Heavy Duty Ball Joint Upgrade!

Posted by Billabong - 06 Nov 2012 05:13

Made it to the shops today and found "my" solution to the diamond and steel dust getting into the ball joints.

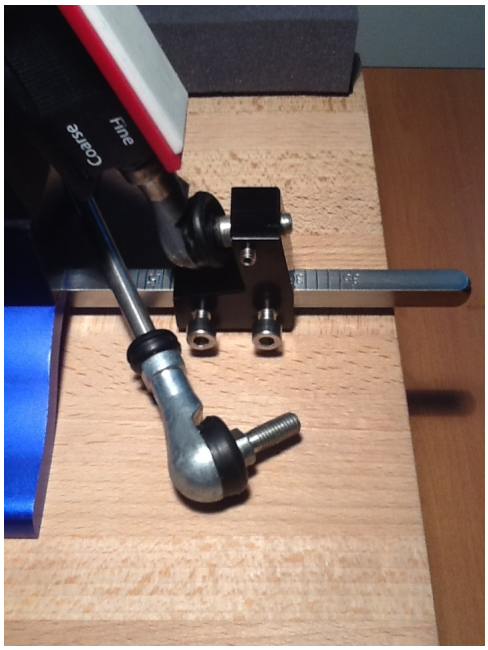
I have replaced the original (exposed) ball joints with fully enclosed versions.

It is a cup and ball principle rather than a ball and race.

In the original the race is made of nylon and I figure it may wear if dust gets into it.

We have all been searching for boots or similar to cover them without much luck.

So why not replace the joints with ones that are designed to be dust proof already?



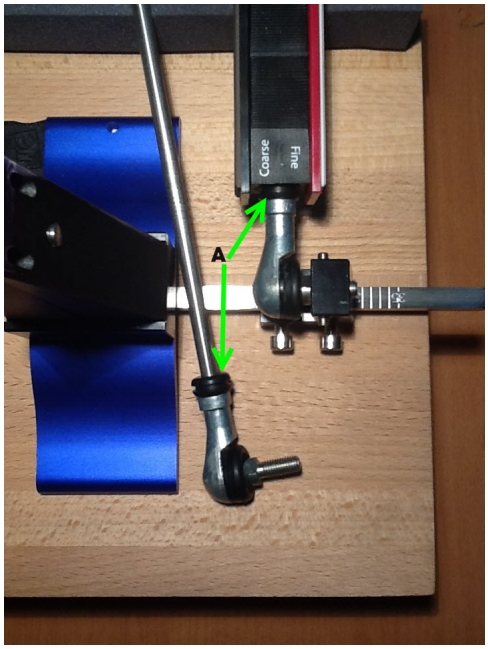
Pic 1!

Also in addition, the arrows "A" (below) show a rubber grommet I put on the arms.

I removed the original lock nut.

Figured I don't need the nut as loctite will keep the arms tight in the thread.

This will absorb some of the horrible bang you get when you bottom out the paddle.



As for the ball joints, I am very happy with the result and cheap enough.

They are called "heavy duty", sealed and lubricated.

Very smooth, not at all tight like the originals.

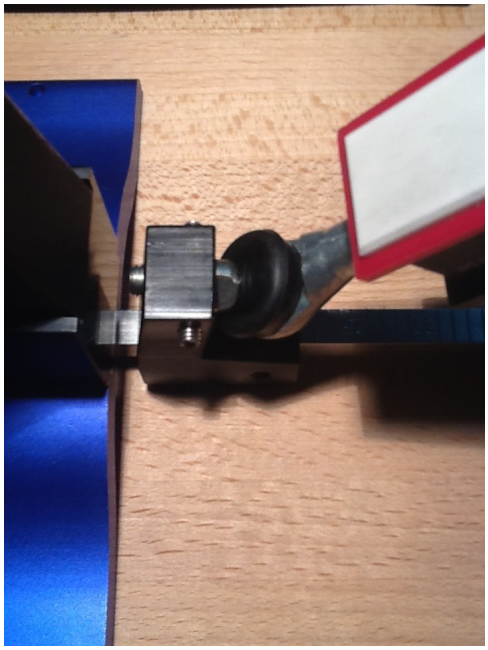
There is no allen key hole in the end of the stud for adjustment.

But I can use a spanner on the other side if I want.

I'm not using the micro-adjust anyway.

Another pic shows how well the seal protects the joint.

Put it on wrong way around to get a clear view.



That's It!

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Re: Heavy Duty Ball Joint Upgrade!

Posted by Billabong - 07 Nov 2012 01:06

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Another thing I notice, the amount of resistance to rotate the stud is a "lot" less.

So if I was to use the micro-adjust with the HD ball joint it is a much better experience.

Now, to get mine broached.

edit- Might put those 8/32 thumb screws to good use put them it the end of the stud.

Super strength loctite.

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Re: Heavy Duty Ball Joint Upgrade!
Posted by DAUG - 07 Nov 2012 14:01

Chris,

That's a great looking setup,and very clever execution, and I want to try it out myself. I take it to make it work I will still need a PPII setup, right? Then I can get the rods, pivot arms, and the new angle notch rods as part of the kit, right? So the heavy duty rods, rubber boot covers, grommets would just be the add-ons..... I like it!

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Re: Heavy Duty Ball Joint Upgrade!
Posted by mark76 - 07 Nov 2012 14:45

Chris,

This looks great. Unfortunately English is not my first language and I didn't spend long enough Downunder. Even with the pics I cannot make out exactly what I see.

Is a ball joint rod end simply a piece of rubber to protect the ball joint? Or does it have other, more common, applications? And what is a grummet? Even my dictionary doesn't know the word...

And how did you find the exact sizes? They look as if they fit very well.

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Re: Heavy Duty Ball Joint Upgrade!
Posted by xuzme720 - 07 Nov 2012 21:20

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mark76 wrote:

Chris,

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Is a ball joint rod end simply a piece of rubber to protect the ball joint? Or does it have other, more common, applications? And what is a grummet? Even my dictionary doesn't know the word...

And how did you find the exact sizes? They look as if they fit very well.

The ball joint rod end is a full assembly replacing the stock ball joint on the upgraded system.

A grommet ("o" not "u") is commonly used to protect wires/cables through a thin substrate, such as wires through a firewall of your car. They actually have many uses beyond that but that is one of the more common.

Hope this helps.

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Re: Heavy Duty Ball Joint Upgrade!

Posted by Billabong - 07 Nov 2012 21:36

DAUG wrote:

I take it to make it work I will still need a PPII setup, right?

You would need to already have a PPII or the ball joint arms upgrade kit.

All I have done is replace one part with another identical but heavier duty part, the ball joint.

Not that it needs to be "heavy duty", but it encloses the ball bearing totally, thus keeping out any abrasive dust.

It is also a much smoother experience. (it comes with the rubber cover)

The "grommet" is simply something else I bought to slide over ther arms to absorb any shock from bottoming out the paddles (stones)

A grommet is not designed for the purpose here.

It is meant to shield electrical cable from cuts while going through a firewall etc.

Commonly used in vehicle wiring.

Upgrade saying the original is not up to the task or will have issues, basically I have upgraded the [illegible] I have explained all above. [illegible] used.didn't spend long enough

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Re: Heavy Duty Ball Joint Upgrade!
Posted by mark76 - 08 Nov 2012 01:13

Thanx Chris and Xuzme. Now it makes sense to me. So you replaced the complete ball joints and did not put just a piece of rubber around them?

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Re: Heavy Duty Ball Joint Upgrade!
Posted by Billabong - 08 Nov 2012 02:13

I did both, yes.

Seperately.

My wife doesn't understand me either.

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Re: Heavy Duty Ball Joint Upgrade!
Posted by DAUG - 09 Nov 2012 17:38

Chris,

Thanks for the clarification and really appreciate the work up on the upgrade. That would be a real fun DIY project once I've purchased the PPII upgrade kit.

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Re: Heavy Duty Ball Joint Upgrade!
Posted by Billabong - 10 Nov 2012 13:29

I'm also finding with the HD ball joints arm rotation is reduced significantly.

The rubber seal seems to hold the joint true.

A much better experience when adjusting the micro-angle screw.

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Re: Heavy Duty Ball Joint Upgrade!

Posted by Billabong - 25 Nov 2012 02:26

I have someone interested in these ball joints also, are they as easy to find in other countries as they are here in Australia?

Perhaps someone that can arrange a purchase and post option for a member here?

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