Installation Manual for PED/Attendant Brake System

Parts Contained In Box For Installation

#1 Skyway wheel set w/ disc rotor (12.5" or 16" wheel) – 2 each
#2 Brake Caliper/Universal bracket mount assembly – 2 each
#3 ½" x 5" axle bolt & nut
#4 Axle spacer – 2 each (for use on chairs without adjustable threaded axles)
#5 Hand brake lever w/ lock up button (1 – each or 2 – each as specified when ordered)
#6 Brake cable & cable housing
System w/ 2 hand levers: 2 – each brake cable & cable housing
System w/ 1 hand lever: 3– each brake cable & cable housing, 1 - each cable doubler (part #7)

Tools Required For Installation

- Allen Wrench – 5 mm
- Metric Torx Wrench (supplied)
- Standard Flat End Screw Driver
- Open End Wrench – 5/16", 3/8", 7/16", 1/2", 9/16" & 3/4"
- Wire Crimper for Aluminum Cable End/Crimp
- Cable Housing Cutters
- Small Vise Grip Pliers for Pulling Brake Cable Tight
- Blue LOCTITE (provided)
- Center punch
- Hammer

References

Page 1 & 2 Parts List, Description & Instructions
Page 3 thru 5 Multi Views of Disc Brake Assembly

Please Note:

Parts are preassembled for reference only. Use supplied Loctite on all fasteners.
For customer service or technical help, please call 210.684.6794 or 888/684-2234.

Directions for Disc, Caliper, Bracket & Wheel Installation

1. Safely block chair so both rear wheels are free spinning.

2. Remove both rear wheels.

3. Loosen and remove 3/4" threaded axle receiver (image #1).

4. Place assembled caliper and bracket (part #2) over the axle mount to the desired position (image #2). Assure that bracket has clearance for the caliper and the most ideal exit location for the cable. Avoid sharp bends in the cable housing. Allow enough clearance for full motion of caliper operation. Left and right caliper location may differ.

5. Once the desired position is achieved, the caliper bracket mount plate (part #2) must be anchored to chair frame (image 10) to avoid movement and or rotation during braking. This is achieved by drilling holes

through the caliper bracket mount plate (part #2) to utilize existing hardware holes (standard locations), or drilling holes through the plate and axle mount/frame using new hardware.
NOTE: It is very important that the caliper mounting plate is securely mounted to frame or bracket.

6. Mark desired hole locations and center punch for drilling (image #3 & 4)

7. Drill holes through caliper bracket mount plate (part #2) (image #5)

8. After holes are drilled through caliper bracket mount plate (part #2) (image #5), mount caliper bracket mount plate (part #2) and mark interferences.

9. It may be necessary to modify caliper bracket mount plate (part #2) to allow clearance for existing hardware, brackets, bolt heads, etc… on chair frame (images 6 & 7).

10. If you are unable to utilize existing frame or bracket holes, it is necessary to drill additional holes for anti rotation (image 8 & 9).

11. Install the caliper mounting plate (part #2) with bolts and tighten (images 10 & 11).

12. With the caliper mounting plate (part #2) properly installed and anchored as specified (steps 6 – 11), tighten ¾" threaded axle receiver and nut (image 1).
NOTE: Threaded receiver should not protrude past nut, more than 1 ½ threads (.100").
* Step 12 not required for Gunnell chairs, use supplied wheel spacer for proper spacing.

13. Remove caliper from caliper mounting plate (part #2) (image 12).

14. Attach new wheel (part #1) to chair with supplied ½" X 5" bolt (part #3) and locking nut (image 14). Tighten bolt to secure wheel without play.
CAUTION: Over tightening will bind the wheel bearings. Spin wheel to check for smoothness and rotor clearance.

15. Remount caliper to caliper mounting plate (part #2) using the 6mm bolts supplied (image 15 & 16). NOTE: Refer to Tecktro manual for adjustment procedure.

<u>Directions for Brake Hand lever, Cable and Cable Housing Installation</u>

1. Mount hand brake lever (part #5) (image 17) to desired location on 7/8" tubing.
2 each – For independent left & right brake lever applications
1 each – Single lever application (requires cable doubler)

CABLE DOUBLER INSTALLATION:
For brake applications where one handle is used, mount cable doubler (part #7) (image 18) with counter sunk 1/4" bolt to a stationary part of the frame. Try to use an existing 1/4" or 5/16" hole, possibly through a 1" diameter crossbar towards the front of the chair.

2. Route cable housing to lever. Avoid sharp bends in housing and any interference throughout the full motion of tilting mechanism (if applicable). Adjust cable tension for even and full braking when handle lock is activated. NOTE: Refer to Tecktro manual for adjustment procedure.

Image #1

Remove nut on threaded axle Piece.

Image #2

Place caliper bracket in desired position

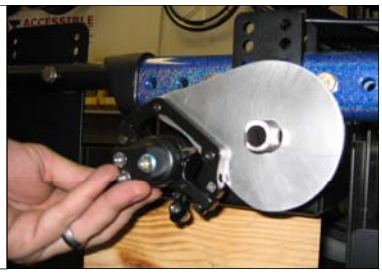

Image #3 & 4

Mark desired hole location and center punch holes for drilling.

Image #5

Drill holes through bracket mount

Image #6 & 7

Mark for interferences
Cut or file clerances

Image #8 & 9

Mark and drill holes through mount or frame for anti rotation

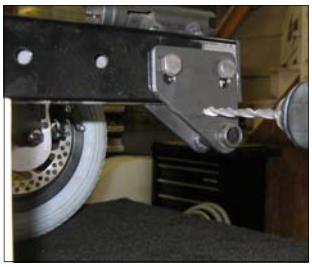

Image #10 & 11

Mount plate w/ screws
Adjust nut per step #12

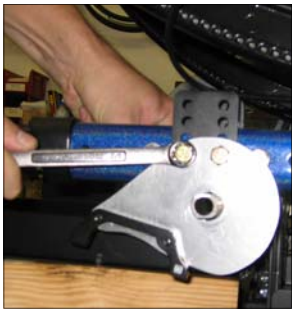

Image #12

Remove caliper from bracket plate.

Image #13 & 14

Install wheel & tighten

Image #15 & 16

Remount caliper to caliper bracket plate and adjust.

Image # 17 & 19

Install brake hand lever as desired:

Single Lever—image 17
Dual Lever—image 18

Image #19

For single lever application:

Mount cable doubler

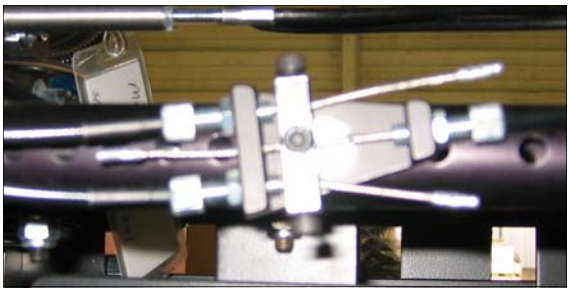

Image # 20

Cable and cable housing routing

Image #21

Hand brake lever w/ lock up button Illustration.