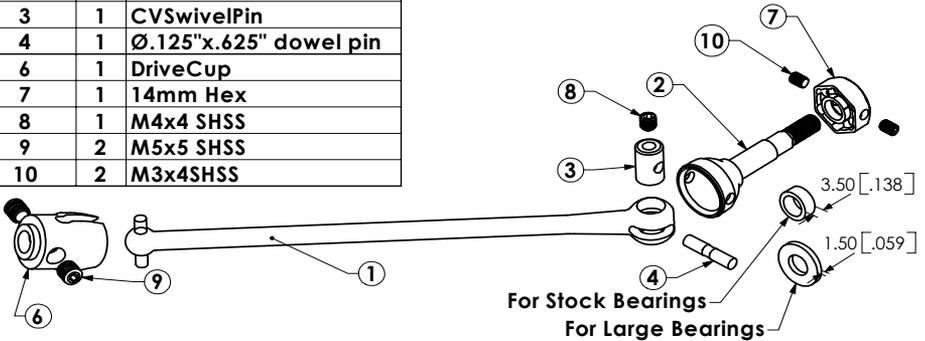


# SuperMaxx Constant Velocity Drive Shaft (C.V.D.S.) Assembly Instructions

Standard Suspension (Steel)

EXT & WideTrac™ Suspension (Steel)

ITEM NO.	QTY.	DESCRIPTION
1	1	CV Shaft
2	1	CV Axel
3	1	CVSwivelPin
4	1	Ø.125"x.625" dowel pin
6	1	DriveCup
7	1	14mm Hex
8	1	M4x4 SHSS
9	2	M5x5 SHSS
10	2	M3x4SHSS



Warranty:

Lifetime for manufacturing defects.

Severe abuse policy: 30% off replacement. So if the replacement part is \$10 you pay \$7

Parts MUST be returned to Unlimited, Inc to be eligible for warranty or severe abuse replacement.

Warranty or severe abuse should be sent directly to Unlimited. Sending through point of purchase will only delay the process.

We make every effort for perfection, but there are always some machining marks in any CNC product. If something is unacceptable to you we will happily replace the part(s). You must return the part(s) new and unused to Unlimited, Inc before replacement is shipped.

I would appreciate it if you give me the opportunity to correct any problems before broadcasting them to the world. I am a small company and negative publicity can do a lot of harm. I will do all that is possible to make you happy. E-mail me at [MonsterMaxx@att.net](mailto:MonsterMaxx@att.net)

Take your time and be patient the rewards will be well worth it.

Check your adjustments frequently, until you are confident they are not changing on you.

Feel free to post questions on the SuperMaxx forum on [www.MaxxTraxx.com](http://www.MaxxTraxx.com). Not only do I frequent it, but there are a number of veterans who can help as well.

Key:

SHCS = Socket Head Cap Screw

PHMS = Pan/Phillips Head Machine Screw

BHCS = Button Head Cap Screw

SHSS = Socket Head Set Screw

Application calls for 262 Red Locktite.

OK, now it's time to get the wrenches and GO!

- Use Red Loctite (262) on the set screws to keep them from loosening over time. This is a MUST. Do not assemble without Loctite. They will come loose.
- Initial CVs are pre-assembled. We have made every effort to ensure these stay in their location. However we have found it impossible to guarantee that these will not come loose in use. It is your responsibility to maintain these and monitor pin retention. This should be considered standard maintenance for any CV design.
- Bearing Separator goes between the bearings. Must be installed. Failure to do so may pre-load the bearings and cause rapid wear. Standard & WT: 3.5mm EXT: 1.5mm. Use one or the other, not both.
- If your suspension has already been assembled the easiest way to get the CV assembly in is to unscrew the top pillowball. This will give you plenty of room to slip the assembly in.
- The following adjustment is critical and MUST be done. It's best to do with shocks off as this will allow maximum travel.
- Install pillowballs with blue Loctite such that the first thread is even with the outside edge of the arm. This does not necessarily mean the first thread is hidden, as countersink depth can vary. This means look at the arm from the front and screw the PB in until the first thread just disappears. This will be a good starting place for  $-1^\circ$  camber.
- Now fully compress the suspension (don't force it). The CV shaft should not bind in the drive cup. You should still be able to feel a little end play. Rotate the shaft fully (and turn the wheel on the front end) making sure it's not bound anywhere.
- Now fully extend the suspension. Try to gently pry the CV shaft out of the drive cup. It should not come out.

If either of the above are violated adjust the pillowballs.

- There's ~2mm range (with the pillowballs) where this will work. Exceed that and you will violate one of the above. Once you achieve a good balance, reassemble. When adjusting Camber, screw one pillowball in and one out in even amounts so you don't throw off the depth much.
- Check your pillowballs and jam nuts frequently to ensure they have not come loose. This is very important, if the pillowballs loosen you will lose the above adjustment and will damage the CVDS.
- The set screws in the 14mm hex are only there to help the hex stay on the axle when you are removing the wheel. The first few times you remove the wheel these will not hold the hex. Tap the hex from the wheel. After a few times they will come out easily, then add the set screws and in the future they will stay on the axle.
- DO NOT ALLOW THE SHAFT TO BIND OR POP OUT! If you do so it will destroy your shafts.
- Watch for marking (shiny spot) on the shaft as this is a good indicator that you have something misadjusted.
- **Lubrication: Do NOT use 'wet' type lubricants (grease, petroleum or water based). These will hold grit in suspension and will quickly wear your CVs. Use only 'dry' type lubricants (graphite, PTFE, moly based.) Clean after use with a pressure type solvent. I've found the best lubricants to be the dry film lubes. I use Pedro's Extra Dry, but there are several others that are similar. These have high shear strength, good lubricity, good bonding, and are not sticky (which**

attracts dirt and grit.) NEVER use grease, it will only attract sand/grit and quickly destroy the moving parts. You can find these lubes at your local bicycle shop. Do not use the Wax types, they do not have a high enough shear strength.

- We have been experimenting with various types of sealed environment systems for the CV joint in order to extend it's life. This is a moving part, there is friction, we are running in a heavily contaminated environment – wear should be expected. It can be minimized with various techniques. While we cannot condone duplication of our experiments we will share them with you. For more information go to:

[www.UnlimitedEngineering.com/Instructions/CV/Bootie.shtml](http://www.UnlimitedEngineering.com/Instructions/CV/Bootie.shtml)

Thank you for choosing Unlimited Inc and congratulations on purchasing the most robust, finely engineered and highest performing upgrades available for your Maxx.

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