

Separating a Discbine Cutterbar Where the Drive Shaft is Seized to Both Modules

On most occasions separating the cutterbar is just a matter of removing the tie bolts and sliding the bar apart. It is common for one end of the drive shaft to remain stuck in the pinion of one of the modules. In those cases it is not necessary to remove the drive shaft unless the drive shaft or the pinion is being replaced. On rare occasions it can be difficult to separate the cutterbar because both ends of the drive shaft are stuck in both pinions. Prying between the module and the spacer will free the drive shaft the majority of times. When prying the parts apart does not work, then you may be faced with sacrificing the spacer and the drive shaft in order to separate the cutterbar.



The module shown above would not separate from the cutterbar. In this case I was able to wedge a small screw driver between the module and spacer. I wedge the screwdriver as far back on the module as possible. I then take a heavy punch and hit the module in the front corner where the module is reinforced. In this case I was able to separate the module from the cutterbar using this method.



You can use bolts to try and push the modules apart. I was not successful in pushing the modules apart. Not shown in the photos is my next attempt at separating the modules. I cut the spacer in half and then pushed against the ears of the now separated spacer halves. Again I was not successful.



Driveshaft

Where I previously cut the spacer

Since it was clear the drive shaft was not going to slide out of the pinions using this method, I cut the drive shaft to separate the two modules. I cut a small window above the drive shaft and cut the drive shaft.



The two modules with the drive shaft cut and the spacer removed

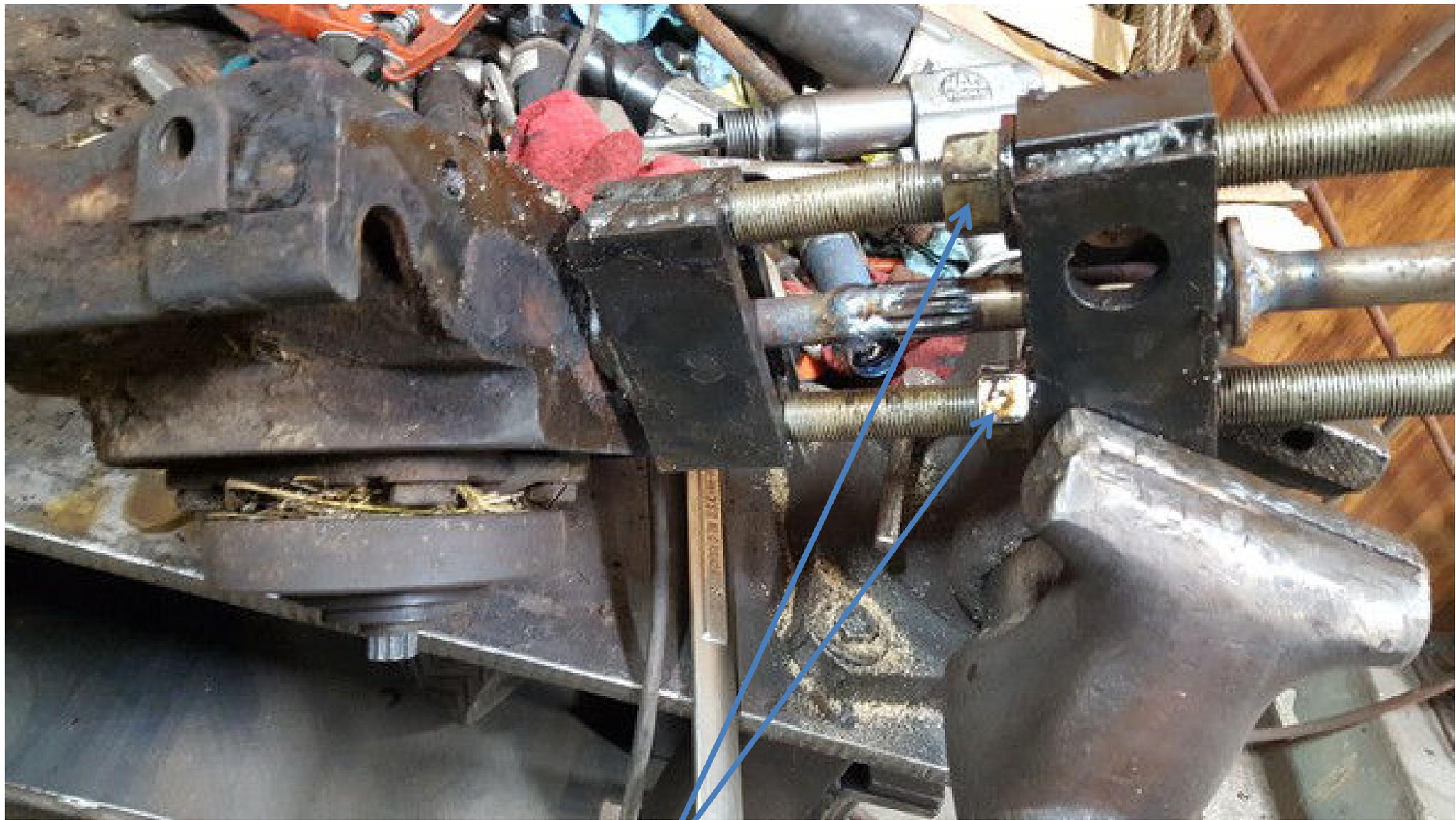


While the spacer is removed, the drive shafts remain stuck in the pinions. To remove a stuck drive shaft, I made this tool to pull the shafts from the pinion. One end slides over the drive shaft and the hardened washer welded on the end of the plates rests against the end of the pinion. The hardened washer is the one used in bolting the modules together.



Washer welded to shaft for tool to push against.

Normally the drive shaft is one piece and will extend through the other end of the tool. In this case since the drive shaft was cut, the shaft did not extend through the tool. I had an old drive shaft handy, so I welded the two shafts together. You could also use a piece of $\frac{3}{4}$ " shaft. In both cases I weld a washer to the shaft for the tool to push against.



Nuts used to push the shaft out of the pinion

Tighten the two nuts to push the shaft out of the pinion. Using an air hammer to shake the shaft will help break the shaft free from the pinion.



The shaft after being pushed out of the pinion.