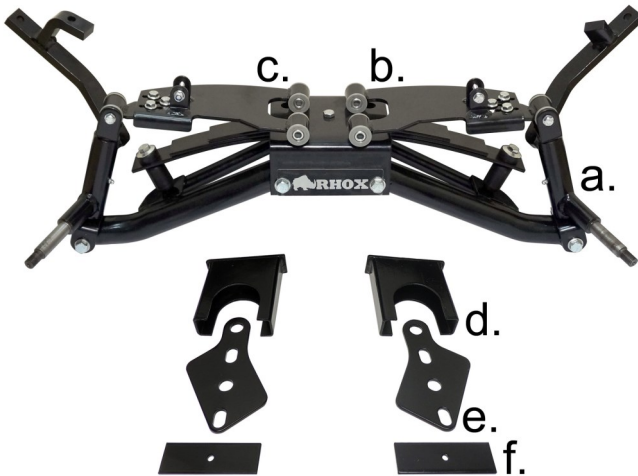




**LIFT-506**  
**BMF Lift Kit**  
**Club Car DS**  
**Gas & Electric 2003.5-09**  
**Installation Instructions**

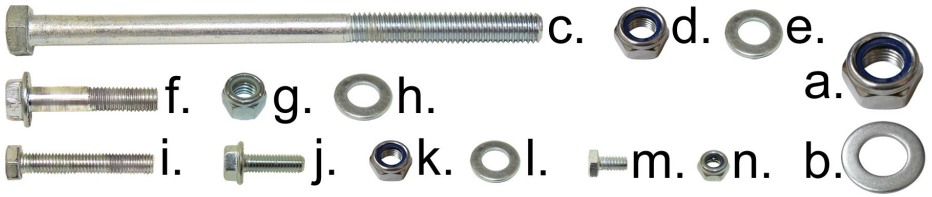


Contents of LIFT-506 Club Car DS BMF Lift Kit:

- a (1 ea.) BMF Front Suspension
- b (1 ea.) Driver Side Upper A-Arm
- c (1 ea.) Passenger Side Upper A-Arm
- d (2 ea.) Riser Blocks
- e (2 ea.) Shock Mounting Plates
- f (2 ea.) Centering Plates
- g (1 ea.) Box of Hardware (Contents on Next Page)
- h (1 ea.) Instructions

**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 all torquing specifications on page 2 for installation.

**Note:** You must install larger tires and wheels once the cart is lifted. Stock wheels will not work. We recommend a 22" tire with a minimum of a 10" offset wheel for use on the RHOOX BMF Lift Kit.



Contents of LIFT-506 Hardware Kit

ITEM	QTY.	DESCRIPTION	TORQUE REQUIREMENTS
a.	2 ea.	16mm Nylock Nuts	-
b.	2 ea.	16mm Flat Washers	-
c.	4 ea.	7/16-14 x 7.25" Hex Head Bolts	54 ft. lbs.
d.	4 ea.	7/16-14 Nylock Nuts	-
e.	8 ea.	7/16" Flat Washers	-
f.	4 ea.	10mm x 50 Serrated Flange Head Bolts	45 ft. lbs.
g.	4 ea.	10mm Nylock Nuts	-
h.	4 ea.	10mm Flat Washers	-
i.	2 ea.	8mm x 50 Hex Head Bolts	22 ft. lbs.
j.	6 ea.	8mm x 25 Serrated Flange Head Bolts	22 ft. lbs.
k.	8 ea.	8mm Nylock Nuts	-
l.	10 ea.	8mm Flat Washers	-
m.	2 ea.	1/4-20 x .5" Hex Head Bolts	6 ft. lbs.
n.	2 ea.	1/4-20 Nylock Nuts	-

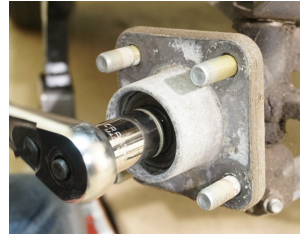
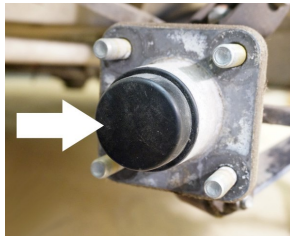
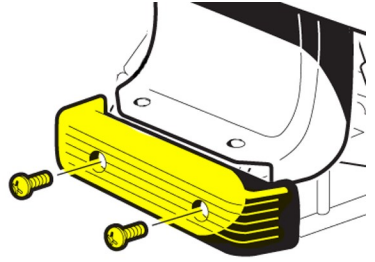
Tools Needed For Installation

- Sockets and Open Ended Wrenches:  
1/2", 9/16", 5/8", 3/4", 13/16", 15/16, 10mm, 13mm, 15mm, 17mm
- Screwdrivers (Phillips and Flat)
- Pliers
- Jack and Jack Stands
- Chock for Wheels
- Rubber Mallet

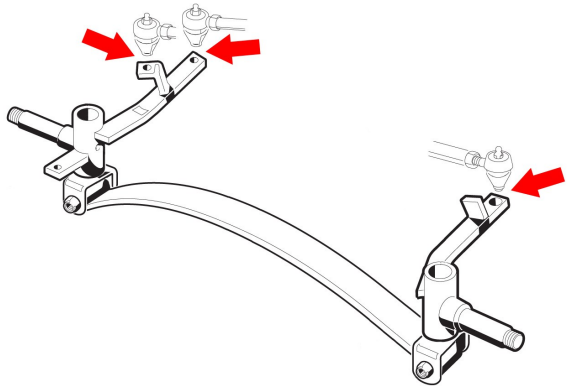
Installation Preparation (Front of the Cart)

1. Make sure the parking brake is engaged and the key is in the Off position.
2. If your cart has a Tow/Run Switch, place switch in the Tow position.
3. Chock the back of the rear wheels to prevent the cart from moving.
4. Remove the hub caps (if any). Loosen the lug nuts on both of the front wheels. Do not remove the lug nuts.
5. Using a jack, safely lift the front end of the cart enough to accommodate the additional height of the larger tires and wheels.

6. Place jack stands securely under the chassis and remove jack.
7. Remove the front bumper by removing the two bolts holding it in place. Retain bumper and hardware.
8. Fully remove the (8) front lug nuts, tires and wheels. Discard the tires and wheels as they will not be reused.
9. Remove the dust caps.
10. Remove the front hubs by removing the flange nut in the center of the hub. Place hubs in a clean and dry location. Discard hardware.



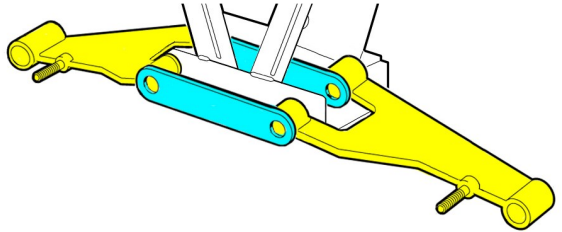
11. Disconnect the (3) tie rod ends from the spindles by removing the safety pins from the tie rod ends. Then remove the nuts on the tie rod ends. Use a wrench to keep the tie rod ends in place as the nuts are removed. Use a tie rod fork to dislodge the tie rod ends if needed. Retain hardware.



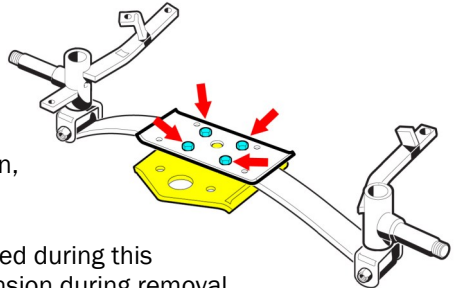
12. Disconnect the bottom of the shocks from the A-Arms. Discard hardware. Push the shock up and out of the way.



13. Disconnect the lower portion of the A-Arms from the spindles and discard hardware. Disconnect the upper portion of the A-Arms from the frame. Discard the A-Arms but retain the hardware and the A-plate straps (blue).



14. Disconnect the original suspension from the chassis by removing the (4) bolts and the spring retainer plate. Discard the original suspension, retainer plate and hardware.



**NOTE:** Additional help is recommended during this step to help support the front suspension during removal.

### BMF Front Suspension Installation

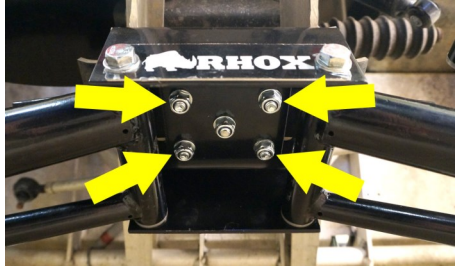
**NOTE:** Please refer to page 2 for torquing specifications for included hardware. Please refer to vehicle's maintenance manual for torquing specifications on reused hardware.

1. Position the new BMF front suspension under the spring mount plate with the *RHOX* name plate facing forward.



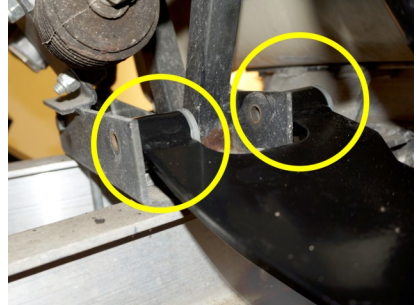
- Using (4) 10mm x 50 Serrated Flange Head Bolts, (4) 10mm Flat Washers and (4) 10mm Nylock Nuts, bolt the new BMF front suspension to the chassis where the original suspension was removed.

**NOTE:** Additional help is recommended during this step to help support the front suspension during installation.



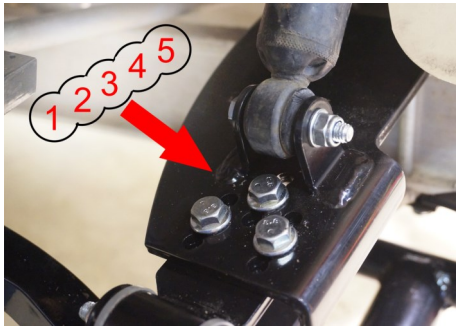
- Using the original mounting hardware and A-plate straps, attach the upper portion of the A-Arms to the chassis.

**NOTE:** It may be easier to disconnect the new A-Arms from the spindles first.



- If the A-Arms are disconnected from the spindles, attach the A-Arms to the spindle assemblies using (6) 8mm x 25 Serrated Flange Head Bolts, (6) 8mm Washers and (6) 8mm Nylock Nuts.

There are (5) adjustable camber positions. To start, it is recommended to use the second position from the outside of the cart. Final adjustments can be made once all tires are installed.



- Attach the shocks to the A-Arm shock mounts using the (2) 8mm x 50 Hex Head Bolts, (4) 8mm Flat Washers and (2) 8mm Nylock Nuts.



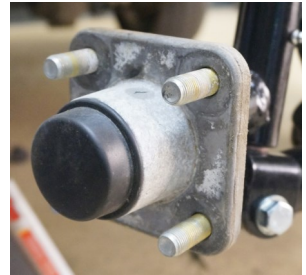


6. Reinstall the (3) tie rod ends onto the spindles using the original hardware. If the safety pin hole is not entirely visible through the castle nut's gaps, keep tightening.

Reinsert the safety pins after the tie rod ends are seated properly.



7. Reinstall the front hubs removed on page 3 using the (2) 16mm Nylock Nuts and (2) 16mm Flat Washers provided in the hardware kit. Reinstall the dust caps.



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

**NOTE:** It is recommended to use at least 22" tires on a 10" wheel with an offset. The wheel shown is a *RHOX Vegas TIR-RX160* with a *RHOX Mojave* tire, TIR-265.



9. Once the tire and wheels are fully secure, place the jack under the cart. Remove any jack stands and lower the cart safely to the ground. Remove the chocks behind the rear wheels.

**NOTE:** The front bumper will remain off until the camber and toe adjustments are made at the end of the installation.

### Installation Preparation (Rear of the Cart)

1. Make sure the parking brake is engaged and the key is in the Off position.
2. Chock the front of the front wheels to prevent the cart from moving.

3. Remove the hub caps (if any) on the rear wheels. Loosen the lug nuts on both rear wheels. Do not remove the lug nuts.
4. 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.
5. Place jack stands under the chassis on both sides of the cart to stabilize it. DO NOT remove the jack.
6. Fully remove the (8) rear lug nuts, tires and wheels. Discard the tires and wheels as they will not be reused.



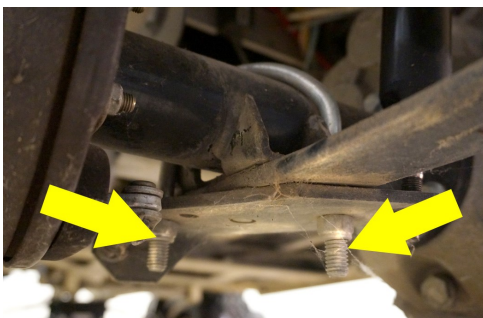
### BMF Rear Suspension Installation

**Safety Note:** The rear axle is only held up by the (2) leaf springs and the jack. For safety reasons, complete one side of the suspension at a time. The photos below show the Driver side.

1. Unbolt the bottom portion of the driver side shock from the shock mounting plate. Push the shock upward and out of the way. Retain hardware.



2. With the axle supported by the jack, remove the (2) nuts holding the driver's side U-bolt around the rear axle, leaf spring and shock mounting plate. Remove and discard hardware.



**NOTE:** The shock mounting plate will remain attached to the brake cable.

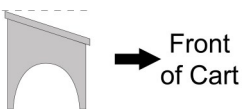
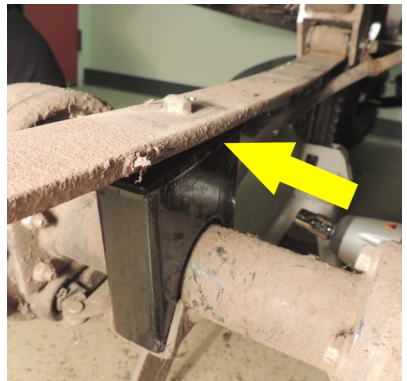
3. Remove the driver side leaf spring from the rear shackle by removing the shackle bolt on the rear portion of the leaf spring. Retain hardware.



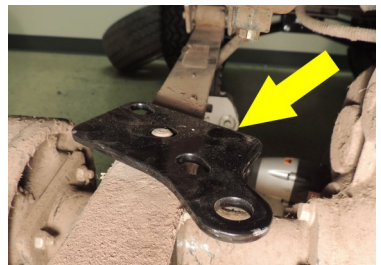
4. Remove the front portion of the leaf spring by removing front pivot bolt. Retain hardware.
5. Remove the leaf spring.
6. Carefully lower the rear axle away from the chassis with the jack. DO NOT remove the jack stands. They will support the chassis.



7. Place the leaf spring on top of the axle.
8. Place a riser block on top of the axle and under the leaf spring. When oriented correctly, it will lean to the front of the cart and the captured nut on the bottom of the leaf spring will seat in the hole on top of the riser block.

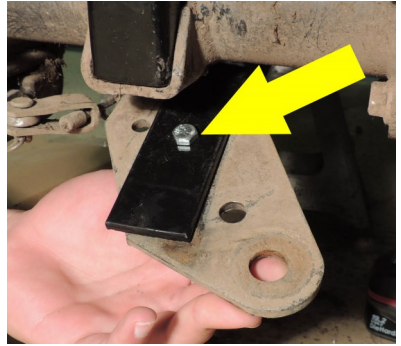


9. Once the spring is seated, identify the shock mounting plate included in the BMF kit. Place it on top of the leaf spring. The captured nut will seat in the small hole. The larger, shock mount hole will face towards the center rear of the cart as shown.

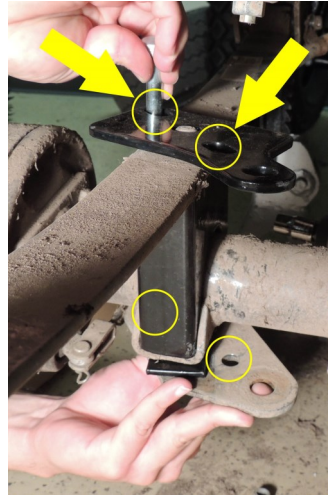
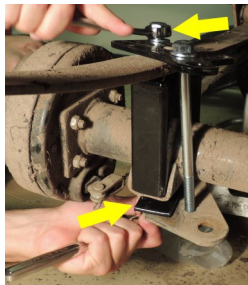




10. Install (1) 1/4-20 x .5" Hex Head Bolt and (1) 1/4-20 Nylock Nut onto the centering plate. Place the centering plate between the original shock mounting plate and the leaf spring mounting perch on the bottom of the axle. The 1/4-20 bolt head and nut will fit into the center hole of the spring perch and original shock mounting plate to aid in alignment of the riser block and mounting plates.



11. Fasten the centering plate assembly to the rear axle, riser block, leaf spring and new shock mounting bracket using (2) 7/16-14 x 7.25" Hex Head Bolts, (4) 7/16 Flat Washers and (2) 7/16-14 Nylock Nuts. Hand tighten.



12. Fully tighten both bolts. Adjustments may be needed to keep all plates and brackets aligned.
13. Repeat steps 1-12 for the passenger side rear leaf spring.
14. Using the jack, safely lift the rear axle and guide the rear portion of the leaf springs to their original positions.
15. Reinstall the rear portion of the leaf springs to the shackles using the Original Hardware removed in step 3.
16. Pull down the shocks and bolt them onto the new shock mounting plates using the Original Hardware.



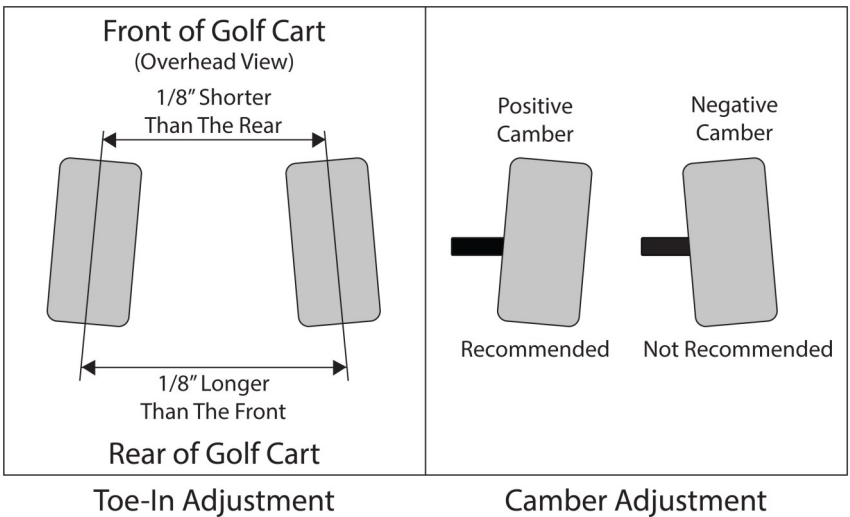
17. If the cart is not high enough to accommodate the larger tires and wheels, raise the cart to the right height with the jack.
18. Install the (2) rear tires/wheels on the rear hubs.
19. Remove the jack stands and lower the cart.
20. Remove the jack.



Adjust the Toe and Camber

1. Drive forward and back 20-40 feet to check the toe and camber before making adjustments. Only make adjustments if needed.

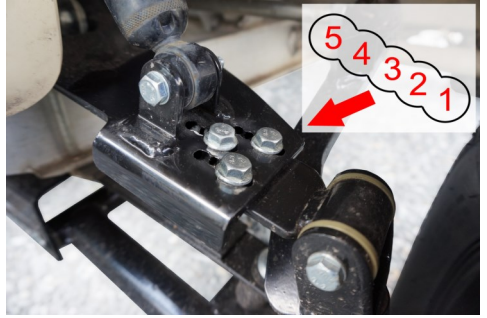
**NOTE:** For stability, an 1/8" toe-in with a positive camber is recommended. This will level out when the cart is loaded.



2. Adjust the toe by loosening both driver and passenger side jam nuts. Lengthen or shorten the tie rod by turning the rod adjustment. Shortening the tie rod increases the toe-in, lengthening decreases it.



3. Adjust the camber by changing the position of the camber adjustment bolts on the upper A-Arms.



4. Once camber and toe adjustments are finalized and set, tighten all hardware and jam nuts.
5. Reinstall the front bumper with the original hardware.



This completes the installation of your Club Car DS BMF Lift Kit.  
Please enjoy safely!

Watch this installation and others on YouTube:  
[www.youtube.com/user/GolfCartInstructions](http://www.youtube.com/user/GolfCartInstructions)

