



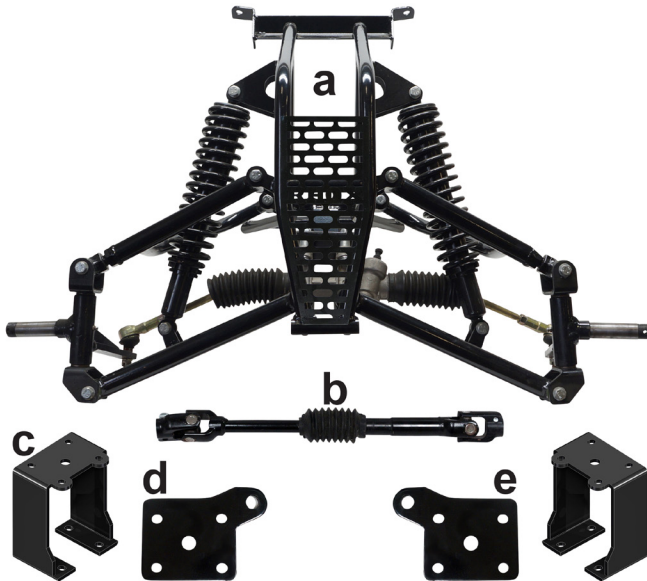
RHIOX

Rugged parts for your ride.

LIFT-514

7" BMF A-Arm Lift Kit

E-Z-Go TXT Gas 19+ w/ EX1 Engine, Electric 01.5+ Installation Instructions

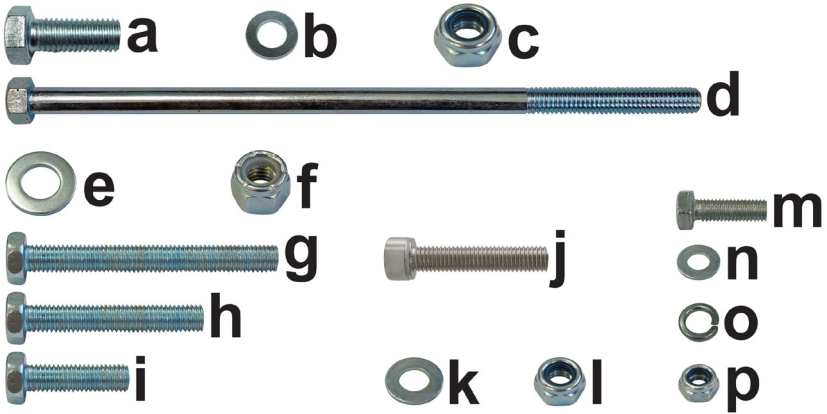


Contents of Kit		QTY
a	7" A-Arm Assembly	1
b	Steering Shaft, Extended	1
c	Rear Lift Blocks	2
d	Shock Mount Plate, Passenger Side	1
e	Shock Mount Plate, Driver Side	1
f	Hardware (Contents on Next Page)	1

Caution: Please read through the instructions carefully. Installer is responsible for damage if instructions are not followed properly. Extra installers will be helpful in some parts of the installation. Please refer to torque specifications on page 2 for new hardware. Please refer to the vehicle's maintenance manual for torque specifications on reused hardware.

Note: You must install larger tires and wheels once the cart is lifted. Stock wheels will not work. We recommend a 23" tires and a 12" or larger wheel with a minimum of a 1" offset.

LIFT-514 Hardware Kit



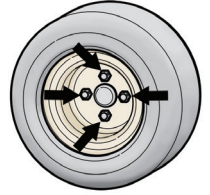
Contents		QTY	Torque Requirements
a	M12 x 30 Hex Head Bolts	2	69 ft. lbs.
b	M12 Flat Washers	4	-
c	M12 Nylock Nuts	2	-
d	3/8"-16 x 9" Shoulder Hex Head Bolts	8	44 ft. lbs.
e	3/8" Flat Washers	16	-
f	3/8"-16 Nylock Nuts	8	-
g	M10 x 85 Hex Head Bolts	2	38.25 ft. lbs.
h	M10 x 60 Hex Head Bolts	4	38.25 ft. lbs.
i	M10 x 35 Hex Head Bolts	6	38.25 ft. lbs.
j	M10 x 45 Socket Head Cap Screws	4	-
k	M10 Flat Washers	32	-
l	M10 Nylock Nuts	16	-
m	M8 x 25 Hex Head Bolts	2	22 ft. lbs.
n	M8 Flat Washers	2	-
o	M8 Lock Washers	2	-
p	M8 Nylock Nuts	2	-

Tools Needed for Installation

- Sockets & Wrenches (3/8", 10mm, 1/2", 13mm, 9/16", 5/8", 16mm, 17mm, 3/4", 19mm)
- Channel Locks
- Needle Nose Pliers
- Wire Cutters
- Flat Head Screwdriver
- Floor Jack, Jack Stands, Chock for Wheels
- Rubber Mallet
- Grease Gun
- Measuring Tape
- Safety Glasses

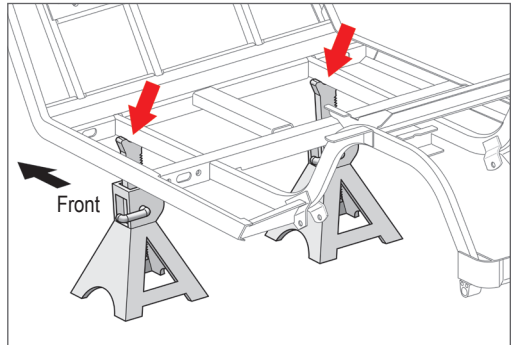
Installation Preparation (Front)

1. Engage parking brake.
2. Turn key OFF.
3. Place Tow/Run Switch in TOW if equipped.
4. Chock the back of the rear wheels.



5. Remove the hub caps (if any).
Loosen the lug nuts on both front wheels but do not remove them.

6. Place a jack under the front axle. Lift the cart high enough to accommodate the new tires and wheels.

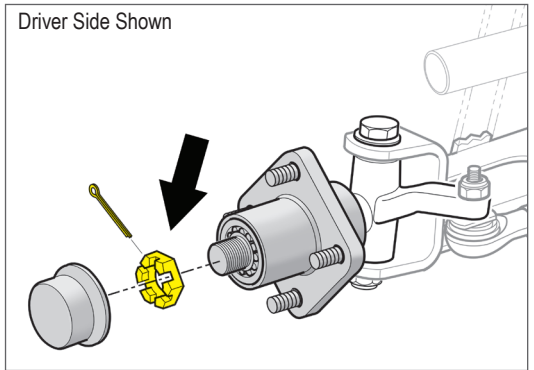


7. Place (2) jack stands securely under the frame and remove the jack.

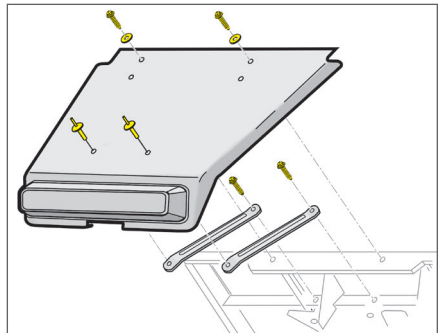
8. Fully remove the (8) front lug nuts, tires and wheels.

9. Remove dust covers, cotter pins, castle nuts (black arrow) and wheel hubs from both spindles. Place hubs in a clean/dry location. Retain all components.

Driver Side Shown

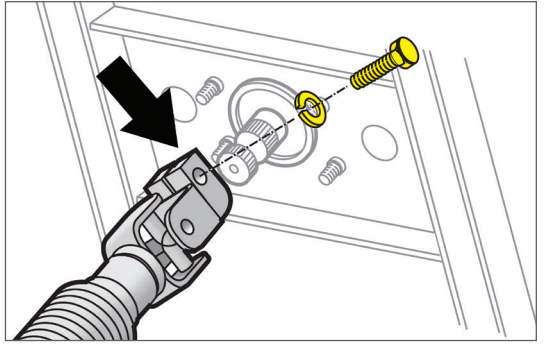


10. Remove the front splash guard. Discard.



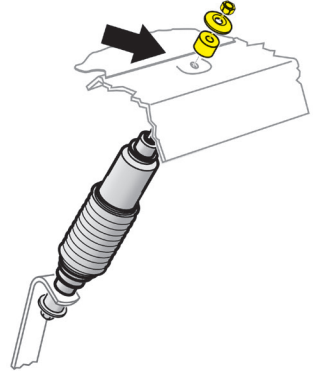
11. Place the jack under the center of the front axle to support the front end as it is disconnected and lowered in the steps below.

12. Disconnect the intermediate steering shaft at the upper mounting point. Discard hardware.

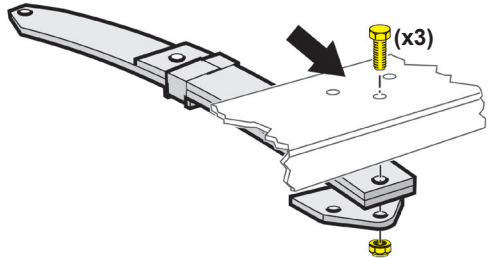


13. Disconnect the shocks at the upper mounting points on the frame. Discard hardware.

NOTE: Remove the front cowl to make this step easier.



14. Pull back the floor mat behind the pedal group to expose the bolts holding the leaf springs to the frame. Disconnect the leaf springs from the frame. Retain hardware. Discard plates.



15. With the front suspension completely disconnected from the cart, use the rolling jack to move the front suspension away from the cart. Discard.

Front Suspension Pre-Assembly

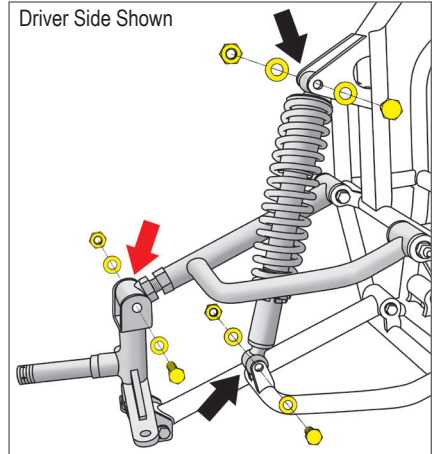
NOTE: This section should be completed while the A-arm assembly is off the cart.

Please refer to page 2 for torque specifications for included hardware. Please refer to vehicle's maintenance manual for torque specifications on reused hardware.

1. Loosely install the shocks to the A-arm assembly using (4) M10 x 60 Hex Head Bolts, (8) Flat Washers and (4) Nylock Nuts (shown on page 5).
2. Rotate the ends of the upper A-arms until 3-4 threads are visible.

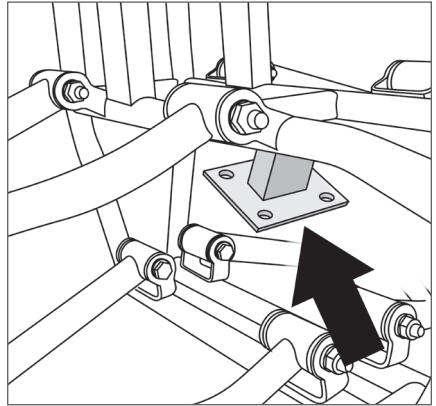
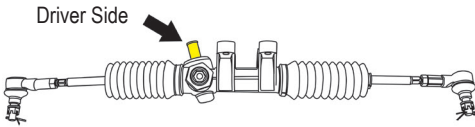
- Loosely install the ends of the upper A-arms to the kingpins using (2) M10 x 85 Hex Head Bolts, (4) Flat Washers and (2) Nylock Nuts.

NOTE: Replace cotter pins if needed. Replacement size is 5/32" x 1/3/4".



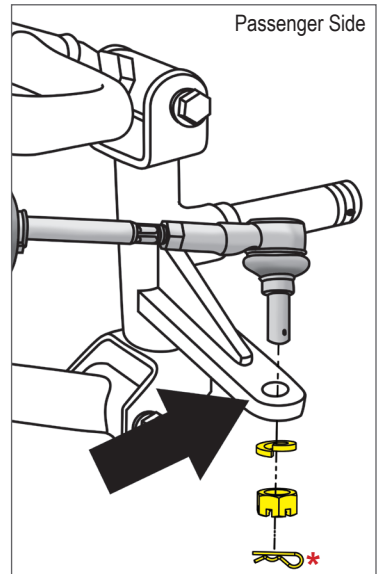
- Install the steering box to the flat mounting plate on the A-arm assembly using (4) M10 x 45 Socket Head Cap Screws, (8) Flat Washers and (4) Nylock Nuts. Tighten until snug. **Do NOT over tighten. Over tightening can damage the steering box.**

NOTE: Spline for input shaft will be on the driver side of the A-arm assembly.



- Adjust the tie rod ends evenly on the steering box as needed for installation. Final toe will be adjusted after the lift kit is completely installed.
- Connect the tie rod ends to the spindles using the (2) Lock Washers and (2) Castle Nuts supplied with the steering box. Install the (2) Cotter Pins* once the final toe is set.
- Snug down all hardware on the A-arm assembly but do not fully tighten.
- Carefully place the A-Arm assembly on a rolling jack. Move the assembly under the front end of the golf cart.

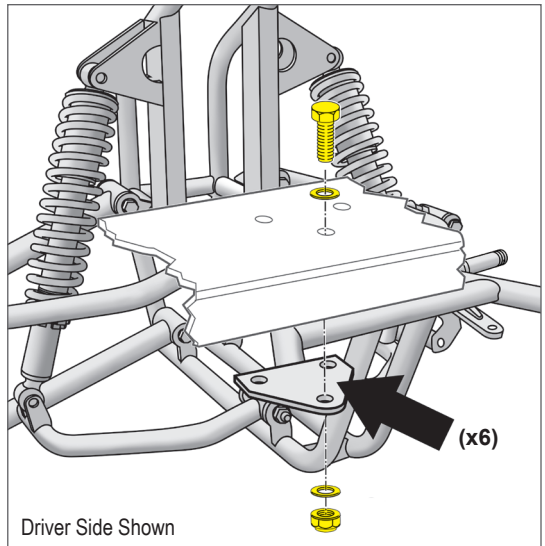
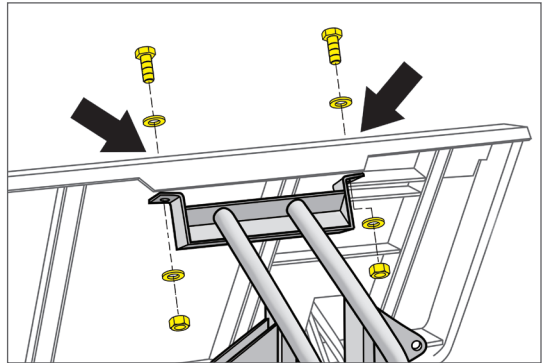
NOTE: A second person will be helpful with this portion of the installation.



Front Suspension Installation

NOTE: Please refer to page 2 for torque specifications for included hardware. Please refer to vehicle's maintenance manual for torque specifications on reused hardware.

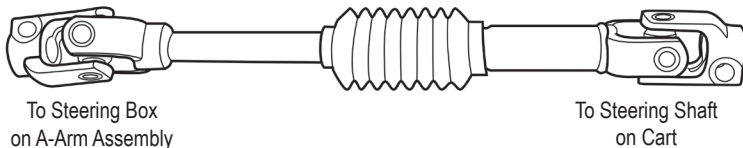
1. Loosely install the top of the A-arm assembly to the frame where the shocks were removed (page 4, step 13) using (2) M12 x 30 Hex Head Bolts, (4) Flat Washers and (2) Nylock Nuts.
2. Loosely install the bottom of the A-Arm assembly to the frame where the leaf springs were removed (page 4, step 14) using (6) M10 x 35 Hex Head Bolts, (12) Flat Washers and (6) Nylock Nuts.
3. Fully tighten all hardware.
4. Place the floor mat back over the pedal group.
5. Straighten the steering wheel.
6. Install the extended steering shaft using (2) M8 x 25 Hex Head Bolts, (2) Flat Washers, (2) Lock Washers and (2) Nylock Nuts. The thicker end will mount to the area where the original intermediate steering shaft was attached (page 4, step 12). The opposite end will mount to the new steering box.



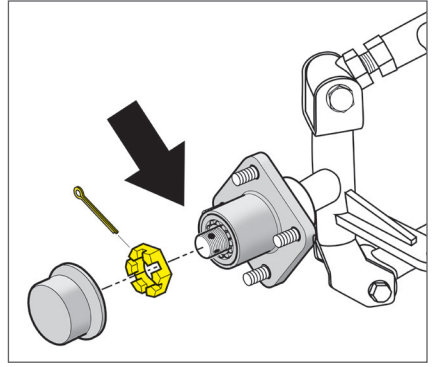
7. Center the steering wheel following these steps: Turn it completely to the driver side. Then, turn it completely to the passenger side and count the number of rotations (X).

Divide "X" by (2) to determine the center point (Y).

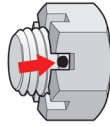
Turn the steering wheel "Y" rotations back to the driver side until it reaches the center point. Remove and adjust the steering wheel if it is not straight.



- Apply a light coat of grease to the spindles and install the hubs on the new spindles using the Original Hardware. Fully tighten the castle nut. If the hole for the cotter pin is not clearly visible, back the castle nut off until the hole is visible. Reinstall the cotter pin and dust cover.



- Grease the fittings on both spindles using a general purpose automotive grease.



- Install the (2) front tires and wheels. The stock tires and wheels will not work on the newly lifted cart. Fully tighten the lug nuts on both wheels.

NOTE: We recommend 23" tires and a 12" or larger wheel with a minimum of a 1" offset.

- Tighten any hardware left loose in this section.
- Once the tires and wheels are fully secure, place the jack under the cart. Remove the jack stands and lower the cart. Remove the chocks behind the rear wheels.

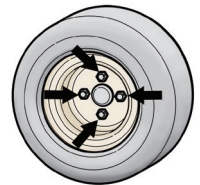
NOTE: Toe adjustments will be made at the end of the installation.

Installation Preparation (Rear)

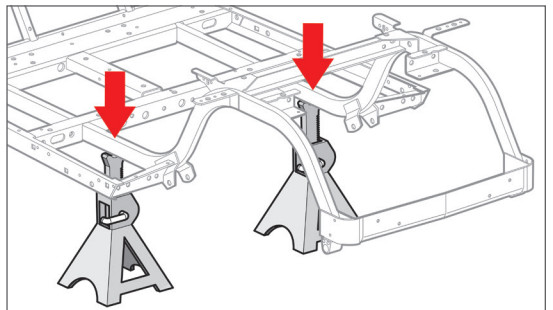
Safety Note: Proper eye and mouth protection should be worn during this section to protect the installer from falling debris when working under the cart.

The rear axle is only secured in place by the leaf springs, U-bolts and the jack. For safety reasons, only complete one side of the suspension at a time.

- Engage parking brake.
- Turn key OFF.
- Place Tow/Run Switch in TOW if equipped.



- Chock the front of the front wheels.
- Remove the hub caps (if any). Loosen the lug nuts on both rear wheels but do not remove them.
- Place a jack securely under the rear axle. Safely lift the rear end of the cart enough to accommodate the additional

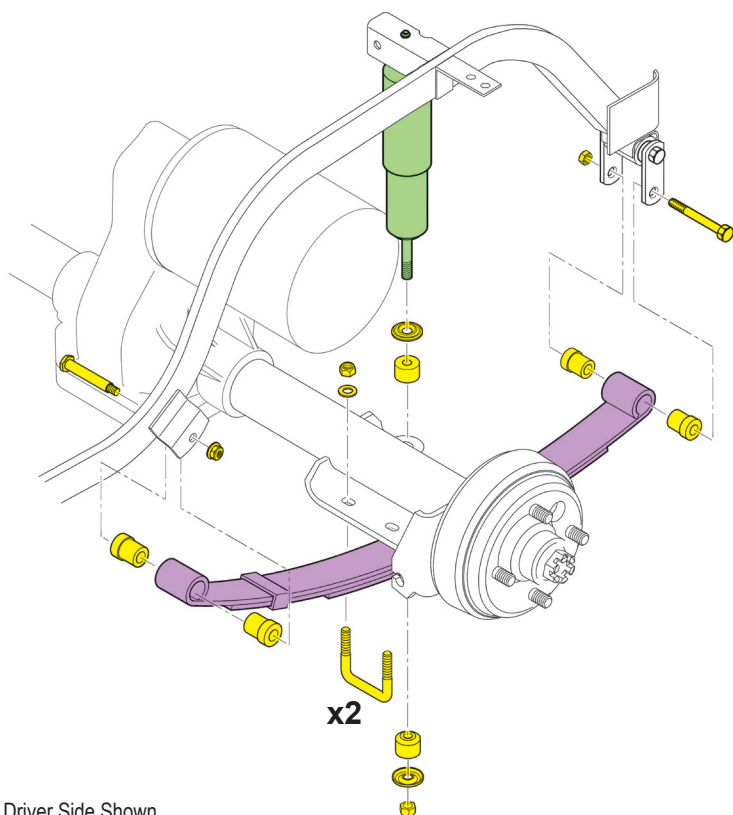


height of the larger tires and wheels.

7. Place jack stands under the chassis on both sides of the cart to stabilize it (shown on page 7). DO NOT remove the jack.
8. Fully remove the (8) rear lug nuts, tires and wheels. Discard.
9. Disconnect the bottom of the rear shocks (shown in green) from the shock mounting plates. Push the shocks upward and out of the way. Retain hardware.
10. With the axle supported by the jack, remove the (2) U-bolts holding the driver side leaf spring (shown in purple) to the axle perch. Discard the U-bolts.

CAUTION: Complete one side at a time.

11. Remove the driver side leaf spring (shown in purple). Retain leaf spring and hardware.
12. Carefully lower the rear axle away from the chassis with the jack. The jack stands will remain in place to support the chassis.



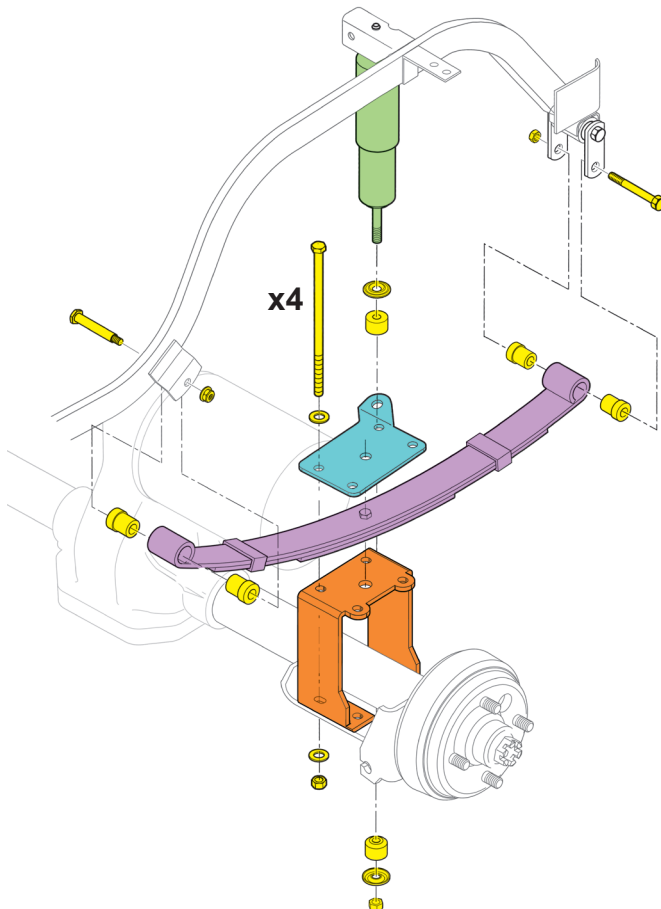
Driver Side Shown

Rear Suspension Installation

1. Place a lift block (orange) in the perch, on top of the driver side axle.
2. Place the leaf spring (purple) on top of the lift block. The alignment pin on the leaf spring will seat in the center hole of the lift block. Reconnect the leaf spring to the front shackle using the Original Hardware.
3. Place the new shock mount plate (blue) on top of the leaf spring. The center hole on the shock mount plate will align with the alignment pin on the leaf spring.

NOTE: The driver and passenger shock mount plates are different. When oriented correctly, the small tab will face upwards towards the shock.

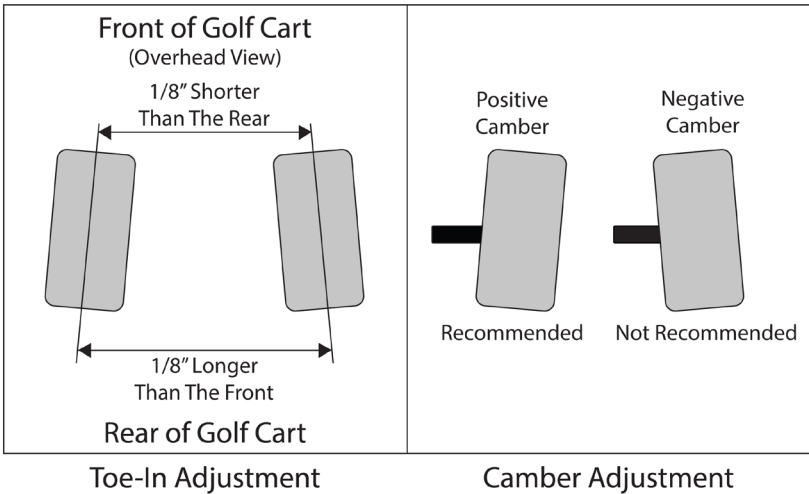
4. Fasten the shock plate, leaf spring and lift block to the perch under the axle with (4) 3/8"-16 x 9" Shoulder Hex Head Bolts, (8) Flat Washers and (4) Nylock Nuts. Hand tighten bolts evenly on both sides.



Driver Side Shown

5. Repeat prep steps 10-12 and installation steps 1-4 on the passenger side.
6. Using the jack, safely lift the rear axle and guide the rear portion of the leaf springs to their original positions. Reinstall the leaf springs (purple) to the rear shackles using the Original Hardware removed in step 11, page 8.
7. Fasten the shocks (green) to the shock mounting plates (blue) using the Original Hardware.
8. Tighten all hardware.
9. Install the (2) new rear tires/wheels on the rear hubs. Remove the jack stands and lower the cart. Remove the jack.

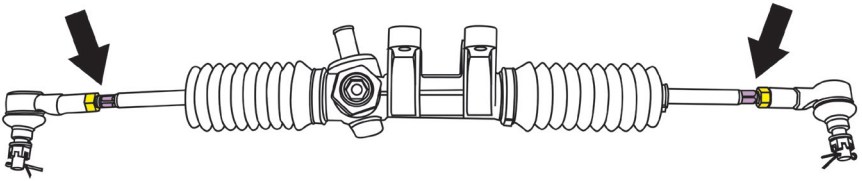
Toe, Camber and Shock Adjustments



Toe Adjustments

1. Drive forward and back 20-40 feet to check the toe before making adjustments. Only make adjustments if needed.
- NOTE:** For stability, an $1/8''$ toe-in is recommended.
2. Calculate the toe of the front tires by measuring the center-to-center distance of the front of the front tires versus the center-to-center distance of the back of the front tires. The front measurement should be $1/8''$ shorter than the rear.
 3. Adjust the toe by loosening the jam nuts. Lengthen or shorten the tie rod by turning the rod adjustments (shown on page 11).

NOTE: Shortening the tie rods increases the toe, lengthening decreases it.



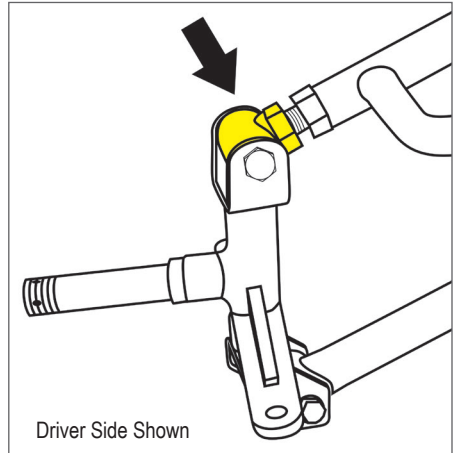
4. Once the toe adjustments are finalized and set, tighten the jam nuts.

Camber Adjustments

1. Lift the front end and place the cart on jack stands.
2. Remove the front tires and wheels.
3. Disconnect the upper A-arm from the kingpins.
4. Rotate the ends of the upper A-arms evenly on both sides until the desired camber is reached.

NOTE: Rotating the ends of the upper A-arms counterclockwise (away from the center of the cart) will increase camber, rotating them clockwise (inward will decrease the camber).

5. Once the desired camber is reached, reinstall the A-arms to the kingpins and the tires and wheels to the spindles.
6. Lower the cart. Repeat if desired adjustments are not met.



Shock Adjustments

1. While installed on the cart or A-arm assembly, adjust the tension of the shock by using a spanner wrench to rotate the upper collar located at the bottom of the shock.

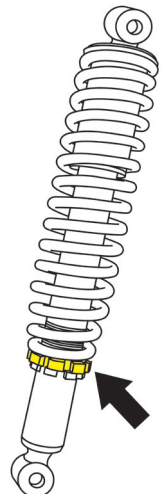
NOTE: If the shock is not installed, use a second spanner wrench on the lower most collar to hold the shock in place as the upper collar is rotated.

Rotating the collar upward will increase the stiffness of the ride.

2. Repeat for the opposite shock. The same adjustments should be made on both shocks to keep the tension even.

After Adjustments

1. Tighten any hardware left loose and install all cotter pins.



**RUGGED
STARTS
HERE**



This completes the installation of your RHOX Lift Kit.
Please enjoy safely! Scan QR code or use the link to view our installation video library.
<https://www.youtube.com/user/golfcartinstructions>