Cognito 4-Inch Standard Front Lift Components for 2019+ GM 1500 2WD/4WD Trucks

INSTALL INSTRUCTIONS:

Cognito 4-Inch Standard Front Lift Components for 2019+ GM 1500 2WD/4WD Trucks

PARTS LIST

QTY	PART #	DESCRIPTION
1	**110-70099**	19+ GM 6-Lug 4" Sub-Frame Component Box
1	**110-70100**	2019+ GM 6-Lug 4" Spindle Component Box
1	**110-70101**	2019+ GM 6-Lug 4" 4WD Component Box
THE COMPONENT BOX BELOW WILL BE REPLACED BY COILOVERS IF THE KIT PURCHASED INCLUDED COILOVERS.		
1	**110-70102**	2019+ GM 6-Lug 4" Strut Spacer

WARNING

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

WARNING: VEHICLES WITH SUPER CRUISE SYSTEM

If your vehicle came equipped with the Super Cruise, hands free driving system, the vehicle ***should not be modified***. The Super Cruise system relies on many sensors that must be calibrated by the manufacturer to ensure proper function and safety. If the vehicle is modified by changing the height or rake of the vehicle these sensors are no longer calibrated. At that point the system will no longer work properly and safety or function of the system cannot be guaranteed.

REQUIREMENTS

- Instructions are written as if working on a left-hand drive (LHD) vehicle, if working on a right-hand drive (RHD) vehicle, the driver and passenger references should be swapped.
  - i.e. Part 8640, for LHD it is installed on the driver side & for RHD it is installed on the passenger side.
- Cutting of the OEM frame and suspension components is required.
- Front-end alignment will be required after completion.
- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- Proper vehicle lifting equipment is required. Always make sure the vehicle is properly supported and **never work under an unsupported vehicle.**

TECH NOTES

- ***Not Compatible with the 2019 LD/Limited trims (2014-2018 body style).***
- ***Not Compatible with Rear Composite Mono-leaf Springs.***
  - To identify, Composite Mono-leaf springs make use of U-bolts with a rounded top.
  - Steel Multi-leaf springs make use of a U-bolts with a square top.
- Trimming of front bumper trim may be necessary based off tire size.
- This lift kit may only be installed on a truck that has not already been lifted or leveled. You cannot stack leveling kits or shock spacers.
- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a kit each kit, and options to kits, are packaged separately. Therefore installation procedures are covered in separate instructions. Familiarize yourself with each specific set of instructions before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.

CHOOSING THE RIGHT LIFT

2019+ GM 6-Lug trucks come from the factory with two different ride heights, the trim of the truck controls the ride height:

AT4 and Trailboss Trims: They have a factory 2" lift, front and rear, which leaves the rear end 1.5" higher than the front. The Cognito 4" front lift for AT4 and Trailboss will be a 4" lift over the originally equipped 2" lift, making the truck as tall as a standard truck equipped with a 6" lift. For an AT4 or Trailboss, Cognito recommends a 4.5" rear block used in place of the stock 2" block, or a mini-pack used with the stock 2" block.

For an AT4 or Trail Boss truck lifted 4", Cognito recommends the following tire options:
OEM 20" Wheels and 295/65R20 or 35x12.5R20 Tires
OEM 22" Wheels and 295/55R20 or 35x12.5R22 Tires
34x12 Tire, 18x10 wheel, 4.5" backspacing ***max***
NOTE: Using an 18" wheel, the max backspacing that can be used is 4.5"
34x12 Tire, 20x10 wheel, 4.75" backspacing
35x12 Tire, 18x10 wheel, 4.5" backspacing ***max***
NOTE: Using an 18" wheel, the max backspacing that can be used is 4.5"
35x12 Tire, 20x10 wheel, 4.75" backspacing

All Other Trims, including vehicles with the Adaptive Ride Control (ARC) System: The rear end is 1.5" higher than the front, so for a 4" front lift Cognito recommends a 2.5" rear end lift to bring the truck to level. This 2.5" rear lift can be done with either a 2.5" rear block, or a mini-pack spring. The mini-pack spring allows adjustment of the rear end lift height and improves ride quality by replacing the OEM bottom overload spring with a more progressive mini-pack of springs. The mini-pack also includes several spacer blocks to fine tune the rear lift height. To take a standard truck to 6", Cognito recommends either a 4.5" rear block, or a mini-pack spring with a 2.5" rear block.

For a standard truck lifted 4", Cognito recommends the following tire options:
OEM 20" Wheels and 295/60R20 Tires
OEM 22" Wheels and 295/55R20 Tires
34x12 Tire, 18x9 wheel, 4.5" backspacing ***max***
NOTE: Using an 18" wheel, the max backspacing that can be used is 4.5"
34x12 Tire, 20x9 wheel, 4.75" backspacing

For a standard truck lifted 6", Cognito recommends the following tire options:
OEM 20" Wheels and 295/65R20 or 35x12.5R20 Tires
OEM 22" Wheels and 295/55R20 or 35x12.5R22 Tires
34x12 Tire, 18x10 wheel, 4.5" backspacing ***max***
NOTE: Using an 18" wheel, the max backspacing that can be used is 4.5"
34x12 Tire, 20x10 wheel, 4.75" backspacing
35x12 Tire, 18x10 wheel, 4.5" backspacing ***max***
NOTE: Using an 18" wheel, the max backspacing that can be used is 4.5"
35x12 Tire, 20x10 wheel, 4.75" backspacing

PARTS LIST FOR SKU: 110-70099

QTY	PART #	DESCRIPTION
1	2612	2019+ GM 6-Lug 4" Skid Plate
2	2613	2019+ GM 6-Lug Skid Plate Clip-Nut Bar
1	2629	2019+ GM 6-Lug 4" Rear Brake Line Drop Bracket
1	2797	2019+ GM 6-Lug 4" Front Brake Line Drop Bracket, Passenger
1	2798	2019+ GM 6-Lug 4" Front Brake Line Drop Bracket, Driver, Lower
1	2799	2019+ GM 6-Lug 4" Front Brake Line Drop Bracket, Driver, Upper
2	6456	1.5" Bump Stop Spacer
1	8635	2019+ GM 6-Lug 4" Front Crossmember
1	8636	2019+ GM 6-Lug 4" Rear Crossmember
1	8640	2019+ GM 6-Lug 4" Sway Bar Drop Bracket, Driver
1	8641	2019+ GM 6-Lug 4" Sway Bar Drop Bracket, Passenger
4	**HP9256**	2019+ GM 6-Lug Cambolt Hardware Pack
1	**HP9257**	2019+ GM 6-Lug 4" Lift Hardware Pack
1	**HP9291**	2019+ GM 6-Lug Transmission Cooling Line Kit

PARTS LIST FOR SKU: HP9256

QTY	PART #	DESCRIPTION
2	2621	2019+ GM 6-Lug Eccentric Washers
1	HARDWARE-M18-FW	M18 DIN 125 Zinc Steel Flat Washer
1	HARDWARE-M18X2.5-LOCKNUT	M18-2.5 Gr 10 Zinc Steel Hex Nut Top Lock
1	HARDWARE-M18-2.5X150-CAMBOLT	M18-2.5 X 150mm Gr. 10.9 Zinc Hex Head Cam Bolt

PARTS LIST FOR SKU: HP9257

QTY	PART #	DESCRIPTION
6	HARDWARE-15109	3/8"-16 X 1-1/2" Grade 8 Yellow Zinc Hex Cap Screw
6	HARDWARE-33082	3/8" SAE Zinc Flat Washer
6	HARDWARE-33622	3/8" Zinc Split Washer
8	HARDWARE-63437	12" Black UV Resistant Nylon Cable Tie
6	HARDWARE-CLIP-NUT-3/8-16	3/8"-16 Black Phosphate Clip Nut for .050"-.200" Thick Material
6	HARDWARE-M6-FLNUT	M6-1.0 Gr 10 Zinc Hex Top Lock Flange Nut
4	HARDWARE-M6-1.0X25-FB	M6-1.0 X 25mm Gr. 10.9 Hex Flange Bolt
4	HARDWARE-M8-F/W	M8 DIN 125 Zinc Flat Washer
2	HARDWARE-M8X1.25-LN	M8-1.25 Gr 10 Zinc Hex Top Lock Nut
2	HARDWARE-M8X1.25X20	M8-1.25 X 20mm Gr 10.9 Zinc Hex Head Cap Screw
4	HARDWARE-M10-F/W	M10 DIN 127 Zinc Flat Washer
4	HARDWARE-M10X1.5-FN	M10-1.5 Class 8 Zinc Nylock Nut
4	HARDWARE-M10-1.5X25-FB	M10-1.5 X 25mm Gr. 8.8 Zinc Hex Flange Bolt
2	HARDWARE-M10X1.5X65	M10-1.5 X 65mm Gr 12.9 Zinc DIN 912 Socket Head Cap Screw
8	HARDWARE-M18-FW	M18 DIN 125 Zinc Steel Flat Washer
4	HARDWARE-M18X2.5-LOCKNUT	M18-2.5 Gr 10 Zinc Steel Hex Nut Top Lock
4	HARDWARE-M18X2.5X120	M18-2.5 X 120mm DIN 931 Class 10.9 Yellow Zinc Hex Head Cap Screw

PARTS LIST FOR SKU: HP9291

QTY	PART #	DESCRIPTION
1	2878	2019+ GM 6-Lug Duramax Transmission Cooling Line Relocation Bracket
2	HARDWARE-M8-F/W	M8 DIN 125 Zinc Flat Washer
1	HARDWARE-M8X1.25-LN	M8-1.25 Gr 10 Zinc Hex Top Lock Nut
1	HARDWARE-M8X1.25X20	M8-1.25 X 20mm Gr 10.9 Zinc Hex Head Cap Screw

PARTS LIST FOR SKU: 110-70100

QTY	PART #	DESCRIPTION
1	8631	2019+ GM 6-Lug 4" Lift Spindle, Driver
1	8632	2019+ GM 6-Lug 4" Lift Spindle, Passenger
1	HARDWARE-M16X1.5-DIENUT	M16-1.5 Thread Repair Die, RH

PARTS LIST FOR SKU: 110-70101

QTY	PART #	DESCRIPTION
1	8638	2019+ GM 6-Lug 4" Front Differential Drop Bracket, Passenger
1	8639	2019+ GM 6-Lug 4" Front Differential Drop Bracket, Driver
1	**HP9258**	2019+ GM 6-Lug 4" Front Differential Drop Hardware

PARTS LIST FOR SKU: HP9258

QTY	PART #	DESCRIPTION
2	HARDWARE-M12-F/W	M12 DIN125 Zinc Flat Washer
1	HARDWARE-M12X1.75-LOCKNUT	M12-1.75 Class 10 Zinc Nylock Nut
1	HARDWARE-M12X1.75X30	M12-1.75 X 30mm Gr 10.9 Yellow Zinc DIN 933 Hex Head Cap Screw
6	HARDWARE-M14-F/W	M14 DIN 125 Zinc Flat Washer
3	HARDWARE-M14X2.0-LOCKNUT	M14-2.0 Gr 10 Zinc Hex Top Lock Nut
2	HARDWARE-M14X2.0X100	M14-2.0 X 100mm Gr 10.9 Yellow Zinc DIN 931 Hex Head Cap Screw
1	HARDWARE-M14X2.0X130	M14-2.0 X 130mm Gr 10.9 Yellow Zinc DIN 931 Hex Head Cap Screw

PARTS LIST FOR SKU: 110-70102

QTY	PART #	DESCRIPTION
2	8711	2019+ GM 6-Lug 4" Tapered Strut Spacer
6	HARDWARE-M10X1.25-FN	M10-1.25 Class 10 Zinc Hex Nylock Flange Nut

TORQUE TABLE:

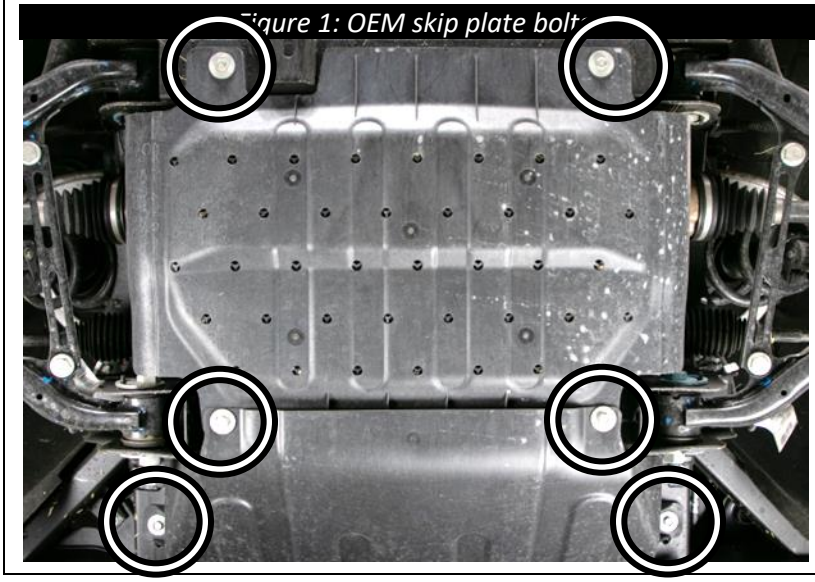
DESCRIPTION	Ft-lbs	Nm
Actuator Mounting Bolts	22	30
Alignment Cam Bolts	129	175
Axle Nuts	177	240
Brake Caliper to Spindle	170	230
Brake Line Brackets to Spindle	8	11
Differential Drop Bracket to Fame	105	142
Differential to Drop Bracket	105	142
Differential to Rear Crossmember	105	142
Drive Line to Differential	18	24
Front Brake Line Bracket to Frame	15	20
Front Crossmember to Frame	225	305
Hub Assembly to Spindle	133	180
Lower Control Arm to Spindle	90	122
OEM Skid Plate to Frame	15	20
Passenger Side Differential Drop Bracket to Crossmember	65	88
Rear Brake Line Bracket to Frame	15	20
Rear Bump Stop to Frame	37	50
Rear Crossmember to Frame	225	305
Skid Plate to Crossmember	37	50
Strut Spacer to Frame	37	50
Strut to Lower Control Arm	37	50
Strut to Strut Spacer	37	50
Sway Bar Drop Bracket to Frame	37	50
Sway Bar End Link to Lower Control Arm	17	23
Sway Bar Mount to Drop Bracket	37	50
Tie Rod Jam Nut	40	54
Tie Rod to Spindle	65	88
Transmission Cooling Line Drop Bracket to Transmission	15	20
Upper Control Arm to Spindle	65	88
Wheel Speed Sensor to Spindle	8	11

INSTALLATION: FRONT

1. Rack the vehicle and lift it off the ground, or if no hoist is available then jack the vehicle off the ground and support properly with jack stands. Remove the tires and set them aside.
    - ***NEVER WORK ON AN UNSUPPORTED VEHICLE.***

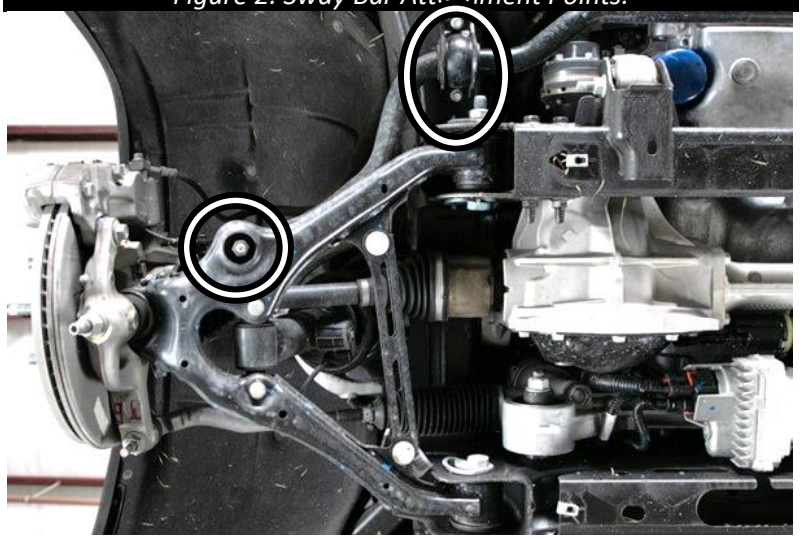
2. Remove the OEM two-piece plastic skid plate:
   Remove the six bolts hold the skid plate in place, set the front half of the skid plate and 4x hardware aside for reuse later. The back half of the skid plate and the remaining hardware may be discarded.

Figure 1: OEM skip plate bolt



3. Remove the front sway bar:
   Remove the nut that holds the sway bar end links to the lower control arms.
   Remove the two bolts from the two sway bar mounts and remove the sway bar from the vehicle.
   Set the sway bar and hardware aside for reuse later.

Figure 2: Sway Bar Attachment Points.

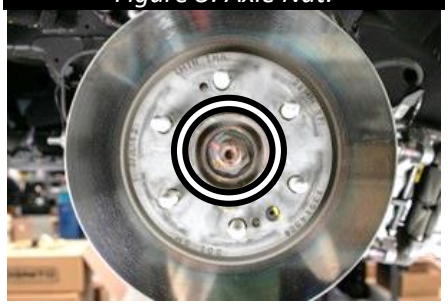


4. ***4WD ONLY:***

Remove the axle nut holding the drive shaft into the spindle on both side of the vehicle and discard the nuts.

- **NOTE:**
  Axle nuts and any other deformed locking nut should not be reused once removed, locking performance cannot be guaranteed once installed and removed.
  Specialty Tooling Required: 36mm or 1-7/16" Deep Socket

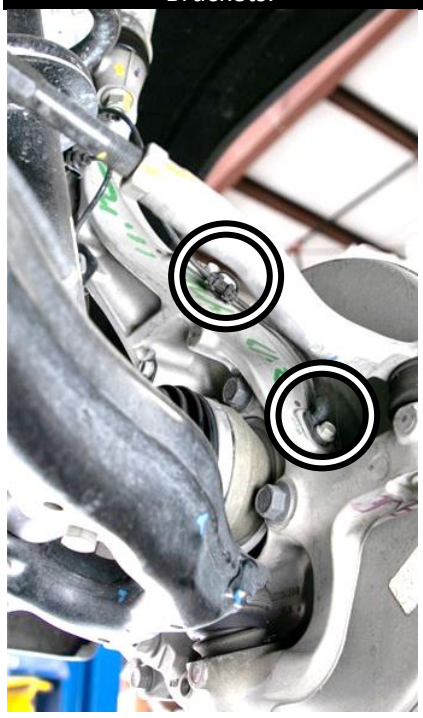
Figure 3: Axle Nut.



5. Remove the wheel speed sensors from both sides of the vehicle:
Remove any brackets and hardware holding the sensor wiring to the spindle.
Disconnect the sensor from the wiring harness.
Remove the bolt that holds the wheel speed sensor to the spindle.
Remove the wheel speed sensor from the spindle, set the sensors and all hardware to the side to be reused later.

- **NOTE:**
  Wheel speed sensors are relatively fragile for automotive sensors, this is why they should be removed from the vehicle for the remainder of the install.
  The sensor is magnetized, metal shavings or dirt will affect how the sensor reads if the sensor gets dirty.

Figure 4: Wheel Speed Sensor & Brackets.



6. Remove the brake calipers with the brake pad ware sensors, if present, from both sides of the vehicle:
Remove any brackets and hardware holding the brake line or sensor wiring to the spindle.
Remove the bolts holding the brake caliper to the spindle.
Hang the brake caliper from the frame, out of the way of work, set all hardware aside for reuse later.

- **NOTE:**
  Never allow a brake caliper to hang using the brake lines! This can damage the brake lines, compromising the braking system which could cause an accident and serious injury.
  The brake pad ware sensor may only be present on one side of the vehicle, the sensor installs into the bottom of the inboard brake pad, the sensor can be left in the caliper or removed.

Figure 5: Brake Caliper Bolts.

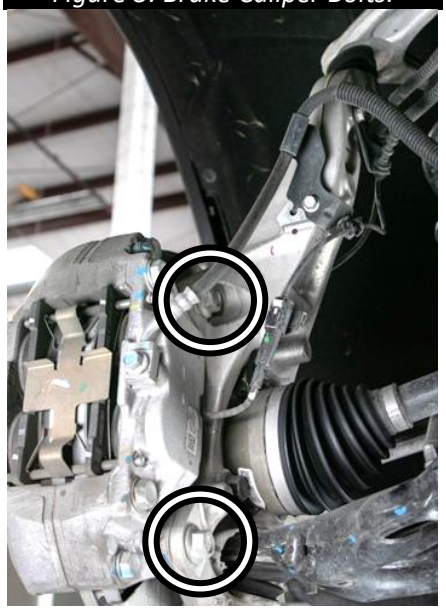


Figure 6: Pad Wear Sensor & Brackets.

7. Separate the outer tie rod end from the spindle and the outer tie rod from the inner tie rod on both side of the vehicle:
Loosen the jam nut at the back of the outer tie rod end.
Remove the nut holding the outer tie rod end to the spindle and retain for reuse later.
Use a joint separator tool to remove the outer tie rod end from the tapered seat of the spindle.
Remove the outer tie rods and jam nuts from the inner tie rods, set them aside for reinstallation later.

- **NOTE:**
  If a joint separator is not available a hammer may be used in one of two ways list below.
  Use the hammer to hit the tapered receptacle of the spindle, the shock should break the joint loose, multiple firm hits may be needed.
  Thread the nut back on to the joint, make sure no threads are sticking out the end of the nut. Hit the nut with the hammer to dislodge the joint from the tapered receptacle of the spindle.
  Use of a ***pickle fork is not recommended*** as the joint will be reused.

Figure 7: Tie Rod Nuts.

8. Separate the upper control arm from the spindle on both sides of the vehicle:
Remove the nut holding the upper control arm to the spindle and retain for reuse later.
Use a joint separator tool to remove the upper ball joint from the tapered seat of the spindle.

- **NOTE:**
  If a joint separator is not available a hammer may be used as described above.

Figure 8: Upper Control Arm Nut.

9. ***4WD ONLY:***
Remove the front drive axles from the vehicle on both sides:
Separate the axle from the front differential by prying between the inboard axle housing and differential.
To remove the inboard joint, allow the spindle to swing out. The inboard axle housing can be compressed slightly, allowing the splines to clear the differential housing and be removed.
Slide the outboard axle housing out of the wheel hub to fully remove axle and set aside for reinstallation later.

- **NOTE:**
  When removing the inboard axle housing from the differential, be extra cautious not to damage the seal in the differential housing. Prying on the seal will damage it, only contact metal components with the pry bar.
  If the outboard axle housing is stuck in the wheel hub, use a hammer and punch to knock the housing out.
  DO NOT use a hammer directly on the treads of the outer axle housing, it will damage the threads.

Figure 9: Pry Inboard Axle Housing out of Differential.

10. Separate the lower control arm from the spindle and remove the OEM spindle on both sides of the vehicle:
Loosen the nut holding the control arm to the spindle but do not remove, this will prevent the spindle from falling.
Use a joint separator tool to remove the lower ball joint from the tapered seat of the spindle.
Remove the nut and spindle, the spindle will not be reused but retain the nut for reuse later.

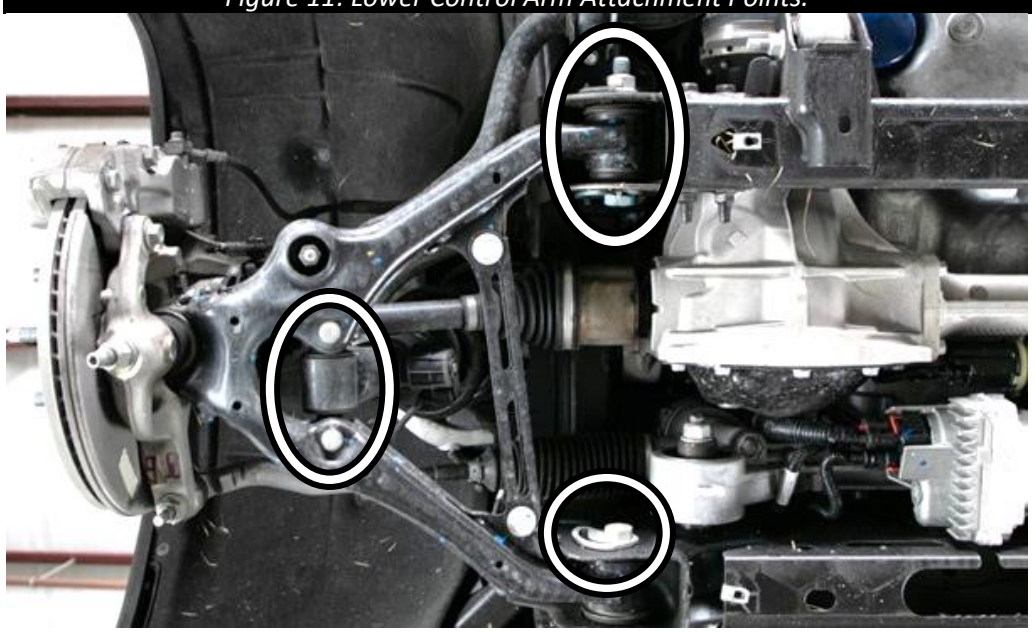
- **NOTE:**
  If a joint separator is not available a hammer may be used as described above.

Figure 10: Lower Control Arm Nut.

11. Remove the lower control arms from both sides of the vehicle:
Remove the two bolts that hold the strut to the control arm, retain the hardware for reuse later.
Remove the two bolts that mount the lower control arm to the frame, this hardware can be discarded.
Pull on the lower control arms to free them from the frame, set them aside for reinstallation later.

- **ADAPTIVE RIDE CONTROL (ARC) VEHICLE NOTE:**
  The wiring harness is clipped onto the lower control arm, this ***must be removed*** prior to removing the arms.
  Wrap up the wiring harness and hang it out of the way.

Figure 11: Lower Control Arm Attachment Points.



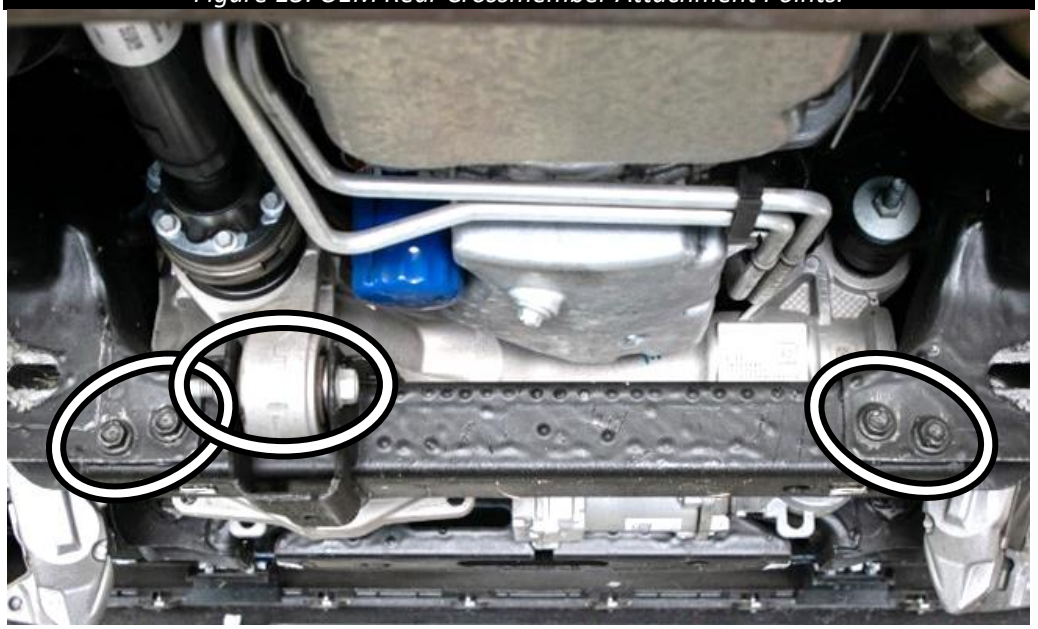
12. Remove the OEM struts from both sides of the vehicle:
Remove the upper mounting nuts hold the strut to the frame, retain this hardware for reuse later.
Remove the OEM strut from the vehicle.

- **NOTE:**
  There is a plastic housing that partially blocks access to the driver side mounting hardware. Lightly prying the housing up will give enough room to remove the outer two nuts.
  The inboard nuts can be removed from inside the engine bay.
- **ARC VEHICLE NOTE:**
  Prior to removing the OEM shocks unplug the wiring harness connectors from the shocks.
  GM tends to utilize locking electrical connectors, to unlock first slide the locking tab out and then depress the clip and pull to remove the connector.

Figure 12: Upper Strut Mounting Nuts. Inboard nut hidden in picture.

13. Remove the OEM rear crossmember:
Remove the bolt mounting the front differential to the rear crossmember, retain this hardware for reuse later.
Remove the four bolts retaining the rear crossmember to the frame, this hardware can be discarded.
Remove the OEM rear crossmember from the frame, the OEM rear crossmember will not be reused.

Figure 13: OEM Rear Crossmember Attachment Points.



14. ***4WD ONLY:***

Disconnect the drive line from the front differential:
Create a unique alignment mark between the flange of the drive line and flange of the differential.
Remove the six bolts retaining the drive line to the differential, retain this hardware for reuse later.
Separate the drive line from the differential, the drive line does not need to be completely removed at this time.
Hang the drive line from the frame, out of the way of work.

- **NOTE:**
  Never allow a drive line to freely hang! This can damage the bearings, compromising the structural integrity of the drive line which could cause an accident and serious injury.

Figure 14: Drive Line Mounting Bolts.

15. ***4WD ONLY:***

Remove the OEM front differential:
Support the differential with a transmission jack, ensure the differential is securely held by the jack.
Unclip the wiring harness connector and clip the two cable ties hold the wiring harness to the differential cover. Ensure the wiring harness is not restrained to the differential anywhere else.
Remove the two bolts holding the actuator in place on the passenger side, this is done to provide clearance to remove the mounting hardware. Retain the hardware for reinstallation later.
Remove the two bolts holding the differential to the frame, one on either side of the vehicle. Retain the driver side mounting hardware, it will be reused, passenger side hardware may be discarded.
Slowly start lowering the differential and stop lowering once the vent line is accessible.
Once the vent line is accessible, clip the line as close as possible to the breather nipple on the differential.
Continue lowing the differential to remove it from the vehicle.

Figure 15: Differential Wiring Harness Connector.

Figure 16: Differential Wiring Harness Cable Ties.

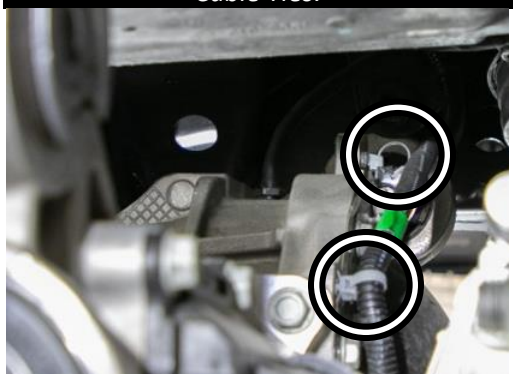


Figure 17: Passenger Side Differential Mount and Actuator. Second actuator bolt hidden in picture.

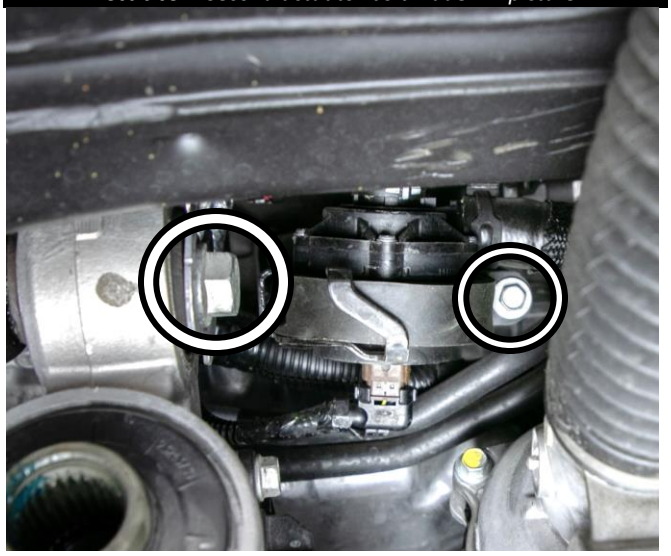
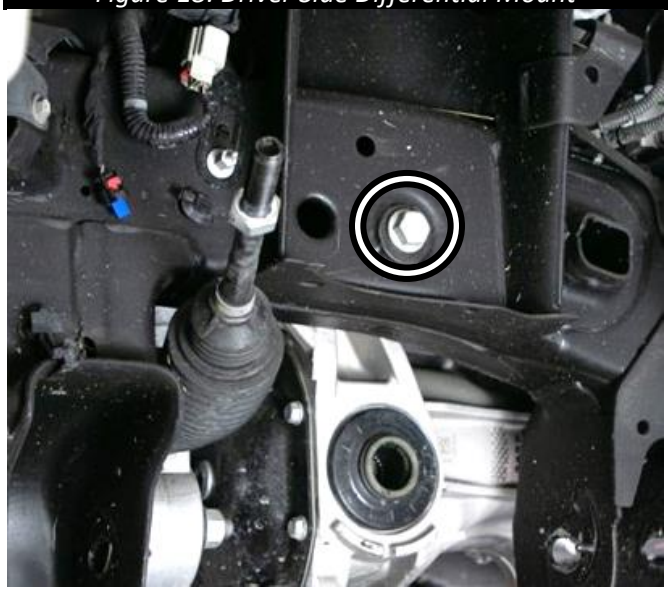


Figure 18: Driver Side Differential Mount



16. ***4WD ONLY:***
    Reinstall the actuator using the two bolts removed prior.
    Torque the hardware to **22 ft-lbs.**

17. ***4WD ONLY:***
    Cut the rear driver side crossmember mount.
    The cut should pass vertically through the middle of the outboard bolt hole.
    - **NOTE:**
      Wear safety glasses
      Ensure fluid lines and wires are free and clear of the cut, shield them from sparks if any kind of grinder is used.
      Deburr and smooth all cut edges.
      Exposed raw metal should be coated or painted to prevent corrosion.

Figure 19: Differential Vent Line.

Figure 20: Cut Driver Side Crossmember Mount.

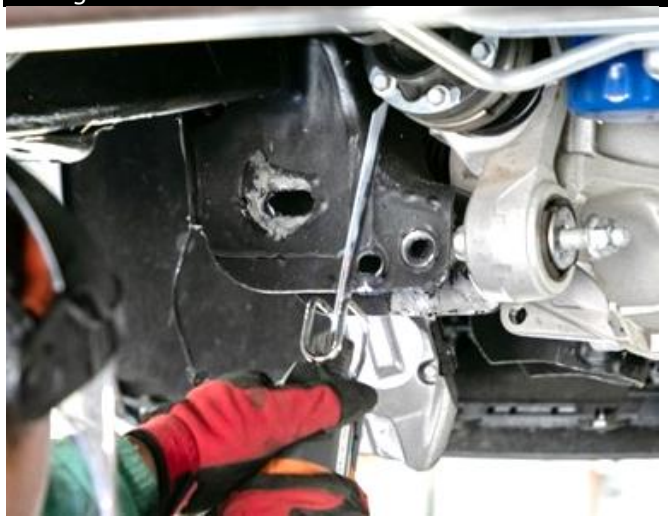


Figure 21: After Cutting Crossmember Mount.

18. Trim rear crossmember mount sheet metal:
Only trim the side closest to the front of the vehicle.
Make a mark 1-1/4” below the slot in the rear crossmember mount on both side of the vehicle.
Cut along the marks made.

- **NOTE:**
  Wear safety glasses
  Ensure fluid lines and wires are free and clear of the cut, shield them from sparks if any kind of grinder is used.
  Deburr and smooth all cut edges.
  Exposed raw metal should be coated or painted to prevent corrosion.

Figure 22: Trim Driver Side Rear Crossmember Mount. ***NOTE:*** *Rear face shown in picture, only trim front face.*

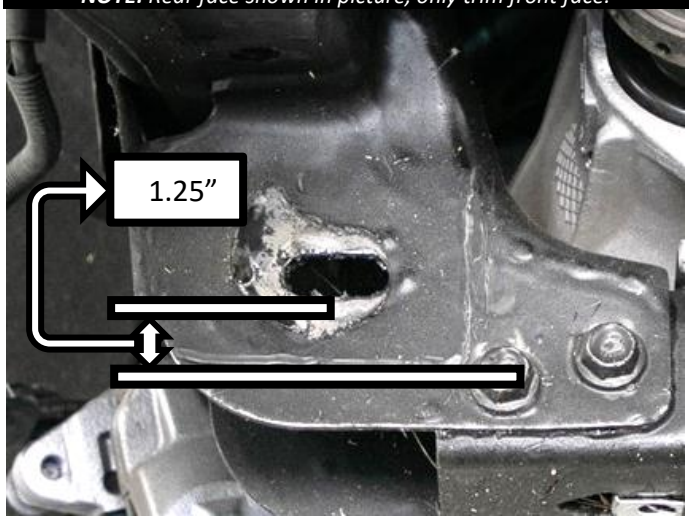


Figure 23: Trim Passenger Side Rear Crossmember Mount. ***NOTE:*** *Rear face shown in picture, only trim front face.*

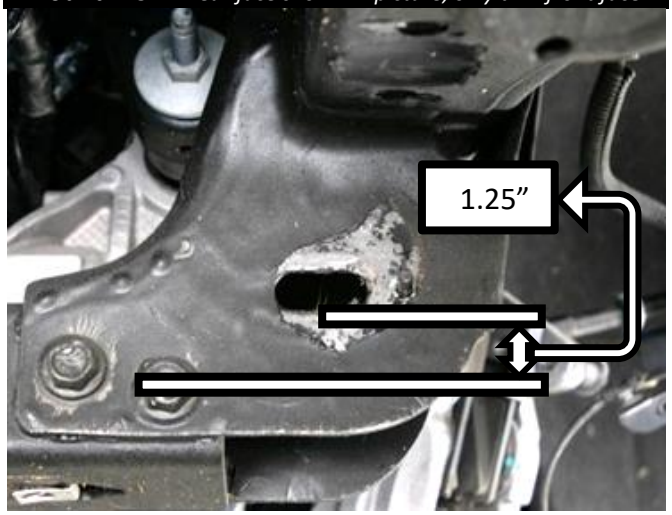


Figure 24: After Trimming Driver Side Crossmember.

Figure 25: After Trimming Passenger Side Crossmember.

19. Trim the front crossmember sheet metal:
Only trim the side closest to the front of the vehicle.
Make a mark 1-1/4” below the slot in the front crossmember on both side of the vehicle.
Cut along the marks made.

- **NOTE:**
  Wear safety glasses
  Ensure fluid lines and wires are free and clear of the cut, shield them from sparks if any kind of grinder is used.
  Deburr and smooth all cut edges.
  Exposed raw metal should be coated or painted to prevent corrosion.

Figure 26: Trim Driver Side Front Crossmember Mount.

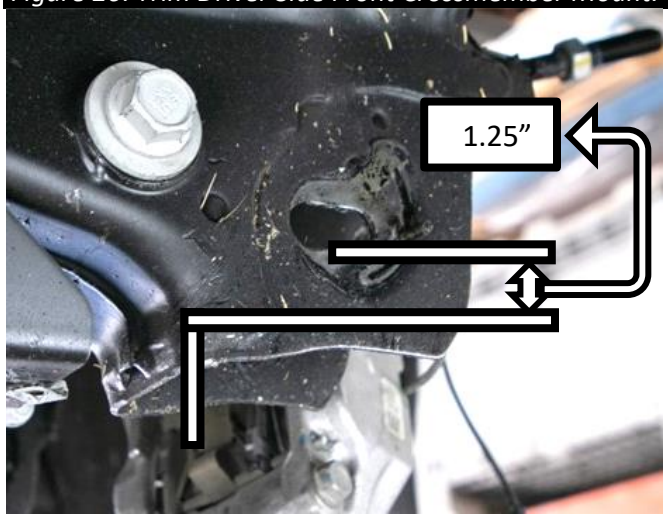


Figure 27: Trim Passenger Side Front Crossmember Mount.

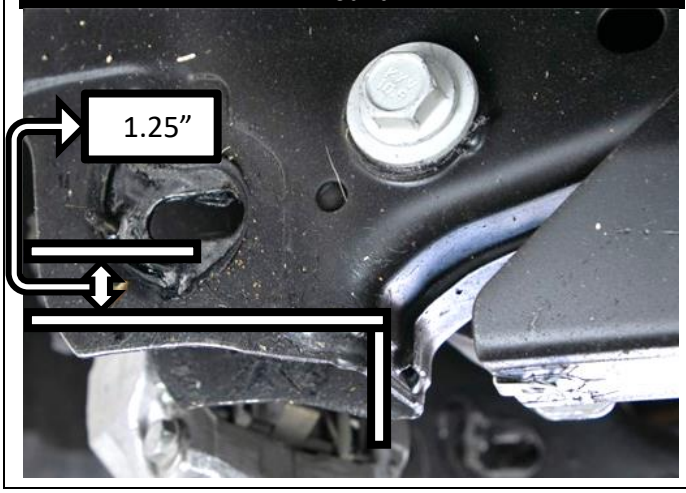


Figure 28: After Trimming Driver Side Crossmember.

Figure 29: After Trimming Passenger Side Crossmember.

20. Thread and cut inner tie rods:
Locate **110-70100**, remove the M16 thread die.
Thread the die onto the inner tie rod by hand and until it stops. One side of the die has tapered thread, the die should be thread on starting with this side.
Apply cutting oil or tapping fluid to the die and the inner tier rod, inboard of the die.
Thread the inner tie rod by rotating the die and holding the inner tie rod using wrenches, stop once the back of the die is 1-3/4" away from the shoulder of the hex on the inner tie rod.
Cut the inner tie rod using the back of the die as a guide.
Thread the remainder of the inner tie rod up to the shoulder of the hex, ***do not*** use power tools for this.
Remove the die and repeat the process for the other side of the vehicle.

- **NOTE:**
  Wear safety glasses
  Ensure fluid lines and wires are free and clear of the cut, shield them from sparks if any kind of grinder is used.
  Exposed raw metal should be coated or painted to prevent corrosion.

Figure 30: Tread OEM Inner Tie Rod with Die

Figure 31: M16 Thread Die.

Tapered Start Side | Non-tapered Side

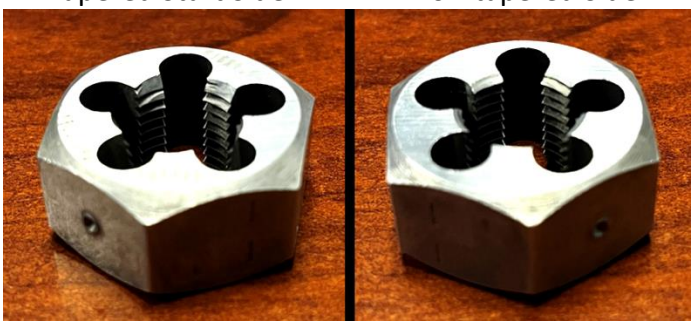
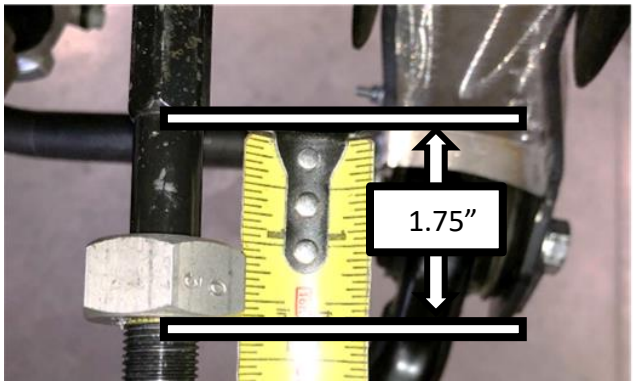


Figure 32: Mark & Cut OEM Inner Tie Rod.



21. Cut the outer tie rods:
Locate the OEM outer tie rods removed prior.
Mark the outer tie rods at a 1/2" from the back of the tie rod, the mark should end up slightly in front of the step on the back of the tie rod.
Cut the outer tie rods on the marks created.
Clean up the end of the tie rod and set them aside for reinstallation later.

- **NOTE:**
  Wear safety glasses
  Ensure fluid lines and wires are free and clear of the cut, shield them from sparks if any kind of grinder is used.
  Exposed raw metal should be coated or painted to prevent corrosion.
  If needed, use a M16-1.5 tap to chase the threads of the tie rod.

Figure 33: Mark & Cut OEM Outer Tie Rods.

22. ***4WD ONLY:***
Install the passenger side front differential drop bracket:
Locate **8638**, passenger side front differential drop bracket, out of component box 110-70101.
Locate **HP9258**, remove 2x M14 flat washers, 1x M14 nut and the 1x M14 by 130mm long bolt.
Install the differential drop bracket onto the passenger side differential mount of the frame using the hardware from the hardware pack.
Do not tighten or torque yet.

Figure 34: Weldment 8636.

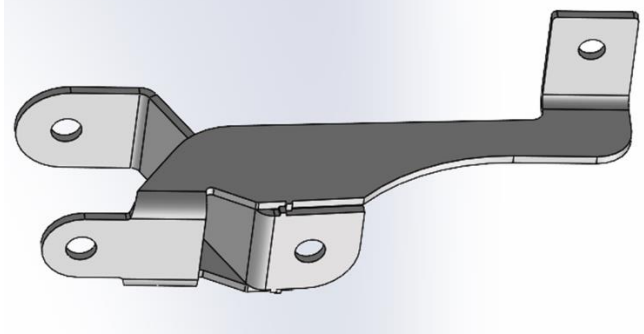


Figure 35: Passenger Side Differential Drop Bracket.

23. ***4WD ONLY:***

Install the driver side front differential drop bracket:

Locate **8639**, driver side front differential drop bracket, out of component box 110-70101.

Install the differential drop bracket into the driver side differential mount of the frame using the OEM hardware removed in a prior step.

Do not tighten or torque yet.

Figure 36: Weldment 8639

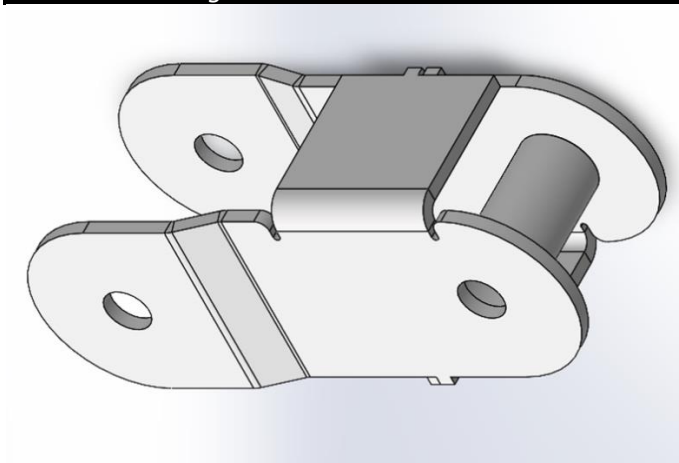
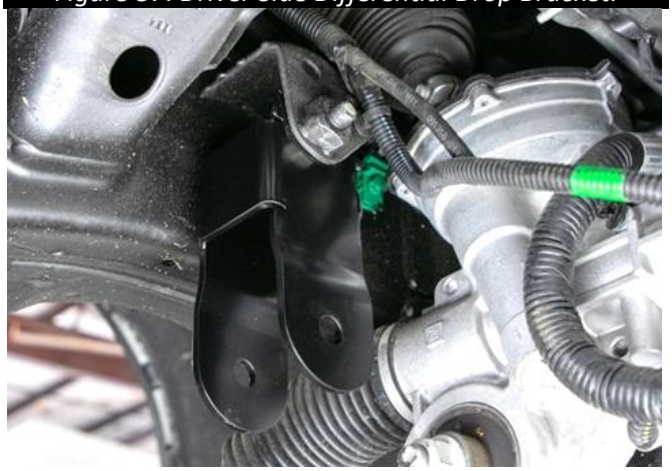


Figure 37: Driver Side Differential Drop Bracket.



24. ***4WD ONLY:***

Reinstall the front differential back into the vehicle:

Prior to lifting the differential back up into the vehicle, cut off the small amount of vent hose still on the breather nipple of the differential.

Locate **HP9258**, remove all the remaining M14 hardware. (4x M14 flat washers, 2x M14 nuts and 2x M14 by 100mm long bolts)

Start raising the front differential back up into the vehicle, lining up the mounting points with the new drop brackets.

Reconnect the vent line to the breather nipple by pushing the hose onto the fitting.

Mount the differential to the drop brackets using the hardware removed from the hardware pack.

Reconnect the wiring harness connector.

Do not tighten or torque yet.

Do not remove the transmission jack yet.

25. Install the rear crossmember:

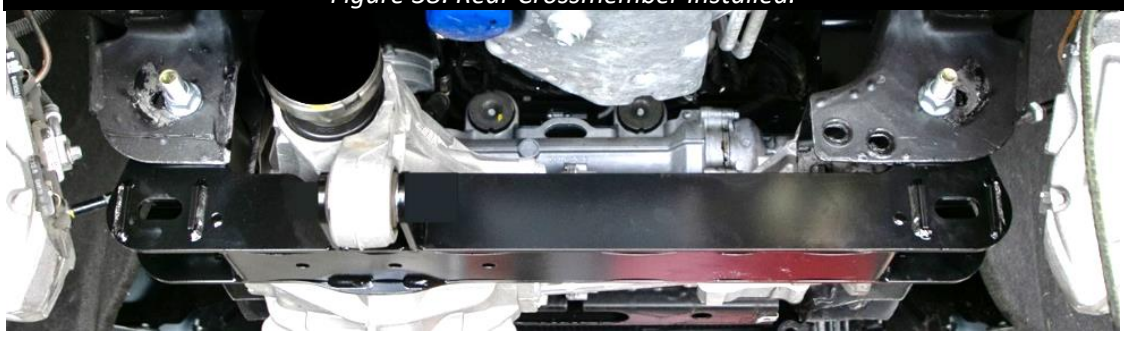
Locate **8636**, rear crossmember, out of component box 110-70099.

Locate **HP9257**, remove 4x M18 flat washers, 2x M18 nut and 2x M18 bolts.

Install the crossmember into the rear crossmember mounts using the hardware removed from the hardware pack.

Torque the hardware to **225 ft-lbs.**

Figure 38: Rear Crossmember Installed.



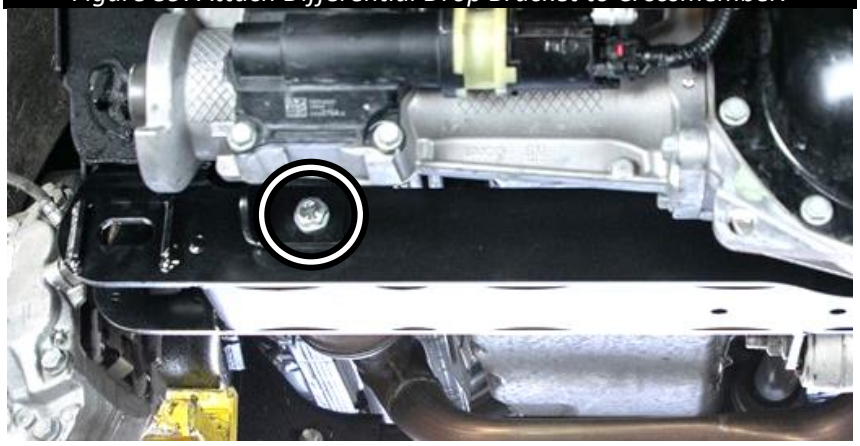
26. ***4WD ONLY:***

Locate **HP9258**, remove the remaining hardware. (2x M12 flat washers, 1x M12 nut, and 1x M12 bolt)

Attach the passenger side differential drop bracket to the rear crossmember using the hardware removed from the hardware pack.

Torque the hardware to **65 ft-lbs.**

Figure 39: Attach Differential Drop Bracket to Crossmember.



27. ***4WD ONLY:***

Attach the rear front differential mount to the rear crossmember using the OEM hardware removed in a prior step.

Torque the hardware to **105 ft-lbs**.

Figure 40: Rear Differential Mount Attached.

28. ***4WD ONLY:***

Using the transmission jack, lightly push the differential up into the vehicle.

Torque the drop bracket to frame mounting hardware to **105ft-lbs.**

Torque the differential to drop bracket mounting hardware to **105 ft-lbs.**

The transmission jack can now be removed.

- **NOTE:**

  Use extreme caution when pushing the differential up into the vehicle, too much force could upset the balance of the vehicle on the lift.

  By slightly pushing up on the differential any slop in the OEM frame is basically removed, ensuring the differential is accurately located in the vehicle.

29. ***4WD w/ Duramax Engine ONLY:***

Locate **HP9291**, remove **2878**, cooling line drop bracket, and all hardware. (2x M8 flat washers, 1x M8 nut and 1x M8 bolt)
Remove the bolt holding the transmission cooling lines to the transmission.
Install the cooling line drop bracket onto the transmission using the OEM hardware removed.
Attach the cooling lines to the drop bracket using the hardware removed from the hardware pack.
Torque the hardware to **15ft-lbs.**

Figure 41: Bracket 2878.

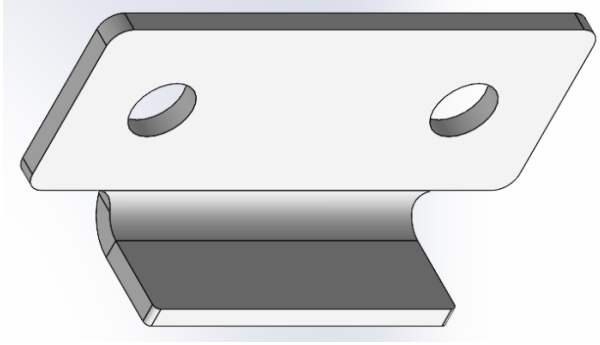
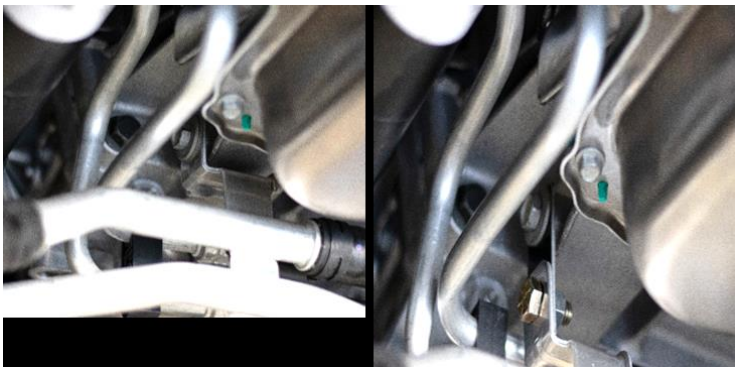


Figure 42: Cooling Line Drop Bracket Installed.

Before After



30. Reinstall the front portion of the OEM skid plate using the OEM hardware removed in a prior step.
Torque the hardware to **15ft-lbs.**

Figure 43: Bracket 2878.

31. Assemble the skid plate clip nut bars:
Locate the 2x **2613**, skid plate clip nut bars, out of component box 110-70099.
Locate **HP9257**, remove the six clip nuts.
Install the clip nuts onto the bars. One clip nut per hole, ensure all the nuts are orientated the same way on the bar.

Figure 44: Clip Nut Bar, 2613.

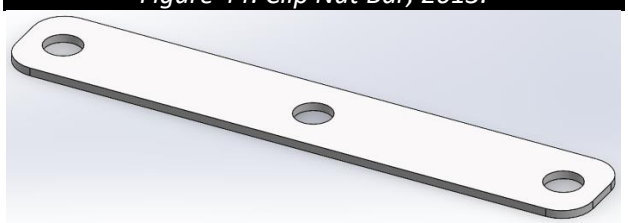


Figure 45: Clip Nut Bar Assembled.

32. Install the front crossmember:
Locate **8635**, front crossmember, out of component box 110-70099
Locate **HP9257**, Remove 2x 3/8" bolts, 4x M18 flat washers, 2x M18 nuts and 2x M18 bolts.
Install one of the clip nut assemblies created prior into the channel of the front crossmember using the 3/8" bolts removed from the hardware pack to temporarily hold it in place. Do not tighten or torque yet.
Install the front crossmember into the pockets in the frame for the lower control arms using the M18 hardware removed from the hardware pack.
Torque the M18 hardware to **225 ft-lbs.**

Figure 46: Front Crossmember Installed.

33. ***SKIP IF, the kit purchased included coilovers***.
Install the strut spacers:
Locate the 2x **8711**, 4" tapered strut spacer, and the 6x M10 nuts from component box 110-70102.
Install the strut spacer onto the strut using the OEM nuts removed prior.
Install the strut with spacer into the vehicle using the M10 nuts provided.
Torque all hardware to **37ft-lbs.**

Figure 47: Weldment 8711.

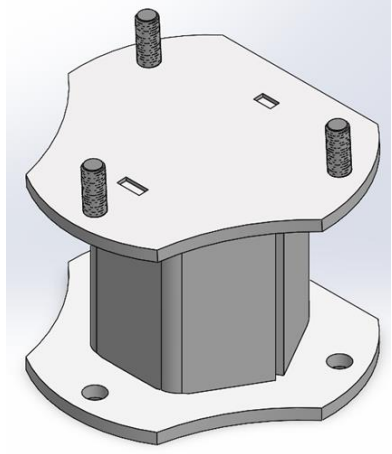


Figure 48: Spacer on Strut.

Figure 49: Spacer and Strut Installed.

34. Reinstall the lower control arm on both side of the vehicle:
Locate the 4x **HP9256**, remove all hardware. (8x 2621, eccentric washers, 4x M18 flat washers, 4x M18 nuts and 4x M18 cam bolts)
Assemble the alignment hardware, slide/press one eccentric washer on each cam bolt.
Install the lower control arms into the new crossmembers using the alignment bolts assembled prior.
Install the remaining eccentric washers, the flat washer and nut, slide/press the eccentric washer onto the cam bolts followed by a flat washer and nut.
Do not tighten or torque yet.

- **NOTE:**
  The cam bolts should be installed so the head of the cam bolt, when installed, is closest to the front of the vehicle. It is safe practice to orient suspension bolts so the head of the bolt will prevent the bolt from falling out in the typical direction of travel in case the fastener ever comes loose.

Figure 50: Eccentric Cam Installed on Cam Bolt.

Figure 51: Lower Control Arm Installed.

35. Attach the strut to the lower control arm using the OEM hardware removed prior.
Torque the hardware to **37 ft-lbs.**

Figure 52: Strut Attached to Lower Control Arm.

36. Transfer the hub assembly from the OEM spindles to the new lift spindles:
Locate **8631**, driver side lift spindle, **8632**, passenger side lift spindle, from component box 110-70100.
Locate the OEM spindles.
Remove the bolts holding the hub assemblies into the OEM spindles, retain the hardware for reinstallation.
Remove the hub assembly, brake shield and O-ring from the OEM spindles.
Install the O-ring, brake shield and hub assemblies into the new lift spindles.
Install the hub assembly bolts removed prior.
Torque the hardware to **133 ft-lbs.**

- **NOTE:**
  Try not to damage the O-ring when removing from it the OEM spindle. To remove, a dull pick or small flat blade screwdriver may be used to gently pry the O-ring out. Replace the O-ring if damaged.
  When transferring the components above make sure to reinstall the components on the same side they were removed from, i.e., driver side components should be reinstalled on the driver side.

Figure 53: OEM Spindle Assembly.

Figure 54: O-Ring Removal from OEM Spindle.

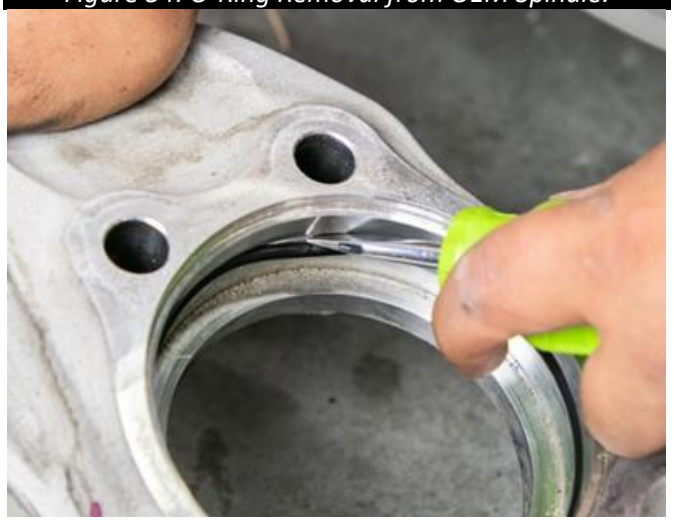


Figure 55: Installing O-Ring into Lift Spindle.

Figure 56: Lift Spindle Assembled.

37. Install the lift spindles on both side of the vehicle:
Prior to installation, ensure the tapered holes in the spindles are free of dirt and debris, a nonwoven abrasive pad can be used to clean the tapers.
Install the spindle onto the lower control arm using the OEM nut removed prior, ensure 8631 get installed on the driver side and 8632 gets installed on the passenger side.
Torque the nuts to **90 ft-lbs.**

- **NOTE:**
  Inspect the plastic insert of the nuts. If any chunks of the plastic are gouged out or missing, it is recommended to replace the nut as the locking feature may no longer work as intended.

38. ***4WD ONLY:***
Reinstall the front drive axles to both sides of the vehicle:
Prior to instillation, ***lightly*** coat the spines of the axles with anti-seize.
Swing the spindle out and slide the outboard axle housing into the wheel hub.
To install the inboard joint, slightly compress the inboard axle housing, allowing it to clear the differential housing and guide the splines into the differential.
Ensure the axle is fully seated into the differential by pulling on the inboard axle housing, it should not move if fully seated.

- **NOTE:**
  Guide the inboard axle housing into the differential, this will help the seals to not get damaged.
  If the axle will not engage with the differential, try rotating the axle slightly while guiding the inboard axle housing into the differential.
  It can require a good amount of force to install the inboard axle housing into the differential due to the snap ring in the splines that must be compressed to be able to install the axle.

Figure 57: Reinstalling Front Drive Axle.

39. Attach the upper control arm to the spindle using the OEM nut on both side of the vehicle.
Torque the nuts to **65 ft-lbs.**

- **NOTE:**
  Inspect the plastic insert of the nuts. If any chunks of the plastic are gouged out or missing, it is recommended to replace the nut as the locking feature may no longer work as intended.

40. Reinstall the outer tie rods onto the inners and attach the outer tie rods to the spindle on both side of the vehicle:
Locate the cut OEM outer tie rods and jam nuts removed prior.
Install the jam nuts onto the inner tie rod, thread them all the way down.
Install the cut OEM outer tie rods onto the inner tie rods, the outer tie rod will need to be swap side to side, i.e., install the driver side on the passenger side and vise vera. Thread them all the way down the inner tie rods.
Attach the outer tie rods to the spindle using the OEM nuts removed prior.
Torque the nuts to **65 ft-lbs.**

- **NOTE:**
  Inspect the plastic insert of the nuts. If any chunks of the plastic are gouged out or missing, it is recommended to replace the nut as the locking feature may no longer work as intended.
  Swapping the outer tie rod from side to side is done due to the orientation of the new lift spindle's tie rod receptacle, it is flipped from the OEM orientation. Therefore, it the tie rods were reinstalled in the location they were removed from the tie rod would interfere with the shocks.

Figure 58: Tie Rod Assembly Attached to Spindle.
***NOTE:** Driver Side Shown*

41. Install the axle nuts on both side of the vehicle.
Torque the nuts to **177 ft-lbs.**

- **NOTE:**
  New axle nuts are not included with this kit, but it is highly recommended to replace the axle nuts as locking performance cannot be guaranteed once installed and removed.

42. Reinstall the brake calipers onto the spindles on both side of the vehicle:
Locate the OEM hardware removed prior.
Install the caliper onto the spindle using the OEM hardware.
Torque the hardware to **170 ft-lbs.**

- NOTE:
  Ensure the brake like is not kinked or twisted when reinstalling the calipers, this will adversely affect braking performance.

43. Install the sway bar drop brackets:
Locate **8640**, driver side sway bar drop bracket, and **8641**, passenger side sway bar drop bracket out of component box 110-70099.
Locate the OEM mounting hardware removed prior.
Install the drop brackets onto the frame using the OEM bolts removed prior, ensure 8640 get installed on the driver side and 8641 gets installed on the passenger side.
Torque the hardware to **37 ft-lbs.**

Figure 59: Weldments 8640 & 8641.

8640 8641

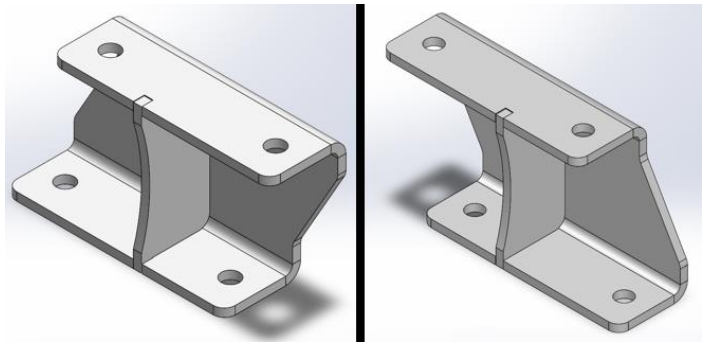


Figure 60: Sway Bar Drop Bracket Installed.
***NOTE**: Passenger Side Shown*

44. Reinstall the sway bar:
Locate **HP9257**, remove 4x M10 flat washers, 4x M10 nuts 4x M10 by 25mm long bolts.
Locate the OEM sway bar, mounts and end links removed prior.
Install the sway bar mounts onto the sway bar drop brackets using the hardware removed from the hardware pack.
Torque the hardware to **37 ft-lbs**

Figure 61: Sway Bar Installed onto Drop Brackets.
***NOTE**: Passenger Side Shown*

45. Attach the sway bar end links to the lower control arms using the OEM nut on both side of the vehicle.
Torque the nuts to **17 ft-lbs.**

- **NOTE:**
  Inspect the plastic insert of the nuts. If any chunks of the plastic are gouged out or missing, it is recommended to replace the nut as the locking feature may no longer work as intended.

Figure 62: Sway Bar End Link Attached to Lower Control Arm.

46. Install the skid plate:

Locate **2612**, 4" lift skid plate out of component box 110-70099

Locate **HP9257**, remove all 3/8" hardware. (6x 3/8" flat washers, 6x 3/8" split washers, and 4x 3/8"-16 bolts)

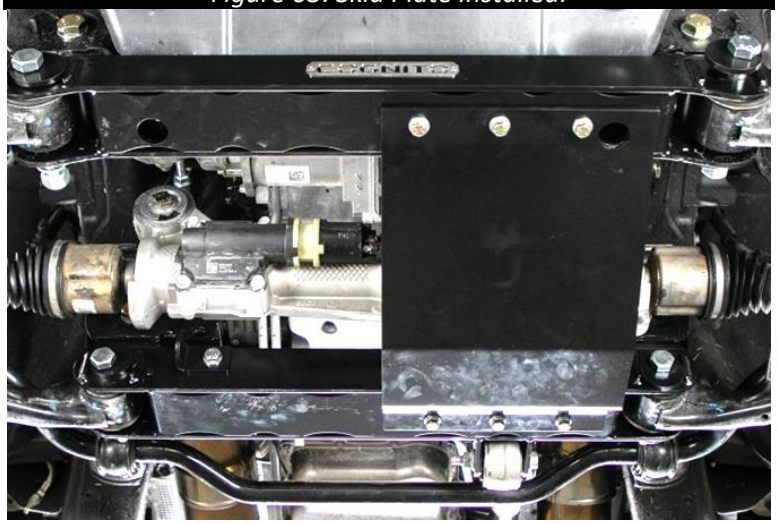
Install one of the clip nut assemblies created prior into the channel of the rear crossmember, aligning the clip nut assembly with the holes in the crossmember.

Remove the two bolts holding the clip nut assembly in place on the front crossmember.

Install the skid plate onto the front and rear crossmember using the hardware removed from the hardware pack plus the two bolts that were holding the front clip nut bar in place.

Torque the hardware to **37 ft-lbs.**

Figure 63: Skid Plate Installed.



47. ***4WD ONLY:***

Swap the pinion flange of the differential:

This process requires advance mechanical procedures, read though, and follow all instructions to avoid damaging the differential.

Using a beam/dial style inch-pound torque wrench, measure the amount of torque require to rotate the differential via the pinion flange nut. Record the torque value here: _____in-lbs.

Remove the pinion nut, retain the hardware for reinstallation later.

Using an automotive puller, remove the OEM pinion flange. This may be discarded as it will not be reused.

Locate **210-90862**, extended length CV drive line.

Locate the u-joint style pinion flange included with 210-90862, lightly oil the splines and shaft seal diameter.

Install the new pinion flange onto the differential, if needed use the pinion nut to draw the flange down onto the splines of the differential.

Apply a bead of RTV sealant to the end of the visible splines in the center of the pinion flange.

Reinstall the pinion nut and washer, run the nut down until it is lightly contacting the pinion flange. Do not tighten or torque yet.

Measure the torque require to rotate the pinion flange and tighten the pinion nut in small increments, no more than 5ft-lbs per increment, until the value measured ***matches*** or ***slightly exceeds*** the value recorded earlier.

- **NOTE:**
  Once the pinion nut has been removed or is loose, the pinion gear of the differential is no longer restrained. Using a hammer to remove or install the pinion flange will result in the pinion gear or bearing being damaged, **DO NOT USE A HAMMER DURING THIS PROCESS.**
  Specialty Tooling Required: Automotive Puller

48. ***4WD ONLY:***

Install extended length CV drive line to the vehicle:

Remove the OEM drive line, pull on the drive line to free the slip yoke from the transfer case. Oil might spill out when removing the drive line.

Locate **210-90862**, extended length CV drive line. Lightly oil the splines and shaft seal diameter of the slip yoke.

Insert the slip yoke of the new drive line into the transfer case.

Attached the drive line to the differential using the two u-joint retaining caps and the four bolts include with the new drive line.

Torque the retaining cap bolts to **18 ft-lbs.**

49. Install the wheel speed sensors into the lift spindles on both side of the vehicle:
Locate the OEM wheel speed sensors and hardware removed prior.
Insert the sensor into the spindle and install the retaining hardware.
Reconnect the sensor to the wiring harness.
Torque Hardware to **8 ft-lbs.**

Figure 64: Speed Sensor Installed.

50. Torque Lower Control Arm Cam Bolts:
Position the cam bolts to the center of the adjustment range.
Torque the Cam Bolts to **129 ft-lbs.**

- **NOTE:**
  The vehicle will require a professional alignment once the install is complete, setting the adjustment range of the cam bolts to the center will be close enough to drive the vehicle to an alignment shop.

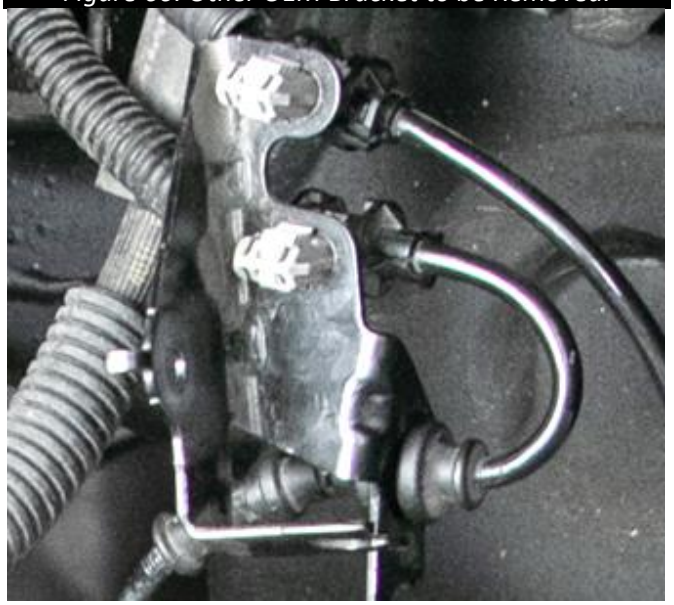
51. Rough Set Toe:
Set toe by adjusting the length of the tie rod.
Adjust the length of the tie rod until the rotors look to be slightly toe in.
Torque the jam nuts to **40 ft-lbs.**

- **NOTE:**
  The vehicle will require a professional alignment once the install is complete, setting the tie rods will be close enough to drive the vehicle to an alignment shop.

52. Remove the two metal brackets, shown below in the pictures, from the brake line and sensor wiring.

Figure 65: OEM Bracket to be Removed.

Figure 66: Other OEM Bracket to be Removed.



53. Brake line and wiring routing:
The OEM brake line and routing of the line change from model year 2019 to model year 2020, the notes below will go over how to deal with both designs.

Model Year: 2020+

1. Install upper brake line drop bracket:
Locate **2799**, upper brake line drop bracket, out of component box 110-70099.

Figure 67: Bracket 2799.

Remove the clip holding the brake line to the OEM bracket on the driver side frame rail where the hard line transitions to soft line.
Remove the bolt attaching the OEM bracket to the frame.
Install 2799 over top of the OEM bracket and reinstall the bolt removed prior.
Reinstall the clip removed prior to attach the brake line to the drop bracket.
Torque the hardware to **15 ft-lbs.**

- **NOTE:**
Ensure the hard line is not rubbing on OEM bracket once the line is restrained to the drop bracket.

Figure 68: Driver Side Brake Line Attached to Upper Drop Bracket.

Model Year: 2019

1. Attach OEM brake line bracket to spindles:
Locate **HP9257**, 4x M6 nuts and 4x M6 bolts.
Attached the OEM bracketry to the spindle using the hardware removed from the hardware pack.
Torque the hardware to **8 ft-lbs.**

Figure 76: OEM Brackets Attached to Spindle.

Model Year: 2020+

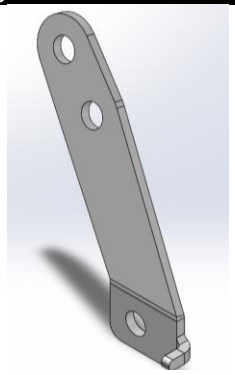
2. Install lower brake line drop bracket:

Locate **2798**, lower brake line drop bracket, out of component box 110-70099.

Locate **HP9257**, remove 2x M6 nuts & 2x M6 bolts.

Install 2798 onto the driver side spindle using 1x M6 nut and bolt removed from the hardware pack.

Figure 69: Bracket 2798.



Remove the clip holding the wear pad wiring to the OEM bracket.

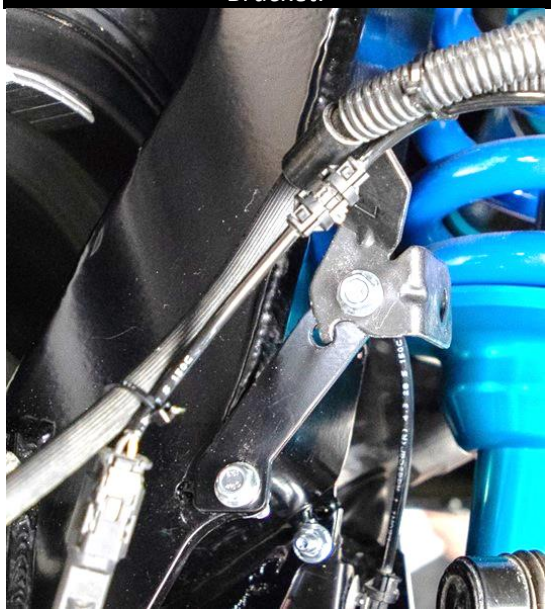
Slide the bracket on the soft line up until it can be installed on 2798.

Install the OEM soft line bracket onto 2798 using the remaining hardware removed from the hardware pack.

Torque all hardware to **8 ft-lbs.**

- **NOTE:**
  Use a lubricant to make sliding the bracket on the soft line easier, if needed.
  Ensure the soft line is not damaged while moving the OEM bracket.

Figure 70: Brake Line Attached to Lower Drop Bracket.



Model Year: 2019

2. Restrain Sensor Wiring:

Locate **HP9257**, Remove the 8x cable ties.

Restrain the sensor wiring to the brake line use the cable.

- **ARC VEHICLE NOTE:**
  Reinstall the wiring harness clips into the lower control arms.
  Restrain the wiring to the frame using the cable ties.

Figure 78: 2019 Wire Routing.

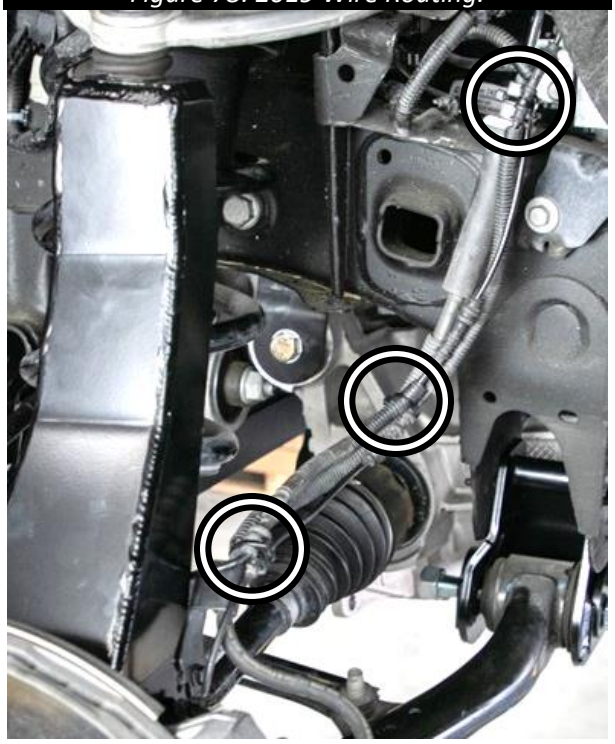


Figure 78: ARC System Wire Routing.

Model Year: 2020+

3. Install passenger side brake line drop bracket:
Locate **2797**, passenger side brake line drop bracket, out of component box 110-70099.
Locate **HP9257**, remove 2x M6 nuts & 2x M6 bolts.
Install 2797 onto the passenger side spindle using 1x M6 nut & bolt removed from the hardware pack.
Install the OEM soft line bracket onto 2797 using the remaining hardware removed from the hardware pack.
Torque all hardware to **8 ft-lbs.**

Figure 71: Bracket 2797.

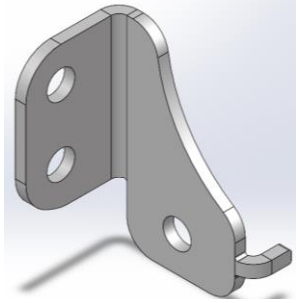


Figure 72: Brake Line Attached to Passenger Side Drop Bracket.

4. Remove Unused OEM Wire Routing Bracketry:
Remove any unrestrained bracketry from the sensor wiring and brake line, they may be discarded.

Model Year: 2020+

5. Restrain Sensor Wiring:
Locate **HP9257**, Remove the 8x cable ties.
Restrain the sensor wiring to the brake line use the cable.

- **ARC VEHICLE NOTE:**
  Reinstall the wiring harness clips into the lower control arms.
  Restrain the wiring to the frame using the cable ties.

Figure 73: Driver Side Wire Routing.

Figure 74: ARC System Wire Routing.

Model Year: 2020+

Figure 75: Passenger Side Wire Routing.

INSTALLATION: REAR

54. Install the rear brake line drop bracket:
Locate **2629**, rear brake line drop bracket from component box 110-70099.
Locate **HP9257**, remove 4x M8 flat washers, 2x M8 nuts and 2x M8 bolts.
Remove the two bolts holding the OEM brake line bracket to the frame.
Install the drop bracket with the OEM hardware removed prior, in place of the OEM bracket.
Attach the OEM bracket to the drop bracket using the hardware removed from the hardware pack.
Torque the hardware to **15 ft-lbs.**

Figure 79: Bracket 2629.

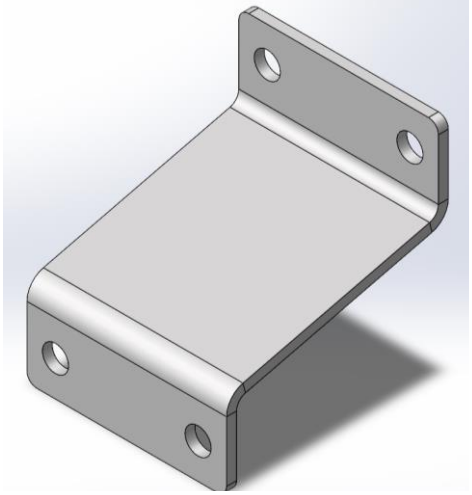


Figure 80: Brake Line Drop Bracket Installed.

55. Install the rear bump stop spacers on both sides of the vehicle:
Locate 2x **6456**, bump stop spacers from component box 110-70099.
Locate **HP9257**, remove the 2x M10 by 65mm bolts.
Remove the rear bump stops, the OEM hardware may be discarded.
Reinstall the bump stops, with the spacer between the bump stop and frame, using the hardware removed from the hardware pack.
Torque to **37 ft-lbs.**

Figure 81: Spacer 6456.

Figure 82: Bump Stop Spacer Installed.

REAR LIFT NOTE:

All trims except AT4 and Trail Boss have a tapered shim between the axle and leaf spring that must be removed. To remove the axle and leaf spring must be separated, this will be covered by another document include with the lift kit purchased. Once the axle and leaf spring are separated follow the steps below to remove the tapered shim.

1. Remove the tapered shim on the bottom of the leaf spring pack:
Use a c-clamp to hold the leaf pack together.
Use vice grips to hold the round head of the leaf spring center pin.
Remove the center pin nut, remove the center pin and tapered shim.
Reinstall the center pin and nut.
Torque the hardware to **30 ft-lbs.**

Figure 83: Removing Tapered Shim.

Have the truck professionally aligned to the following specifications:
Caster: +3° ± 1° with 0.8° of cross caster, higher on the passenger side, to account for crowned roads.
Camber: 0.0° to -0.5°
Toe: 0.1° in each side

WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports, Inc. hereinafter "Cognito," warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on "competition" vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito's obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are "consumables" and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warrantied separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

Return Policy

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle's original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle's frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle's susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle's ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle's suspension components and tires.

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