Today I replaced my torn CV boot at home. Isuzu will tell you the CV's are NOT a serviceable part and that the entire shaft needs to be replaced at a cost of \$850 per side. Since I had everything apart I changed both the inner and outer boot. Parts cost me \$33 for both the inner and outer boot (x2 if doing both sides) and another \$2.99 for a can of break cleaned. \$36 vs. \$850! All you need is a willingness to get dirty and greasy and about 2 hours of your time. Here is the culprit...The torn boot



Very few tools are needed to do the job: 1 jack, jack stands, a deep 17mm socket, ratchet (a long one helps for leverage needed), snap ring pliers, a screw driver, rags and a can of brake cleaner. A band tool is helpful also...I didn't use one and it was a pain but I got it done.



Jack up the front of the VX and place it on jack stands. Remove wheel/tire.



Place jack under lower control arm and lift to relieve pressure on the lower ball joint.



Remove the 4 17mm bolts on the bottom of the lower control arm that hold the ball joint bracket.

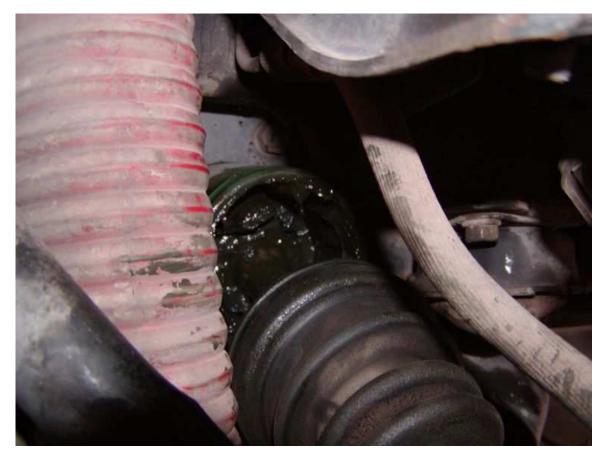


(yes, that is duct tape as a VERY temporary fix till I got a chance to do the boot change) Next reposition the ball joint bracket to the top of the lower control arm.

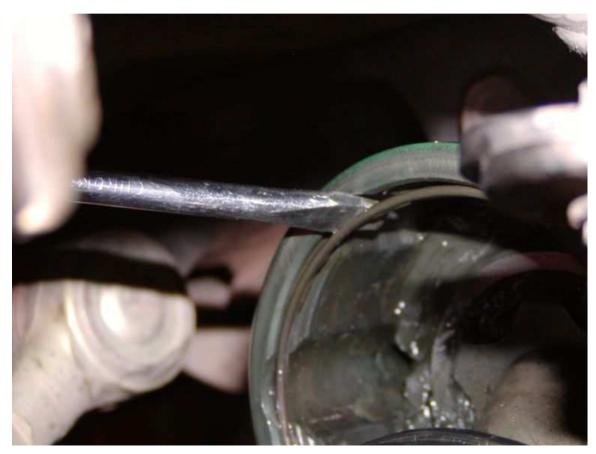


Remove the bands from the INNER CV BOOT. Move boot off of CV Joint.





Clean as much grease out as you can. Rags and brake cleaner work great. Next locate the wire ring just inside the inner lip and slide a screw driver under it. Pop the ring out. This is the retainer ring that holds your CV joint and axle shaft in!



This is the ring once removed.



Next you pull the CV joint out by pulling the brake assembly outward. This is the result.



Be prepared for the balls to fall out. This is what the CV joint will look like...yeah its greasy!



Use the brake cleaner and rags to clean it up. Use a screw driver to remove the 6 balls.



There is a snap ring on the end of the shaft.



Remove the ring with snap ring pliers. The snap ring once removed.



Next remove the inner part of the CV joint from the splined shaft. I needed to use a small gear puller on mine since it was pretty tight. Once removed, notice the recessed inner part on one end. That side goes on first when reinstalling it or it will not fit on all the way. You can see it here...



Now the outer crown will also come off. Notice which way it comes off for reinstalling later. Here are all the CV joint parts removed...



Remove the inner boot by removing the small band and sliding the boot off the shaft.

Now remove the large and small band from the outer boot. Then slide the outer boot off the shaft. Clean the outer CV joint using the brake cleaner and rags. You can also use high pressure air to blow out the CV joint. The thing is you need to get out any dirt that may have gotten into the CV joint through the tear in the boot.



Now you are ready to start putting it back together.

Fill the outer CV joint with grease supplied in the boot kit. Get it as deep into the joint as possible. Then apply the new outer boot per the instructions in the boot kit (the kit contains the boot, boot straps and grease). Slide the outer (large end) on and apply the strap. The strap tool really would have helped here but I managed by using a screw driver, pliers and

cutters. You then "burp" any extra air out of the boot by sliding a screw driver under the small end and squeezing the boot. Remove the screw driver and allow the boot to go back into shape. Apply the small end strap. The straps line up on the grooves on the large end and on the groove on the shaft on the small end.



Next slide the new inner boot on (small end first).



Next put the outer CV joint back together the opposite of taking it apart. Outer cage, center piece onto splined shaft, snap ring, and then the balls. Apply grease to the parts and balls. This will help keep it all together.

Now carefully manipulate it back into the space it came out of. You will have to move the assembly around until it all lines up and then it will just drop right into place.



Fill with remainder of grease. Now slide the large end of the boot into place and secure it with the supplied strap. Burp the air and slide the small end into place on the shaft. Apply the small strap.



Now reposition the ball joint bracket back under the lower control arm. Use the jack to lift the control arm until the holes line up for the bolts. Insert the bolts and tighten up the nuts. Torque specs are found in your manual. Put your wheel back on. Repeat for other side if needed. Lift VX with jack. Remove jack stands. Lower VX. You ready to roll with a lot of saved cash in your pocket for your trip to Moab next May!

Thread:

I just took my VX on a 400 mile road trip to the coast & back. When I got back I noticed a "rattling" noise when coasting at 10-30 mph (so everytime I come to a stop sign or make a turn). I noticed that the boots (both sides) where the front axels exit the transfer case are chewed up.

Is this a common problem with VX? I've only had mine for about 3 months so I'm just learning about the rig. The previous owner did a 3 inch lift and put on 33x12.50's so the axels are at a fairly severe angle.

Are the CV's the likely source of the noise and is there an aftermarket upgrade or are OEM replacements the best bet?

Any help or comments would be appreciated.

Replies:

The most used replacement CV boots are meca-tech & are available at independent4X.com.

The rattling is likely to be a heat shield on the exhaust system.

Good luck !

Ldub

Well, I would assume right off the bat that if your CV boots are chewed up, then the grease that was once inside, now isn't. That is most likely the source of the rattling/clicking noise you are hearing, and the reason you are only hearing it at low speeds is because the ambient noise at high speeds and the higher frequency of the clicking(turning faster) is making it harder to hear. I would seriously suspect the lift and consequent high driveline angles to be the source as well. There really aren't any aftermarket CV units available that have proven to be better than the stock units, except from a pricing point of view. Right now, you really have two options as it stands:

Option 1: Replace the boots. Not that advisable considering you've been running the axles with little to no grease in them and they may be damaged from heat buildup/wear. If you do go this rout, check here for how to do it: http://vehicross.info/forums/showthread.php?t=9031

Option 2: Buy new CV joint units. You can get OEM or aftermarket, with the aftermarket being considerably cheaper. Do a search on this, since I believe someone recently had the same problem as you and there was a post on getting new units for under \$80 each.

Actualy there is a third option which is to tear out your whole front end and take the differential brackets and cut and weld them to extend them so you driveline angle won't be so severe in the future. This won't fix your current woes, but it will make it so they don't come back to haunt you agian in the future. I recently did this and it is very involved. In any case, the Mecatech boots are the way to go.

http://www.independent4x.com/item.jhtml?UCIDs=839915%7C938630&PRID=955395