



Part #: 16-7423

Jake's Long Travel Lift Kit

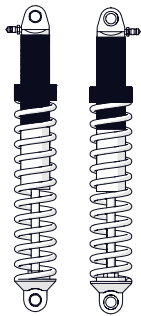
Yamaha Drive 2 Gas
w/ Independent Rear Suspension

ITEMS INCLUDED

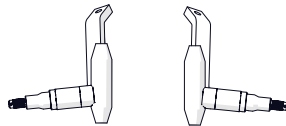
| | |
|--------------------------|---------------------|
| Front Sub-Frame | 2 Front Shocks |
| Front Upper Shock Plate | Rear Shock Goalpost |
| 2 Upper A-arm Assemblies | Rear Subframe |
| 2 Lower A-arm Assemblies | Hardware Kit |
| Driver's Side Spindle | |
| Passenger's Side Spindle | |

TOOLS NEEDED

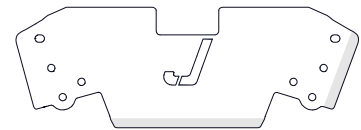
| | |
|----------------|--------------|
| Drill | 9/16" Socket |
| Ratchet | 22mm Wrench |
| 3/8" Drill Bit | 17mm Wrench |
| 17mm Socket | 14mm Wrench |
| 14mm Socket | 3/4" Wrench |
| 3/4" Socket | 5/8" Wrench |
| 5/8" Socket | 9/16" Wrench |



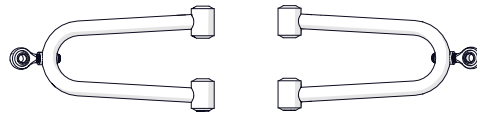
FRONT SHOCKS



FRONT SPINDLES



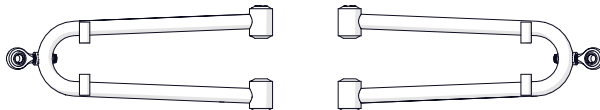
FRONT J-PLATE



UPPER A-ARMS



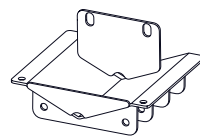
MOTOR BLOCKS



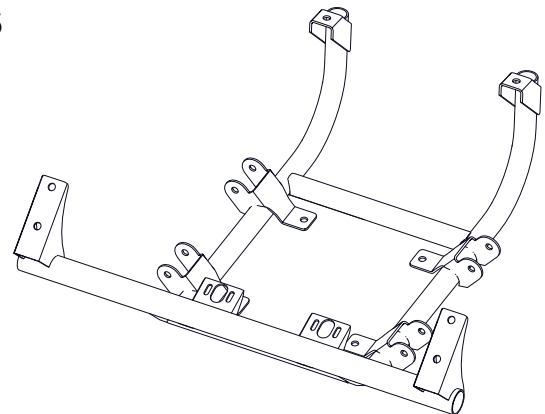
LOWER A-ARMS



REAR SHOCK
RISER



FRONT
SUBFRAME



REAR
SUBFRAME

WARNING:

After installing this lift kit, the front wheels must be properly aligned. Failure to properly align the front wheels may result in decreased ability to control the Golf Cart which may result in a rollover or crash.



WARNING



- To reduce risk of accidents and injury or death -

Be Prepared

- Wear seat belt, motorcycle helmet, eye protection and protective gear.

- Keep your body completely inside the vehicle at all times. Keep both hands on the steering wheel. Be sure passenger is seated, belted, and holding onto the handholds.

Be Qualified and Responsible

- This vehicle is intended for use only by an operator 16 or older with a valid motor vehicle license.

- Passenger and driver must be able to place both feet flat on the floorboard while seated upright with their backs against the seat backs.



Avoid Rollovers and Crushing Injuries

- Use care when turning:

- Turning the steering wheel too far or too fast can result in a rollover or loss of control.

- Slow down before entering a turn.

- When making tight turns from a stop, or at slow speeds, avoid sudden or hard acceleration.

- Avoid sideways sliding, skidding, or fishtailing, and never do donuts.

- Drive straight up and down inclines, not across them, if crossing a hill is unavoidable, drive slowly and turn downhill immediately if you feel the vehicle may tip.

Abrupt maneuvers or aggressive driving have caused rollovers- even on flat, open areas

**MUST BE
16 or Older**



| | NEW HARDWARE | QUANTITY |
|---------------------------|-----------------------|----------|
| FRONT SUSPENSION ASSEMBLY | 3/8" x 1" HEX BOLT | 8 |
| | 3/8" FLAT WASHER | 10 |
| | 3/8" NYLOCK NUT | 12 |
| | 3/8" x 3" HEX BOLT | 4 |
| SPINDLES | 1/2" x 7.5" HEX BOLT | 2 |
| | 1/2" NYLOCK NUT | 2 |
| | HEIM SPACER | 4 |
| FRONT SHOCKS | 7/16" x 5" HEX BOLT | 2 |
| | 7/16" x 3.5" HEX BOLT | 2 |
| | 7/16" NYLOCK NUT | 4 |
| | SPACER BUSHING | 4 |
| STEERING | STEERING EXTENSION | 2 |
| | TIE ROD END | 2 |
| REAR SUBFRAME | 1/4" x 0.75" HEX BOLT | 4 |
| REAR SHOCK RISER | 3/8" x 2" HEX BOLT | 2 |
| | 3/8" LOCK NUT | 2 |

STEP 1

Remove the roof, front cowl, and front bumper from the vehicle, saving all hardware for reinstallation.

Place the front of the vehicle on jack stands, making sure it is raised high enough to accommodate the new lift and larger tires.

Remove stock wheels, hubs, spindle, shocks, and a-arms. Keep the stock hubs, hub hardware, and a-arm hardware for later reinstallation.



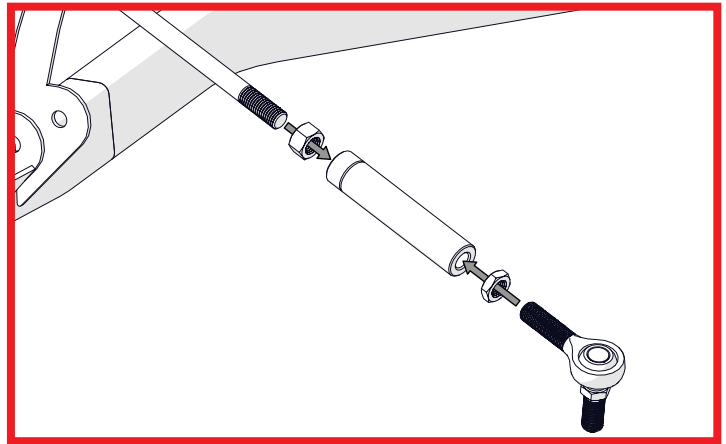
STEP 2



17mm and 22mm WRENCH

Remove stock tie rod ends from steering box and discard. Install steering extension and new tie rod end with jams nuts on both sides of the steering box.

NOTE: The length of thread visible on either side of the steering extension should be the same.

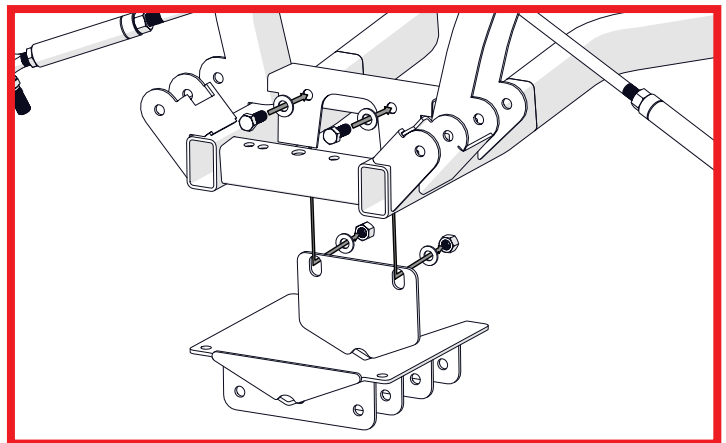


STEP 3



9/16" WRENCH, 9/16" SOCKET

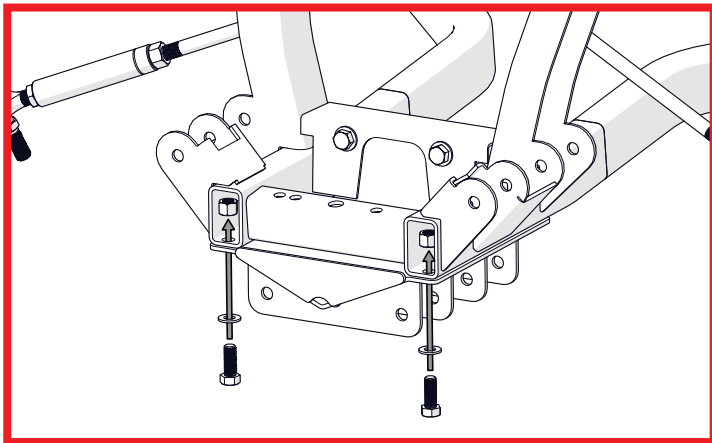
Install the front sub-frame to the front cross member of the vehicle using two 3/8" x 1" hex bolts, two 3/8" lock nuts, and four 3/8" flat washers.



STEP 4

 9/16" WRENCH, 9/16" SOCKET,
3/8" DRILL BIT, DRILL

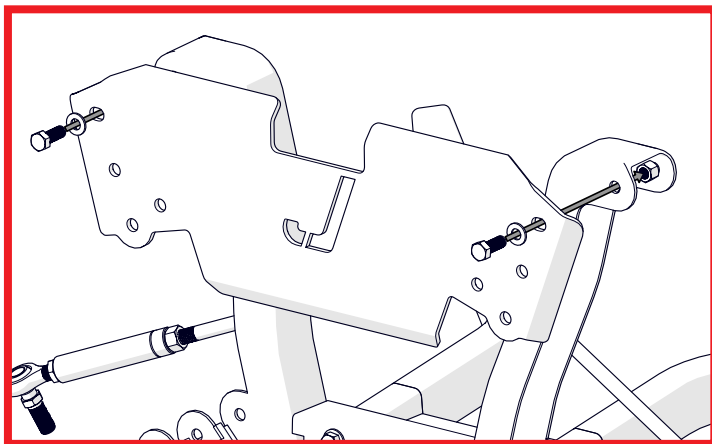
Using the front sub frame as a guide, drill two holes up into the vehicle frame tubes and install two 3/8" x 1" hex bolts and two 3/8" lock nuts.



STEP 5

 9/16" WRENCH, 9/16" SOCKET

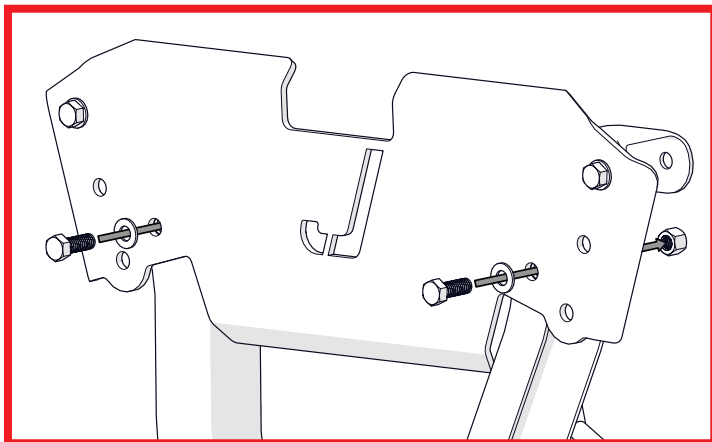
Install the front upper shock plate to the holes where the stock shocks were mounted using two 3/8" x 1" hex bolts, two 3/8" flat washers, and two 3/8" lock nuts.



STEP 6

 9/16" WRENCH, 9/16" SOCKET,
3/8" DRILL BIT, DRILL

Using the front upper shock plate as a guide, drill two holes into the vehicle shock towers and install two 3/8" x 1" hex bolts, two 3/8" flat washers, and two 3/8" lock nuts.

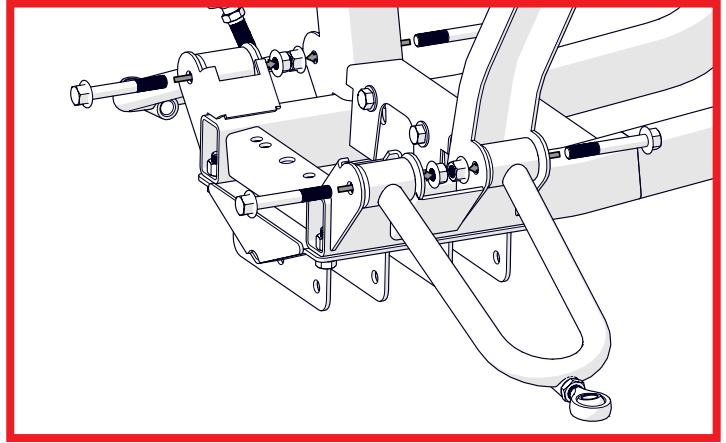


STEP 7

 14MM WRENCH, 14MM SOCKET

Install the upper a-arms (oriented as shown with heim joints on the bottom) to the stock a-arm mounting locations using the stock a-arm mounting hardware.

NOTE: Upper a-arms are not side specific.

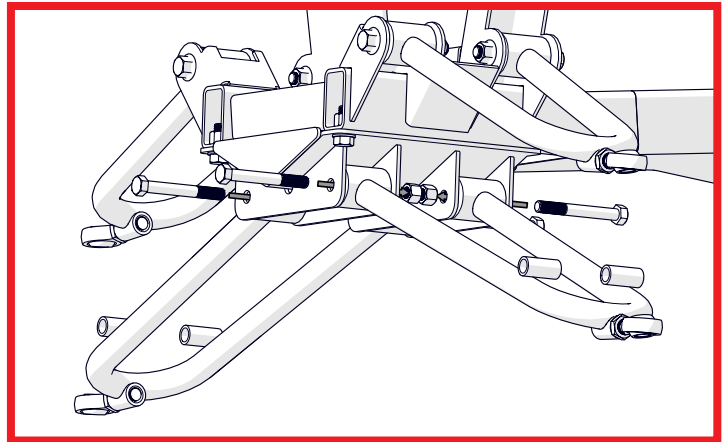


STEP 8

 9/16" WRENCH, 9/16" SOCKET

Install the lower a-arms (oriented as shown) to the front sub frame using four 3/8" x 3" hex bolts and four 3/8" lock nuts.

NOTE: Lower a-arms are not side specific.

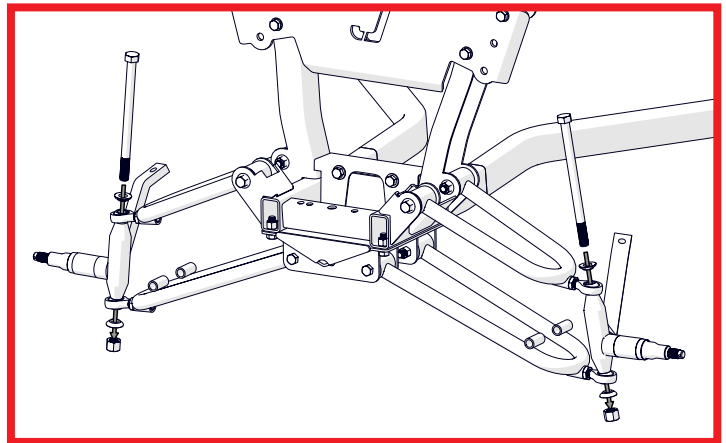


STEP 9

 3/4" WRENCH, 3/4" SOCKET

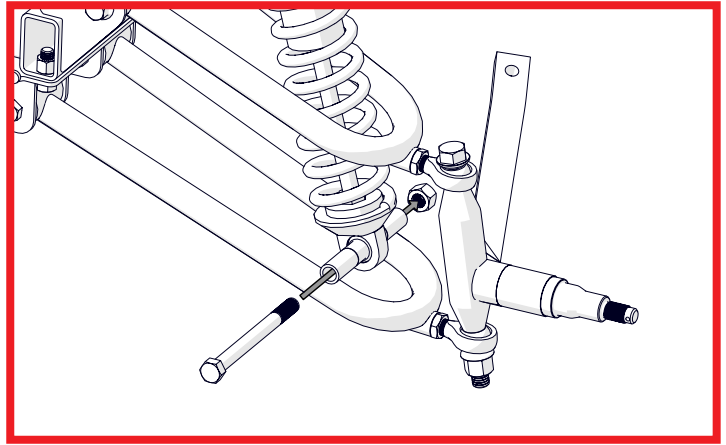
Install the driver's side spindle (oriented as shown with the steering arm pointing up and to the rear) to the heim joints on the a-arms using two heim joint spacers, one 1/2" x 7.5" hex bolt and one 1/2" lock nut.

Repeat with the passenger's side.



STEP 10 5/8" WRENCH, 5/8" SOCKET

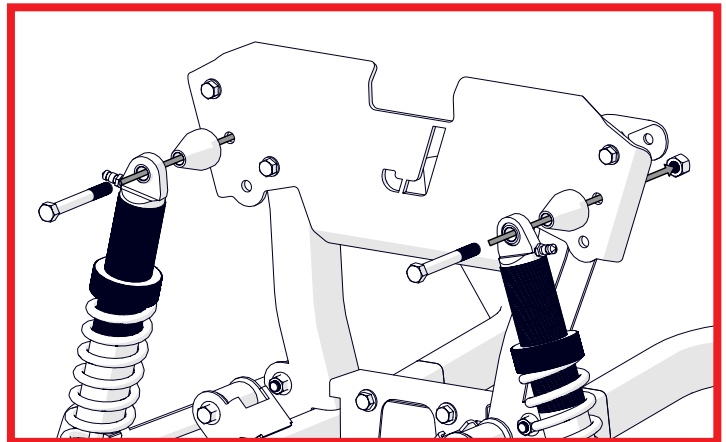
Install the bottom of each shock to the lower a-arm using two spacer bushings (one on either side of the shock), one 7/16" x 5" hex bolt, and one 7/16" lock nut.



STEP 11 5/8" WRENCH, 5/8" SOCKET

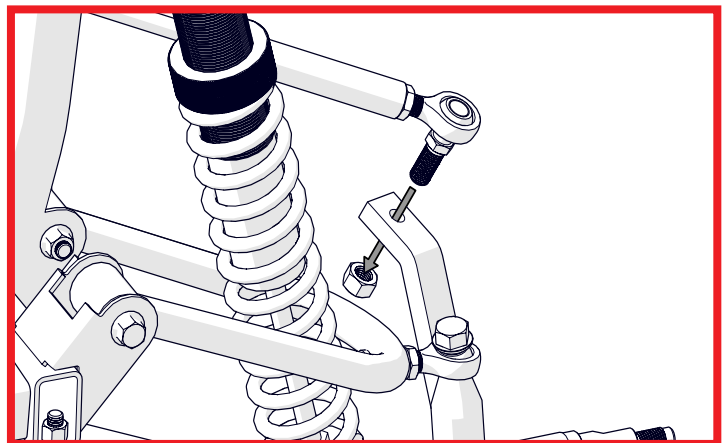
Install the new shocks to the front upper shock plate using two cone shock spacers (oriented as shown), two 7/16" x 3.5" hex bolts, two 7/16" flat washers, and two 7/16" lock nuts.

NOTE: Orient shock with valve facing out.



STEP 12 17mm WRENCH, 17mm SOCKET

Install the tie rod ends from the steering box to the steering arm on each spindle using stock castle nut and cotter pin.



STEP 13

Reinstall the wheel hubs to the new spindles using the stock hardware.

Install new wheels and tires.

Reccomend 22x11x10 or 23x10.5x12 tires on 3x5 offset wheel for best fit

NOTE: Stock wheels and tires are not compatible with this lift kit.



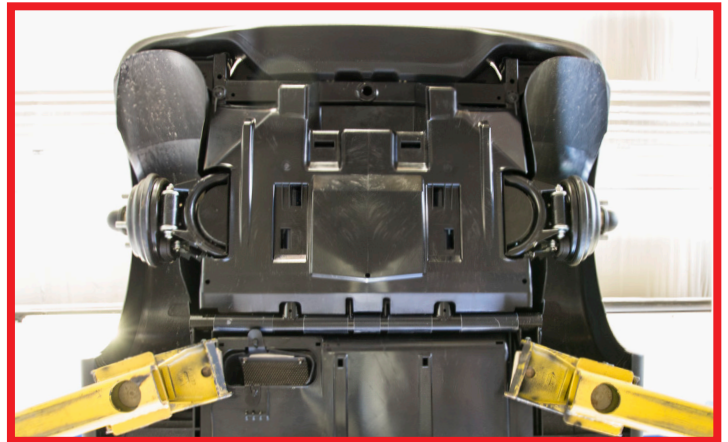
STEP 14

Chock front wheels and place the rear of the vehicle on jack stands, making sure it is tall enough to accomodate the new lift and new, larger tires.

Place an additional floor jack to support the weight of the motor.

Remove the rear seat kit, if equipped.

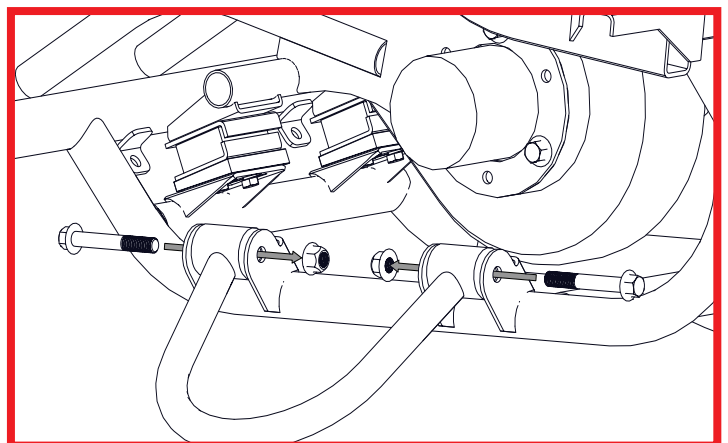
Remove the bagwell, and rear plastic skid plate. Keep the bagwell hardware for later reinstallation. The rear skid guard will not be reinstalled.



STEP 15

 14mm WRENCH, 14mm SOCKET

Disconnect the rear a-arms from the stock rear subframe, allowing the rear hubs to be supported only by the shocks.

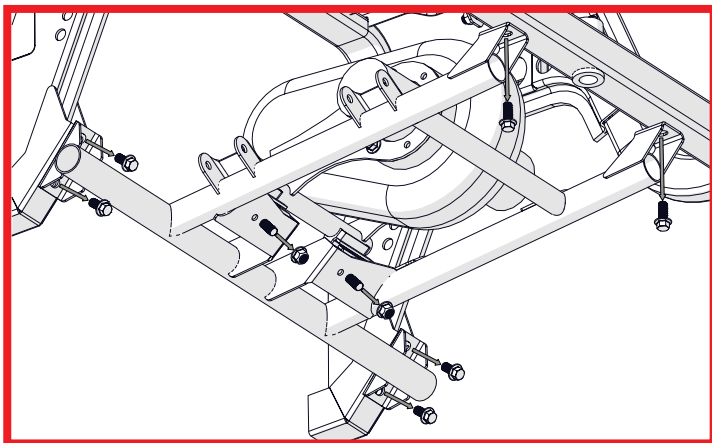


STEP 16

 14mm WRENCH, 14mm SOCKET

Remove the nuts holding the motor mounts to the rear sub frame. Then, supporting the motor with a floor jack, uninstall the rear subframe from the vehicle. Retain the hardware, but this subframe will not be reused.

For 2019 and older vehicles, proceed to step 20.



STEP 17

 STRAIGHT EDGE, MARKER

For 2020 and new vehicles, use a straight edge to mark a line on the frame bracket that is parallel to the subframe mounting face, as shown. Repeat on the opposite side.



STEP 18

 ANGLE GRINDER, CUT OFF DISC, FLAP DISC

Use a cut off wheel to remove the unneeded portion of the bracket on both sides, as shown. Deburr any sharp edges using a flap disc.



STEP 19



SPRAY PAINT

Cover the newly exposed metal using a corrosion resistant paint

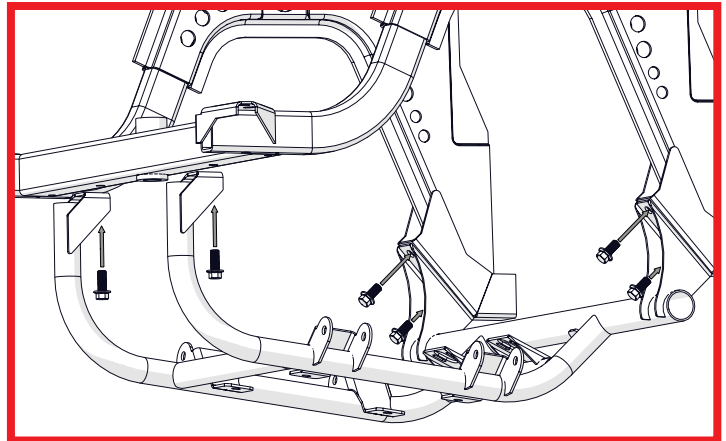


STEP 20



14mm WRENCH, 14mm SOCKET

Install the Jake's rear suspension subframe to the vehicle frame using the four stock M10 hardware for both the front and rear of the subframe as shown.



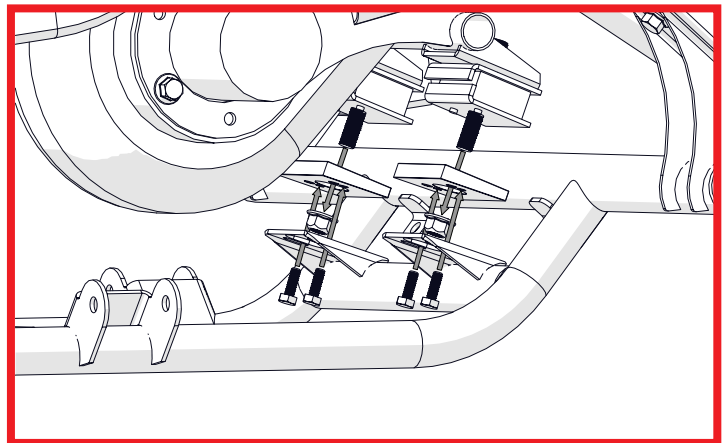
STEP 21



14mm WRENCH, 14mm SOCKET, 7/16" SOCKET

Install the rubber isolators and the Jake's aluminum shim to the motor using the two stock M10 nuts. The unthreaded holes in the shim correspond to the pins on the rubber isolator, and the thick part of the shim orients to the back of the vehicle.

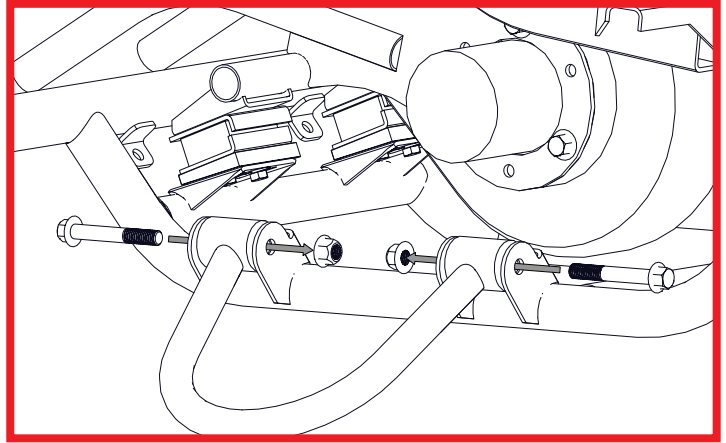
Then use the floor jack to carefully lower the motor onto the motor mount tabs of the subframe. Mount the wedges to the subframe using four 1/4" x 3/4" hex bolts, as shown.



STEP 22

 14mm WRENCH, 14mm
SOCKET

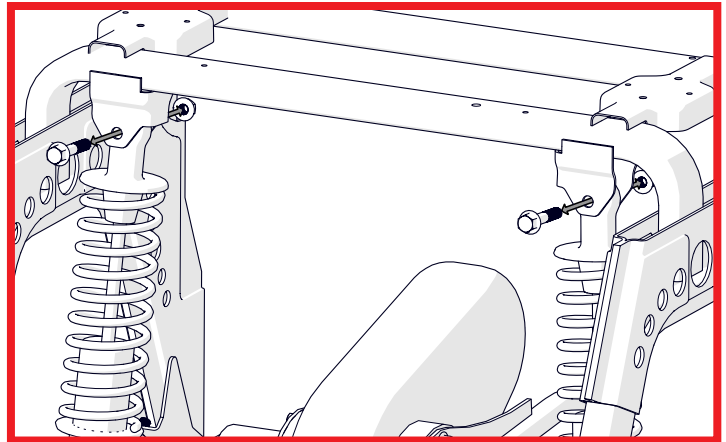
Install the a-arms to the subframe using the stock M10 bolts and nuts.



STEP 23

 14mm WRENCH, 14mm
SOCKET

Support the outside of the rear control arms. Uninstall the top of the rear shocks from the vehicle and retain the hardware.

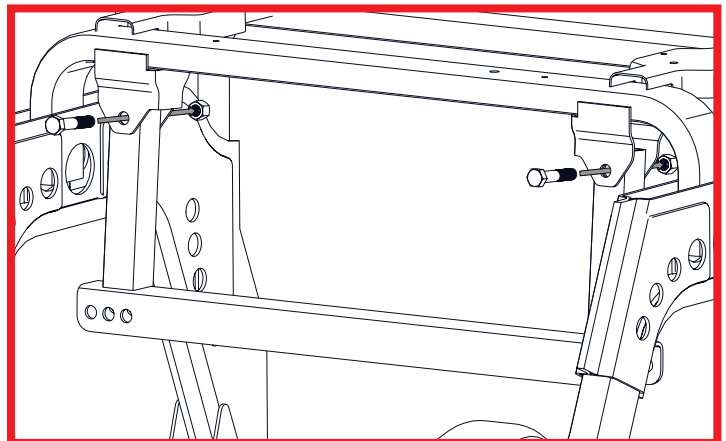


STEP 24

 9/16" WRENCH, 9/16" SOCKET

Install the rear shock goal post to the stock shock mounting location using two 3/8" x 2" hex bolts and two 3/8" lock nuts.

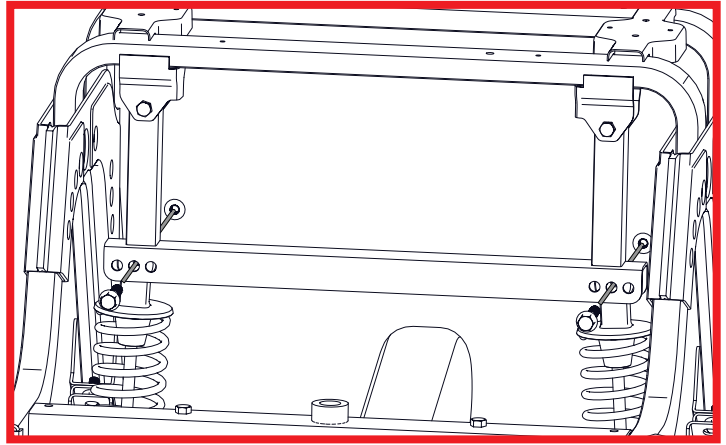
NOTE: The "J" on the goal post should face the front of the vehicle.



STEP 25

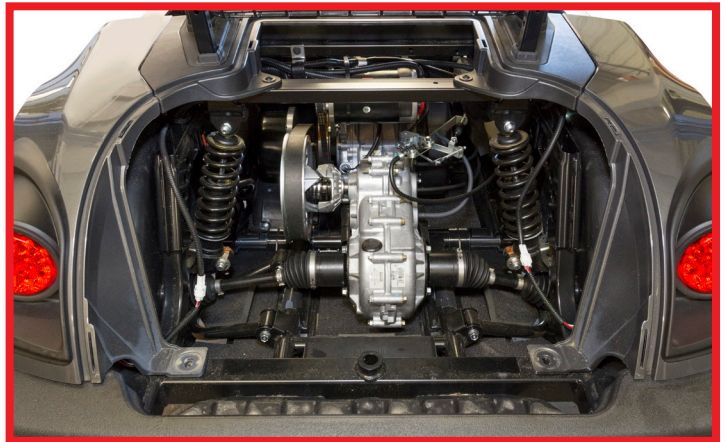
 14mm WRENCH, 14mm SOCKET

Install the top of the rear shocks to the bottom of the goal post using the stock M10 upper shock mounting bolt and nut.



STEP 26

Make sure all lines and cables running to the engine and rear axle have enough length for safe operation, and adjust as needed.



STEP 27

 19mm SOCKET, 3/4" SOCKET

If not using wheel spacers, install wheels to hubs using stock lug nuts.

If using wheel spacers (recommend 1"), install them to the rear hubs using the stock lug nuts. Then install the wheels to the spacers using the lug nuts provided with the spacers.

Lower the vehicle to the ground and torque the lug nuts to 65ft-lbs in the front and 58ft-lbs in the rear.



STEP 28

Reinstall the bag well and seat kit, if equipped, using the hardware retained from Step 14.

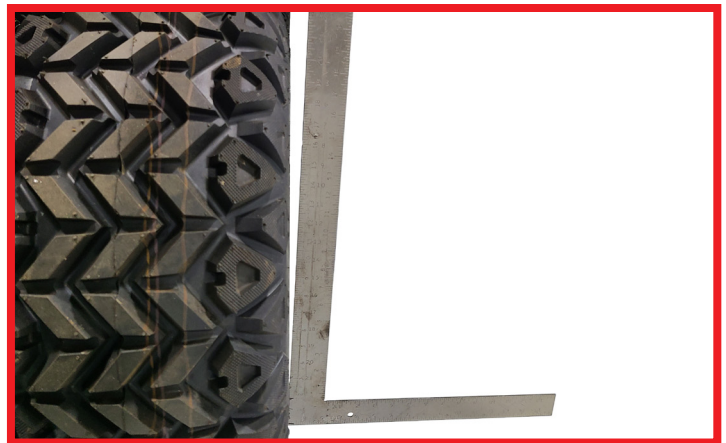


STEP 20

Using a framing square, adjust the camber of each front wheel until the tire is square to the floor.

To adjust, lift the side of the vehicle you want to adjust onto jack stands and remove the nut from the bottom of the spindle bolt. Remove the lower a-arm from the bolt. Loosen the jam nut on the out heim joint of the lower a-arm. Turn the heim joint in or out to make desired adjustment and tighten the jam nut back. Reattach the lower a-arm to the spindle and retighten the hardware. Set the vehicle back on the ground to check the camber again.

Repeat on the opposite side of the vehicle.



STEP 21

Ensure the steering wheel is straight to begin adjusting the toe of the front tires. The measurement between the center of the tread of the two front tires at the front the should be $1/8$ "- $1/4$ " **shorter** than the same measurement at the back of the tires.

To adjust, loosen the jam nut on either side of each steering extension. Turn the extension to adjust in or out as needed and recheck the measurement front and back. Also, ensure that the measurement from the front of each tire to the center of the vehicle is the same on both sides and adjust accordingly.

Once the toe is corrected, tighten the jam nuts on both steering extensions.

Test drive vehicle and check camber and toe measurements again. If needed, adjust accordingly and retighten all hardware.



STEP 22

Place the included warning label in a highly visible area on the vehicle for all users to read before operating the vehicle (recommend steering column).



INSTALLATION COMPLETE

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