

H2 1000 STEERING RACK FULL UPGRADE

First you will need to slide the front diff forward to access the bolts on the steering rack.

If a winch is installed, you will need to remove it.

There are 4 bolts that hold the diff to the frame.

You do not need to remove arms, axles or any of the suspension.

The steering rack has 3 bolts that hold it to the frame.

The steering shaft is attached to the rack with a splined collar and a retaining bolt. Remove it as well.

Once the rack is out of the machine you can disassemble the tierods

Before disassembly take note how free the rack cycles

use a small set of vise grips and cycle the rack



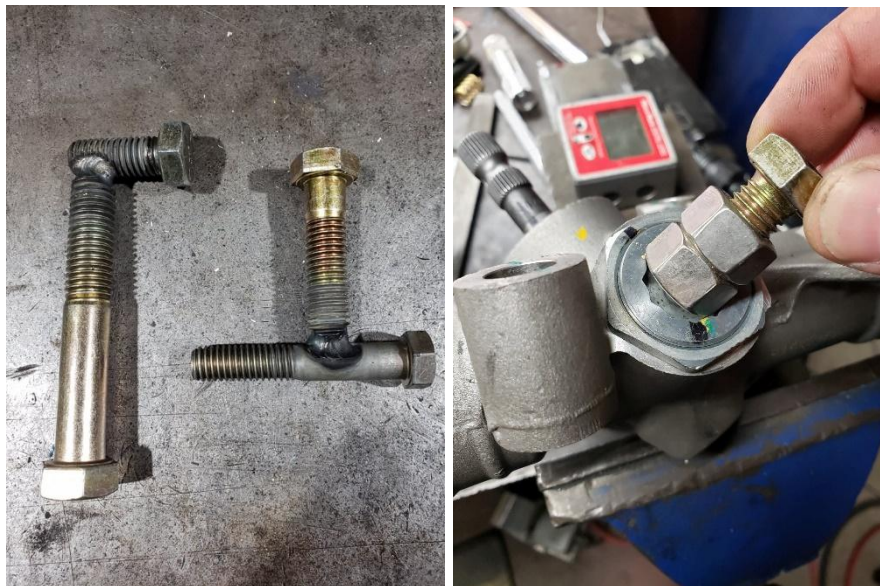
Once the rack is out of the machine you can disassemble the jam nut and cap



Use the provided 19mm Allen wrench

You can also use a $\frac{1}{2}$ " bolt. The head of the bolt is $\frac{3}{4}$.

Double nut and a wrench works as well



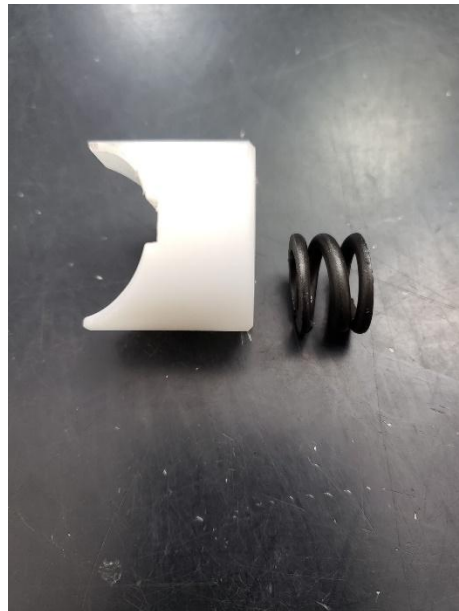
It is easier to loosen the jam nut first and unscrew the assembly.

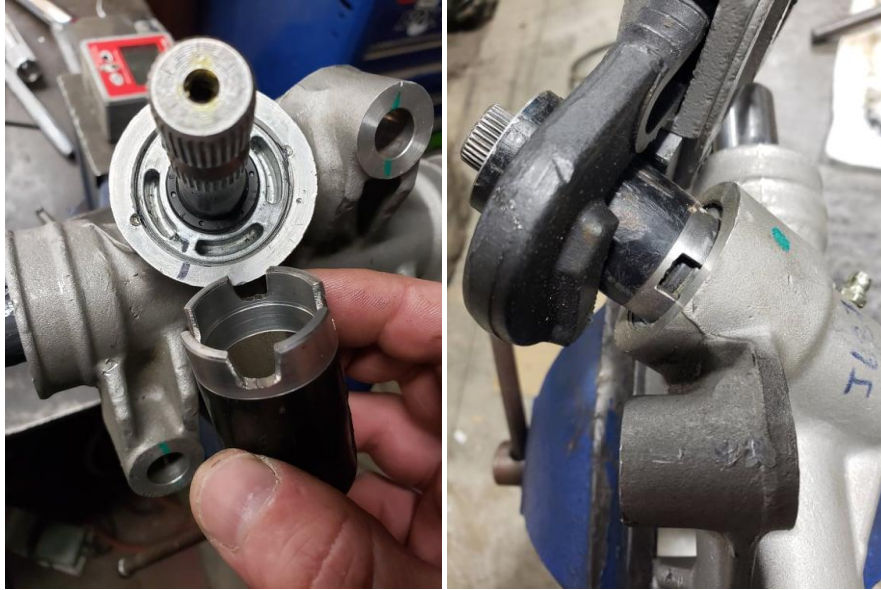
The jam nut is $1\frac{1}{2}$ "

The assembly has a lot of blue Loctite.
Remove the blue Loctite for re assembly.



Remove the factory spring and bushing from the rack





Unscrew the pinion assembly with the 4 prong tool provided.

Pipe wrench with the tool works well.



Change the pinion seal with the one provided

Remove the pinion assembly from the rack housing, it is not a press fit

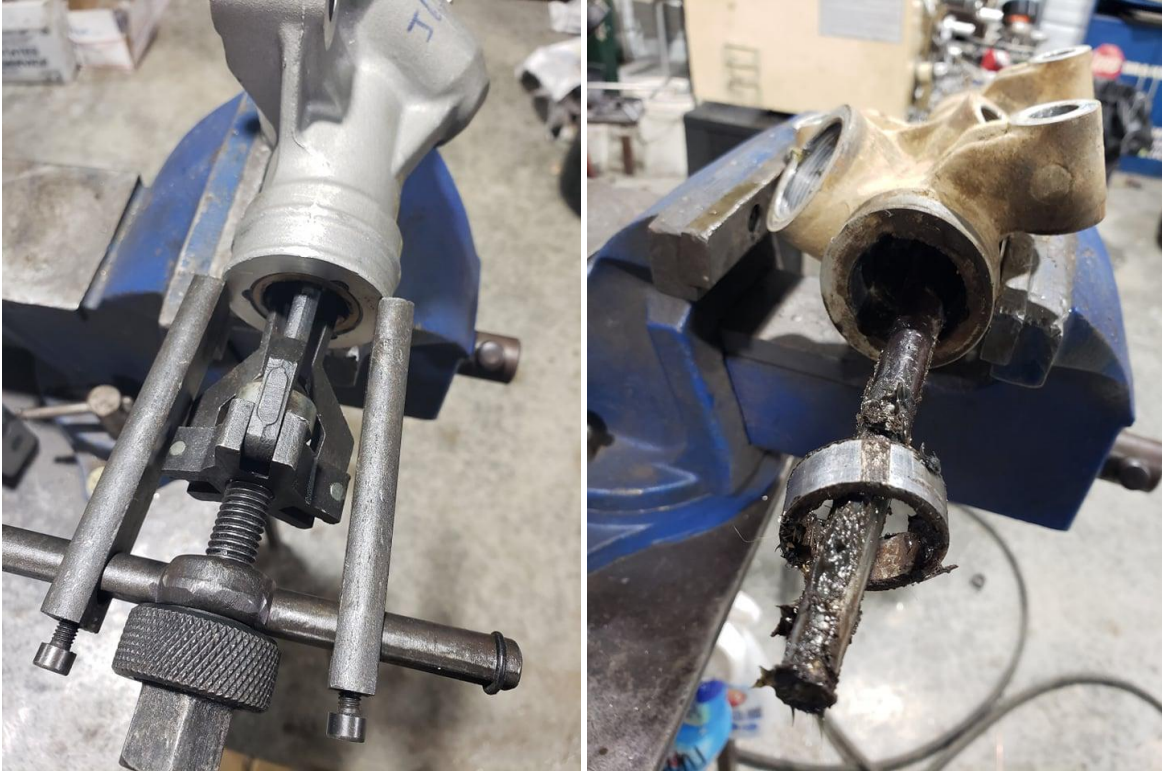


Remove the c clip and press off the OEM bearing

Press on the new sealed bearing provided

DO NOT USE A HAMMER TO INSTALL THE NEW BEARING, DAMAGE CAN OCCUR

Re install c clip



Using a 3 jaw puller or a long punch remove the two end bushings from the rack housing



A PRESS IS RECOMMENDED TO install the new bushings. Bushings are labeled driver and passenger
If you do not have a press available, take care not to damage the rack housing or new bushing when installing. Use a block of wood with a hammer to install

Remove the rack shaft from the housing and clean any dirty grease or debris.

With the housing empty clean any dirty grease or debris



Install the grease fitting in this general location with the provided drill and tap.

Placement of fitting is not overly critical

CLEAN ANY DRILL OR TAP SHAVINGS FROM THE HOUSING COMPLETELY

With the end bushings and grease fitting installed,

Re install the rack shaft

Take note the shorter fully round end of the rack shaft goes to the driver side.

With the rack shaft installed re install the pinion assembly

Lightly grease the nose of the pinion OR grease the roller bearing inside the rack housing

Install the pinion retainer with the new seal installed

Grease seal and pinion shaft area

Apply grease to the rack shaft thru the hole where the bushing goes

Install the new bushing.



Install the cap and jam nut.

When adjusting the cap take note how the rack felt before disassembly.

You want some drag to keep the rack tight and right.

Not too tight where its hard to cycle the steering rack.

not so loose where the shaft flops around.

Once the desired tension is achieved tighten the jam nut.

Using the grease fitting installed pump the rack full of grease until it comes out each end.

LITERALLY PUMP IT FULL!

Cycle the rack to get full coverage on the rack shaft

Wipe up any excess

Reinstall the rack into the machine.



When re installing the front diff to the driveshaft there is an access panel on the passenger side footwell.

Remove the panel to access the driveshaft. This will aide in aligning the splines to the front diff.

Alignment procedure

The power steering assembly does not care where it is in rotation, meaning you can spin the steering wheel infinity and it will not hurt anything.

When installing the rack shaft to the steering rack you can get it close to straight on the wheel.

Do not worry if it is not perfect, that can be corrected.

With the steering rack bolted into place measure the stick out of the rack shaft to the end of the body will be $2 \frac{1}{16}$ " on either side.



That will perfectly center the steering rack and you will work your way out from there.

If the steering wheel is crooked pull the cover, remove the nut on the steering wheel and realign the wheel.

If the tires are not straight adjust the tierods.
We recommend 1/8" toe in at settled ride height