Retro Fit Assembly Procedures
for Mobile Aisle Model
820 (New Handle in 2005)
1. REMOVE OLD STAR HANDLE  
(MA–820 SYSTEMS ONLY)

Remove the black #10–32 x 2” bolt and lock nut with a 1/8” allen wrench. Then pull the handle off of the drive shaft (Fig. 1.1).

2. REMOVE END PANEL

The end panel is removed by simply lifting upward on end panel.

NOTE: IF YOU ARE REPLACING THE METAL END PANELS AS WELL AS THE HANDLE, PLEASE SKIP TO STEP 7. IF YOU ARE REPLACING JUST THE TOP SPROCKET ASSEMBLY AND HANDLE, PLEASE CONTINUE BELOW.

3. DISASSEMBLE THE DRIVE MECHANISM:

(MA–820 S) Disconnect the chain that runs to the top sprocket assembly by removing the master link. Loosen the (4) 1/4–20 bolt and nut that are securing the top sprocket assembly and completely remove the top sprocket assembly. If you are retrofitting a dual drive system, do not remove the bottom chain. (Fig. 3.1).

4. ASSEMBLE THE DRIVE MECHANISM

Install NEW top sprocket assembly. DO NOT TIGHTEN. Install the chain removed on the previous step and reconnect with the master link. Slide the top sprocket assembly up to remove slack and tighten. (Fig. 4.1).

5. REPLACE END PANEL

Place the end panel back into position. Make sure lances on the side are engaged into the end filler panel.

6. INSTALL THE DRIVE HANDLE  
(MA–820 SYSTEMS ONLY)

Secure the Range Lock Plate to the top sprocket assembly using the provided hardware. (Fig 6.1).

Insert a C-clip into groove in shaft. Place Key Stock into slot in shaft and slide handle into place. Tighten set screw in handle into the hole provided in the shaft. (Fig 6.2). The range lock is activated by pushing the knob in the center of the handle inward. Spring activated pins will protrude into the range lock plate and prevent the range from moving. To unlock the range, simply pull back the knob in the handle.

Assembly is complete.
7. DISASSEMBLE THE DRIVE MECHANISM:

(MA-820 S) Disconnect the chains by removing the master link. Loosen the (4) 1/4–20 bolt and nut that are securing the sprocket assembly and completely remove the sprocket assembly. If you are retro fitting a dual drive system, remove the bottom chain as well as the bottom sprocket assembly. (Fig. 7.1).

8. REMOVE THE END FILLER PANEL

Remove all self tapping screws that are holding the end filler panel in place. Be sure to have a person holding the end filler panel so it does not fall down. Set end filler aside.

9A. MOUNT END PANEL COVER:

(For 12” & 15” 4–Post units mounted on a 18” Wheel Channel. If you do not have a single face 4–post unit on an 18” carriage, please proceed to step 10). Secure End Panel Cover to wheel channel & ‘L’ upright using TEK Screws at (1) locations and (6) pieces of Black Double Face Tape 3/4”X 1”. (Fig. 9.1)

Evenly space (6) pieces of double sided tape to the end panel flange with multiple holes in the flange. (These are paint hanging holes only, not for installation purposes)

Firmly press end panel cover against the ‘L’ upright. Verify that the canopy top flange is on the outside of the end panel cover. (The canopy flange will be on the inside of the ‘L’ upright)

9B. MOUNT END PANEL COVER:

Screw end panel cover into the wheel channel using the provided TEK Screw. (Fig. 9.2)
10. MOUNT END PANEL TEMPLATE:

(All MA-820) Secure End Panel Template to wheel channel using TEK Screws at (3) locations. (Fig. 10.1)

11. ASSEMBLE THE DRIVE MECHANISM:

(MA-820 S) Drill (4) 1/4” Dia. holes through top (4) holes in template into the "L" upright. Install top sprocket assembly and adjust the chain tension to remove all slack. Chain must be broken using a chain breaker. Master link must be inserted onto chain and tightened to fit snugly around upper and lower sprocket. Ensure chain parallelism to the inner panel, measuring for equal distance between the chain and the panel at the upper and lower sprocket (Fig. 11.1).

(MA-820 D or H) Drill (8) 1/4” Dia. holes through all (8) holes in template into the "L" upright. Install top sprocket assembly and center gear reduction assembly. DO NOT TIGHTEN Install the lower chain joining the wheel drive sprocket and small gear of the bottom sprocket assembly. Slide the bottom sprocket assembly up to remove slack and tighten. Repeat procedure for chain joining the bottom sprocket assembly and top sprocket assembly. (Fig. 11.2).

12. END PANEL ASSEMBLIES: Secure end panel to "L" upright with TEK Screws (Fig. 12.1). For easier installation, pre-drill pilot holes in "L" upright prior to using TEK Screws. Installer's discretion on number of TEK Screws to use.
Note: When securing an end panel to an end panel cover drive TEK Screw through the end panel cover, into the canopy top and into the end panel. (Fig. 12.2)

Insert a C-clip into groove in shaft. Place Key Stock into slot in shaft and slide handle into place. Tighten set screw in handle into the hole provided in the shaft. (Fig. 6.2). The range lock is activated by pushing the knob in the center of the handle inward. Spring activated pins will protrude into the range lock plate and prevent the range from moving. To unlock the range, simply pull back the knob in the handle.

13. INSTALL THE DRIVE HANDLE
(MA-820 SYSTEMS ONLY)

Secure the Range Lock Plate to the top sprocket assembly using the provided hardware. (Fig 13.1).

14. INSPECT SYSTEM:

Deck: Secure_____ Level_____ Solid_____  
Ramp: Secure_____  
End Panels: Secure_____  
Even With Other Panels_____  
Ranges: All Hardware Secure_____ No Drift_____  
Range Bumper Cushions: Secure_____  
Accessories: Secure_____ Operational_____  
Free of Dents and Scratches_____  
Chain Adjustment_____  
Range Safety Locks Operational:_____ (If ordered)  
Aisle Integrity:_____ Aisle Closure Gap:_____

Note: Range Lock Plate is mounted after the End Panel is installed.