

To: All Fox Factory-affiliated General Motors Dealers
Subject: **Recall Remedy Instructions for Safety Recall 21V-718**
Certain Tuscany-upfitted MY 2019 – 2021 General Motors Vehicles and Certain
SCA-upfitted MY 2020-2021 General Motors Vehicles
Front Upper Control Arm

REASON FOR THIS SAFETY RECALL:

On September 2, Fox Factory filed a Defect Information Report with the National Highway Traffic Safety Administration (NHTSA) informing the agency that in the subject vehicles (equipped with Tuscany, SCA Performance, Rocky Ridge Conversions, and Rocky Mountain Truck lift kits), accelerated wear on the GM-installed ball joint in the front upper control arm can result in premature failure and the affected front wheel separating while the vehicle is in motion. Partial or total separation of a front wheel while the vehicle is in motion can increase the risk of a crash.

REMEDY:

Remedy parts are provided in this box. Dealers will install new Fox Factory front upper control arms in place of the GM front upper control arms. This service must be performed on all affected vehicles at no charge to the vehicle owner.

REIMBURSEMENT:

For reimbursement for SCA Performance, Rocky Ridge Conversions, and Rocky Mountain Truck vehicles please contact Tim Hatcher at thatcher@ridefox.com. For reimbursement for Tuscany vehicles please contact Jenee Pritt at jpritt@drivetuscany.com.

NOTE TO INSTALLER:

1. Enclosed you will find components and installation instructions for replacing OEM upper control arm assemblies with upper control arms manufactured for the use with Tuscany, SCA Performance, Rocky Ridge Conversions, and Rocky Mountain Truck applications. If at any point, there are questions in regards to the application or installation of these components, please contact customer service Corey Rider at (517) 278-7144 ext. 123 or crider@ridefox.com.
2. The installation procedures must be followed as outlined below. These new components have design characteristics that require specific steps that may vary slightly from OEM service manual steps of OEM part replacement.
3. The provided owner information sheet at the end of these instructions must be supplied to the owner of the vehicle once service is complete. It contains important information regarding servicing the newly installed components as well as replacement part information and customer service contact information.

IMPORTANT INSTALLATION INFORMATION:

1. Provided control arm pivot hardware **must be used and torqued to the specification provided** when installing these upgraded upper control arms. **Do not reuse factory control arm pivot hardware.**
2. Control arms typically add 1-2 degrees caster above stock alignment specifications.
3. Ball joint used is 500-1105, use this for replacement purposes if a new ball joint is ever needed. Ball joint is directional and must be installed with the 'dot' facing either inward or outward on the vehicle, otherwise damage may occur.
4. Tools Required: Basic Hand Tools / Socket & Wrench Set up to 22mm, Jack Stands, Tape Measure, Cut Off Wheel

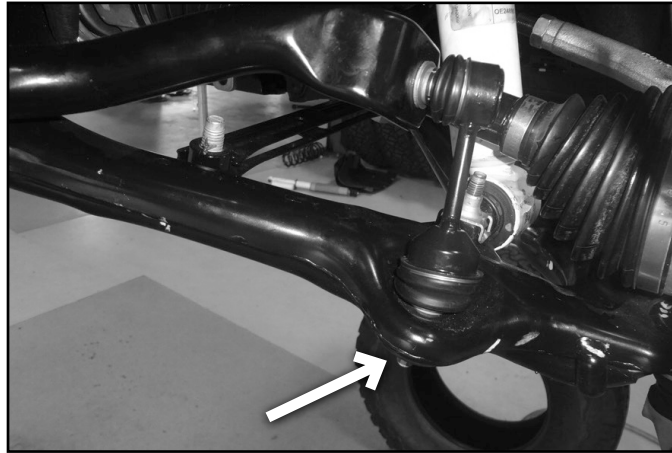
OE Control arms as pictured on the left below will be replaced with the upgraded upper control arm on the right.



FULLY READ AND FOLLOW THE PROVIDED INSTRUCTIONS

INSTALLATION INSTRUCTIONS:

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Raise the front of the vehicle and support the frame rails with jack stands.
3. Remove the front wheels.
4. Disconnect the front driver's and passenger's side sway bar links from the lower control arm.

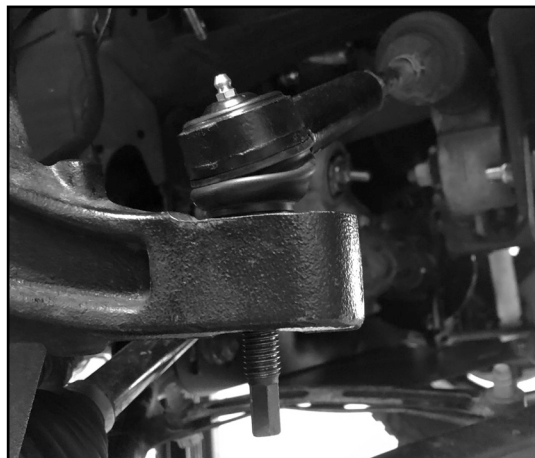


PERFORM THE FOLLOWING INSTALLATION STEPS ON ONE SIDE AT A TIME:

5. If attached, remove the wire retaining clips from the strut studs and loosen but do not remove the three upper strut mount nuts at the frame. Do not loosen- the center strut rod nut. Support the lower control arm with a jack.

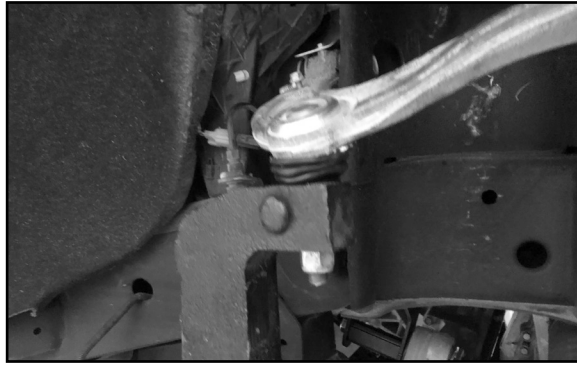


6. Remove the nut from the steering tie rod end. Dislodge the tie rod end taper from the knuckle. Remove the tie rod end from the knuckle. Save nut.



7. Disconnect the ABS wire from the knuckle for additional slack.

8. With the lower control arm supported with a hydraulic jack, remove the nut from the upper ball joint. Dislodge the upper ball joint taper from the knuckle. Remove the nut and allow the knuckle to swing rearward out of the way.



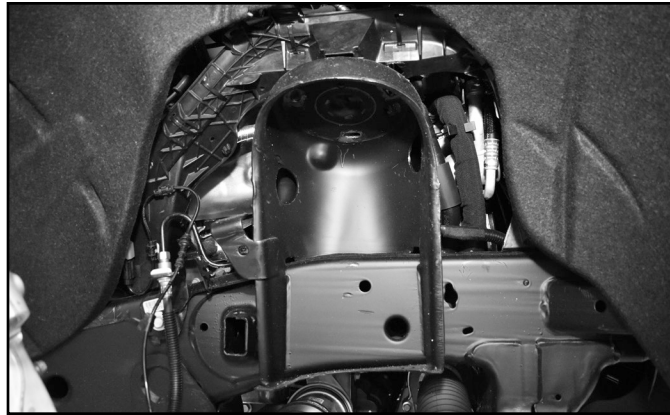
9. Remove the two lower strut bar pin bolts. Lower the control arm with the jack so there is enough room to remove the OE strut assembly with the strut spacer still attached.



10. Remove the three nuts attaching the strut to the frame. Remove the strut from the vehicle. DO NOT remove the center strut rod nut.



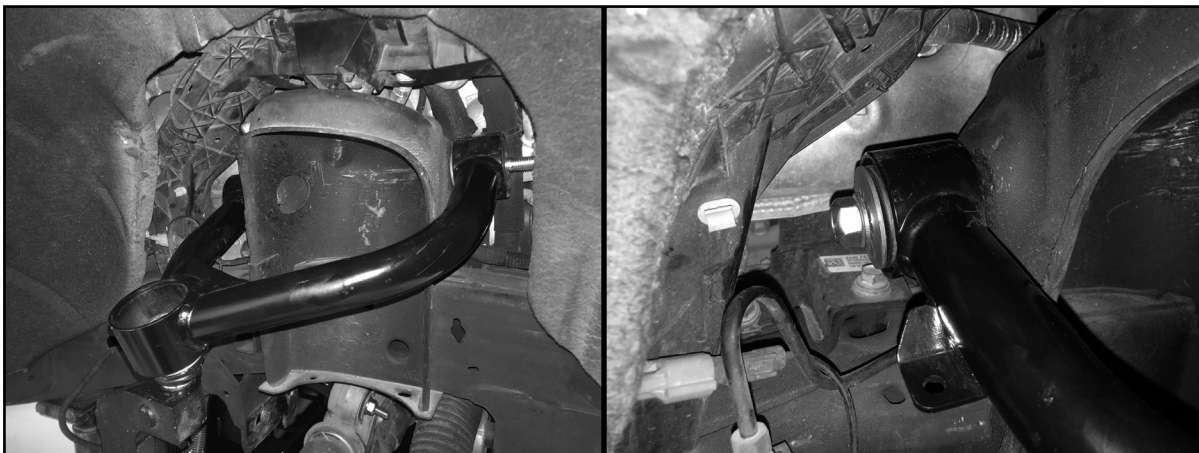
11. Remove the ABS wire / brake sensor wire from the OE upper control arm. Discard the bracket and hardware.
12. Remove the upper control arm from the vehicle by removing the two bolts attaching the upper control arm to the strut bucket / frame. If replacing the upper arm on a Denali truck, remove the sensor arm from the ball stud on the upper control arm.



13. The new replacement control arm assemblies have a larger profile than the OEM assemblies. They are also designed with a wider range of available travel. Due to these unique differences, the tab on the side of the strut bucket must be removed to avoid interfering with the proper function of the new control arm assembly. Cut the tab from the side of the strut bucket as shown below.



14. Install the new upper control arm to the vehicle using the **new provided 14mm bolts, washers, and nuts and using the provided thread locker**. Run the bolt with a washer from the inside out of the strut bucket outwards. Apply thread locker and fasten with a washer and nut on the outer bushing washer surface. Do this for the front and rear control arm mounts. Snug up hardware.



15. Attach the ball joint on the new upper control arm to the knuckle. Snug up ball joint using the OE nylock nut, **but do not torque down**. The upper ball joint will be removed from the knuckle later so that the strut can be installed.

Note: The OE nylock nut will only be temporarily used to set the control arm at the correct ride height so that the rubber bushing preload is correct. DO NOT USE THE OE NYLOCK NUT FOR THE FINAL INSTALL.



16. **Important:** Set the ride height from the fender lip to the center of the hub at 28". Using a torque wrench on the **inside of the strut bucket** and a wrench on the **outside bushing to prevent the nut / bushing from moving**, tighten the control arm hardware to **148 ft-lbs**. This will ensure the rubber bushings are tightened to the right position and not put preload in the rubber bushings. **DO NOT** spin the "bushing side" hardware when tightening, only tighten from the inside "frame side".

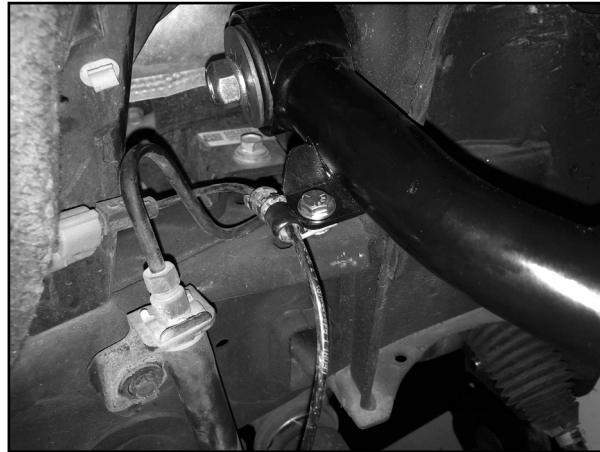


17. Dislodge the upper ball joint from the knuckle. Discard the OE nylock nut at this time. Make sure the knuckle is supported so it does not pull out the CV.
18. Reinstall the strut into the strut mount on the frame of the vehicle. Leave the hardware loose.
19. Install the lower strut mount bolts. Torque the lower mount hardware to 37 ft-lbs.
20. With the lower hardware tight, torque the upper strut mount nuts to 40 ft-lbs.
21. Reattach the upper ball joint to the knuckle. **Use the provided nylock nut in bolt pack 874.** Torque the upper ball joint nut to 26 ft-lbs with the first pass and 60-75 degrees on the final pass.



22. Reattach the tie rod to the knuckle. Torque the tie rod end nut to 44 ft-lbs.

23. Repeat installation on the opposite side of the vehicle. When both sides are complete, reattach the sway bar links and tighten hardware to 60 ft-lbs.
24. Reattach the brake wire / ABS wires to the OE position on the knuckle. Use the provided wire clamps and 1/4" bolt to attach the brake wire / ABS wire to the upper control arm. Check for enough slack in the wires by cycling the steering back and forth and adjust as necessary.



25. Grease the upper ball joint until the dust boot begins to bulge. This should take a relatively small amount of grease as the joints are pre-greased from the factory. Install the dust cap on top of the ball joint housing by installing the O-ring into the groove on the cap. Lubricate the o-ring with grease and press firmly to install onto the upper control arm.
26. Reinstall the front wheels and lower the vehicle to the ground. Torque lug nuts to OE specification.
27. Check all hardware for proper torque.
28. The vehicle will need a complete front end alignment.
29. Leave the next two pages in the owner's vehicle.

Caster		Cross Caster +/-1.0°	Camber +/-0.8°		Cross Camber +/-0.8°	Total Toe +/-0.2°	Steering Wheel Angle +/-3.5°
Left	Right	(Left - Right)	Left	Right	(Left - Right)	(Left + Right)	
3.6°-6°	3.6°-6°	0.0°	-0.4°	-0.4°	0.0°	0.1°	0.0°

VEHICLE OWNER'S INFORMATION SHEET

Your vehicle has been equipped with an upgraded upper control arm. Expect long life from these control arms, but unlike the OE ball joints, these ball joints are greaseable. Follow these steps for greasing the ball joint at regular service intervals.

SERVICE / CARE FOR UPGRADED UPPER CONTROL ARM:

1. Remove ball joint cap by finding the flat head screw driver slot on the cap.



2. Using a standard grease gun and a standard multi-purpose NLGI Grade 2 grease, apply 1-2 pumps into the grease fitting until the dust boot begins to bulge. Grease may expel near the steering knuckle surface, this is common. Clean up any excess grease using a rag. Check for any cracking or holes in the ball joint boot at this time. If the ball joint boot is compromised, replacement is necessary.



3. Lightly grease the O-ring and reinstall the ball joint cap by pressing firmly on the cap to seat it into the upper control arm.



BALL JOINT REPLACEMENT INFORMATION:

With regular greasing and service, expect a long life from these upgraded upper control arms. If the ball joints do become worn they can be replaced with a new ball joint (Part # 500-1105). Contact the following service e-mail at ucaservice@ridefox.com including the last 8 digits of your VIN to identify your vehicle.

Note for new ball joint installation the provided replacement ball joint is directional and must be installed with the 'dot' facing either inward or outward 90 degrees from the pivot location as shown below, otherwise damage may occur. Follow instructions provided with the new 500-1105 ball joint for proper installation.

