

FORM#3101_12202019

2020 GM 2500HD & 3500HD 3 Inch Upper Control Arm Kit INSTALLATION INSTRUCTIONS

Engineered for Both 4WD & 2WD Models.

2020 Chevrolet Silverado 2500HD

2020 GMC Sierra 2500HD

2020 Chevrolet Silverado 3500HD (Non-Dually)

2020 GMC Sierra 3500HD (Non-Dually)

NOTE: Does NOT Fit Models With Rear Overload Springs
Does NOT Fit Models With Magnetic Ride Control

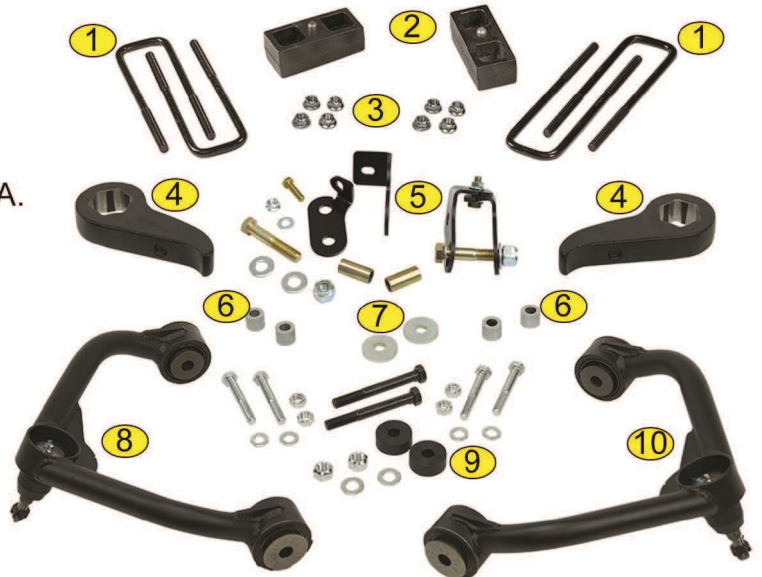


CAUTION: MAKE SURE YOU HAVE THE CORRECT LIFT FOR YOUR VEHICLE:

Double check the Year, Make, Model, Lift Height and KIT Part Numbers.

NOTE: Prior to beginning the installation, OPEN the Boxes and CHECK the Included Components Compared to the Parts Breakdown. Check all parts and hardware in the box with the parts list below. Be sure you have all needed parts and know where they install.

- ① 3/4" x 3-1/8" x 12" U-bolt, Square Bend
- ② 1.5" Lift Blocks, Rear
- ③ 3/4" Case Hardened Flange Nuts
- ④ Torsion Bar Keys, DR. & PA Side
- ⑤ Shock Relocation Brackets, Rear, DR. & PA.
- ⑥ Shock Spacer, Front Top, DR. & PA. Side
- ⑦ Differential Spacer, Rear, DR. & PA. Side
- ⑧ Upper Control Arm, PA. Side
- ⑨ Differential Spacer, Front, DR. & PA.
- ⑩ Upper Control Arm, DR. Side



How to Read the Kit Breakdown Charts:

The 'ENT KIT BREAKDOWN' lists the Part Numbers, Quantities & Part Description of the Boxes that are included in the Enthuze Kit. The 'KIT BREAKDOWN' lists Part Numbers, Quantities & Part Description of the Individual Components & Hardware Bags that are included in Each Box. The 'HARDWARE BREAKDOWN' lists the Part Numbers, Quantities & Part Description of the Individual Components.

KIT BREAKDOWN		
Kit Part Number ENT3101		
Part Number	Qty.	Part Description
66-01-3355	1	Upper Control Arm, DR. Side
66-02-3355	1	Upper Control Arm, PA. Side
66-01-40052	2	Torsion Bar Keys, DR. & PA. Side
77-3345	1	Hardware Bag: Kit Nuts & Bolts
77-3345A	1	Hardware Bag: Spacers
55-10-3355	1	Shock Relocation Bracket: PA. Side, Inner
55-11-3355	1	Shock Relocation Bracket: PA. Side, Outer
55-12-3355	1	Shock Relocation Bracket: DR. Side, Inner
55-13-3355	1	Shock Relocation Bracket: DR. Side, Outer
018	2	1.5" Rear Lift Block
34x318x12UB	4	3/4" x 3-1/8" x 12" Ubolt, Square Bend
77-750	1	3/4" Flange Nut Kit

HARDWARE BAG BREAKDOWN

Kit Part Number 77-3345			Kit Part Number 77-3345A		
Part Number	Qty.	Part Description	Part Number	Qty.	Part Description
14Mx2x120CS	2	14mm x 120mm Bolt, 2.0 Pitch	55-03-3355	4	Shock Spacer: Front, Top
14MLN	2	14mm Lock Nut, 2.0 Pitch	55-04-3355	2	Differential Spacer, Front
14MFW	2	14mm Flat Washer	55-03-3340	2	Differential Spacer, Rear
12Mx1.75x70CSAT	4	12mm x 70mm Bolt, 1.75 Pitch	14-3355	2	Crush Sleeve: Rear Shock Bracket
12MFW	4	12mm Flat Washer			
916x3C8CS	2	9/16" x 3" Bolt, Coarse, Grade 8	Kit Part Number 77-750		
916SW	4	9/16" SAE Flat Washer	Part Number	Qty.	Part Description
916C5NN	2	9/16" Nyloc Nut, Coarse	34FCHSFN	8	3/4" Case Hardened Flange Nuts
38x114C8CS	2	3/8" x 1-1/4" Bolt, Coarse, Grade 8			
38SW	2	3/8" SAE Washer			
38C5FN	2	3/8" Flange Nut, Coarse, Grade 5			

Step	Part Number	Qty. per Kit	Description	New Attaching Hardware	Qty. per Bracket	Hardware Bag Number
5	55-04-3355	2	Differential Spacer, Front	14mm x 120mm Bolt, 2.0 Pitch	1	77-3345
				14mm Lock Nut, 2.0 Pitch	1	
				14mm Flat Washer	1	
5	55-03-3340	2	Differential Spacer, Rear			
12	66-01-3355	1	Upper Control Arm, DR. Side			
	66-02-3355	1	Upper Control Arm, PA. Side			
14	55-03-3355	4	Shock Spacer: Front, Top	12mm x 70mm Bolt, 1.75 Pitch	1	77-3345
				12mm Flat Washer	1	
17	66-01-40052	2	Torsion Bar Keys, DR. & PA. Side			
23	018	2	1.5" Rear Lift Block	3/4" x 3-1/8" x 12" U-bolt, Square Bend	2	
				3/4" Case Hardened Flange Nuts	4	77-750
24	55-10-3355	1	Shock Relocation Bracket: PA. Side, Inner	Crush Sleeve: Rear Shock Bracket	1	77-3345A
	55-11-3355	1	Shock Relocation Bracket: PA. Side, Outer	9/16" x 3" Bolt, Coarse, Grade 8	1	77-3345
	55-12-3355	1	Shock Relocation Bracket: DR. Side, Inner	9/16" SAE Flat Washer	2	
	55-13-3355	1	Shock Relocation Bracket: DR. Side, Outer	9/16" Nyloc Nut, Coarse	1	
				3/8" x 1-1/4" Bolt, Coarse, Grade 8	1	
				3/8" SAE Washer	1	
				3/8" Flange Nut, Coarse, Grade 5	1	

THANK YOU For Choosing ENTHUZE For ALL Your Suspension Needs!

Read And Understand All Instructions And Warnings Prior To Installation Of System AND Operation Of Vehicle.

INTRODUCTION BEFORE INSTALLATION...

Installation requires a professional mechanic. In addition to these instructions, professional knowledge of disassembly / reassembly procedures and post installation checks must be known.

PRIOR to beginning, inspect the vehicles steering, driveline, and brake systems, paying close attention to the suspension link arms and bushings, sway bars and bushings, tie rod ends, pitman arm, idler arm, ball joints and wheel bearings. Also check the steering sector-to-frame and all suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition; repair or replace all worn parts.

Read instructions several times before starting.

Read each step completely as you go.

Be sure you have all needed parts and know where they install.

NOTES:


- Do NOT install this suspension system in conjunction with any other type of torsion bar lift keys than those included in the kit nor heavy-duty replacement torsion bars.
- Front end alignment is necessary.
- A foot-pound torque specification reading is given in parenthesis () after each appropriate fastener.
- Tool and Wrench/Socket size is given in brackets [] after each appropriate step.
- Always wear safety glasses when using power tools.
- Prior to attaching components, be sure all mating surfaces are free of grit, grease, excessive undercoating, etc.
- Do not fabricate any components to gain additional suspension height.
- A factory service manual should be on hand for reference.
- Due to payload options and initial ride height variances, the amount of lift is a 'base figure'. Final ride height dimensions may vary in accordance to original vehicle stance.

BEFORE YOU DRIVE...

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering components for clearance.

Test and inspect brake system. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/replacement may result in component failure.

Perform head light check and adjustment.

 **WARNING:** It is the ultimate buyer's responsibility to have all bolts / nuts checked for tightness after the first 100 miles and then every 1000 miles. The steering, suspension and driveline systems, plus wheel alignment should be inspected by a qualified professional mechanic at least every 3000 miles.

TECH TIP / TIME SAVER...

- Disassembly/assembly of the factory torsion bar system requires the use of a special unloading tool. The GM specified tool is #**CH48809**.
- Some minor trimming will be required with certain wheel/ tire combination. This is normal with most aftermarket tire/wheel fitment on today's trucks. Trimming will normally include the bottom edge of the inner fender shrouds and/or lower corner of front bumper valance. As a rule of thumb, deeper backspacing and shorter/ narrower tires will reduce/eliminate trimming required.

TIRES & WHEELS...

Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.

⚠️ NOTE: **Stock 18" Wheels Will Fit back on the vehicle once this suspension system is installed. Stock 17" Wheels Will NOT Fit.**

⚠️ WARNING: ANY larger or wider tire & wheel combination other than listed Will Require Vehicle Trimming.

⚠️ NOTE: **ALL Tire & Wheel Combinations Should Be Test Fit Prior to Installation. * Some Minor Trimming Maybe Required.** Some minor trimming will be required with certain wheel/tire combinations.


This is normal with most aftermarket tire/wheel fitments on today's trucks. Trimming will normally include the bottom edge of the inner fender shrouds and/or lower corner of front bumper valance. As a rule of thumb, deeper backspacing and shorter/narrower tires will reduce/eliminate trimming required.

TIRE SIZE SPECIFICATIONS			
Tire Size	Wheel	Backspacing (INCH)	Offset (MM)
285/75 R18	Factory 18	--	--
35 x 12.50 R20	20 x 9	--	0mm to +20mm
315/60 R20	20 x 9	--	0mm to +20mm

TOOLS & TECH...

This is a list of tools needed to install this lift kit. Double check the list to make sure that you have all the tools and equipment required to accomplish the complete install.

TOOLS				
Miscellaneous Tools		Wrenches / Socket Sizes		
Floor Jacks	Jack Stands	Standard	Metric	
Ball-Peen Hammer	Chisel	11/16"	13mm	22mm
Adjustable Pliers	Vice Grips	3/4"	15mm	24mm
Torque Wrench	Pry Bar	15/16"	18mm	27mm
Screwdrivers - Flathead & Phillips		1-1/8"	21mm	
Plastic Fastener Removal Tool		Swivel / Wobble Extension		
GM Torsion Bar Puller Tool #CH48809		Socket Extensions - Various Lengths		

We have also included a **Tech Tip** noted by this icon  **TECH TIP** to help if we have found a quicker or easier way to accomplish a task in the steps.

Torque Specifications					
STANDARD			METRIC		
Size	Grade 5	Grade 8	Size	Grade 8.8	Grade 10.9
5/16"	15 ft/lbs.	20 ft/lbs.	6mm	7 ft/lbs.	10 ft/lbs.
3/8"	30 ft/lbs.	35 ft/lbs.	8mm	17 ft/lbs.	24 ft/lbs.
7/16"	45 ft/lbs.	60 ft/lbs.	10mm	33 ft/lbs.	47 ft/lbs.
1/2"	65 ft/lbs.	90 ft/lbs.	12mm	59 ft/lbs.	83 ft/lbs.
9/16"	95 ft/lbs.	130 ft/lbs.	14mm	101 ft/lbs.	131 ft/lbs.
5/8"	135 ft/lbs.	175 ft/lbs.	16mm	146 ft/lbs.	202 ft/lbs.
3/4"	185 ft/lbs.	280 ft/lbs.	18mm	201ft/lbs.	283 ft/lbs.

CAUTION: ENTHUZE engineered this lift system to work specifically with the supplied ENTHUZE torsion bar adjuster keys. Using aftermarket leveling adjuster key or over cranking the factory keys will drastically effect the ride quality and performance. It will also cause harm and/or lessen the wear life of the ball joints, CV axles, bushings, etc. This lift was engineered to reduce the OEM rake with the supplied 1.5" rear blocks.

NOTE: Use the check-off box found at each step to help you keep your place. Two denotes that one check-off box is for the Driver Side (Left) and one is for the Passenger Side (Right). Unless otherwise noted, always start with the Driver Side.

FRONT DISASSEMBLY

NOTE: Save ALL factory components and hardware for reuse, unless noted.

1. PREPARE VEHICLE FOR FRONT...

Disconnect the battery.

Chock rear tires and place transmission in neutral. Raise the front of vehicle with a jack and secure a jack stand beneath each frame rail. Ease the frame down onto the stands, place transmission in low gear for Manual Transmission or Park for Automatic. Remove the front wheels & tires. [Lug Nuts 22mm]

2. UNLOADING THE TORSION BARS...

WARNING: Because of the tremendous loads generated, a standard 2-jaw gear puller tool tends to bend down the crossmember 'lips' or bent edges where it attaches and pops out of place. **Do Not Use this Type of Tool.**

NOTE: For safe removal & installation of the torsion bars, a special puller tool designed specifically for GM torsion bars is required. The GM specified tool is #CH48809. Many auto parts chains offer 'rental' programs: AutoZone, O'Reilly, Napa, PepBoys, Advanced Auto Parts, etc.

WARNING: Be extremely careful when loading and unloading the torsion bars; there is a tremendous amount of energy stored in them. Keep your hands and body clear of the adjuster arm assembly and the puller tool in case anything slips or breaks.

[Illustration 1-A] Position puller and load adjuster arm, so the torsion bar adjuster block can be removed from crossmember. Apply light lubricating grease to the torsion bar puller tool threads and the puller shaft-to-adjuster arm contact point.

[Illustration 1-B] Unload the torsion bars, but Do Not Remove torsion bar. [21mm] Remove and Save the torsion bar adjuster bolt. [21mm].

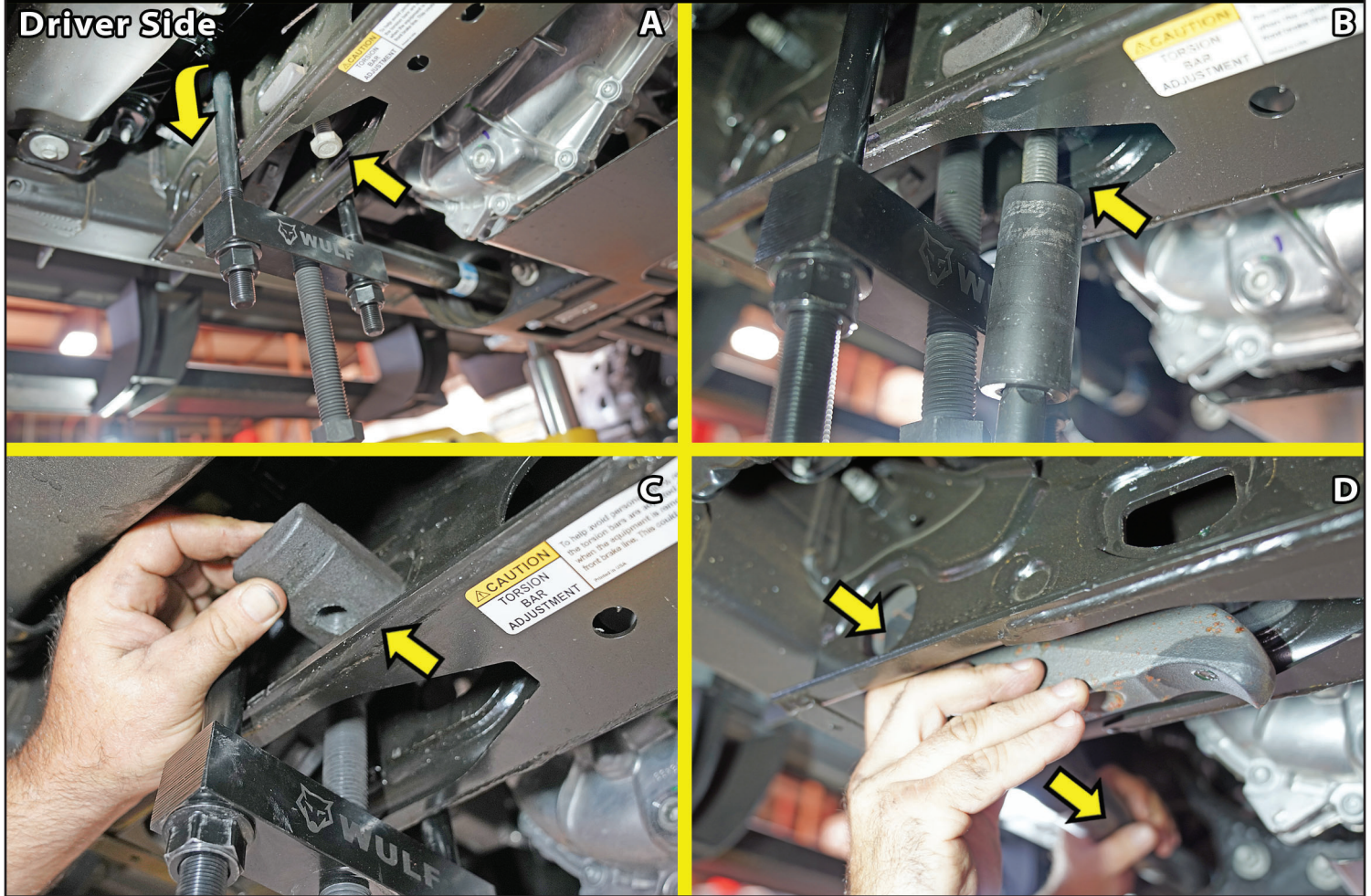
[Illustration 1-C] Remove and Save Adjuster Block.

[Illustration 1-D] Remove the torsion bar adjuster arm/torsion key by pushing the torsion bar forward to allow the key to drop free. **TECH TIP** On some vehicles this will require using a hammer/punch or air hammer. Access the end of the torsion bar through the hole in the back of the torsion bar crossmember and drive torsion bar forward. When the bar shifts forward, the adjuster arm will fall free.

Leave the torsion bars hanging in the lower control arms at this time. Do Not Remove from vehicle.

Illustration 1

Unloading Torsion Bars...



3. REMOVE FACTORY SKID PLATE & BELLY PAN...

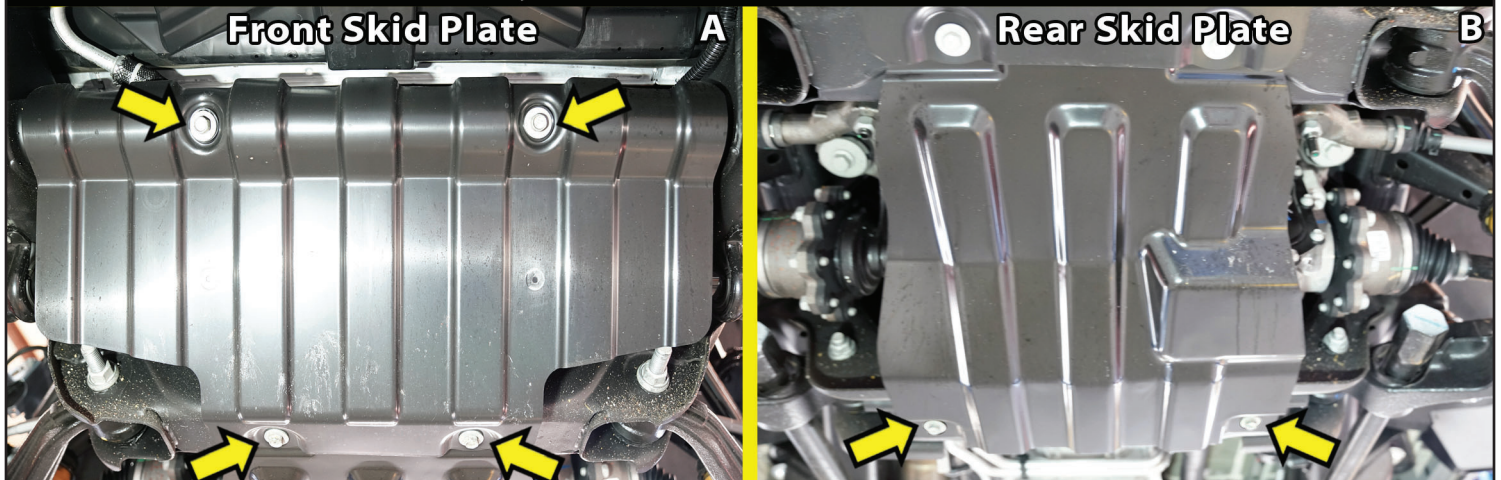
If equipped, remove the front and rear factory skid plates. **NOTE:** Hold the skid plate when removing fasteners, so it does not fall.

[Illustration 2-A] On the front skid plate, remove the (4) factory bolts. [15mm]

[Illustration 2-B] On the rear skid plate/belly pan, remove the (2) factory rear bolts. [15mm] The factory belly pan and hardware will be retained.

Illustration 2

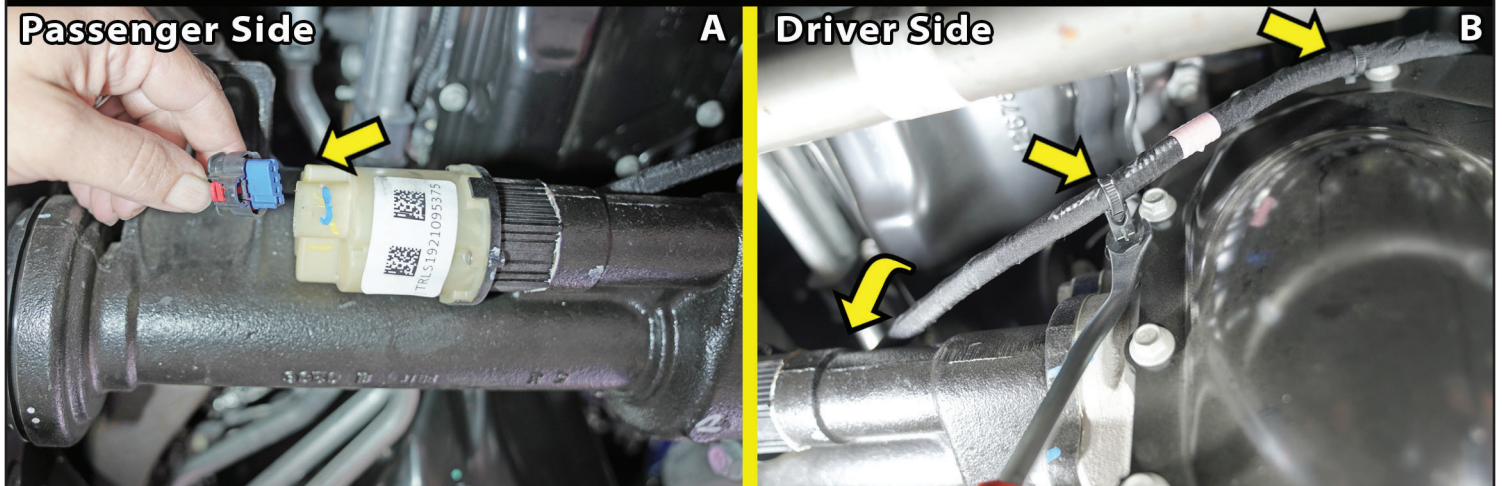
Remove Front & Rear Factory Skid Plates...



4. DISCONNECT DIFFERENTIAL ELECTRICAL...

[Illustration 3-A] Disconnect the electrical connector from the front differential actuator. [flathead screw driver or pick tool]

[Illustration 3-B] Remove the three (3) plastic wire loom retainer plugs from the differential. One (1) Behind the Actuator. Two (2) are Above the Differential Cover on Top of the Differential.

Illustration 3**Disconnect Differential Electrical...****5. LOWER DIFFERENTIAL & INSTALL DIFFERENTIAL SPACERS...**

Locate the ENTHUZE Hardware Bag #77-3345A. Locate the (2) Differential Spacer, Front (Thick UHMW Plastic) #55-04-3355 and the (2) Differential Spacer, Rear (Metal) #55-03-3340.

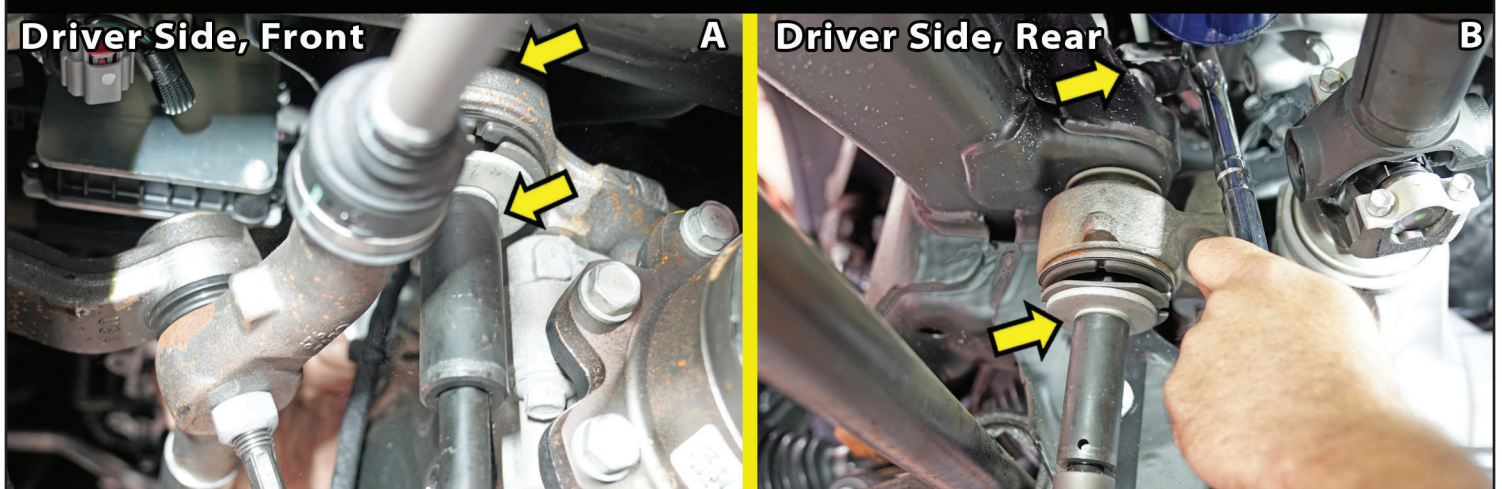
Locate the ENTHUZE Hardware Bag #77-3345. Hardware PER Side for Front Diff Mounts: (1) 14mm x 120mm Bolt, 2.0 Pitch, (1) 14mm Lock Nut, 2.0 Pitch and (1) 14mm Flat Washer.

Place a jack or jack stand under the differential to support the weight of the differential.

Locate the Differential-To-Frame mounts. There are two (2) mounts in front of the differential and two (2) in the rear behind the rear crossmember.

[Illustration 4-A] Remove the front (2) differential bolts & nuts. [21mm | 21mm] The front bolts will be replaced, but the factory washers will be reused. **TECH TIP** A ratchet extension on the bolt and a flexible head ratchet on the nut will help remove the front and rear mounts.

[Illustration 4-B] Remove the rear (2) differential bolts & nuts. [21mm | 21mm] Retain all the rear hardware. Once the bolts are removed, the differential will need to be lowered to install the differential spacers.

Illustration 4-A & 4-B**Remove Differential Hardware & Lower Differential...**

[Illustration 4-C] Install the #55-03-3340 (Thin-Metal Spacer) in the rear mounts with the factory bolts. Secure hardware, but do not tighten.

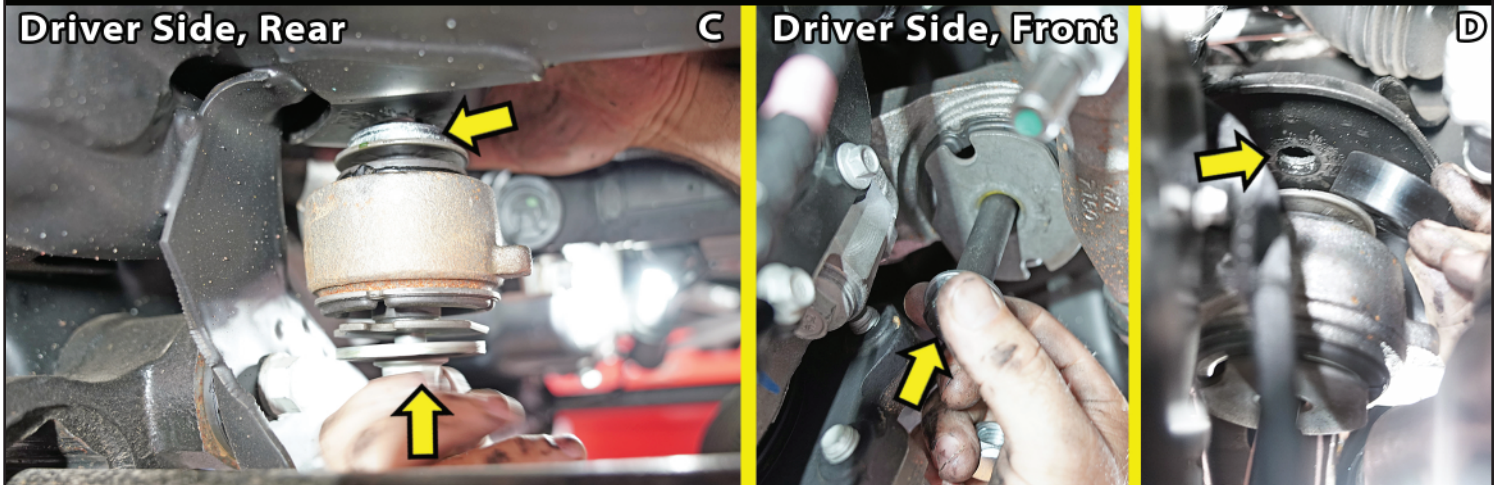
[Illustration 4-D] On the front differential mounts, place a 14mm flat washer onto a 14mm x 120mm bolt. Insert the bolt up through the differential mount. Insert the #55-04-3340 spacer (Thick-UHMW Plastic) and run the bolt through the spacer and into the frame mount. Attach with 14mm nut. [22mm | 22mm].

Tighten all four (4) differential bolts. [Front - 22mm (101), Rear - 21mm (101)]

Remove the jack from the differential.

Illustration 4-C & 4-D

Install Differential Spacers...



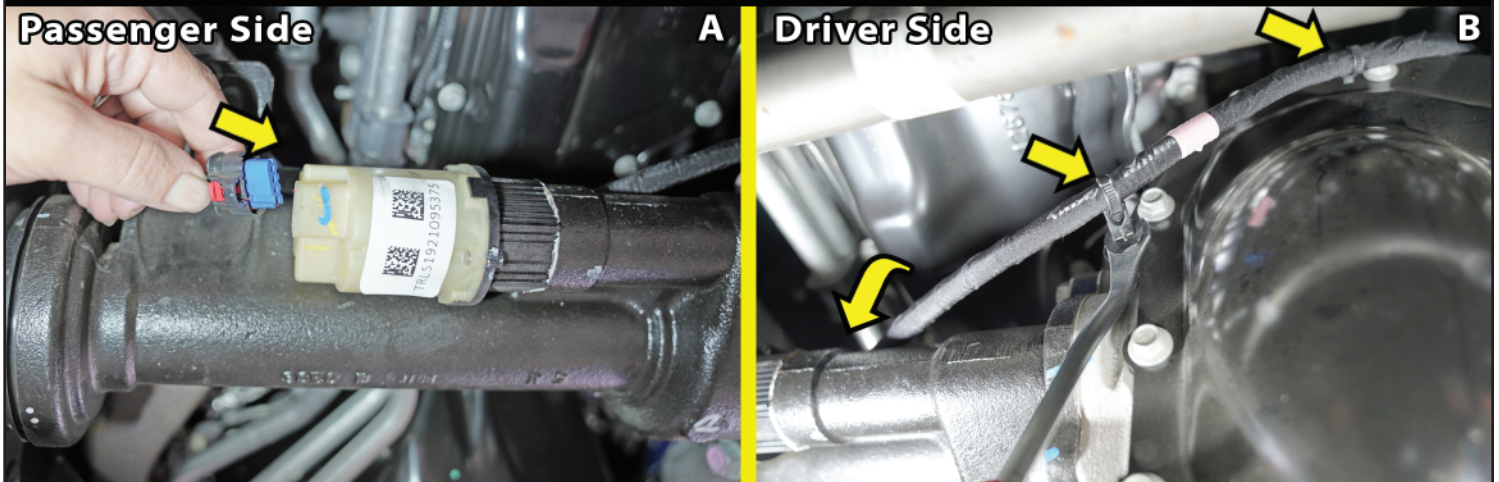
6. RECONNECT DIFFERENTIAL ELECTRICAL...

[Illustration 5] Reconnect the electrical connector to the front differential actuator.

Reattach the 3 plastic wire loom retainer plugs to the differential. One (1) Behind the Actuator. Two (2) are Above the Differential Cover on Top of the Differential.

Illustration 5

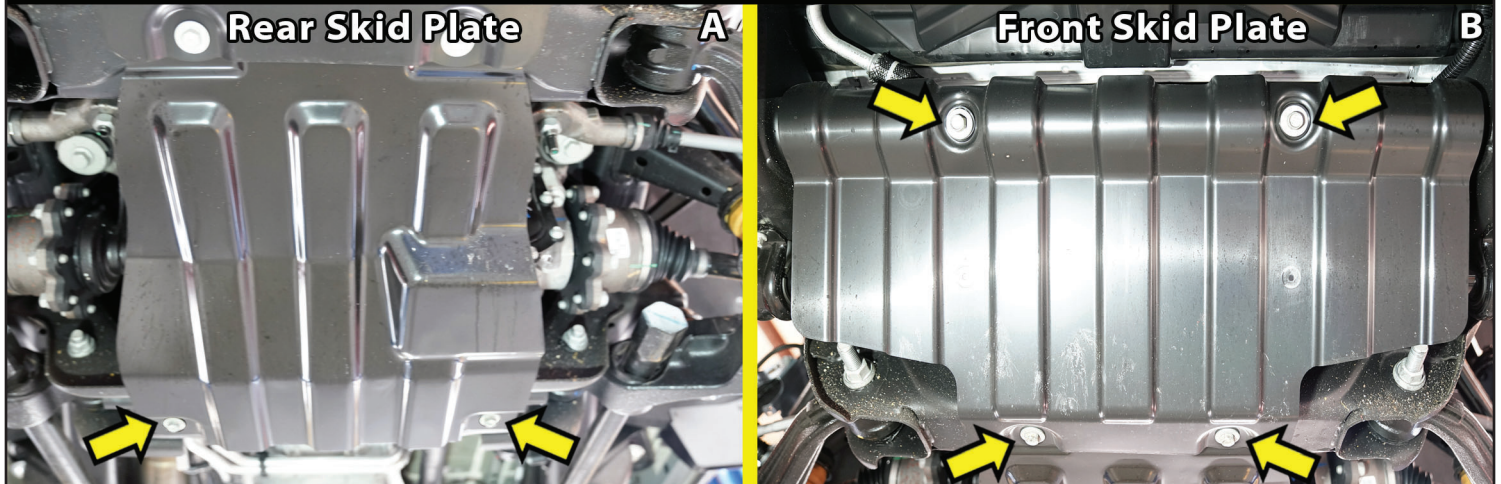
Reconnect Differential Electrical...



7. REINSTALL FACTORY BELLY PAN...

[Illustration 6-A] On the rear skid plate/belly pan, reinstall the (2) factory rear bolts. [15mm] The factory belly pan and hardware will be retained.

[Illustration 6-B] On the front skid plate, reinstall the (4) factory bolts. [15mm]

Illustration 6**Reinstall Front & Rear Factory Skid Plates...**

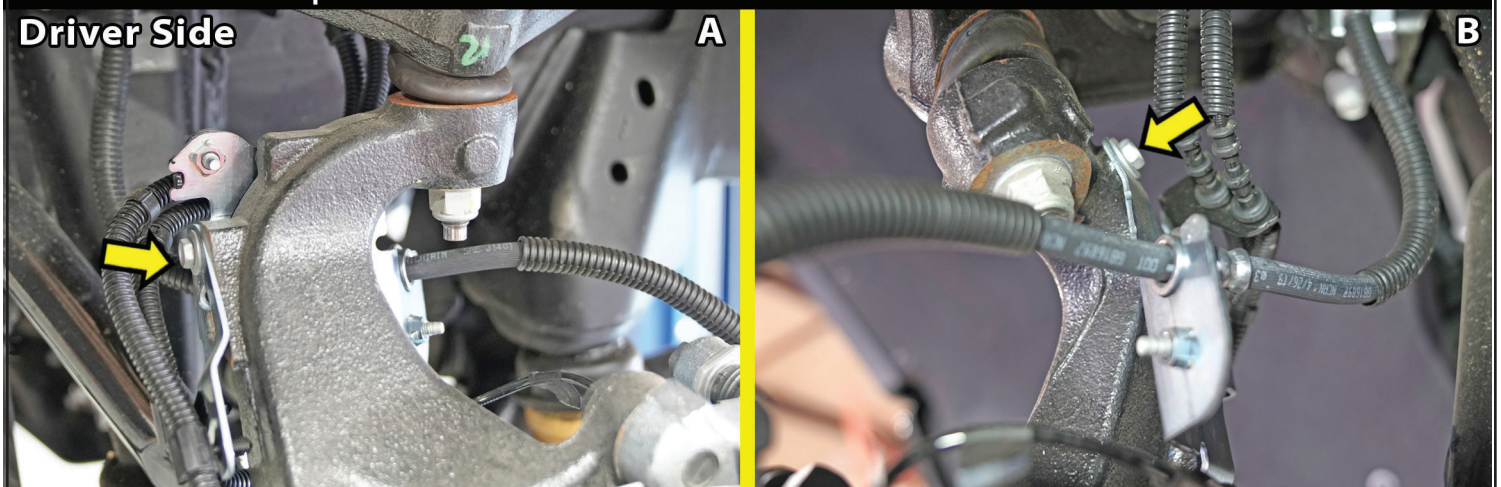
⚠ NOTE: Perform Steps 8 -15 One Side at a Time.

8. DISCONNECT ABS | BRAKE LINE BRACKET FROM KNUCKLE...

[Illustration 7-A] Disconnect the ABS | brake hose bracket from the steering knuckle. Remove bolt from the forward side of the steering knuckle. Retain hardware. [10mm]

🔴 TECH TIP When you remove a factory nut or bolt, (like the steering knuckle bolts) put it back into the factory location for safe keeping. You will not have to look or sort through removed hardware to find the proper hardware. Same with upper ball joint nuts, shocks, etc.

[Illustration 7-B] Remove bolt from the inside of the steering knuckle. Retain hardware. [10mm]

Illustration 7**Disconnect ABS | Brake Line Bracket from Knuckle...**

9. DISCONNECT UPPER BALL JOINT FROM KNUCKLE...

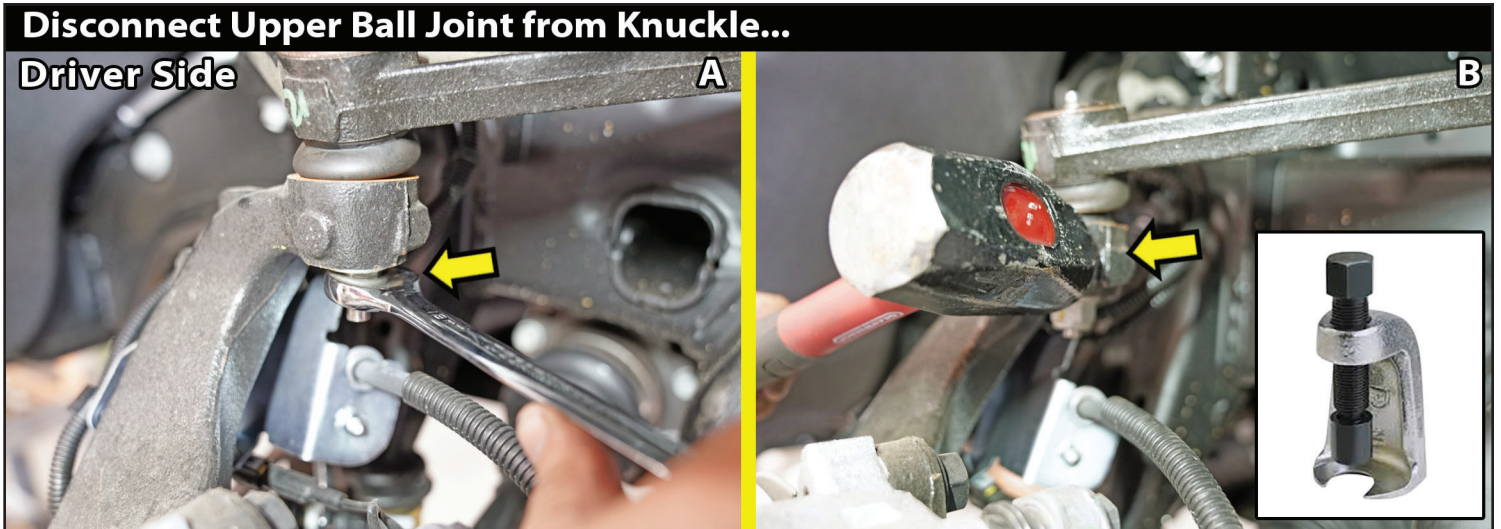
[Illustration 8-A] Remove the upper ball joint nut. Reinstall the nut a couple of turns by hand. [18mm]

[Illustration 8-B] Use a Ball Joint Puller Separator to separate the ball joint from the knuckle.

⚠ WARNING: Be careful. Do not let the knuckle fall to the side abruptly. It could cause damage to the ABS wires or brake lines.

If you do not have a puller, you can use the method of striking the knuckle near the ball joint end to dislodge the knuckle. Strike the knuckle portion only.

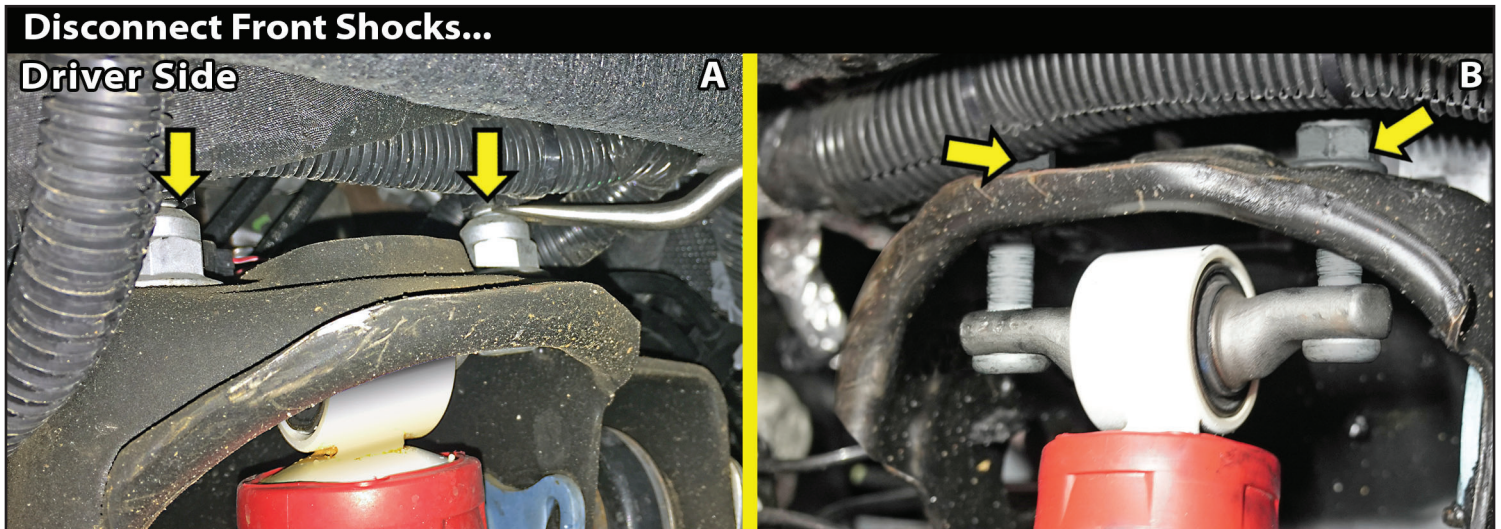
Remove the ball joint nut and save for re-install.

Illustration 8**10. DISCONNECT FRONT SHOCKS...**

Disconnect the shock at the lower mount on the lower control arm. [21mm wrench/21mm socket] Retain the lower shock mount hardware.

[Illustration 9-A] Disconnect the wiring harness clip located on the top of the shock stud. [Plastic Fastener Removal Tool]

[Illustration 9-B] Disconnect the shock from the upper mount at the frame. There are 2 factory studs on the upper mount. [19mm wrench] Retain factory flange nuts. Remove shocks.

Illustration 9

11. REMOVE UPPER CONTROL ARM...

☐☐ [Illustration 10] Unbolt the upper control arm from the frame. [24mm] **NOTE:** Use caution not to damage alignment pins. Remove the cam bolts. Remove the upper control arm.

12. GREASE BALL JOINT & INSTALL UPPER CONTROL ARM (UCA)...

Locate the (1) ENTHUZE #66-01-3355 UCA-Driver Side & (1) #66-02-3355 UCA-Passenger Side. These UCAs are side specific. **NOTE:** The UCA have a 'Notch' in the ball joint gusset that goes to the FRONT of the vehicle.

WARNING: Note that the new UCAs Must Be Greased BEFORE vehicle is Driven.

NOTE: Failure to add grease to the UCA Ball Joint Will Void the UCA Warranty.

☐☐ [Illustration 11-A] Using a standard manual powered grease gun, attach hose coupler fitting to grease fitting. Press down squarely until you feel the 'snap' of the adapter grabbing the grease fitting.

Watch the dust boot and slowly give the grease gun a few good pumps until you see the boot begin to swell. STOP as soon as the boot begins to swell. Detach the coupler from the grease fitting.

☐☐ [Illustration 11-B & 11-C] **NOTE:** Note the proper cam bolt placement and use caution not to damage alignment pins. Install the new UCA using the factory hardware. Snug tighten only. Leave hardware loose. (These bolts will be torqued with the weight of the vehicle on the suspension.) [24mm]

Illustration 11

Illustration 10

**Remove Upper Control Arm...
Driver Side - Front Leg**

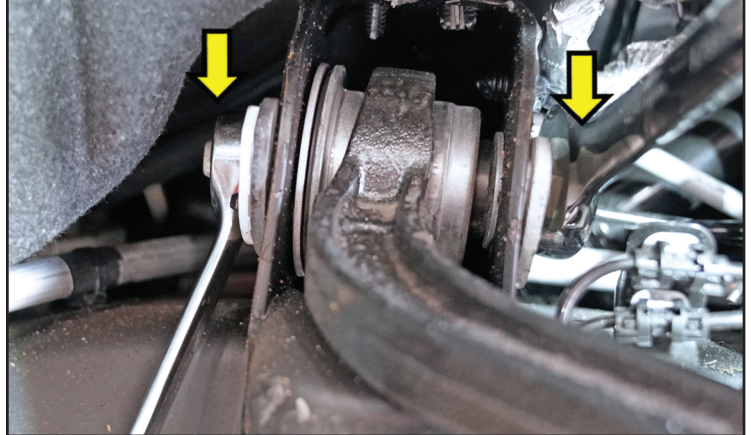
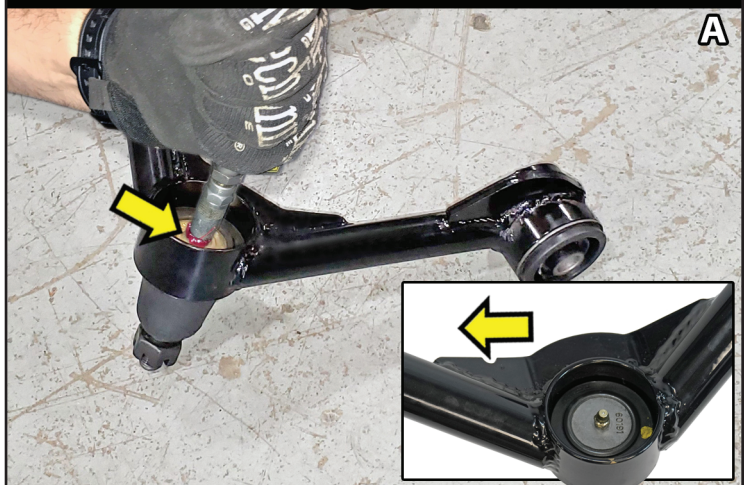
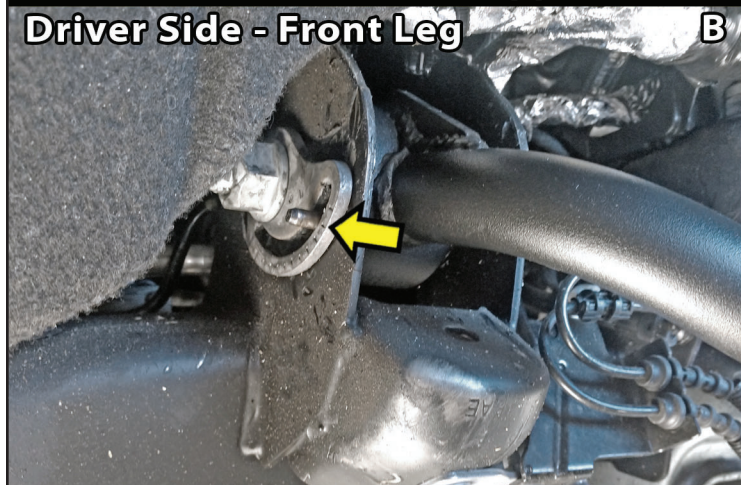


Illustration 11

Grease UCA Ball Joint...



Grease Ball Joint & Install Upper Control Arm...



13. ATTACH KNUCKLE TO UPPER CONTROL ARM...

[Illustration 12] Position a jack or jack stand under the knuckle assembly. The assembly is heavy and you may need to lift or lower to attach the knuckle.

Connect the upper ball joint to the knuckle and secure using the supplied nut. Tighten the upper nut (37) [11/16"]

14. INSTALL FRONT SHOCK & SPACERS...

Locate the ENTHUZE hardware in Bag #77-3345A.
PER Side: (2) #55-03-3355 Shock Spacer, Front, Top.

Locate the ENTHUZE hardware in Bag #77-3345.
PER Side: (2) 12mm x 70mm Bolts, 1.75 Pitch & (2) 12mm Flat Washers.

Locate the front factory shocks. The factory shock studs must be removed.

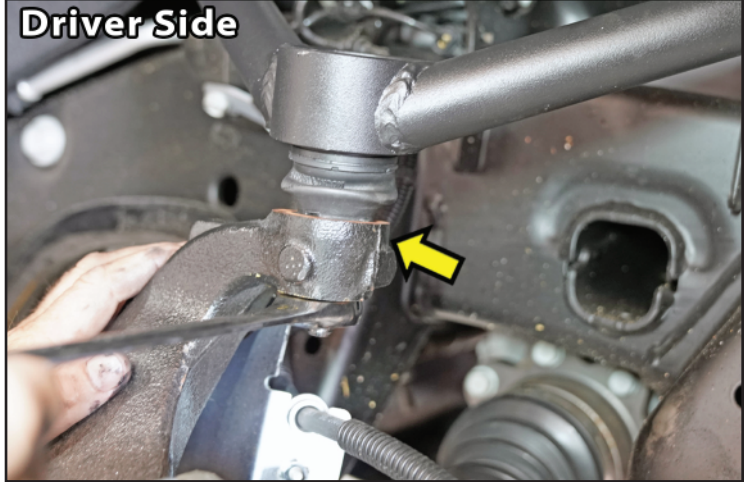
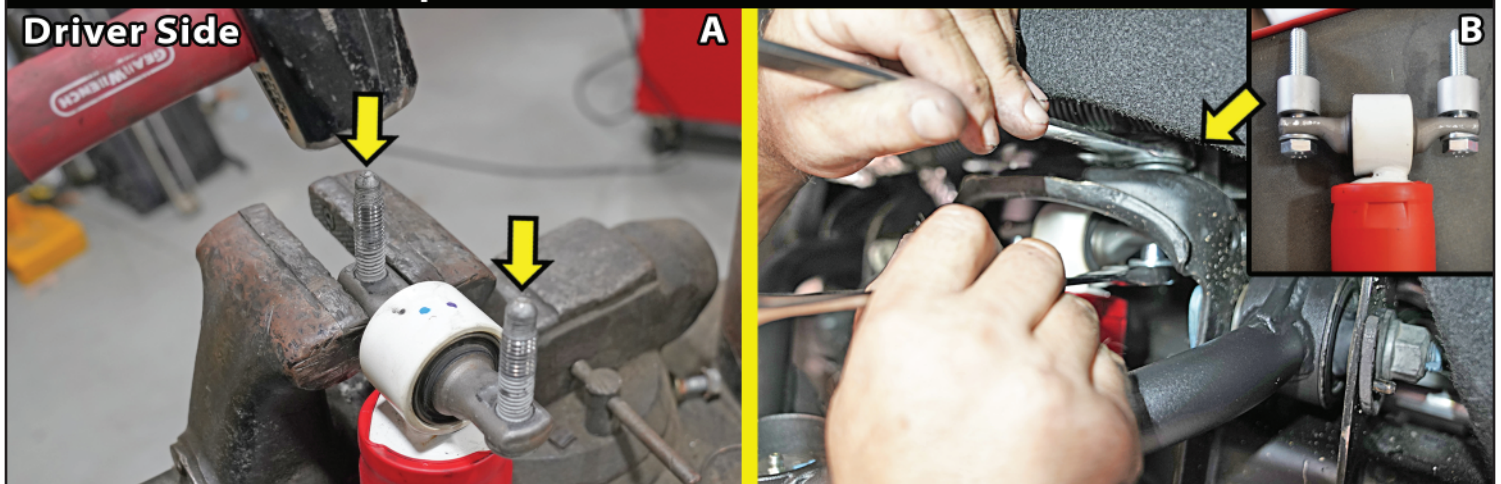
[Illustration 13-A] Using a vise or table top, support the shock bar pin. Using a ball peen hammer, strike and drive the stud down and out of the bar pin.

[Illustration 13-B] On the upper shock mount, attach 12mm Washer to 12mm Bolt. Insert through bar pin. Add Shock Spacer and insert into the factory frame mount. Attach using the factory flange nut. Snug tighten only. [19mm]

Attach the lower shock mount into the factory position on the lower control arm using the factory hardware. [21mm wrench/21mm socket] Snug tighten only. Leave hardware loose. (These bolts will be torqued with the weight of the vehicle on the suspension.)

Tighten and torque upper mount. [19mm] (59)

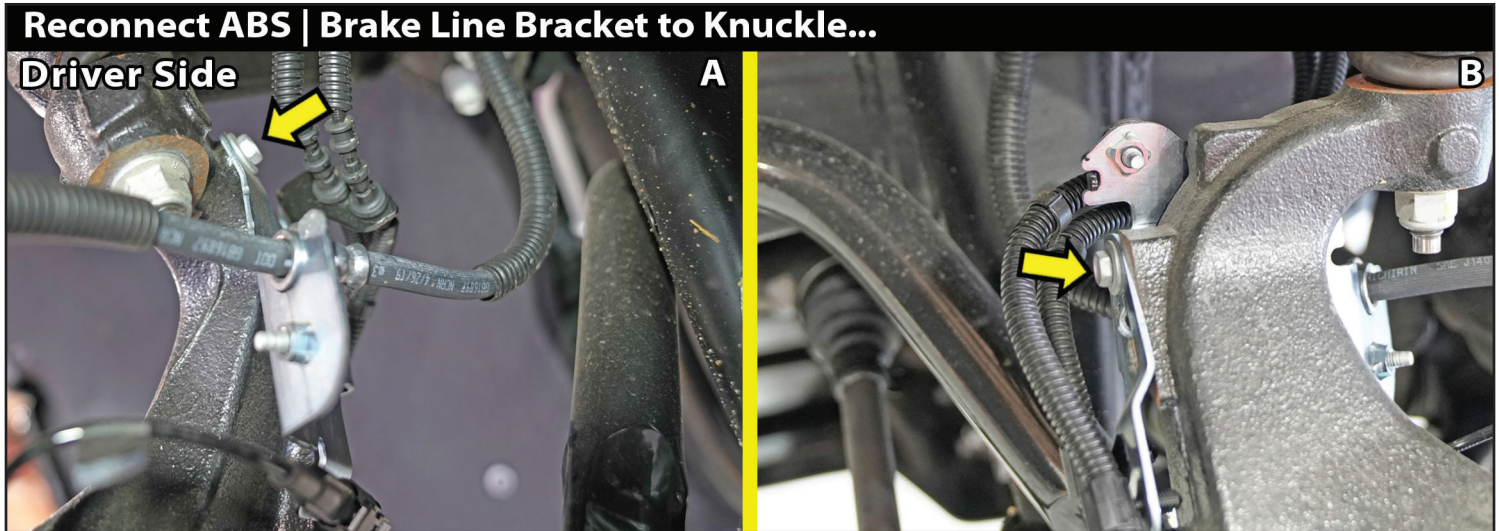
Re-attach the factory ABS wire clips to the top of the shock studs.

Illustration 12**Attach Knuckle to Upper Control Arm...
Driver Side****Illustration 13****Install Front Shock & Spacers...****Driver Side**

15. RECONNECT ABS | BRAKE LINE BRACKET TO KNUCKLE...

[Illustration 14-A] Reconnect the ABS | brake hose bracket to the inside of the steering knuckle using the factory bolt. [10mm]

[Illustration 14-B] Reconnect the ABS | brake hose bracket to the forward side of the steering knuckle using the factory bolt. [10mm]

Illustration 14

⚠ NOTE: Repeat Steps 8 -15 On the Opposite Side.

16. TIGHTEN & TORQUE...

Now tighten and torque everything up... (All Except the upper control arm mounts & the lower shock mount.) Double check all other components to be sure they are all tight & torqued.

17. LOAD TORSION BARS...

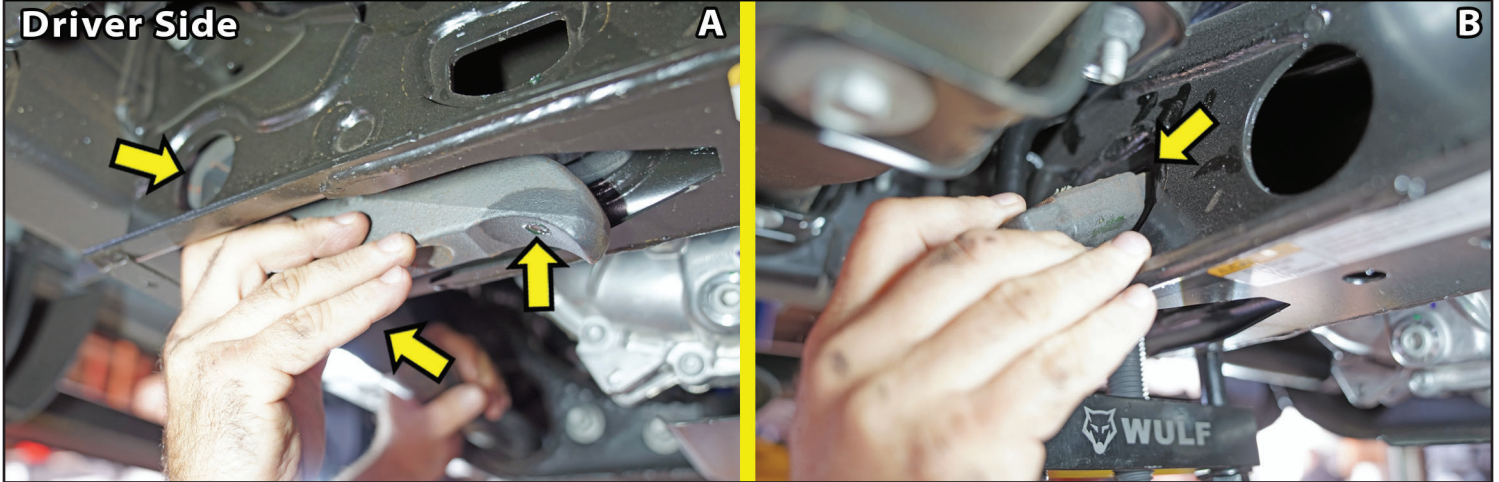
Locate the ENTHUZE Torsion Bar Keys, Driver and Passenger - #66-01-40052. The keys are not side specific. Locate the GM Torsion Bar puller tool. Locate the factory Retainer Block & Adjuster Bolt.

⚠ WARNING: Be extremely careful when loading and unloading the torsion bars; there is a tremendous amount of energy stored in them. Keep your hands and body clear of the adjuster arm assembly and the puller tool in case anything slips or breaks.

[Illustration 15-A] Slide the torsion key up into the crossmember. Slide the torsion bar into the hex opening and completely through the key. The torsion bar should be locked into position in the front lower control arm factory mount.

🔴 TECH TIP Apply a light lubricating grease to the threads and the tip of the adjuster bolt to help with install. Apply light lubricating grease to the torsion bar puller tool threads and the puller shaft-to-adjuster arm contact point. Position puller and load adjuster arm so the Retainer Block & Adjuster Bolt can be reinstalled into the crossmember.

[Illustration 15-A] Load the torsion bars. Reinstall the retainer block and bolt. Run the adjuster bolt 'all the way' up to fully load the torsion bar. [22mm] **🔴 TECH TIP** (It's easier to 'unload' the torsion bars to adjust the height, than it is to add load.) This adjustment will be changed at the end of the installation.

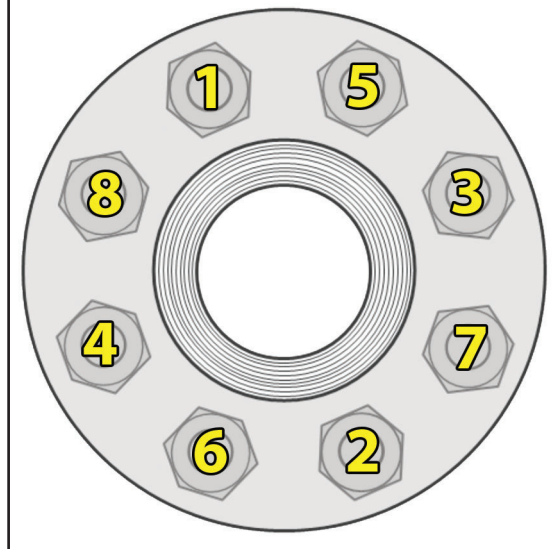
Illustration 15**Load Torsion Bars...****Driver Side****18. FRONT TIRES / WHEELS...**

[Illustration 16] Install the front tires & wheels. [Lug Nuts 22mm] (140) Lower the vehicle to the ground.

⚠ WARNING: When the tires / wheels are installed, always check for and remove any corrosion, dirt, or foreign material on the wheel mounting surface, or anything that contacts the wheel mounting surface (hub, rotor, etc.). Installing wheels without the proper metal-to-metal contact at the wheel mounting surfaces can cause the lug nuts to loosen and the wheel to come off while the vehicle is in motion.

Illustration 16**Lug Nut Torque Sequence...**

Follow the Sequence Below to Torque the Lug Nuts

**19. FRONT CLEARANCE CHECK...**

Reconnect the battery.

With the vehicle on the ground, cycle the steering lock-to-lock and check all components for proper operation and clearances. Pay special attention to the clearance between the tires / wheels and knuckles, brake hoses, wiring, etc.

Raise the vehicle back onto jack stands and secure as per **Step 1**. With the suspension 'hanging' at full extension travel, cycle the steering lock-to-lock and check all components for proper operation and clearances. Pay special attention to the clearance between the tires / wheels and knuckles, brake hoses, wiring, etc. Lower the vehicle to the floor.

REAR INSTALLATION

NOTE: Save ALL factory components and hardware for reuse, unless noted.

20. PREPARE VEHICLE FOR REAR LIFT...

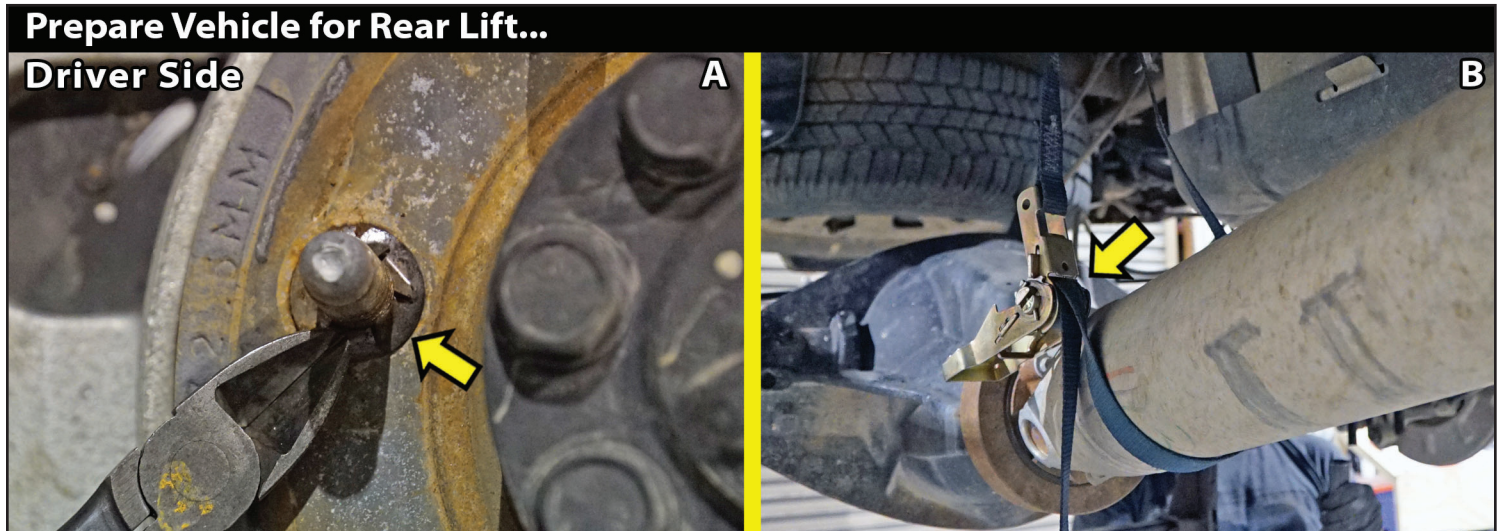
Chock front tires and place transmission in neutral. Raise the rear of vehicle with a jack and secure a jack stand beneath each frame rail, just ahead of the front leaf spring hangers. Ease the frame down onto the stands, place transmission 'Park'. Remove the rear wheels & tires. [Lug Nuts 22mm]

[Illustration 17-A] Remove the metal retaining clip from the wheel lug & discard.

Support the rear axle with a hydraulic jack. Leave plenty of room to lower the rear axle.

[Illustration 17-B] **TECH TIP** Secure the axle at the drive shaft yoke with a ratchet strap. The strap acts as a safety precaution and it allows you to adjust/roll the axle as need to position axle rear blocks, u-bolts, etc.

Illustration 17

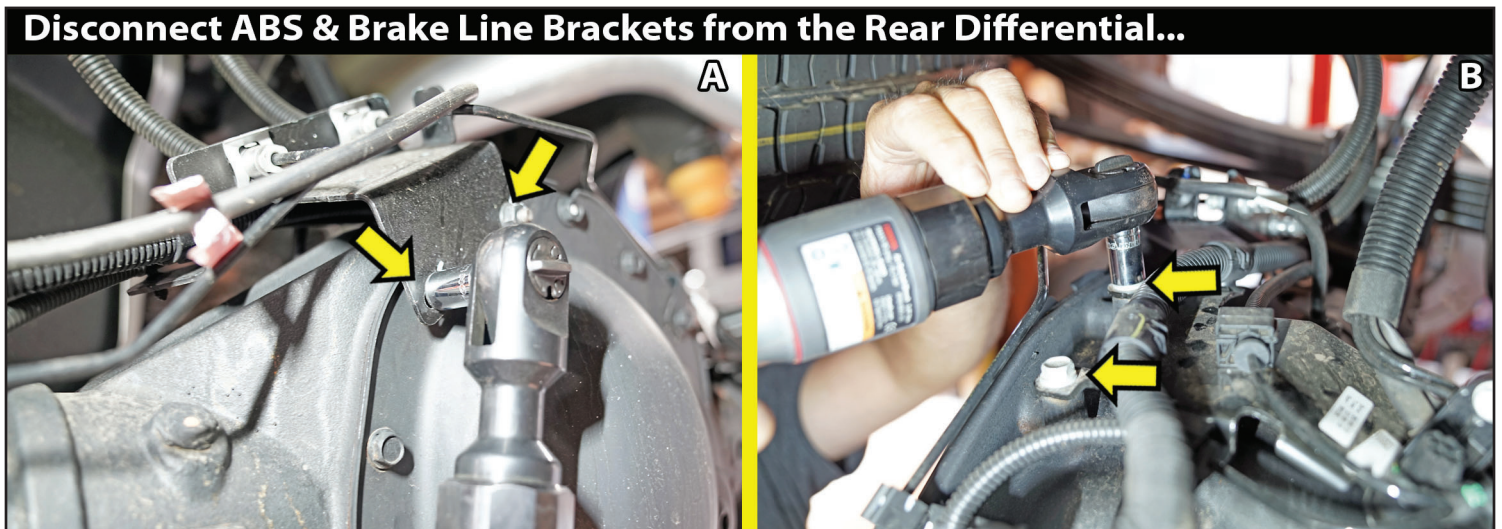


21. DISCONNECT ABS & BRAKE LINE BRACKETS FROM REAR DIFFERENTIAL...

[Illustration 18-A] Disconnect the factory brake line bracket from the center of the rear axle. Unbolt the two (2) bolts connecting the bracket to the differential. [13mm]

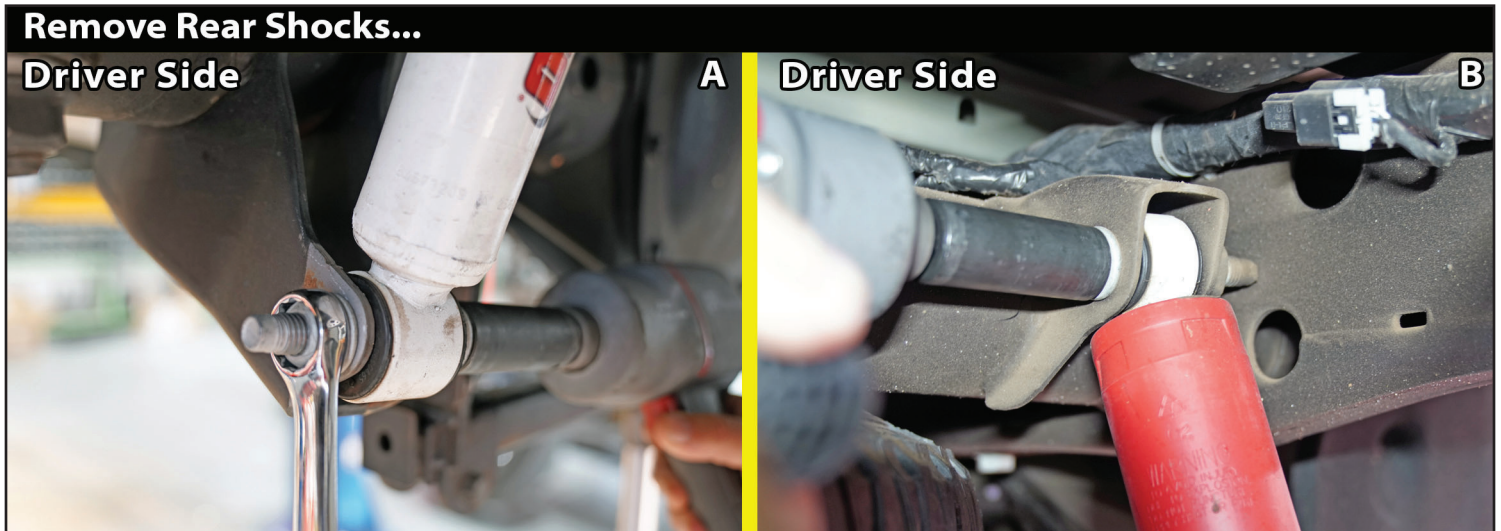
[Illustration 18-B] Disconnect the factory ABS wiring harness from the center of the rear axle. Unbolt the two (2) bolts connecting the bracket to the differential. [13mm]

Illustration 18



22. REMOVE REAR SHOCKS...

[Illustration 19] Remove the factory shock absorbers. Lower mount: [21mm wrench | 21mm socket] The upper shock mount has the nut attached to the shock mount. [21mm]. Retain hardware.

Illustration 19**23. INSTALL REAR BLOCK KIT...**

Locate the ENTHUZE (2) 1.5" Rear Blocks #018 and (4) U-Bolts - 3/4" x 3-1/8" x 12" U-bolt, Square Bend.

Locate the hardware in Bag #77-750. PER Side: (4) 3/4" Flange Nut.

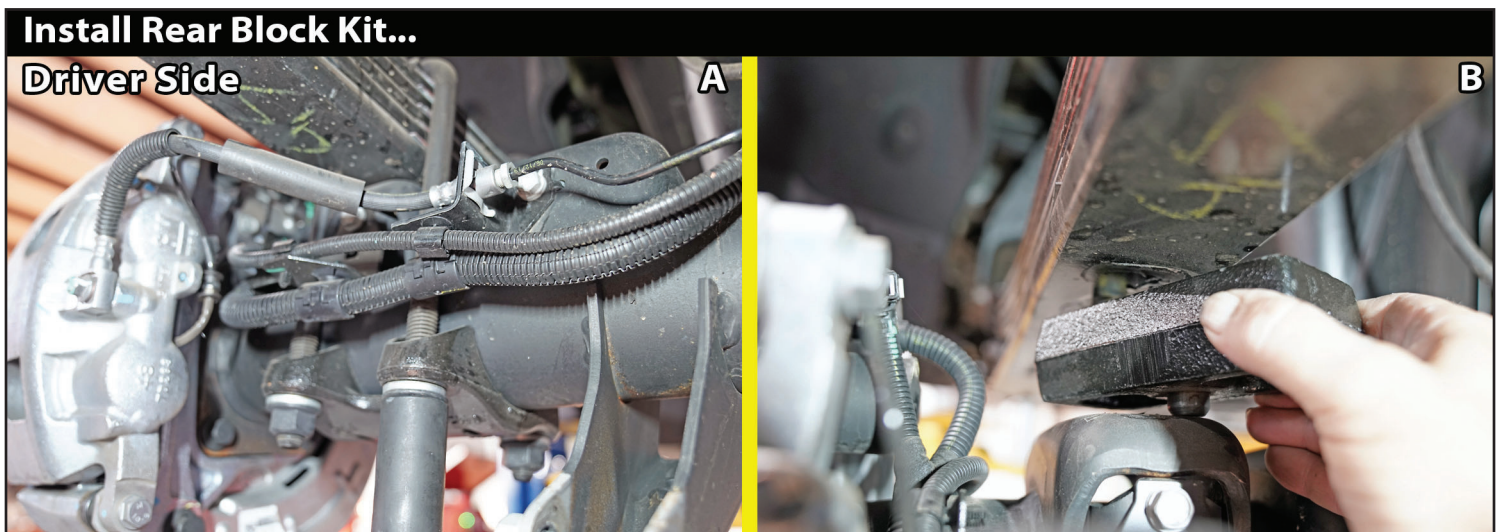
[Illustration 20-A] With the axle well supported, remove the u-bolts and lower u-bolt plates. This will allow the axle to move more easily and aid in installation. [27mm]

[Illustration 20-B] Lower the axle and install the ENTHUZE 1.5" rear blocks **⚠ NOTE:** Make sure the locating pins are seated correctly.

Jack the axle back into position while making sure that the axle pins are seated correctly into the block.

Install the new 3/4" x 3-1/8" x 12" u-bolts using the supplied 3/4" flange nuts; tighten using the "X" pattern. [1-1/8"] (234)

Repeat rear block installation on Passenger side.

Illustration 20

24. INSTALL REAR SHOCK BRACKETS...

Locate the ENTHUZE Shock Relocation Brackets: **NOTE:** PA. Side Brackets Have a 'Notch' on the Top Flange. (1) #55-10-3355 - PA. Side, Inner, (1) #55-11-3355 - PA. Side, Outer, (1) #55-12-3355 - DR. Side, Inner & (1) #55-13-3355 - DR. Side, Outer.

Locate the hardware in Bag #77-3345. PER Side: (1) 9/16" x 3" Bolt, Coarse, Grade 8, (2) 9/16" SAE Flat Washers, (1) 9/16" Nyloc Nut, Coarse, (1) 3/8" x 1-1/4" Bolt, Coarse, Grade 8, (1) 3/8" SAE Washer & (1) 3/8" Flange Nut, Coarse, Grade 5.

Locate the hardware in Bag #77-3345A. PER Side: (1) #14-3355 - Crush Sleeve: Rear Shock Bracket.

[Illustration 21-A] On the Passenger Side, attach a 3/8" SAE washer to the 3/8" x 1-1/4" Bolt. Insert the bolt up through the #55-10-3355 PA. Side, Inner Bracket. Place the bracket inside the upper factory shock mount and insert the bolt up through the factory hole in the mount.

[Illustration 21-B] Attach the #55-11-3355 PA. Side, Outer Bracket over the outside of the shock mount and 3/8" bolt. Loosely secure with 3/8" flange nut.

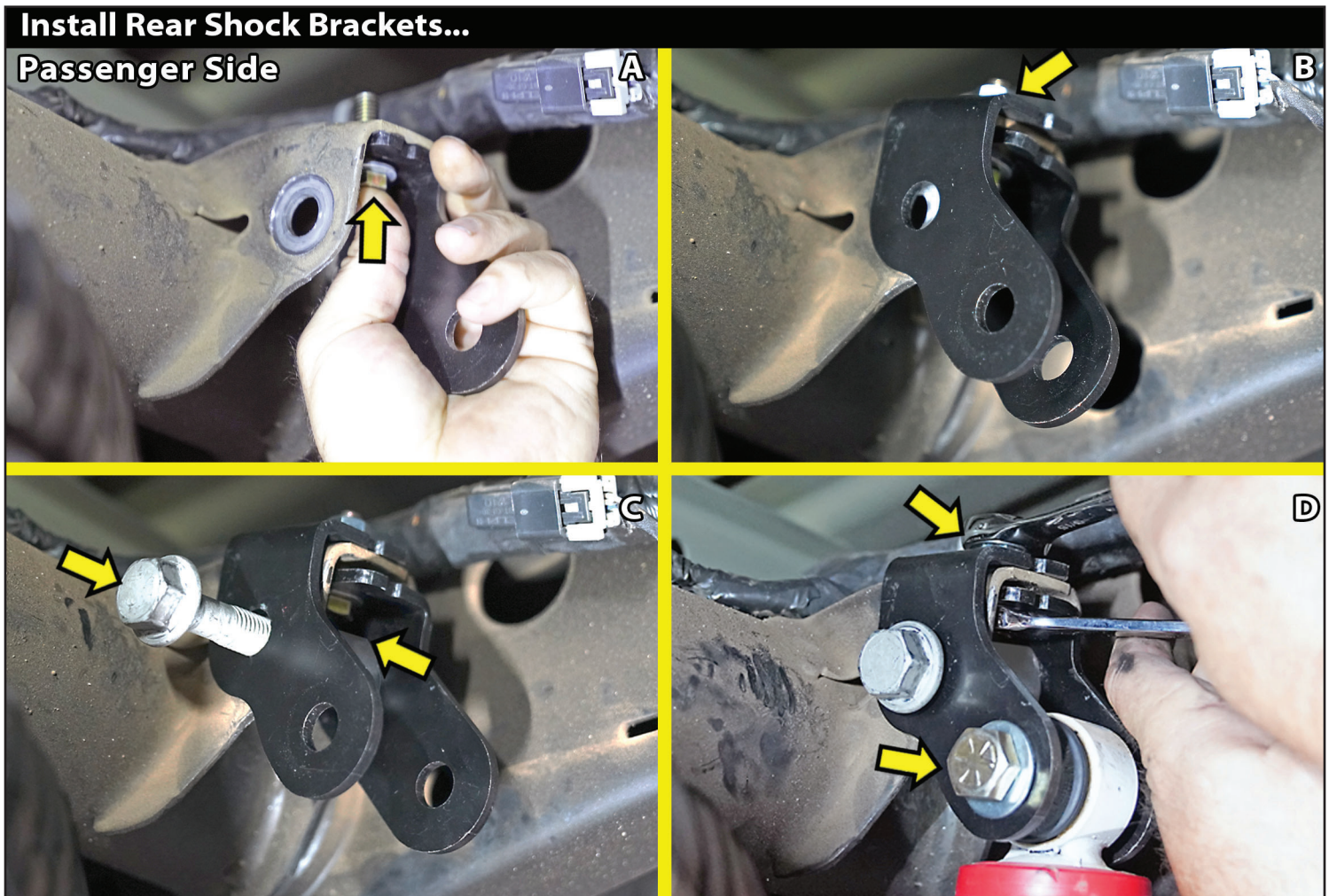
[Illustration 21-C] Insert the factory shock bolt through the outer bracket into the factory shock mount. Insert the #14-3355 - Crush Sleeve in between the factory mount & inner bracket. Loosely secure. [21mm]

[Illustration 21-D] Attach a 9/16" SAE Flat Washer to the 9/16" x 3" Bolt. Install the rod end of the shock to the shock bracket. Secure with 9/16" SAE Flat Washer & 9/16" Nyloc Nut. (110)

Install the shock cylinder body end into the lower shock mount at the axle using the factory hardware. [21mm wrench | 21mm socket] (110)

[Illustration 21-D] Tighten 3/8" bolt and nut on the shock bracket. [9/16" | 9/16"] (35)

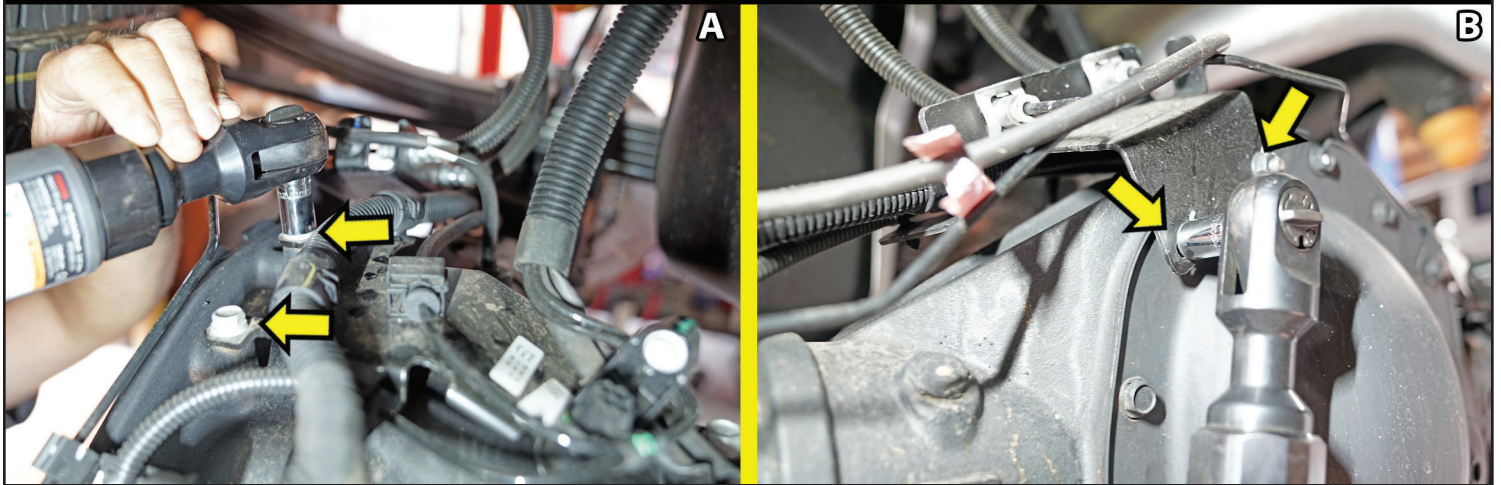
Repeat shock bracket installation on Driver Side.

Illustration 21

25. RECONNECT ABS & BRAKE LINE BRACKETS FROM REAR DIFFERENTIAL...

[Illustration 22-A] Reconnect the factory ABS wiring harness to the center of the rear axle. Reinstall the two (2) factory bolts connecting the bracket to the differential. [13mm]

[Illustration 22-B] Reconnect the factory brake line bracket to the center of the rear axle. Reinstall the two (2) factory bolts connecting the bracket to the differential. [13mm]

Illustration 22**Reconnect ABS & Brake Line Brackets from the Rear Differential...****26. REAR TIRES / WHEELS...**

[Illustration 16] Install the rear tires & wheels. [Lug Nuts 22mm] (140) Lower the vehicle to the ground.

⚠ WARNING: When the tires / wheels are installed, always check for and remove any corrosion, dirt, or foreign material on the wheel mounting surface, or anything that contacts the wheel mounting surface (hub, rotor, etc.). Installing wheels without the proper metal-to-metal contact at the wheel mounting surfaces can cause the lug nuts to loosen and the wheel to come off while the vehicle is in motion.

27. SET FRONT SUSPENSION HEIGHT

🚫 CAUTION: ENTHUZE engineered this lift system to work specifically with the supplied ENTHUZE adjuster keys. Using aftermarket leveling adjuster key or over cranking the factory keys will drastically effect the ride quality and performance. It will also cause harm and/or lessen the wear life of the ball joints, CV axles, bushings, etc.

This lift was engineered to reduce the OEM rake with the supplied 1.5" rear blocks.

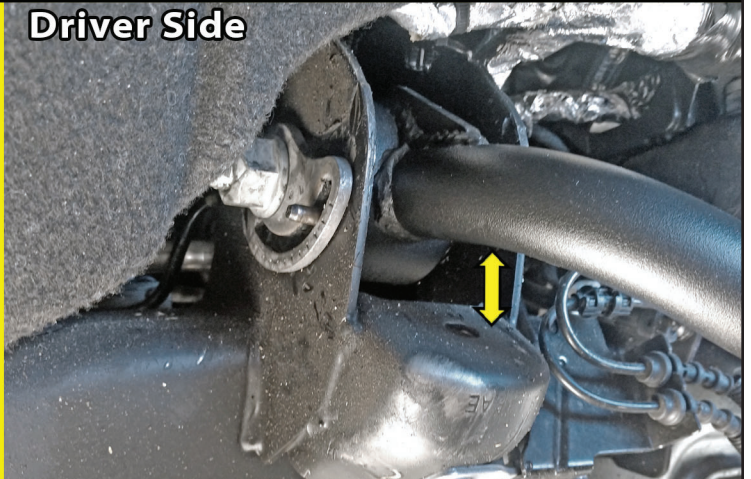
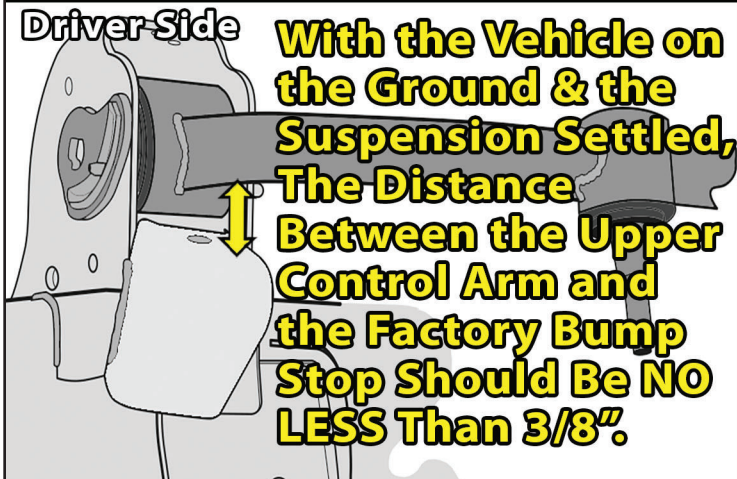
[Illustration 23-A] It is very common for the particular vehicle model to have widely varying starting suspension heights. The key to adjusting the correct ride height for the optimum performance is the allowed space between the Upper Control Arm and the Frame Bump Stop.

Roll the vehicle forward and back to settle the front suspension. **🔴 TECH TIP** Pull down on the front frame mount tow hooks at the bumper to bounce/flex the suspension.

[Illustration 23-B] With the vehicle on flat, level ground measure the ride height from Front-To-Rear. Check how much you need to 'unload' the torsion bars to get close to 'Level'. Make the adjustment to the torsion bar adjuster. Roll the vehicle forward and back and 'bounce' the front to settle the suspension.

Measure the stance again. Measure Front-to-Rear and also measure Side-to-Side. Measure the distance between the upper control arm and the frame bump stop. Do Not Go Below 3/8". (1-/8"-1/4" will limit the down travel and result is a very harsh ride)

Make adjustments as need to achieve the proper ride height and proper distance between the upper control arm and the bump stop.

Illustration 23**Upper Control Arm-to-Frame Bump Stop...****Set Front Suspension Height...****28. TIGHTEN UPPER CONTROL ARMS & SHOCKS...**

Bounce the front end to settle the suspension.

- Torque the upper control arm bolts. [27mm wrench | 27mm socket] (250)
- Torque the lower shock mount. [21mm wrench | 21mm socket] (85)

ADD GREASE TO BALL JOINTS IN UPPER CONTROL ARMS...

- ⚠️ WARNING:** Note that the new ball joints Do Not Have Grease at this time. Grease Must Be Installed BEFORE vehicle is Driven.

⚠️ NOTE: Failure to add grease to the ball joints Will Void Your Limited Lifetime Warranty.

Using a standard manual powered grease gun, attach hose coupler fitting to Zerk fitting. Press down squarely until you feel the 'snap' of the adapter grabbing the Zerk.

Watch the dust boot and slowly give the grease gun a few good pumps until you see the boot begin to swell STOP as soon as you boot begins to swell. Detach the coupler from the Zerk fitting.

Wipe any excess grease away from the Zerk and dust boot.

FINAL CHECKS

29. CLEARANCE CHECK...

Check all hardware for proper torque specifications.

With the vehicle on the ground, check all components for proper operation and clearances. Pay special attention to the clearance between the tires / wheels, brake hoses, wiring, etc. Check tire/wheel clearance with the fenders/bumper as well as with the steering knuckle. **⚠ NOTE:** Depending on your choice of tire size and wheel width, it is not uncommon to trim the lower plastic valance of the bumper and inner fender shroud slightly to add proper tire clearance while turning.

30. WHEEL ALIGNMENT...

Realign vehicle to factory OEM specifications. It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. It is recommended that your vehicle alignment be checked after any off-road driving.

31. HEADLIGHTS...

Re-adjust headlights to proper setting. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle head lamps for proper aim and alignment.

32. FOUR WHEEL DRIVE...

Activate the four wheel drive system and check for proper engagement.

IMPORTANT MAINTENANCE INFORMATION

It is the ultimate buyer's responsibility to have all bolts / nuts checked for tightness after the first 100 miles and then every 1000 miles. The steering, suspension and driveline systems, plus wheel alignment should be inspected by a qualified professional mechanic at least every 3000 miles.

⚠ WARNING:

LIMITED LIFETIME WARRANTY / WARNINGS

Your ENTHUZE® product is covered by the Limited Warranty explained below that gives you specific legal rights. This limited warranty is the only warranty ENTHUZE® makes in connection with your product purchase. ENTHUZE® neither assumes nor authorizes any retailer or other person or entity to assume for it any other obligation or liability in connection with this product or limited warranty.

What is covered? Subject to the terms below, ENTHUZE® will repair or replace its products found defective in materials or workmanship for so long as the original purchaser owns the vehicle on which the product was originally installed. Your warranter is ENTHUZE, doing business as ENTHUZE®.

What is not covered? Your ENTHUZE® Limited Warranty does not cover products ENTHUZE® determines to have been damaged by or subjected to:

- Alteration, modification or failure to maintain.
- Normal wear and tear (bushings, rod ends, etc.). Scratches or defects in product finishes (powder coating, plating, etc.).
- Damage to, or resulting from, the vehicle's electronic stability system, related components or other vehicle systems.
- Racing or other vehicle competitions or contests. Accidents, impact by rocks, trees, obstacles or other aspects of the environment.
- Theft, vandalism or other intentional damage.

Remedy Limited to Repair or Replacement. The exclusive remedy provided hereunder shall, upon ENTHUZE's inspection and at ENTHUZE's option, be either repair or replacement of the product covered under this Limited Warranty. Customers requesting warranty consideration should contact ENTHUZE® by email at info@enthuze.ca to obtain a Returned Goods Authorization number. All removal, shipping and installation costs are customer's responsibility.

If a replacement part is needed before the ENTHUZE® part in question can be returned, you must first purchase the replacement part. Then, if the part in question is deemed warrant-able, you will be credited / refunded.

OTHER LIMITATIONS - EXCLUSION OF DAMAGES - YOUR RIGHTS UNDER STATE LAW

- Neither ENTHUZE® nor your independent ENTHUZE® dealer are responsible for any time loss, rental costs, or for any incidental, consequential or other damages you may have.
- This Limited Warranty gives you specific rights, and this is the only warranty ENTHUZE® makes in connection with your product purchase. You may also have other rights that vary from state to state. For example, while all implied warranties are disclaimed herein, any implied warranty required by law is limited to the terms of our Limited Lifetime Warranty as described above. Some states do not allow limitations of how long an implied warranty lasts and / or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you. ENTHUZE® neither assumes nor authorizes any retailer or other person or entity to assume for it any other obligation or liability in connection with this product or Limited Warranty.

IMPORTANT PRODUCT USE AND SAFETY INFORMATION / WARNINGS

⚠️ WARNING: As a general rule, the taller a vehicle is, the easier it will roll over. Offset, as much as possible, what is lost in rollover resistance by increasing tire track width. In other words, go "wide" as you go "tall"; always use as wide a tire and wheel combination as feasible to enhance vehicle stability. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll bar and cage system. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capabilities are decreased when significantly larger / heavier tires and wheels are used. Take this into consideration while driving. Also, changing axle gear ratios or using tires that are taller or shorter than factory height will cause an erroneous speedometer reading. On vehicles equipped with an electronic speedometer, the speed signal impacts other important functions as well. Speedometer recalibration for both mechanical and electronic types is highly recommended.

Do not add, alter, or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the ENTHUZE® product purchased. Mixing component brands is not recommended.



Enthuze Automotive Products

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