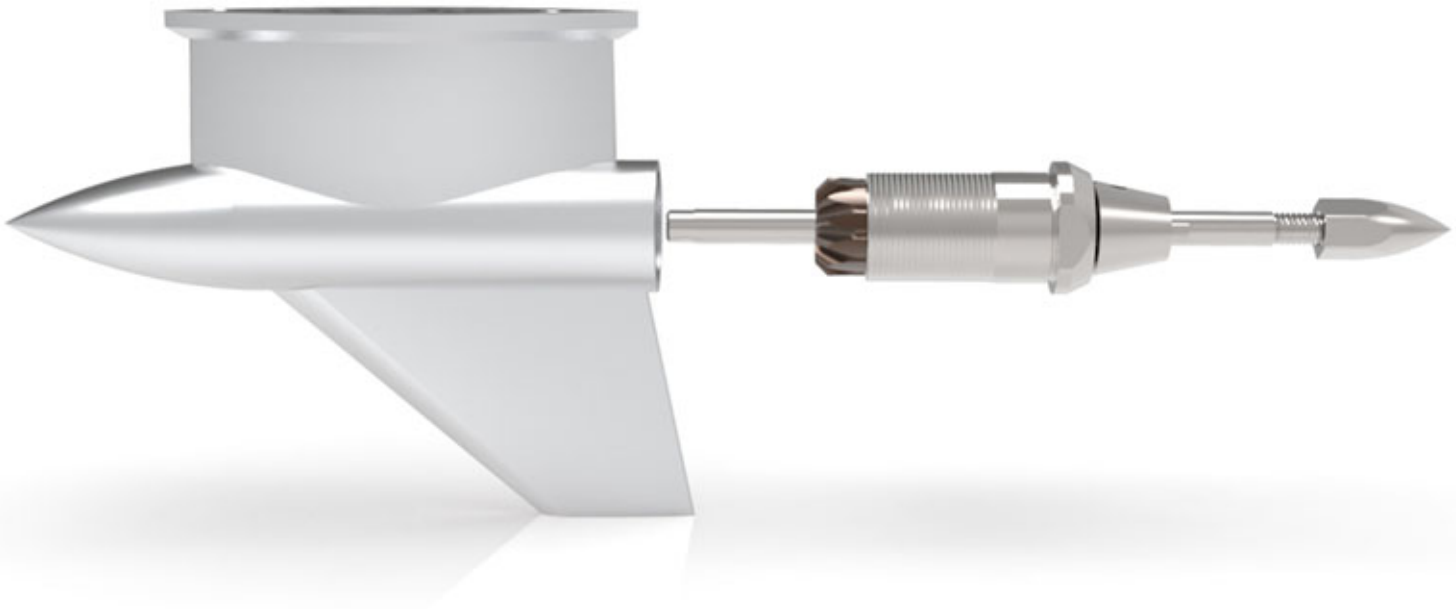
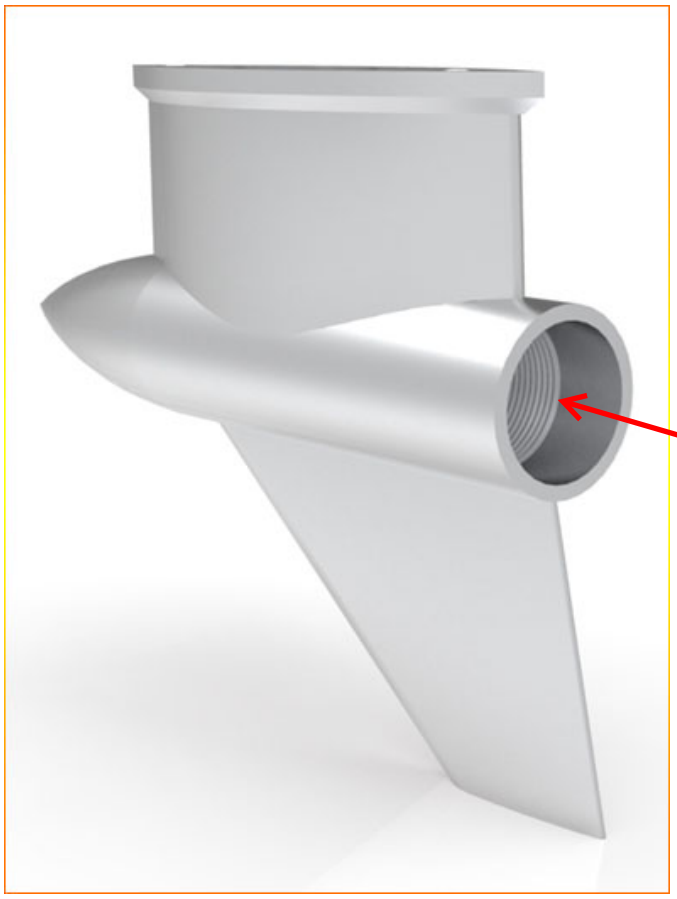


We have two version of gear pin design for the prop-shaft assembly, both versions are working well, we will demonstrate the version #1 in following instruction manual.

Lower Unit Assembly



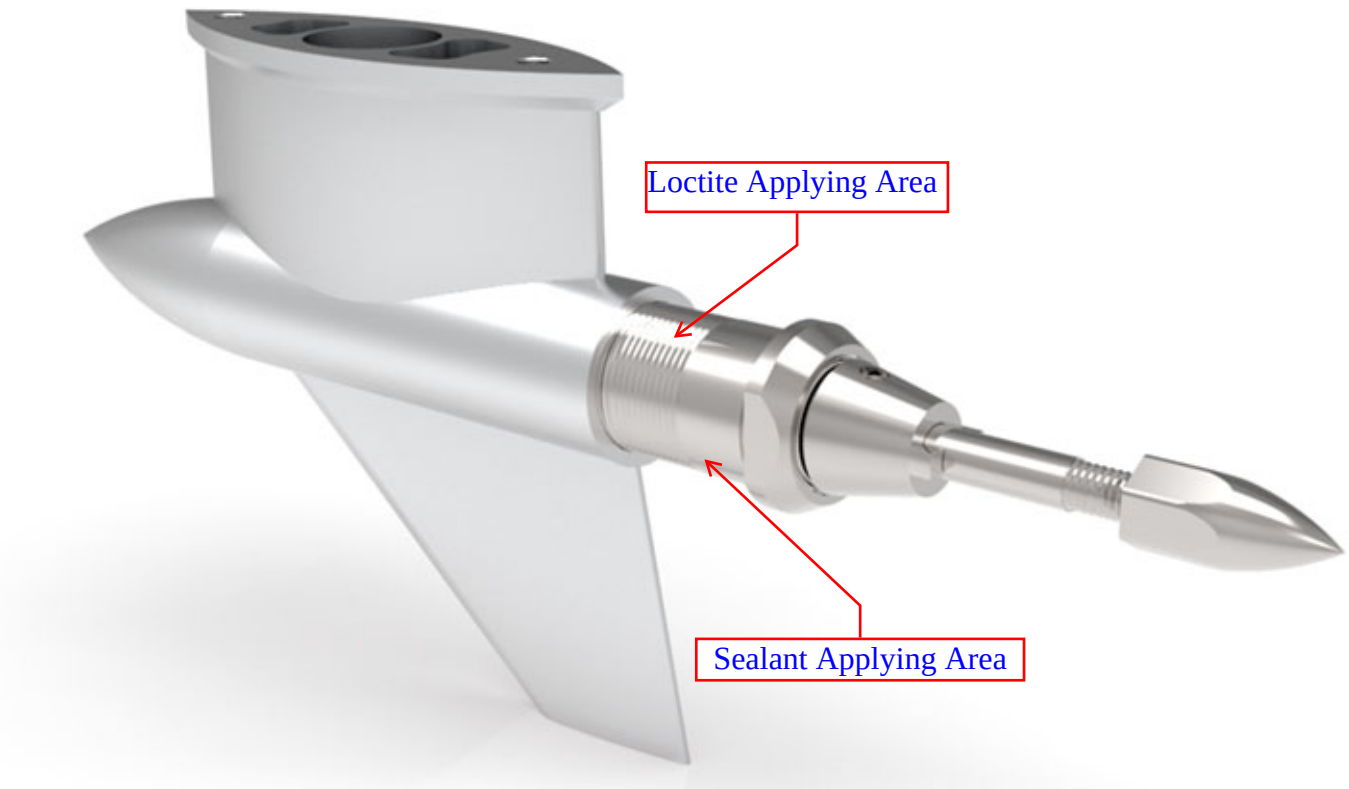
Prepare the prop-shaft assembly and screw it into the lower unit in left hand direction.



Note that when the prop-shaft housing reaches about15mm from the end, it might stop because -The thread on the lower unit is designed with two levels;the first 15mm of thread has a ‘loose’ fit while the remainder is a ‘tight’ fit. So the prop-shaft housing might tighten up at some point between the first and secondlevels of thread. When that happens, simply rotate the prop-shaft housing left or right a bit until the thread onthe housing engages into the second level of thread onthe lower unit.

Note: Do NOT force the prop-shaft in when you feel ittighten up as that could damage the thread on the lowerunit.

Loctite the Prop-Shaft Housing

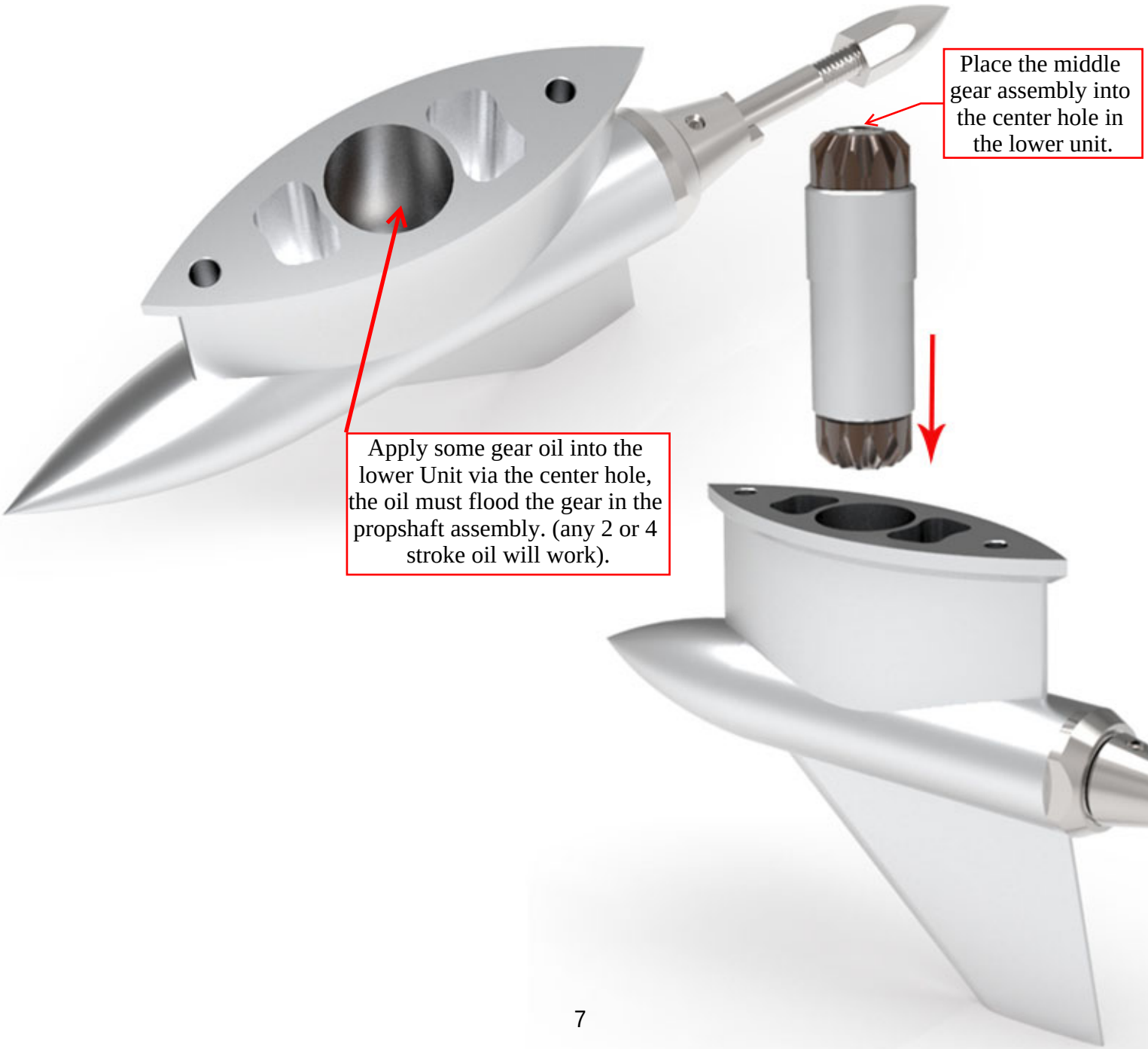


Apply both loctite and sealant on the prop-shaft housing; this is a very important step to keep the prop-shaft housing hold firmly in place, especially for counter-rotation. It also prevents from the oil and water leakage. Use a 21mm wrench to tighten the prop-shaft housing into place.

Note: Before trying to screw the prop-shaft housing out for maintenance, heat the loctite area from outside in order to soften the loctite. Do NOT force it out with a wrench if you feel that it is hard to unscrew.

Middle Barrel Gear Assembly Diagram

Top Unit Assembly



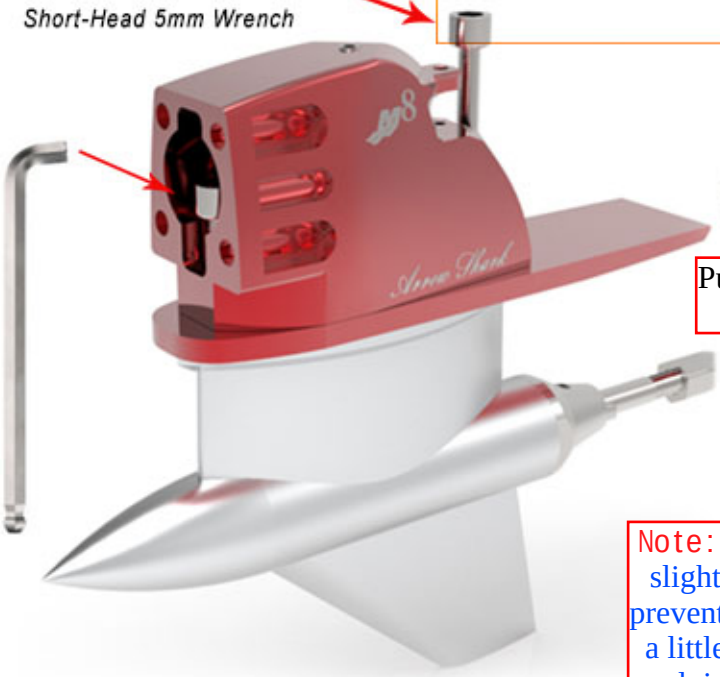
Apply some sealant around the edge of middle barrel assembly to prevent the oil leaking out from top unit.

Place the riding plate and top unit onto the lower unit.

Top Gear Assembly Diagram

Tighten the both front and back bolts by using 5mm hex nut wrench, to properly tighten the front bolt, you will need a short-head version 5mm hex nut wrench.

Short-Head 5mm Wrench



Push the top gear assembly into the top unit hole.

Note: The diameter on the rubber seal is slightly bigger than the hole in order to prevent oil leakage; therefore, it may need a little force to push it in, or you can try applying a little oil around the rubber seal to make it easier to push in.

Front Unit Assembly

Connect the front unit to the top unit, and use M4x12 bolts to secure them together by using M4 hex nut wrench.

Steering Arm Assembly

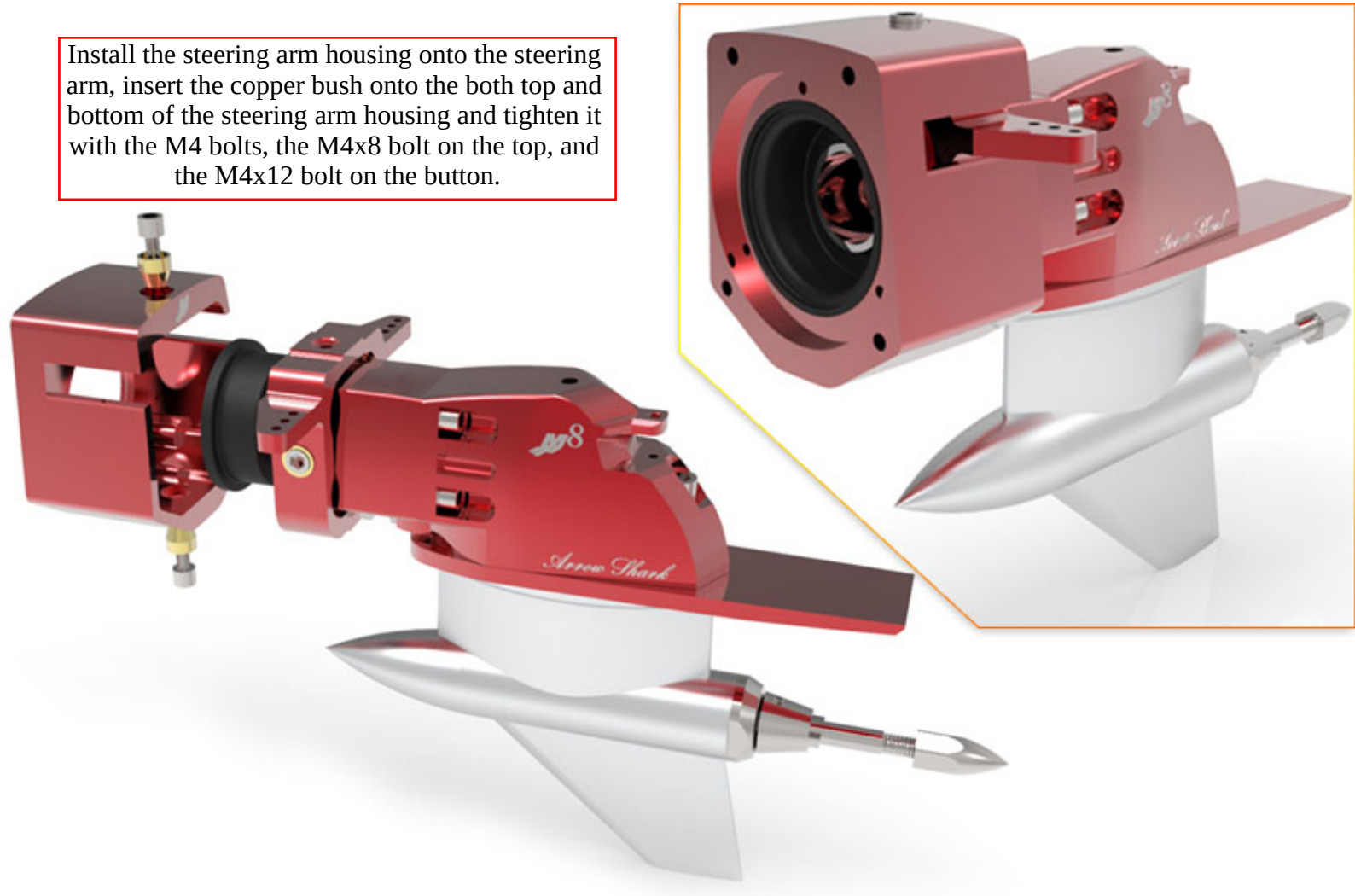
Install one of the copper bushes to each side of the steering arm and tighten it with two M4x12 bolts.

Rubber Seal Assembly

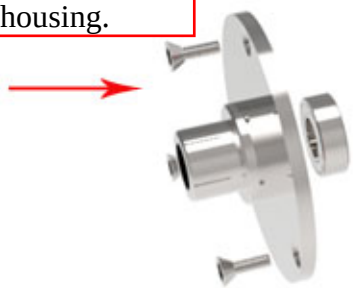
Connect the rubber seal to the front unit adaptor.

Steering Arm Housing Assembly

Install the steering arm housing onto the steering arm, insert the copper bush onto the both top and bottom of the steering arm housing and tighten it with the M4 bolts, the M4x8 bolt on the top, and the M4x12 bolt on the button.



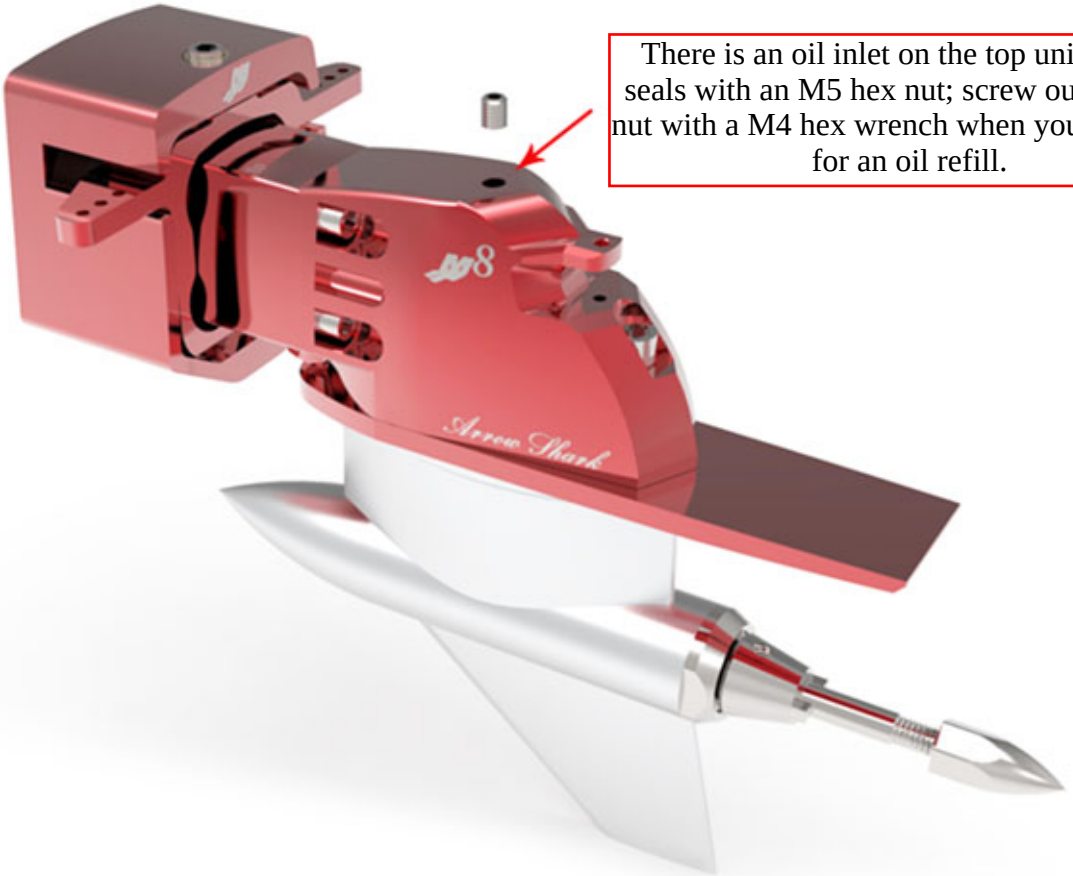
Apply the M3x8mm bolts into the cover in order to tighter it into the steering arm housing.



Note: All bolts in the above installation must be applied with med strength loctite in order to prevent from the bolts loosing during operation, but still able to loose them when requires.

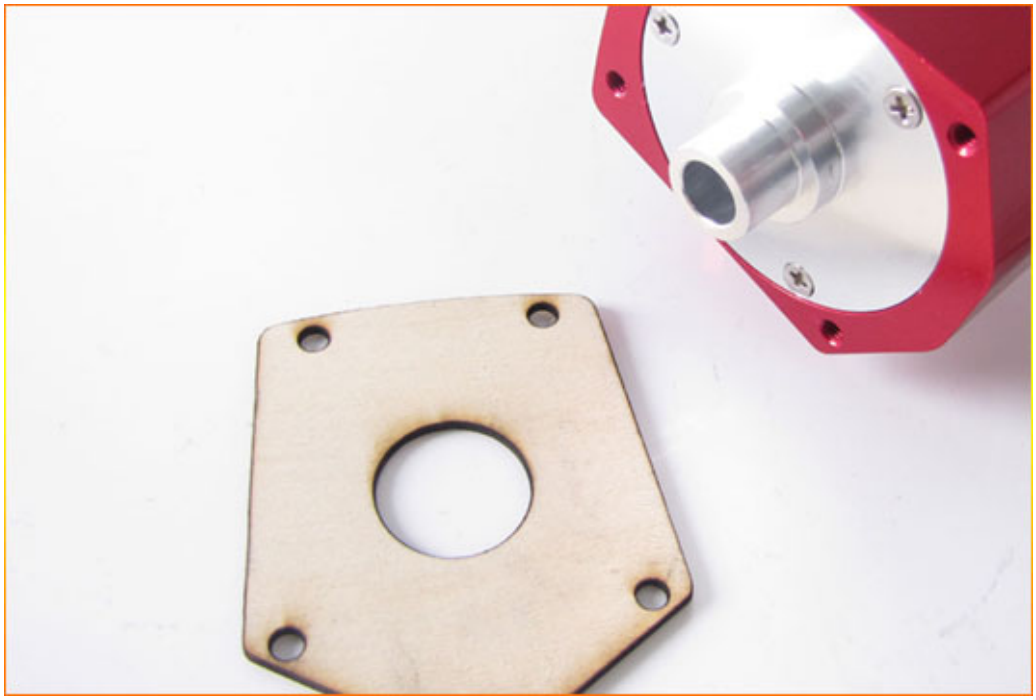
Oiling The Drive

There is an oil inlet on the top unit which seals with an M5 hex nut; screw out the hex nut with a M4 hex wrench when you are ready for an oil refill.

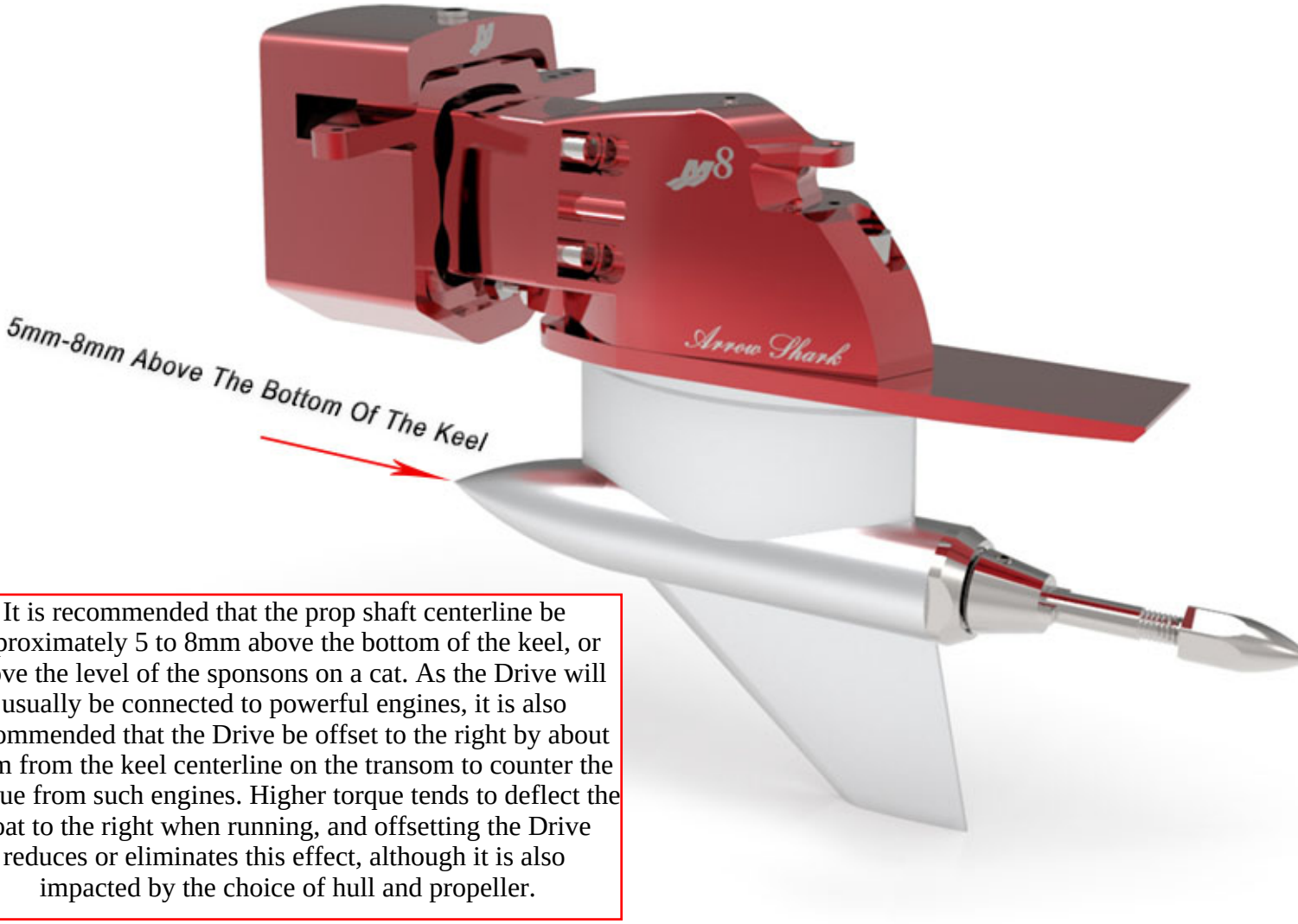


Congratulations! Your Installation Is Completed!

Drilling Installation Holes In The Transom



The M8-classics come with a laser cut wooden template for easy drilling the holes on your transom, the holes on the template will be match the installation holes on the base of the drive, so, all you need to do is attached the wooden template to the right spot of your transom and drill the installation holes with 4mm driller.



It is recommended that the prop shaft centerline be approximately 5 to 8mm above the bottom of the keel, or above the level of the sponsons on a cat. As the Drive will usually be connected to powerful engines, it is also recommended that the Drive be offset to the right by about 5mm from the keel centerline on the transom to counter the torque from such engines. Higher torque tends to deflect the boat to the right when running, and offsetting the Drive reduces or eliminates this effect, although it is also impacted by the choice of hull and propeller.

Twin M8-Classics Set-Up

Billet Tie-Bar

It is recommended that the spacing for two Drives in a twin M8-Classisc set-up would be 85mm-90mm between the two centers of the tie-bar installation hole. With this set-up, you can use up to 85mm diameter props for your boat. We offer a color-matched billet tie-bar from our website.

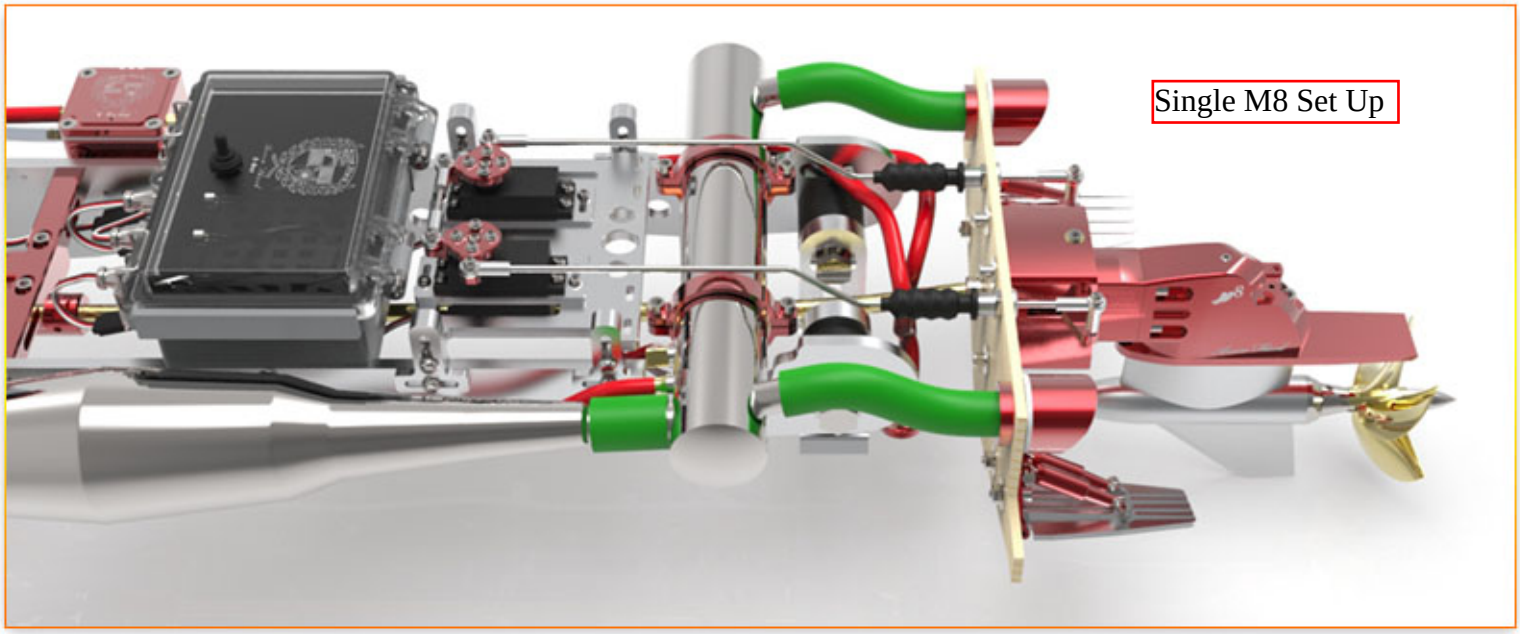
Steering Control Set Up

Smart Servo Tray

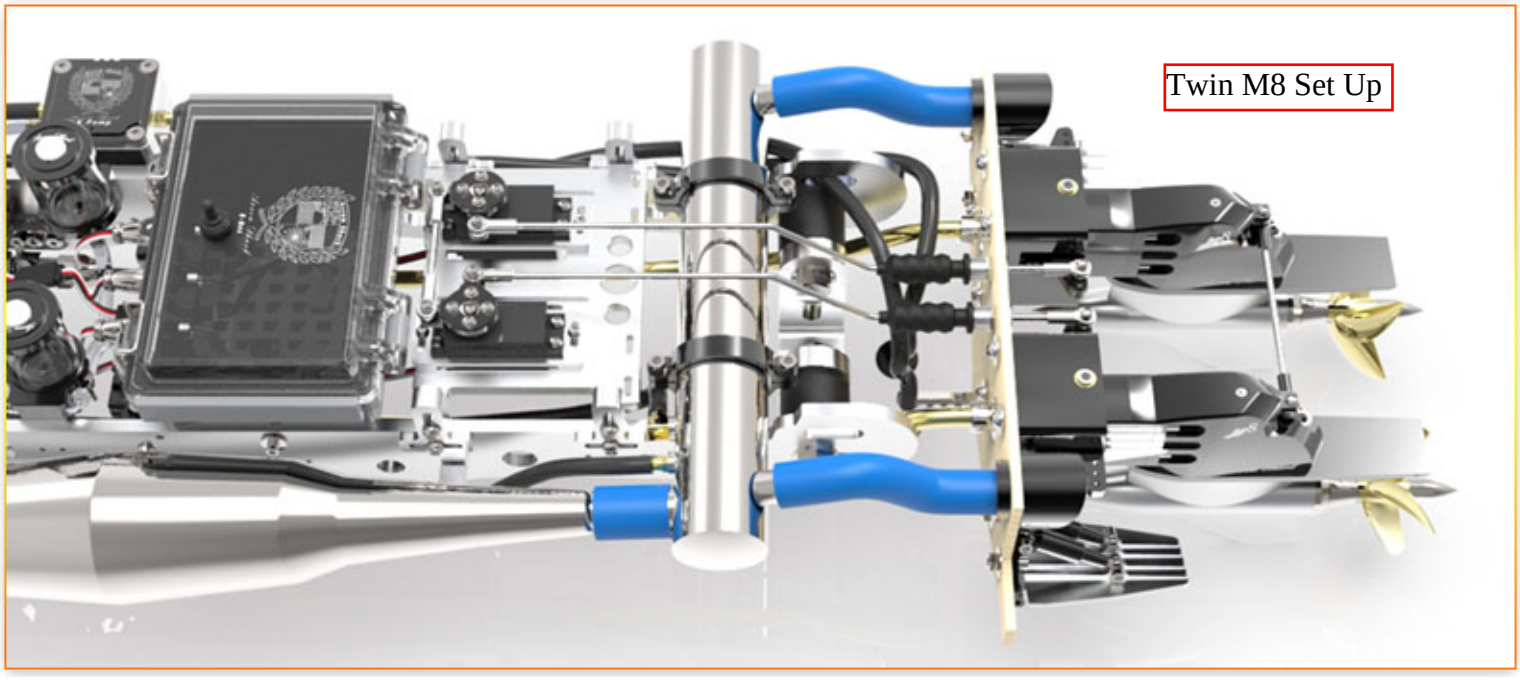
Servo Tie-Bar

Arrow Shark billet smart servo tray and servos tie-bar will work for virtually size mono hulls, it could easily set up for single or twin M8-Classics outdrive applications, the servos tie-bar accepts any 25T standard servos, whilst the smart servo tray is fully position adjustable for the servos to be precisely connected to the M8 steering arms.we recommend to use two 20KG hi-torque servos for single M8 out-drive set up, and use two 30KG hi-torque servos for twin M8 out-drive Set up.

Single M8 Set Up



Twin M8 Set Up



M8-Classics Performance Tip

#1: Lubrication oil needs to be changed for every 10-12 hours of use.

#2: When the M8 drive replaces with new gear and seals, it will be tight to turn it, and it is normal, just simply use a short flexible shaft and connect it to electric driller, then run it for 5-10 minutes, it will become loose. With the brand new M8 drive or after replacing the new gears, we recommend to run it for about 2-3 tanks of gas with half throttle before go on the full speed.

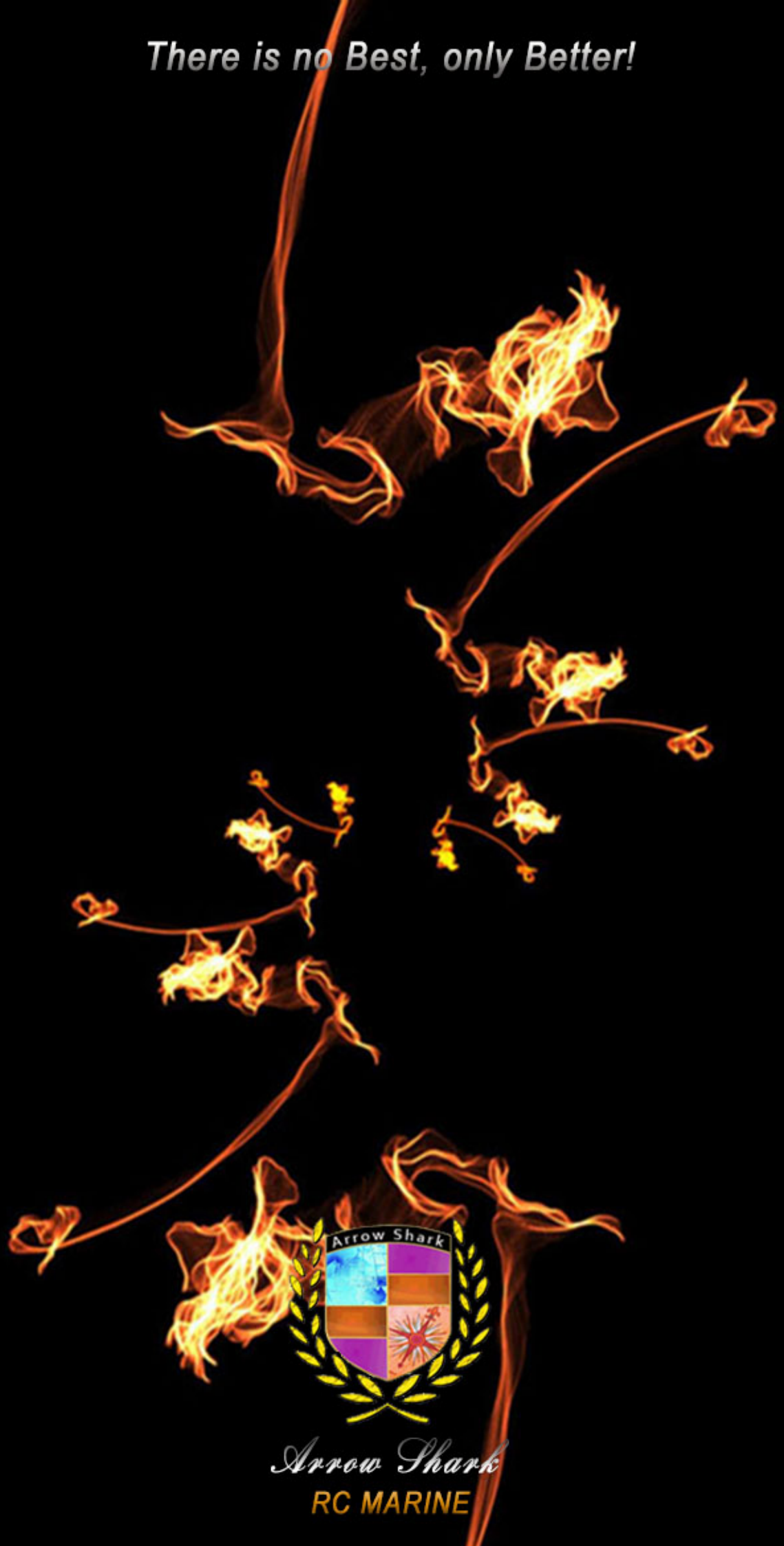
#3: No matter for single or twin M8 set up, we recommend the gas engine to have a clutch system installed for easier engine starting.

#4: Every time before you run your boat, make sure the prop-shaft housing is secured firmly in the lower unit, especially for the right hand rotation drive, as if the prop-shaft housing loosing out during the operation, it could have the gears improperly engaged and cause damage. This is very important step for the M8 drives to have long-lasting performance.

#5: The bearing in the M8 lower unit is designed to be loose fit, so, it can be easy to take out when you need to replace it. It was hold in place by some loctite, therefore, every time when you change the gear oil and re-install the prop-shaft housing assembly, make sure this bearing is not loosing out and still in place.

Thank You! Enjoy your M8-Classics Version Stern drive!

There is no Best, only Better!



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RC MARINE