



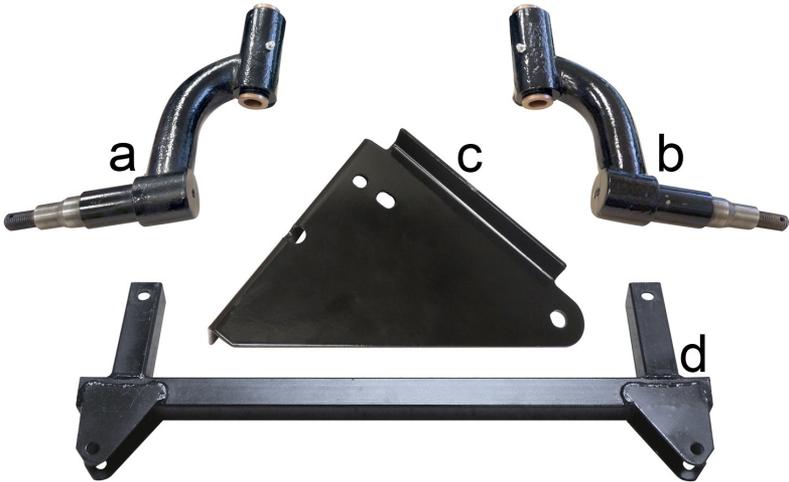
## LIFT-105

### 6" Drop Spindle Lift Kit

### Yamaha Drive

### Gas or Electric

### Installation Instructions



Contents of LIFT-105 Yamaha Drive Drop Spindle Lift Kit:

- a (1 ea.) Passenger Side Spindle
- b (1 ea.) Driver Side Spindle
- c (1 ea.) Connecting Rod Bracket
- d (1 ea.) Rear U-Bracket
- e (1 ea.) Bag of Hardware (Contents on Next Page)
- f (1 ea.) Instructions

**Caution:** Please read through the instructions carefully. Installer is responsible for damage if instructions are not followed properly. Look behind each drill or cut location BEFORE YOU DRILL OR CUT. Installer is responsible for damage (i.e. drilling/cutting into a wiring harness, battery, fuel tank etc.). 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 RHOX Lift Kit.



**Contents of LIFT-105 Hardware Kit:**

<u>ITEM</u>	<u>QTY.</u>	<u>DESCRIPTION</u>	<u>TORQUE REQUIREMENTS</u>
a.	1 ea.	12mm x 25 Hex Head Bolt	69.00 ft. lbs.
b.	1 ea.	12mm Nylock Nut	-
c.	2 ea.	10mm x 70 Hex Head Bolts	38.25 ft. lbs.
d.	2 ea.	10mm x 60 Hex Head Bolts	38.25 ft. lbs.
e.	4 ea.	10mm Nylock Nuts	-
f.	8 ea.	10mm Flat Washers	-

Tools Needed For Installation

- Sockets and Open Ended Wrenches:  
10mm, 12mm, 14mm, 17mm, 18mm, 19mm and 21mm
- Drill and Drill Bits (1/8" or 3/16", 13/16")
- Flat Screwdriver
- 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. Electric Carts Only: If your cart has a Tow/Run Switch, place switch in the Tow position.
3. Remove the hub caps (if any). Loosen lug nuts on both front wheels. Do not remove lug nuts.
4. Chock the back of the rear wheels to prevent the cart from moving.
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. Fully remove the (8) front lug nuts, tires and wheels. Discard the tires and wheels as they will not be reused.



8. Remove the dust covers.
9. Remove the front hubs by removing the safety pin and nut in the center of the hub. Place hubs in a clean and dry location. Retain hardware.



10. Disconnect the steering knuckles from the spindles by removing the safety pins, nuts and bolts. Retain hardware.



11. Remove the spindles from the lower portion of the shocks by removing the safety pin, nut and bolt. Retain the hardware, thrust covers and spacers. Discard spindles.



### 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. Insert the Original Spacers into the new spindles and place the Original Thrust Covers over the bushings on the new spindles.



2. Install the new spindles to the bottom portion of the shocks using the Original Hardware. Driver side is shown.
3. Attach the knuckle arms to the new spindles using the Original Hardware.



4. Install the hubs onto the new spindles using the Original Hardware. Reinstall the dust covers.



5. 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 10" wheels with an offset. The wheel shown is a *RHOX Vegas TIR-RX160* with a *RHOX Mojave* tire, TIR-265.



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

### Installation Preparation (Rear of the Cart)

1. Turn the key to the Off position and lock the parking brake.
2. Electric Carts Only: If your cart has a Tow/Run Switch, place switch in the Tow position.
3. Chock the front of the front wheels to prevent the cart from moving.
4. Remove the rear access panel by removing the rivets and unclipping it from the body. Retain rivets.



5. Remove the hub caps (if any) on the rear wheels. Loosen the lug nuts on both wheels but do not remove the them.
6. Place a jack securely under the rear axle. Safely lift the rear end of the cart enough to accommodate the additional height of the new tires and wheels.
7. Place jack stands under the chassis on both sides of the cart to stabilize it. Lower the jack but do not remove it.
8. Fully remove the (8) rear lug nuts, tires and wheels. Discard the tires and wheels as they will not be reused.



Rear Suspension Installation

**NOTE:** The rear body was removed for visibility purposes in the photos shown. The lift kit can be installed with the body installed.

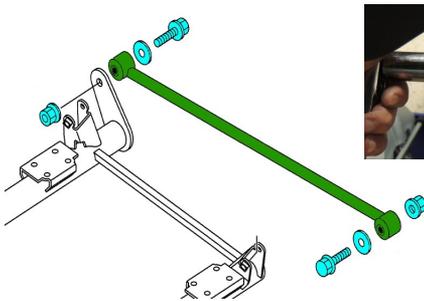
**Safety Note:**

Proper eye and mouth protection should be worn during this section to protect the installer from debris when working under the cart or drilling.

1. With the frame of the cart supported by the jack stands, carefully raise the jack to support the rear axle.



2. Disconnect the rear connecting rod by removing the (2) bolts, nuts and washers. Retain rod and hardware.



3. Disconnect the top of the rear shocks from the shock mounts. Retain hardware.



4. Disconnect the 3-pin connector attached to the motor to eliminate damage when lowering the rear suspension.
5. With the cart in the Tow position, slowly and carefully lower the rear axle.



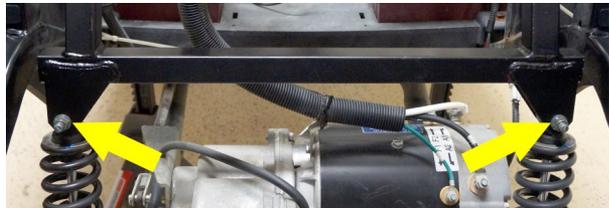
**Safety Note:** The electrical system could be damaged if the cart is NOT in the Tow position and a shock contacts the motor.

6. Identify the U-bracket. When oriented correctly, the bracket will be angled towards the front of the cart.

7. Slide the U-bracket into the original shock mounts. Install the U-bracket to the shock mounts using (2) 10mm x 60 Hex Head Bolts, (4) 10mm Flat Washers and (2) 10mm Nylock Nuts.



8. Slowly raise the rear axle until the top of the shocks reach the new shock mounts. Install the top of the shocks to the shock mounts using the Original Hardware.



9. Reroute and reconnect any wires or cables removed in step 4. Use wire ties to secure them if needed.

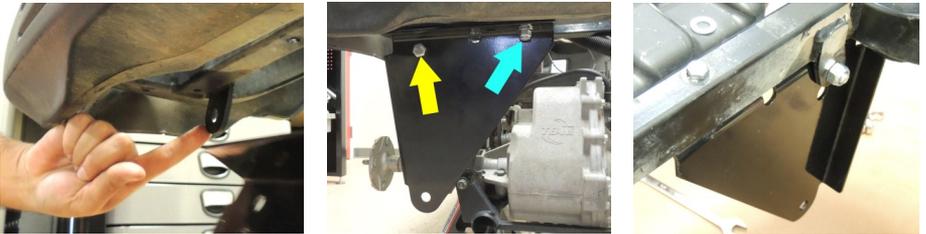


10. Locate the two bolts in the bagwell area. Remove the bolt on the driver side.

11. Using the empty bolt hole as a guide, drill a 1/8" - 3/16" pilot hole completely through the chassis. Then drill a 13/32" hole through the pilot hole.



12. Orient the connecting rod bracket so the rounded corner is facing downward and is closer to the driver side of the cart.
13. Place the connecting rod bracket on the underside of the chassis and behind the original connecting rod mounting tab.
14. Install the bracket to the mounting tab using (1) 12mm x 25 Hex Head Bolt and (1) 12mm Nylock Nut (yellow arrow). Do not tighten.
15. Install the bracket to the chassis using (1) 10mm x 70 Hex Head Bolt, (2) 10mm Flat Washers and (1) 10mm Nylock Nut (blue arrow).



16. Tighten both sets of hardware from steps 14 and 15.

**NOTE:** For matching bolt heads in the bagwell area, a second set of 10mm hardware is included in the lift kit. Repeat steps 10-11 for the passenger side if desired. This will not effect the lift kit.

17. Reinstall the connecting rod to the new bracket and the original mounting tab using the Original Hardware.



18. Tighten any hardware left loose in this section.
19. If the cart is not high enough to accommodate the larger tires and wheels, raise the cart to the correct height with the jack.
20. Install the (2) rear tires/wheels on the rear hubs.

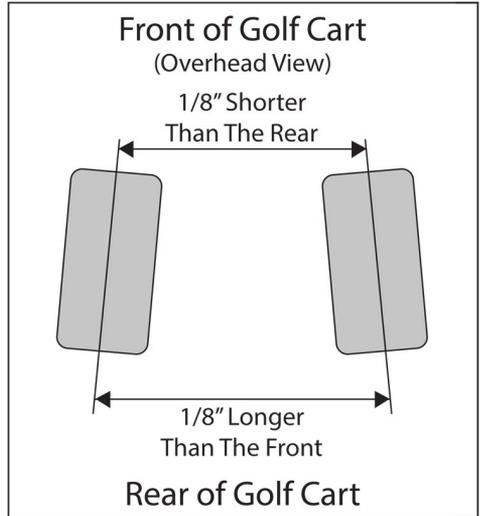


21. Remove the jack stands and lower the cart. Remove the jack.

### Adjust the Toe

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.



### Toe-In Adjustment

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 nut then lengthen or shorten the tie rod by turning the hex shaped rod adjustment. Shortening the tie rods increases the toe-in, lengthening decreases it.
4. Once the toe adjustments are finalized and set, tighten the jam nuts.



This completes the installation of your Yamaha Drive Lift Kit.  
Please enjoy safely!

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