

Rebuild an 88 steering rack with me

Topic started by: **smartaxel**, Date: **07-05-2005 09:07 PM**

Original thread: <http://www.fiero.nl/forum/Archive-000001/HTML/20060811-2-064744.html>

smartaxel (jamesdnye@gmail.com)

MSG #1, 07-05-2005 09:07 PM

I'm completely rebuilding an 88 suspension/car. If there is anything you want pics of, let me know. For now, I don't think I have seen any pics/rebuilds of an 88 rack, so here you are. It's rediculously easy to replace the rack bushing using Rodney's replacement bushing. My old plastic one was still somewhat tight, but rodney's one just makes a BIG difference.

Remove rack from car and clean up with a little Marine Clean. Wives love it when you use the kitchen sink!!



Pay CLOSE attention to the area where the mounts/rubber were. Seems salt gets in there and corrodes the entire rack. I wire brushed all the gunk off and used heavy POR-15 to take up the extra space the corrosion once took up.



Paint the rack with a LOT of POR-15 , especially in the corroded areas.



Now, order Rodney's bushing

[This message has been edited by smartaxel (edited 07-05-2005).]

smartaxel (jamesdnye@gmail.com)

MSG #2, 07-05-2005 09:16 PM

OK, You have Rodney's bushing?

Remove the old plastic bushing following Rodney's instructions (EASY).



Now slide the new bushing in place, smaller side in.





I choose to use set screws, and drilled and tapped the holes using a 1/4-20 NC Tap and #7 drill bit.



Then I locktited and installed the set screws.



Done.. A LOT easier then I expected, and there is NO PLAY in my rack at all now.

jetman (dangerkitty@wideopenwest.com)

MSG #3, 07-05-2005 10:10 PM

Outstanding job, nice photos too.

I thought that only single guys could use the kitchen sink as a parts cleaner! 😊

I'll see you when I need my rack rebuilt! 🇺🇸

You did great!

Tm

fierohoho (fierohoho@gmail.com)

MSG #4, 07-05-2005 10:51 PM

Good thread and excellent pics, however, I do have a couple questions/requests.

Do you have pics of how the old bushing was held in, I realize Rodney's kit has the instructions but I don't have one and would like to know what's involved.

You drilled and tapped a hole to hold Rodney's bushing in with a set screw, is there another way for the bushing to be held in.

I've yet to pull a rack apart so I'm ignorant to this stuff, thanks.

Steve

MstangsBware (stephen_p38@yahoo.com)

MSG #5, 07-05-2005 10:55 PM

I am fixing to do this so I am glad this Thread got started.

JamesCurtis (jamie.curtis@outlook.com)

MSG #6, 07-06-2005 12:43 AM

awesome thread, definitely a + for you. I've been looking to do this for a while now

smartaxel (jamesdnye@gmail.com)

MSG #7, 07-06-2005 08:08 AM

Jetman,

Thanks again for the seat cleaning stuff.(I dont think you saw my "thanks" thread). I have yet to finish them, but they came out NICE. If you ever need help with anything, let me know!

smartaxel (jamesdnye@gmail.com)

MSG #8, 07-06-2005 08:23 AM

Steve,

If you look above at the plastic bushing pic above, you can see a clip facing you. That is what held it in place. There are three total. They just clip into a lip inside the rack. you take a screw driver and pop them off. Takes all of 20 seconds!

I chose to drill/tap cause i thought it would be nice and flush. Rodney includes 2 self tapping screws and also 2 stainless rivets which are all you need. His instructions mention that some people have chosen the option of drilling/tapping. The drill and tap set was only \$4.00 at the hardware store, so I chose that one, but it is far from necessary. Was my first time drilling/tapping. That also was pretty EZ.

quote

Originally posted by fierohoho:

...
Do you have pics of how the old bushing was held in, I realize Rodney's kit has the instructions but I don't have one and would like to know what's involved..... is there another way for the bushing to be held in.I've yet to pull a rack apart so I'm ignorant to this stuff, thanks.

Steve

[This message has been edited by smartaxel (edited 07-06-2005).]

Dodgerunner (dodgerunner@yahoo.com)

MSG #9, 07-06-2005 12:39 PM

Now I would coat the set screws with some rust proofing. Probably will never have to remove them, but who knows.....

Set those black screws like to rust really fast.

sspeedstreet (sspeedstreet@verizon.net)

MSG #10, 07-06-2005 04:36 PM

quote

Originally posted by smartaxel:

Then I locktited and installed the set screws.

I love spellcheck. Whenever I find a geat how-to write-up like this I save it to my "Fiero" file. "locktited" became "lactated"

smartaxel (jamesdnye@gmail.com)

MSG #11, 07-06-2005 05:22 PM

quote

[B]Originally posted by sspeedstreet:[/B]

I love spellcheck. Whenever I find a geat how-to write-up like this I save it to my "Fiero" file. "locktited" became "lactated"

I NEVER lactated on my set screws.. Say what you want, produce any pics you want. It wan't me lactating. LOL.

TG oreiF 8891 (tdirham@yahoo.com)

MSG #12, 09-06-2005 11:35 PM

Bump to add to favorites.

Reviving this because I think I need to replace the bushing as well. My steering rack moves up and down at the nylon bushing, so I assume I need the brass replacement. How exactly do you remove the tie-rods to get the bushing in place? I have heard a "puller" is easier than using the pickle fork? I don't really know how to use the fork I bought anyway, but where do I get a tie-rod puller for this car, Harbour freight?

[This message has been edited by TG oreiF 8891 (edited 09-06-2005).]

smartaxel (jamesdnye@gmail.com)

MSG #13, 09-07-2005 08:05 AM

I used a puller that came in a kit at a local Murrays. They have a tool "borrowing" section. I got it there. I have a pic of it at home, and can add it to this, if reminded. I believe you can buy the tool itself relatively cheap, but I didnt know what size to get, so I went with the kit.

Basically, it slides over the control arm/tie rod connection, then it it wrenched on till the tie rod comes off. I'll get a pic later tonight.

TG oreiF 8891 (tdirham@yahoo.com)

MSG #14, 09-07-2005 08:14 AM

I think I get the idea, but if you could find a picture that would be awesome. Thanks for the great write-up, + for you.

Raydar (raydarfiero@comcast.net)

MSG #15, 09-07-2005 10:47 AM

quote

Originally posted by TG oreiF 8891:

How exactly do you remove the tie-rods to get the bushing in place? I have heard a "puller" is easier than using the pickle fork? I don't really know how to use the fork I bought anyway, but where do I get a tie-rod puller for this car, Harbour freight?

FWIW, the exact name of the tool I use is a "pitman arm puller".
It works so well that I've owned a pickle fork for 20 years and have never used it.

smartaxel (jamesdnye@gmail.com)

MSG #16, 09-07-2005 06:05 PM

I think Raydar is on the money. I use Rodney's Balljoint tool to remove the control arms, and this thing to remove the tie-rods. Looks like it IS a pitman arm puller. I think there are two sizes, at least there seemed to be when I got this

one. I used the smaller one.



This is it in position. I just set one of Rodney's Tie Rod ends there to show how it works, but you get the point!



[This message has been edited by smartaxel (edited 09-07-2005).]

TG oreiF 8891 (tdirham@yahoo.com)

MSG #17, 09-09-2005 08:06 PM

Awesome, thanks for the pictures, I'll have to go buy one. I saw one at Harbour Freight for \$3.99.

jchad (joechoes@msn.com)

MSG #18, 09-09-2005 09:21 PM

Hope you have an easier time putting your rack back in then I did! I couldn't get the dd rod to go back into the intermediate shaft! I had to take the rack out again, remove the steering column, pound the intermediate shaft onto the rack, and then wedge the rack back up into place. which required removing the spare tire tray, and the two rubber hoses from the radiator, and a lot of grunts and groans. It was nearly impossible to pull the rubber cover over the intermediate shaft. Then i put the other half of the intermediate shaft onto the part connectet to the rack from inside the car. I do not recommend doing it this way, you can probably pound half of the intermediate shaft onto the rack with the help of a friend if you bolt the rack back in place first. Anyways good luck!

smartaxel (jamesdnye@gmail.com)

MSG #19, 09-09-2005 09:57 PM

Yeah, the intermediate shaft was kinda a pain.

On mine, it seemed there was a slight edge on it. Darn thing wouldn't go back on. I used a little sand paper to clean it up, and remove the rough edging. then greased it liberally. I also removed the bucket for better clearance. What I did was get it onto the steering wheel shaft, then get it slightly onto the rack, then screwed the rack in place. in my case, the screwing in the rack pressed the rack into the intermediate shaft. Everything seems good.

2000RagTop (mwwhite@earthlink.net)

MSG #20, 10-15-2005 09:56 PM

up

BrewCheese (hyhy4u@hotmail.com)

MSG #21, 10-16-2005 12:48 AM

Awesome write up and Thanks for posting! This is one of the projects I have on my winter list and its nice to see everything step by step before you have to do it. Just out of curiosity did you have any problems removing the bolts that hold the rack to the crossmember. Ive using penetrating oil on them every couple days but still worried about breaking them off.

Thanks,
Jason

smartaxel (jamesdnye@gmail.com)

MSG #22, 10-16-2005 07:59 PM

Three came out clean, one bolt broke. It was a pain. I drilled it, then tried to use a bolt extractor bit to remove it. The bolt extractor bit broke off in the hole, causing more grief, cause those are a pain to drill.. After more drilling, and more grief, I got the old bolt chunks out, and tapped the hole again, and replace the bolt. Think that took longer then removing the rack!

It was a pain in the tail/

theogre

MSG #23, 10-16-2005 09:52 PM

Good pictures.

A general comment...

Always use the pitman arm puller for the rod ends and a tool like Rodney's for the control arms unless you are replacing the rod end or joints. The fork separators will almost always trash the boots and can even trash the joint itself. Pounding the fork into a rod end can damage the rack.

You can get the pitman tool in the loaner pool at autozone and some others.

ig88vsbobafett (ig88vsbobafett@mail.com)

MSG #24, 11-21-2005 03:16 PM

I just wanted to Bump this for Ppl who didnt see it the first time (I am doing this as we speak)

ig88vsbobafett (ig88vsbobafett@mail.com)

MSG #25, 11-23-2005 05:28 PM

One thing guys do you grease the steering rack after you chang the bushing ?

USFiero

MSG #26, 02-28-2006 09:19 AM

bump to mark it

2000RagTop (mwwhite@earthlink.net)

MSG #27, 02-28-2006 11:26 AM

quote

Originally posted by ig88vsbobafett:

One thing guys do you greese the steering rack after you chang the bushing ?

Good question! Should the rack get greased while or after changing the bushing?

Phoenix (paul@phoenixhobbies.com)

MSG #28, 02-28-2006 01:01 PM

Has anyone replaced the pinion bearing on the rack? When I removed the nut holding the pinion to the bearing the pinion shaft dropped out of ther rack. What I need to know is the indexing of the pinion shaft to the rack. Also, I have had 2 racks completely destroy this bearing - anyone else experiance this failure?

Thanks

2000RagTop (mwwhite@earthlink.net)

MSG #29, 03-02-2006 01:25 PM

quote

Originally posted by ig88vsbobafett:

One thing guys do you greese the steering rack after you chang the bushing ?

Good question! Should the rack get greased while or after changing the bushing?

smartaxel (jamesdnye@gmail.com)

MSG #30, 03-02-2006 08:57 PM

Whoa.. Saved from the archives, eh? 😊

I don't know if it should be greased or not. Personally, I did. I used some good grease on the new bushing-side. I figure it can't hurt.