

201 Grandin Road Maineville, Ohio 45039 (513) 677-0500

## **G-Car Right Door Pushrod Manual**

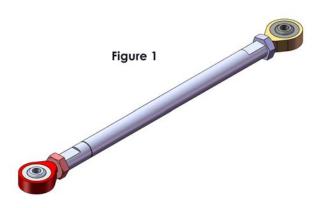
Copyright 2013 E. F. Bavis & Associates, Inc. All Right Reserved Revised 08/28/2013 P/N/ 00750021

## **Table of Contents**

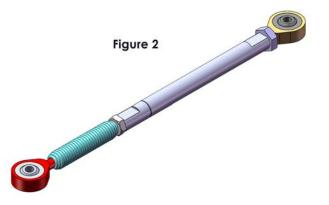
Introduction	1
Installation Instructions	2
Bill of Materials & Exploded View	3
Door Adjustment Procedure	4
Pushrod Guide Drill Fixture	5

#### Introduction

There are two types of Right Door Pushrods currently available. The first version is **PN: 04370992, GC Right Door Pushrod Assembly.** See Figure 1.



The second version is **PN: 04321991, GC Spring Pushrod Assembly**. See Figure 2. This version was designed with a breakaway spring that tolerates excessive customer abuse (typically vehicle impact). This is the version currently in use.

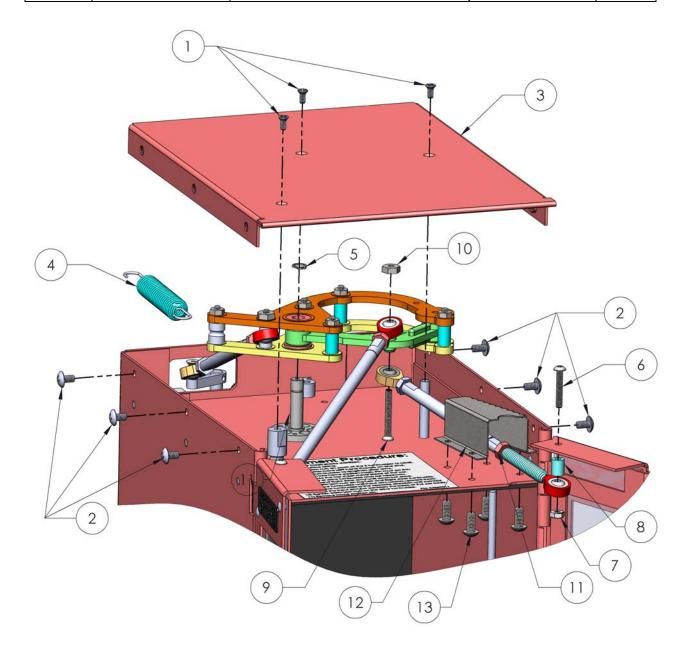


## **Installation Instructions**

- 1. Send the car to the outside (customer) position.
  - a. This entire installation procedure may be easier if the car is removed from the machine. This is accomplished by removing the outside speaker plate, and releasing the brake while feeding the tape out of the machine.
- 2. Remove the three # 4-40 x 3/8" Flat Head Machine Screws located on the very top of the car (Item 1 on page 3).
  - a. A #1 Phillips bit works best.
- 3. Remove the six # 6-32 x 1/4" Truss Head Machine Screws located on the top sides of the car (Item 2 on page 3).
  - a. A #2 Phillips bit works best.
- 4. Remove the GC End Cover (Item 3 on page 3).
- 5. Remove the GC Door Close Spring (Item 4 on page 3).
- 6. Remove the 1/4" Retaining Ring using retaining ring pliers (Item 5 on page 3).
- 7. Remove the # 5-40 x 3/4" Button Socket Head Machine Screw that connects right pushrod assembly to the door (Item 6 on page 3).
- 8. Lift up on the black plastic Magnetic Over Run Assembly.
- 9. Remove the # 5-40 x 1" Phillips Flat Head Machine Screw that connects the Right Pushrod Assembly to the black plastic Magnetic Over Run Assembly (Item 9 on page 3).
- 10. Remove and discard the damaged Right Pushrod Assembly.
- 11. Swap the left and the Right Pushrods so that the Right Spring Pushrod is on the bottom and the Left Spring Pushrod is on the top of the Magnetic Over Run Assembly (refer to the diagram on page 3).
- 12. If you are replacing a non-spring version pushrod with the spring version you **must** install the GC Pushrod Guide using the Pushrod Guide Drill Fixture.
  - a. Refer to page 5 on how to use the pushrod guide drill fixture (04388011). Make sure that the guide is tight to the door hinges. Drill the four holes with a 11/64 drill bit.
  - b. Mount the Pushrod Guide using the four 8-32 x 3/8 button screw (Item 13 on page 3) supplied in the kit. These screws can be installed through the liner and chassis on the interior of the car.
- 13. Install the correct New Right Pushrod Assembly by reversing steps 5 9. Make sure that you slide the Spring Pushrod into the guide before you remount the Over Run Assembly.
- 14. The G Car Doors must then be inspected to ensure they operate properly. Make sure that the Right Door Pushrod is not rubbing against the pushrod guide. If necessary, adjust the door action following the procedure on the page 4.
- 15. Reinstall the GC End Cover using the hardware provided in the kit.

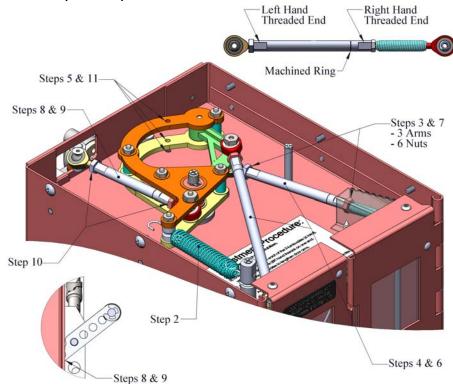
## **Bill of Materials**

Item	Part Number	Description	Qty.
1	91062129	#4-40 x 3/8 Phillips Flathead MS SS	3
2	92042723	#6-32 x 1/4 Phillips Truss MS SS	6
3	04305011	GC End Cover SM	1
4	04317021	GC Door Close Spring	1
5	95005072	1/4" Retaining Ring Zinc	1
6	04348151	#5-40 x 3/4 Socket Button Screw	1
7	04348011	#5-40 x Nylon Locking Nut	1
8	04355011	6 x 8 x M3 Unthreaded Spacer	1
9	04348301	#5-40 x 1 Phillips Flathead MS	1
10	04348021	#5-40 x 3/32 Nut	1
11	04321991	GC Spring Pushrod Assembly	1
12	04395011	GC SS Pushrod Guide	1
13	93062933	8-32 x 3/8 Button Socket Cap Screw SS	4



## **Door Adjustment Procedure**

- 1. Car must be off black plastic stabilizers.
- 2. Remove door close spring.
- 3. Loosen BOTH jam nuts on each of the 3 turnbuckles (6 total).
  - a. NOTE: turnbuckles have LEFT hand threads on one end, (The end that is closest to the machined ring is RIGHT hand threaded).
- 4. Rotate door turn buckles to lengthen door arms.
- 5. Insert 1/8" pin into home position holes. Pin must go thru both arms into the top sheet metal piece of the car.
  - a. Adjustment of drive turnbuckle may be necessary.
- 6. Adjust Left and Right door arms until doors just close.
- 7. Tighten BOTH jam nuts on the Left and Right door turnbuckle.
- 8. Rotate drive turnbuckle until input arm rotates upward freely.
- 9. Rotate drive turnbuckle in the opposite direction until pointed corner of the input arm just contacts the back of the car body.
- 10. Tighten BOTH jam nuts on the drive turnbuckle.
- 11. Remove home position pin.



# Positioning the Pushrod Guide Drill Fixture (04388011)

#### NOTE:

Seating the Drill Fixture against the door hinges is critical. If it is not, the Pushrod Guide will rub against the Right Pushrod Assembly. Drill the four mounting holes with a 11/64 drill bit. Mount the Pushrod Guide using the four 8-32 x 3/8 button screws (Item 13 on page 3) supplied in the kit. These screws can be installed up through the liner and chassis on the interior of the car.

