

SOUTHERN TRUCK

Lift your life.

2012-2015 Dodge Ram 1500 4WD 6" Suspension Lift Kit

35015

- 2 - Knuckle (Driv/Pass)
- 2 - Differential Bracket (Driv/Pass)
- 2 - Front Brake Line Brackets
- 1 - Front Lower Skid Plate
- 2 - Brake Line Bracket (2 Fr/2 Rr)
- 2 - Front Strut Spacers
- 2 - Rear Bump Stop Brackets
- 2 - Rear Shock Absorbers
- 2 - Rear Coil Spring Spacers
- 2 - Crossmember (Front/Rear)
- 1 - Diff. Brace Bracket (Pass)
- 2 - Sway Bar Bracket (Driv/Pass)
- 4 - Sway Bar Links (2 Fr/2 Rr)
- 1 - Rear Track Bar Bracket
- 1 - Driveshaft Spacer
- 2 - Rear Upper Control Arms
- 2 - Strut Preload Spacers

*See back page for complete list of included hardware

PRE-INSTALLATION

Professional installation by a certified technician is strongly recommended.

Not responsible for altered products. No claims are made regarding any lifting devices. Any and all claims implied in this document excluded.

NOTES:

The following instructions assume the use of 37 x 12.5 tire with aftermarket wheels (20" with 5.5" back spacing or 18" with 5" back spacing). Factory wheels require the addition of 0.25" wheel spacer.

REQUIRED TOOLS:

- | | | | |
|--------------------|----------------------|--------------------|--------------------|
| 5mm Allen Wrench | 8mm Allen Wrench | T-30 Torx Bit | 8mm Socket/Wrench |
| 10mm Socket/Wrench | 13mm Socket/Wrench | 14mm Socket/Wrench | 15mm Socket/Wrench |
| 16mm Socket/Wrench | 17mm Socket/Wrench | 18mm Socket/Wrench | 19mm Socket/Wrench |
| 21mm Socket/Wrench | 22mm Socket/Wrench | 24mm Socket/Wrench | 35mm Socket |
| 1 1/16" Socket | Drill | Reciprocating Saw | Hammer |
| Dead-blow Hammer | Jack and Jack Stands | WD-40 | Thread lock |

Torque Specs:

Size	Grade 5	Grade 8
5/16"	15 ft/lbs	20 ft/lbs
3/8"	30 ft/lbs	35 ft/lbs
7/16"	45 ft/lbs	60 ft/lbs
9/16"	95 ft/lbs	130 ft/lbs
5/8"	135 ft/lbs	175 ft/lbs
3/4"	185 ft/lbs	280 ft/lbs

Size	Class 8.8	Class 10.9
6MM	5 ft/lbs	9 ft/lbs
8MM	18 ft/lbs	23 ft/lbs
10MM	32 ft/lbs	45 ft/lbs
12MM	55 ft/lbs	75 ft/lbs
14MM	85 ft/lbs	120 ft/lbs
16MM	130 ft/lbs	165 ft/lbs
18MM	170 ft/lbs	240 ft/lbs

INSTALLATION INSTRUCTIONS

Front

- STEP 1:** Chock rear wheels and raise front of vehicle using floor jack.
- STEP 2:** Support vehicle with jack stands.
- STEP 3:** Remove wheels (22mm socket)
- STEP 4:** Remove tie-rod end nut. (21mm wrench)
- STEP 5:** Strike knuckle with hammer to dislodge tie rod.
- STEP 6:** Remove brake caliper. (21mm wrench) Secure out of way and remove rotor.
- STEP 7:** Remove ABS wire from hub. (5mm allen wrench) Unclip ABS wire from knuckle.
- STEP 8:** Remove axle nut. (35mm socket)
- STEP 9:** Remove knuckle. (Top ball joint: 21mm wrench, Lower ball joint: 24mm wrench) Strike knuckle with hammer to dislodge ball joints.
- STEP 10:** Remove stock knuckle from truck. Do not allow shaft to over-extend.
- STEP 11:** Remove lower strut mount. (21mm and 24 mm wrench)
- STEP 12:** Remove sway-bar link from sway-bar. (16mm wrench)
- STEP 13:** Remove upper strut mount. (15mm wrench) Remove strut.
- STEP 14:** Use dead blow hammer to remove axle from differential.
- STEP 15:** Remove lower control arm. (24mm wrenches - save factory hardware)
- STEP 16:** Unplug differential wiring harness from differential.
- STEP 17:** Remove two upper differential bolt from motor mount/differential mount. (18mm socket - save factory hardware)
- STEP 18:** Remove rear cross-member. (18mm wrench)
- STEP 19:** Remove driveshaft from differential. (15mm wrench)
- STEP 20:** Support differential and remove passenger side bolts. (18mm wrench) Remove three bolts on driver side. (18mm wrench)
- STEP 21:** Carefully remove differential from vehicle.
- STEP 22:** Follow differential wiring harness up from differential and remove three plastic retainers securing wiring harness to frame. This will allow slack in line when differential is reinstalled with differential brackets.
- STEP 23:** Align included templates with lower holes and tape to driver side lower control arm rear pocket.
- STEP 24:** Cut at line on templates to make room for rear cross member. Grind sharp edges and paint.
- STEP 25:** Install rear differential drop bracket on differential using stock hardware and tighten. (18mm wrench)
- STEP 26:** Install driver side upper differential drop bracket using factory hardware, but do not tighten.

INSTALLATION INSTRUCTIONS *Front (Continued)*

- STEP 27:** Install passenger side differential bracket using factory hardware in upper location.
- STEP 28:** Reinstall differential in forward driver side mount with included 12mm x 45mm bolts, washers. Do not tighten at this time.
- STEP 29:** Secure driver side differential to frame using included 12mm x 45mm bolts, flat washers, and flange lock nuts.
- STEP 30:** Secure differential in passenger side bracket with included 12mm x 45mm bolts & flange lock nuts. Bend stock differential wiring harness bracket up for clearance.
- STEP 31:** Tighten all differential bolts. (18mm / 19mm wrench)
- STEP 32:** Apply thread lock to included 12mm x 55mm bolts and install driveshaft spacer, then tighten. (19mm wrench)
- STEP 33:** Reinstall differential plug back in differential and reinstall wiring harness in bracket. Make sure harness clears rack and pinion.
- STEP 34:** Install rear cross member using included 18mm x 150mm bolts, square washers and nuts.
- STEP 35:** Install front cross member using included 18mm x 150mm bolts, square washers and nuts, but do not tighten.
- STEP 36:** Install lower control arm using stock cam bolts.
- STEP 37:** Install skid plate using included 3/8" X 1" bolts and 3/8" washers on front cross-member. (14mm socket)
- STEP 38:** Install skid plate on rear cross-member with included 3/8" x 1" and washers.
- STEP 39:** Tighten all cross-member bolts. (1 1/16" wrench and socket)
- STEP 40:** Make sure axle is fully engaged in housing and install axle shafts
- STEP 41:** Place a strut compressor on coil spring and compress coil, so strut top nut can be removed. Remove strut top and add preload spacer to coil assembly. Spacer will fit between factory coil isolator and strut top.
- STEP 42:** With coil spring still compressed, assemble strut and tighten strut top nut.
- STEP 43:** Install 10mm studs into strut spacer. (17mm socket) Lightly tap studs in if necessary.
- STEP 44:** Install spacer on strut with factory hardware. (15mm wrench)
- STEP 45:** Install strut onto truck with included upper 10mm nuts and washers, then tighten. (17mm wrench)
- STEP 46:** Attach lower control arm to lower part of strut with factory hardware. Tighten lower strut hardware. (24mm and 21mm wrench)
- STEP 47:** Remove sway-bar link from control arm. (18mm and 8mm wrench)
- STEP 48:** Install lower link bracket on lower control arm with included 12mm X 50mm bolt and flange nuts. Install new link on bracket with included 12mm x 65mm bolts and flange nuts, then tighten. (18mm and 19mm socket & wrench)
- STEP 49:** Install sway bar link bracket to bottom side of sway bar and tighten with 12mm x 35mm bolts and flange nut. (18mm and 19mm wrench) Install sway bar link to bracket and tighten with 12mm x 65mm bolts and flange nuts.
- STEP 50:** Remove bolt from brake line mount (13mm wrench) and pull brake line out to give clearance for cutting.
- STEP 51:** Notch a section of stock mount to remove brake line and remove line from housing. Straighten bends in hard metal lines making sure not to kink lines.
- STEP 52:** Install new brake line bracket onto brake line using included 5/16" x 3/4" bolts, washers and nuts.
- STEP 53:** Attach bracket to frame using factory bolt in lower hole and new included 3/8" x 1" bolts, washers and nuts. (Factory bolt and lower brake line bolt: 13mm wrench, top brake line bolt: 14mm wrench)
- STEP 54:** Remove bearing assembly from stock knuckle. (18mm socket)
- STEP 55:** Install bearing into new knuckle with factory bolts and thread locking compound.
- STEP 56:** Install new knuckle onto truck. (Lower ball joint: 24mm and 12mm wrench)
- STEP 57:** Slide axle into bearing assembly and install knuckle on upper ball joint. (21mm and 10mm wrench)
- STEP 58:** Tighten axle nut. (35mm socket)
- STEP 59:** Unclip ABS wire from upper control arm and install wire back into bearing assembly. (5mm allen wrench)
- STEP 60:** Use WD-40 to move rubber insulator to right spot and clip back into upper control arm.
- STEP 61:** Install rotor and brake caliper. (21mm socket)
- STEP 62:** Install tie rod into knuckle. (21mm wrench)
- STEP 63:** Remove ABS wire bracket from old knuckle and install on new one. (T-30 bit) Reinstall ABS wire on mount.
- STEP 64:** Repeat steps on opposite side.
- STEP 65:** Install tires and wheels.
- STEP 66:** Remove jack stands and lower vehicle to ground.
- STEP 67:** Tighten lower control arm hardware. (24mm socket / wrench)

INSTALLATION INSTRUCTIONS *Rear*

- STEP 1:** Chock front tires. Raise rear of vehicle with floor jack.
- STEP 2:** Support rear with jack stands
- STEP 3:** Remove wheels. (22mm socket)
- STEP 4:** Remove ABS clip from axle.
- STEP 5:** Remove brake line. (13mm wrench)
- STEP 6:** Remove sway-bar link. (Lower: 8mm and 18mm wrench, Upper: 18mm wrench)
- STEP 7:** Remove shocks from axle. (21mm wrench)
- STEP 8:** Remove inner fender wells - 10 bolts on driver side and 10 on passenger side. (8mm socket) Use a socket on back side of shock to remove bolt.
- STEP 9:** Remove upper track bar bolt. (21mm wrench)
- STEP 10:** Remove vent hose from frame.
- STEP 11:** Remove coil springs.
- STEP 12:** Remove upper control arm. (24mm wrench and socket)
- STEP 13:** Install new control arm in axle and frame mounts with factory hardware and tighten. (24mm wrench)
- STEP 14:** Install track bar bracket using included crush sleeve, 14mm x 80mm bolt, washers and nut, but do not tighten. Make sure bracket is installed aligning lower hole in new bracket directly below stock hole. Failure to install this bracket correctly will push axle out of center.
- STEP 15:** Use bracket to mark side hole to be drilled. Drill hole on side of bracket using 13/32" drill bit.
- STEP 16:** Install 3/8" x 1 1/4" bolt, washers & nut on side hole and tighten. (14mm socket/wrench)
- STEP 17:** Double-check to make sure bracket is still in position.
- STEP 18:** Drill other two upper holes using 13/32" drill bit and install included 3/8" x 1 1/4" bolts, washers and nuts, then tighten. (14mm wrench/socket)
- STEP 19:** Install bump stops using included 3/8" x 1" bolts, washers and nuts, then tighten. (14 mm wrench) Pin in block goes in front hole.
- STEP 20:** Install round retainer washer from top side of upper coil pocket. Using included 3/8" x 5.0 bolt, insert bolt through center hole of rear coil spacer and tighten. (9/16" socket) Install factory coil spring and isolator.
- STEP 21:** Install new shock absorber onto truck with factory hardware using included flag nut for top bolt.
- STEP 22:** Install washer on bottom of shock to outside of truck. (21mm wrench)
- STEP 23:** Pull down and straighten brake line, careful not to kink brake line.
- STEP 24:** Install sway bar links and brake line brackets on frame with included 12Mm x 65mm bolts, washers and nut.
- STEP 25:** Install stock brake line mount on bracket using included 5/16" x 3/4" bolt, washers and nut. (Sway bar link bolts: 18mm and 19 mm wrench, brake line bolts: 13 mm wrench)
- STEP 26:** Install track bar into bracket with factory hardware and tighten. (Upper bolt: 22mm wrench, Lower bolt: 21mm wrench) Lower truck to ground if necessary.
- STEP 27:** Use WD-40 or alcohol to adjust rubber insulator on ABS wire so it fits back into clip on brake line.
- STEP 28:** If not removed previously, cut zip tie for axle vent tube and install new zip tie and vent tube on lower part of frame.
- STEP 29:** Reinstall fender wells. (8mm socket)
- STEP 30:** Make sure all fasteners are tight.

POST-INSTALLATION

- STEP 1:** Adjust steering wheel to re-center before driving vehicle.
- STEP 2:** Check for proper torque on all fasteners. Check steering for proper working order and check for interference. Inspect and test brake system. Check clearance between all rotating, mobile, fixed and hot parts. Check clearance between exhaust and brake lines, fuel tank and lines, wiring harness and floorboards.
- STEP 3:** Check distance between tire sidewall and the brake hose during full-turn to full-turn steering sweep. Do not skip this step! Any contact may result in component failure. Check rear brake hoses at full extension for proper slack and if needed, purchase longer hoses.
- STEP 4:** Re-torque u-bolts and other fasteners after first 100 miles, then again after another 100 miles.
- STEP 5:** Adjust headlights to proper alignment.

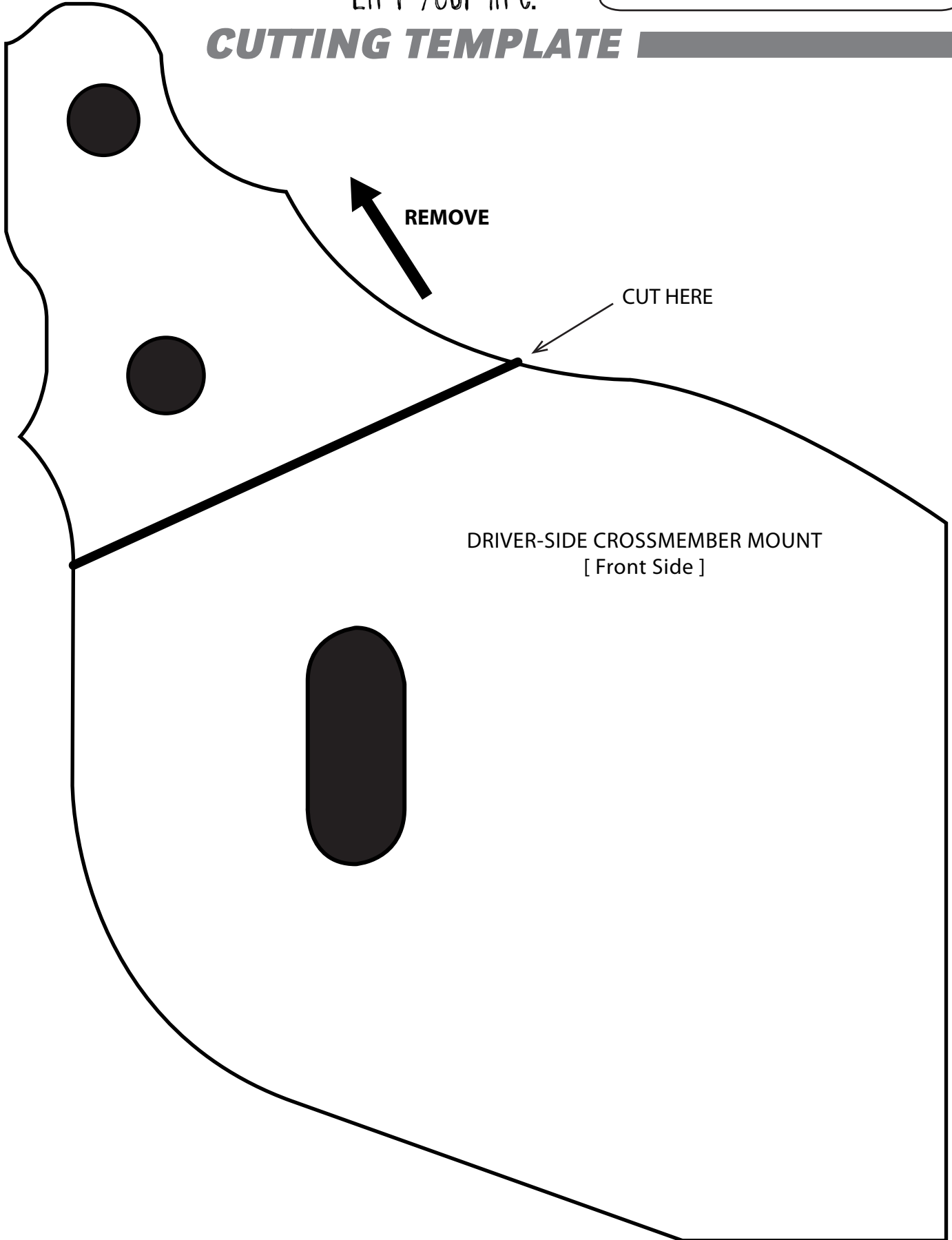
MAINTENANCE: After 500 miles, re-torque all fasteners. (Recommended every 1000 miles thereafter) Have all suspension, driveline and steering components inspected by a certified technician during routine maintenance (Recommended every 3000 miles)

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CUTTING TEMPLATE

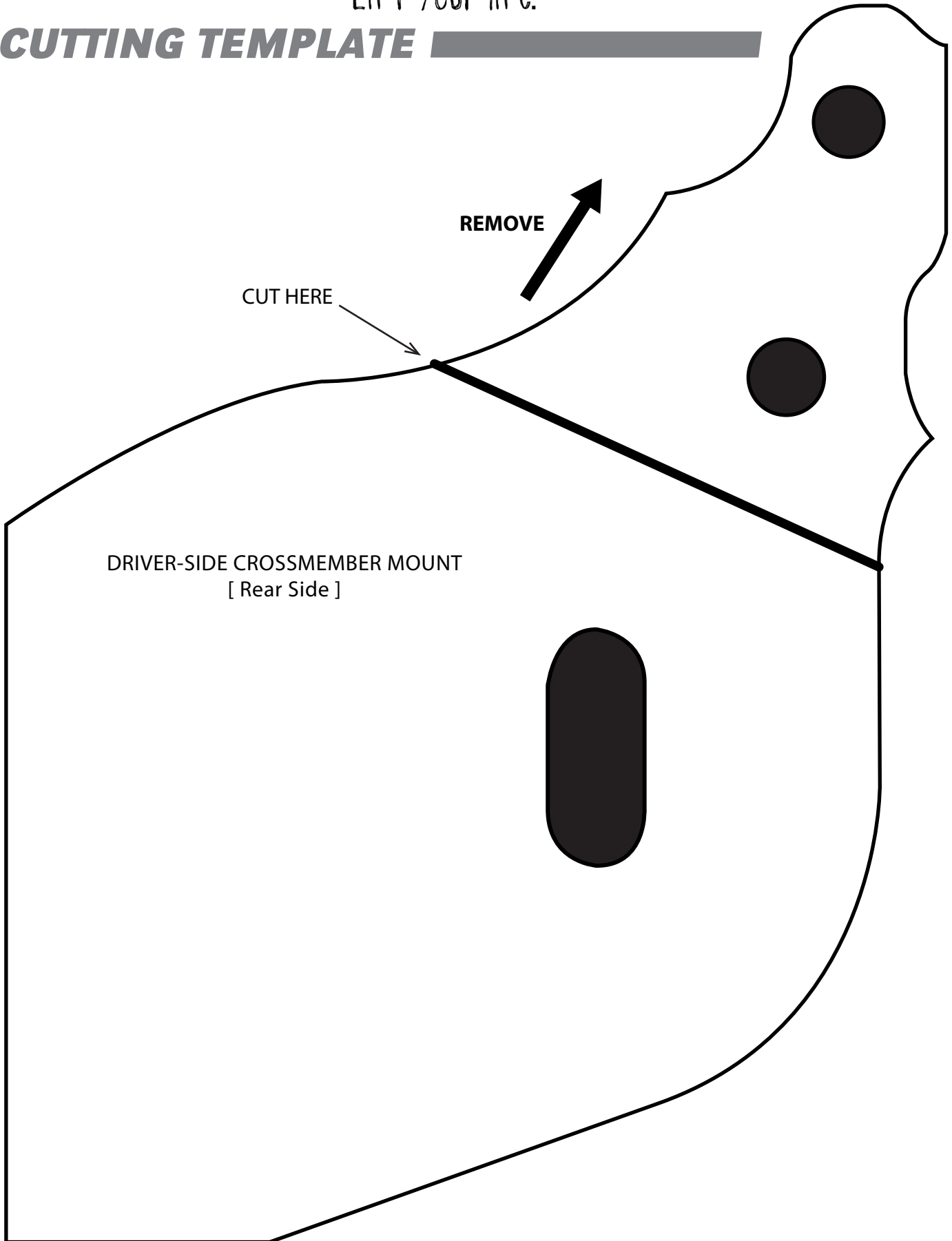


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CUTTING TEMPLATE



REMOVE

CUT HERE

DRIVER-SIDE CROSSMEMBER MOUNT
[Rear Side]

HARDWARE PARTS LIST

Front and Rear Driver-side Upper Differential Mount:

- 5 - 12mm x 45mm Bolt
- 5 - Flat Washers
- 5 - 12mm Flange Lock Nut

Passenger-side Differential Mount:

- 2 - 12mm x 45mm Bolt
- 2 - Flat Washers
- 2 - 12mm Flange Lock Nut

Front and Rear Crossmembers:

- 4 - 18mm x 150mm Bolts
- 8 - 18mm Square Washers
- 4 - 18mm Lock Nuts

Front Lower Control Arms:

- 4 - 18mm x 160mm Cam Bolts
- 4 - 18mm Lock Nuts

Skid Plate:

- 4 - 3/8" x 1" Bolt
- 4 - 3/8" Flat Washers

Driveshaft:

- 4 - 12mm x 55mm Bolts
- 4 - Flat Washers

Front Brake Line Bracket:

- 2 - 5/16" x 3/4" Bolt
- 2 - 5/16" Flat Washer
- 2 - 5/16" Flange Lock Nut
- 2 - 3/8" x 1" Bolt
- 2 - 3/8" Flat Washer
- 2 - 3/8" Flange Lock Nut

Sway Bar Brackets:

- 4 - 7/16" x 1" Bolts
- 8 - 7/16" Flat Washers
- 4 - Lock Nuts

Front Strut Spacers:

- 6 - 10mm Self Clinch Studs
- 6 - 10mm Lock Washer
- 6 - 10mm Nuts

Front Sway Bar Links:

- 2 - 12mm x 35mm Bolts
- 2 - 12mm x 50mm Bolts
- 4 - 12mm x 65mm Bolts
- 8 - 12mm Flange Nuts

Rear Brake Line Bracket:

- 2 - 5/16" x 3/4" Bolt
- 2 - 5/16" Flat Washers
- 2 - 5/16" Flange Lock Nut

Rear Track Rod Bracket:

- 1 - Rear Track Bar Sleeve
- 1 - 14mm x 80mm Bolt
- 1 - 14mm Lock Nut
- 2 - Flat Washers
- 3 - 3/8" x 1 1/4" Bolt
- 3 - 3/8" Flat Washers
- 3 - 3/8" Flange Lock Nut

Rear Sway Bar Links:

- 4 - 12mm x 65mm Bolts
- 4 - 12mm Lock Nuts
- 8 - Flat Washers

Rear Bump Stop Bracket:

- 2 - 3/8" x 1" Bolt
- 2 - 3/8" Flat Washers
- 2 - 3/8" Flange Lock Nut

Rear Vent Hose:

- 1 - Cable Tie

Rear Shock Absorbers:

- 2 - Washers
- 2 - Flag Nuts