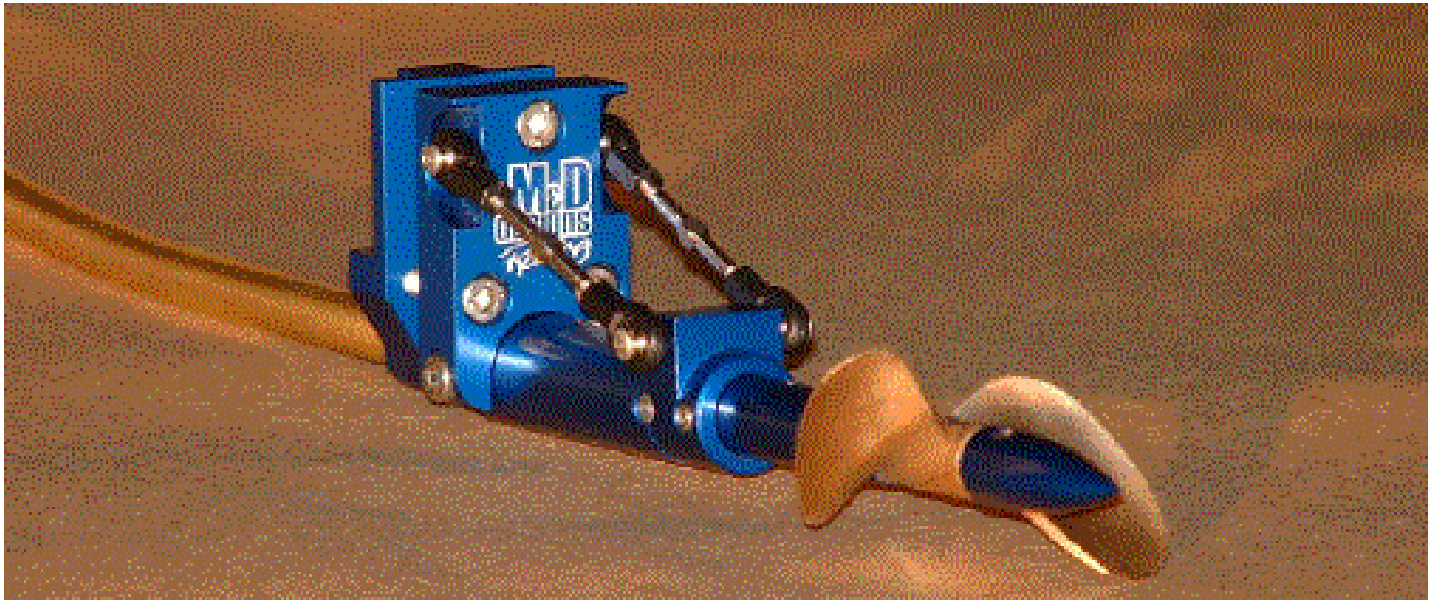


# ■ MDd-Drive System/ ■ MDd-Drive (alone)

## Welcome



Thanks for purchasing The MDd-Drive or the MDd-Drive System. We hope you are pleased with your decision and feel confident that you will be. We have done years of testing with these systems before offering them for sale, many refinements have been made along the way. We have also learned a few things about setting up Large Scale Gas Monos and Deep Vee's. There are MANY setup factors that determine how a fast boat handles. I will touch on some of them here.

Hopefully this supplement will be useful in helping you setup your own boat with our drive. That being said, there are no "absolutes" as far as setups go. You may have different ideas of what works best and that is OK. If everyone followed without thought, there would be no progress.

Have Fun!

db and Matthew  
M&D designs Racing, LLC

# MDD-Drive System/ MDD-Drive (alone)

## Care Instructions and Setup Tips:

### Welcome

#### 1.0 General Care and Maintenance

##### 1.1 Cleaning

1.1a Things to use and things not to use (test product first)

##### 1.2 Lubrication

1.2a As many opinions as there are people with them...

##### 1.3 Fasteners

1.3a Balanced drive-line

1.3b Check fasteners often

#### 2.0 Setup for MDD-Drive System

2.1 Hole pattern for placement on transom

2.2 Stuffing tube

2.2a cut to length

2.2b bend to align with motor

#### 2.5 Setup without Stuffing tube Assembly

2.6 Hole pattern for placement on transom

2.7 Stuffing tube

#### 3.0 Replacement parts

3.1 Parts list with prices

3.2 Contact Information

#### 4.0 Product Disclaimer



# MdD-Drive System/ MdD-Drive (alone)

## 1.0 General Care and Maintenance

### 1.1 Cleaning

**1.1a** Care should be taken when cleaning the drive. Anodized aluminum parts can be adversely effected by some harsh cleaners. Simple Green is one example; *It* has been known to leach the color out of the anodize. It is a good idea to test any harsh cleaners you may want to use. I personally like to use WD-40 on a shop towel to wipe down the hardware. It works as a de-greaser and also as a protectant.

The anodized finish is harder than plain polished aluminum. It creates a hard layer of oxidation that can be colored, blue in the case of MdD-Drives and MdD-Drive Systems. The color can be stripped off if you do not like the blue but you will need to do more work to keep the drive looking good. I have been told that Oven Cleaner will strip the anno. An anodizer can also strip the color and put another color on but be aware that every time you go through that process you loose a little bit of surface material. The parts and threads will have a looser fit. It is not recommended therefore.



# MDD-Drive System/ MDD-Drive (alone)

## 1.0 General Care and Maintenance

### 1.2 Lubrication

**1.2a** There are as many opinions on lubes as there are people with them. Most of them(lubes) are just as good as the next. The main decider comes to how much/often you want to clean and lube and how hungry you are for that last RPM.

#### **General Use/Play**

For General Use or Play I would recommend any good waterproof grease. (I like "Slick 50 One Grease"). Smear it on the stub shaft and squirt some into the bearing carrier before you insert the stub shaft. Wipe off excess grease. On your cable you want to start with a clean cable and work grease into all of the strands. Bend and twist the cable to get it worked into the strands. You don't need to use gobbs of grease as all it does then is make a mess and slow down the cable.

#### **Racing**

For racing or time trials some people like to use a thin oil on their shaft and cable because they offer much less drag on the drive-line. The bad thing about using thinner lubes is that you must use them much more often and you run a better chance of having a failure if you are not religious about your lube/maintenance schedule.

At the end of a day of running you should remove your drive-line(cable, shaft and bearing). Inspect it for broken cable strands and check that the weld or solder joint looks good. Also wipe down and leave out to dry. If you use a de-greaser make sure to re-lube the cable and shaft to avoid rust.(Enemy Number One!)

# MdD-Drive System/ MdD-Drive (alone)

## 1.0 General Care and Maintenance

### 1.3 Fasteners

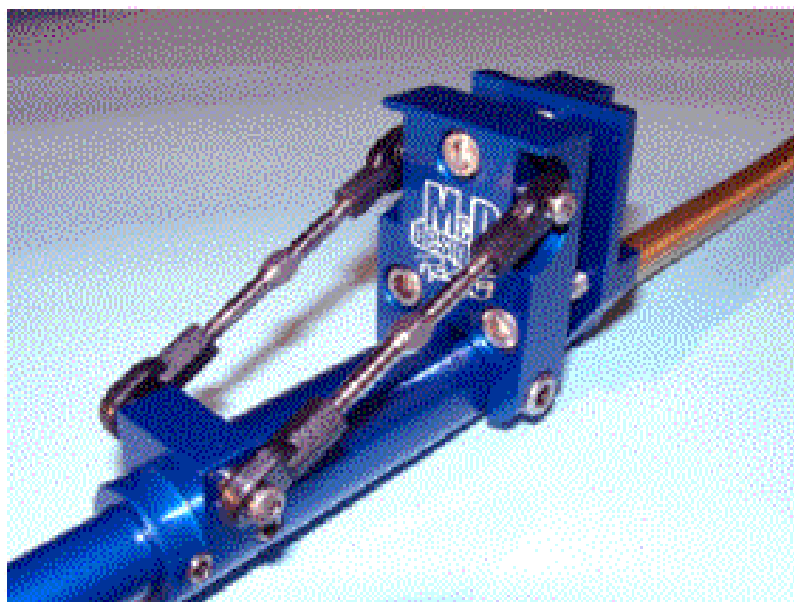
#### 1.3a **Balanced drive-line**

Remember that you are spinning the whole drive-line up to anywhere from 13K to 18K+ and vibration can definitely become an issue in many systems if it goes unchecked. Vibration can shake bolts and screws loose, it can shake your radio equipment to a point where it becomes unreliable and it can also cause a problem with fuel foaming. Vibration will fatigue your hull and create much more noise than is necessary.

Your Prop in particular **MUST** be carefully sharpened and balanced before using.

#### 1.3b **Check fasteners often**

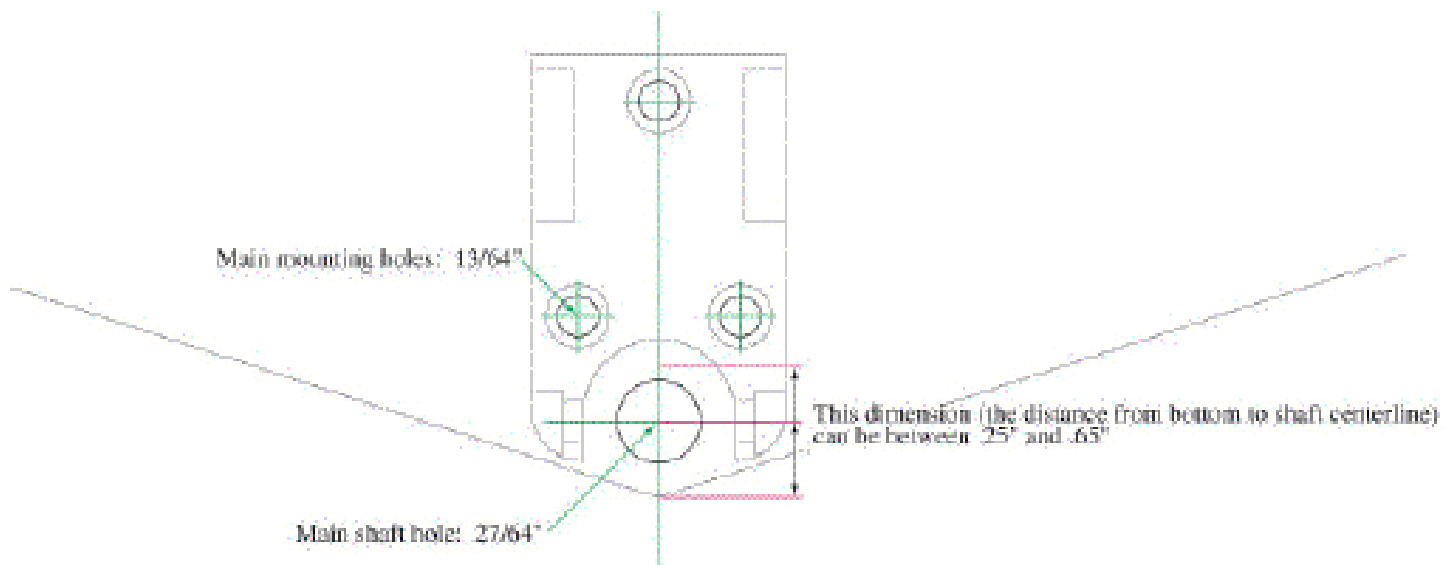
The main concern for us here is the loosening of fasteners. One thing to remember is that we are dealing with aluminum threads which can be stripped if you try to tighten the bolts too tight. That being said, you must check that they are not loose after every few runs. Use of Loc-tite type thread locking compounds should be done carefully as it can sometimes work "Too well".



# Md-Drive System/ Md-Drive (alone)

## 2.0 Setup for Md-Drive System

### 2.1 Hole Pattern for placement on transom



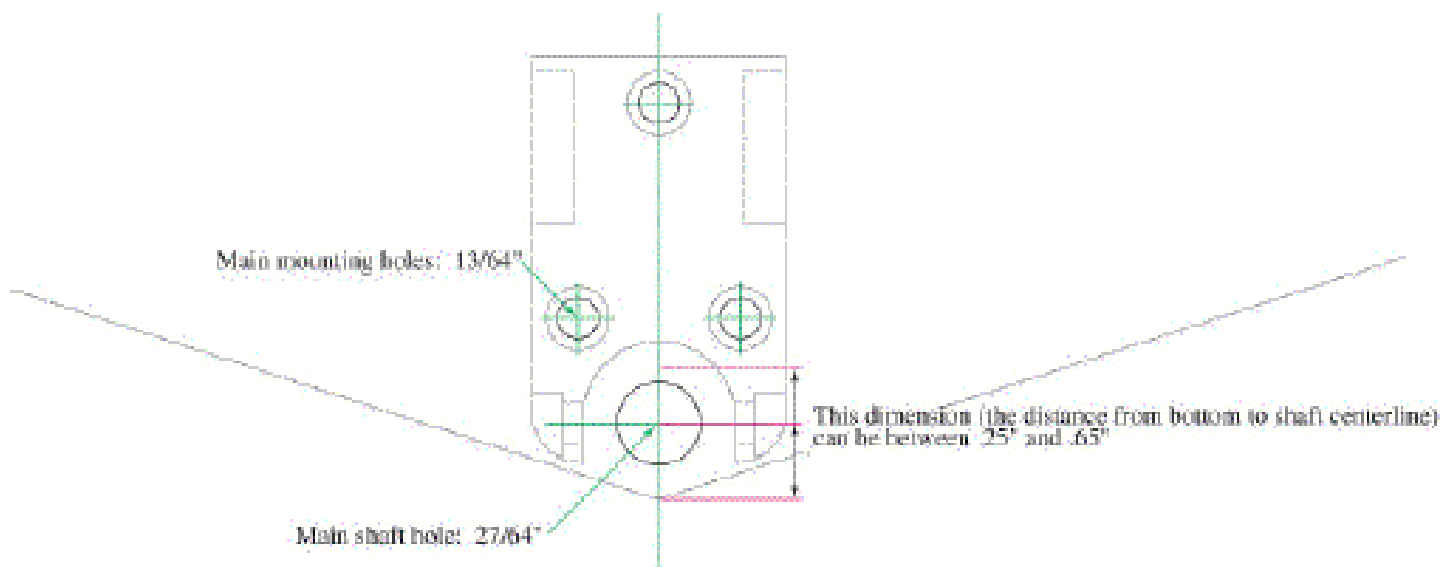
#### 2.1 MDd-Drive Placement (and adjustment)

The best location for the drive on the transom depends on many things. The only real way to find the BEST position is trial and error. You would be wise to check with the manufacturer of your hull for their opinions on this matter but be aware that they may not have yet found the BEST position themselves. There are again many factors that play a part in this, the size prop you are running and the amount of power you have to spin it are variables to be experimented with. That being said, one of the neat features of the MDd-Drive System is that if you slot the 4 holes in your transom you can make adjustments very easily, in fact with the loosening and tightening of the 3 main mount bolts.

# MdD-Drive System/ MdD-Drive (alone)

## 2.5 Setup for MDd-Drive (alone)

### 2.6 Hole Pattern for placement on transom



#### 2.6 MDd-Drive Placement

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### 2.7 Stuffing tube

#### 2.7 Consult Manufacturer

Consult the manufacturer of the stuffing tube/cable system you are using for the best mounting setup. The hull manufacturer may also have suggestions. If you are stuck we may be able to help with specific questions. (see contact info 4.0)

# M&D-Drive System/ M&D-Drive (alone)

## 4.0 Legalese

### 4.0 Product Disclaimer

#### Product Disclaimer:

#### LIMITED WARRANTY

M&D designs Racing LLC (M&D) provides a Limited Warranty to the original purchaser of M&D products against manufacture defects from the date of original purchase for a period of twelve (12) months. M&D will repair or replace, at M&D's discretion, the defective product provided that the product is still under warranty and the defective product is returned to M&D designs Racing LLC, postage prepaid, at the following address:

M&D designs Racing LLC  
3120 Jessup Road  
Cincinnati, Ohio 45239 U.S.A.

The following information must be provided with the returned product:

- Name, address, and daytime phone number of the original purchaser.
- A photo copy of the original invoice from M&D designs Racing LLC showing the original purchase date
- Detailed problem description.

The purchaser will pay shipping charges for the defective product unless other conditions are agreed upon by both parties. M&D will pay any other shipping charges for the return of the repaired product or a replacement product. This limited warranty is void if any product has been repaired or altered in any way, by any party other than M&D designs Racing LLC, as to affect its use and operation, as determined by M&D. This limited warranty is also void if the product has been determined by M&D to be subject to abuse, misuse, and/or an accident.

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