ASSEMBLY INSTRUCTIONS

Self-Stabilizing Hand Truck with C5 Stair Climbers

Table of Contents:



Watch Assembly Video/ www.youtube.com/maglineinc



Download Assembly Instructions/ magliner.com/assembly-instructions

For safe, efficient product use, Magline recommends inspecting equipment regularly and replacing damaged components immediately.



Magline, Inc.

1205 W. Cedar Street • Standish, MI 48658 USA 1-800-MAGLINE (624-5463) • (989) 512-1000 (outside U.S. & Canada)

TOOLS REQUIRED

- (2) 1/2" COMBINATION WRENCH OR SOCKET
- (1) #3 PHILLIPS SCREWDRIVER

- (1) HAMMER
 (1) PLIERS
 (1) 7/16" COMBINATION WRENCH OR SOCKET

• (1) T30 TORX DRIVER

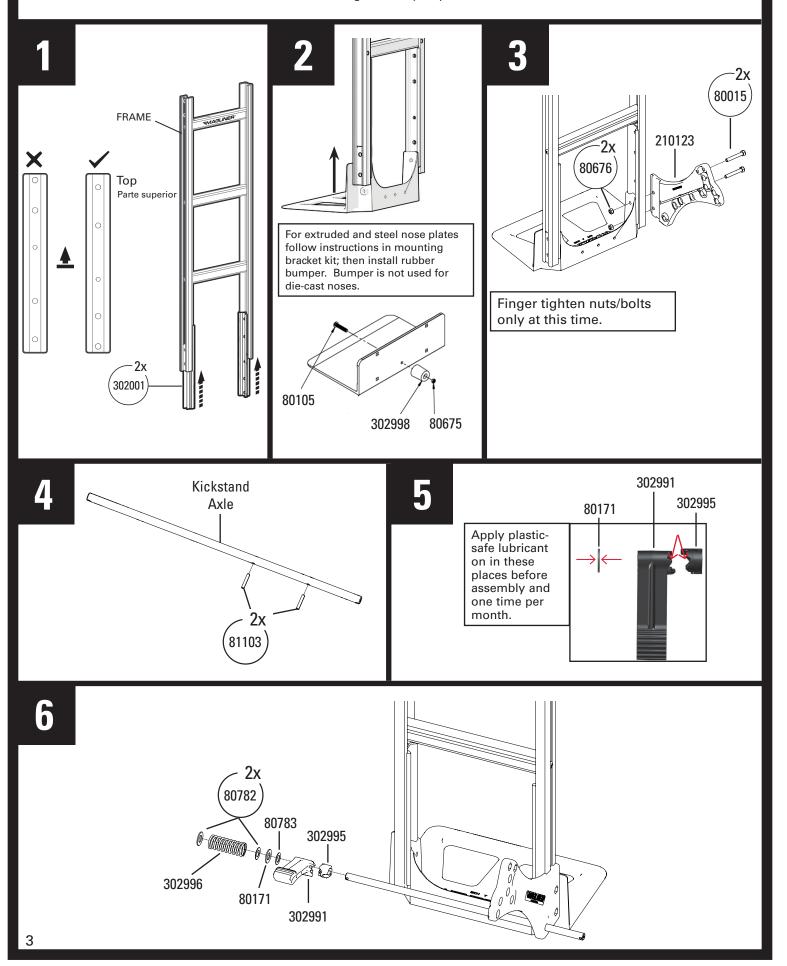
• (1) 3/16" ALLEN WRENCH

ADDITIONAL TOOLS REQUIRED TO RETROFIT TO EXISTING TRUCK:

- (1) ELECTRIC DRILL
- (1) 5/16" DRILL BIT

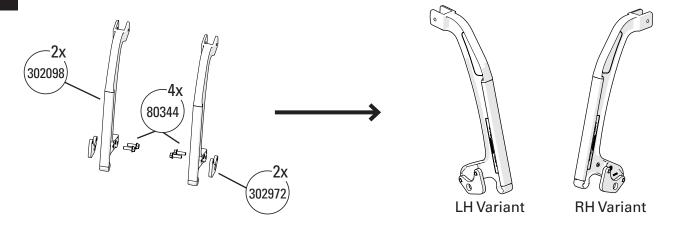
Description	Qty.	Part No.
Handle	1	Varies
Frame	1	Varies
LH wheel bracket	1	210124
RH wheel bracket	1	210123
Nose plate	1	Varies
18" axle	1	22101 or 22141
Wheel (C5 option compatible with 10" wheels only)	2	Varies
Side channel reinforcements	2	302001
C5 stair climber	2	302098
Stair climber glide bracket	2	302972
Spreader tube	1	302971
C5 adapter bracket - RH	1	302969
C5 adapter bracket - LH	1	302970
Rubber bumper (used only with flush mount extruded aluminum or steel noses)	1	302998
Pan head machine screw - 1/4"-20 x 1-3/4" long Used on models with extruded aluminum nose without vertical strap OR models with steel nose/vertical strap combination		80105
Pan head machine screw - 1/4"-20 x 1-5/8" long Used on models with steel nose without vertical strap	1	80167
Pan head machine screw - 1/4"-20 x 1-7/8" long Used on models with extruded aluminum nose/vertical strap combination		80039
Hex lock nut - 1/4"-20 (used with rubber bumper)	1	80675
Kickstand/Multi-Directional Wheel Pack consists of items below:		
Kickstand axle	1	Varies
Roll pins for kickstand axle	2	81103
Kickstand lever assembly	1	302991
Kickstand cam	1	302995
Kickstand spring	1	302996
1/2" washer - thick	6	80782
Nylon washer - 1/2" x 1" x 1/16"	1	80171
1/2" washer - thin	6	80783
Cotter pin for wheel axle - 1/8" x 1" long	2	81077
Multi-directional wheel	2	130502 (double row) 130503 (triple row)
Hardware kit 301033 contains the following parts:		
Cotter pin for wheel axle - 1/8" x 1" long	2	81077
Roll pin - 1/8" x 1-1/8"	2	190104
Hex head screw - 5/16"-18 x 2" long	4	80015
Hex lock nut - 5/16"-18	4	80676
Hex head thread forming screw - 5/16"-18 x 1" long	4	80344
5/8" washer - thin	6	80707
5/8" washer - thick	4	80705
Pan head machine screw - 1/4"-20 x 1-7/8" long	2	80039
Pan head thread forming screw - 1/4"-20 x 1-1/4" long	2	80340
Pan head machine screw - 1/4"-20 x 1" long	4	80102
Pan head machine screw - 1/4"-20 x 1-1/4" long	2	80104
Pan head machine screw - 1/4"-20 x 1-1/2" long	4	80105
Hex lock nut - 1/4"-20	10	80675

Use a workbench or table of convenient height and place all components in view and within reach. It may be helpful to assemble the hand truck oriented face down. The following assembly sequence is recommended:



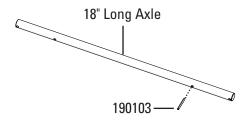
7

Install one glide bracket to the left-hand side of a stair climber, and the second glide bracket onto the right-hand side of a stair climber.

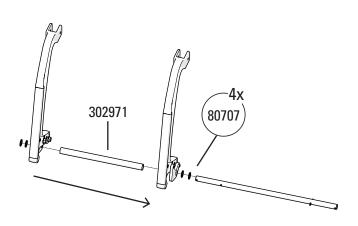


Tighten the bolts to 140 - 150 in-lbs. torque. A socket and ratchet or powered driver may provide the level of torque required.

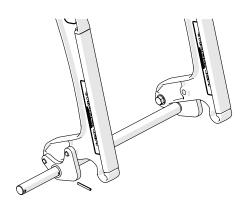
8



8a. Install one roll pin into the inside hole in the right-hand half of the 18" long axle.



8b. Be sure to orient the glide bracket so that the stair climber is oriented toward the center of the axle.

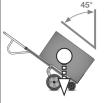


8c. Install the second roll pin onto the axle. You may need to remove the last washer if it covers up the hole.

9

9a.

Set-up the recline angle to suit the load







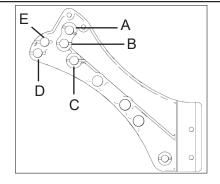


Low, heavy load

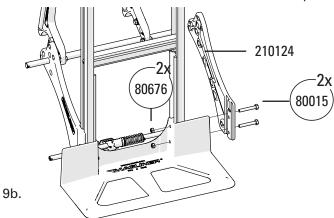
Regular Load

Tall load Tall, shallow load

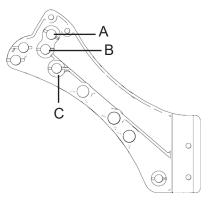
REAR AXLE POSITION	WHEEL DIA	RECLINE ANGLE (MEASURED OFF VERTICAL)
Α	10"	40°
В	10"	35 °
С	10"	32 °
D	Do not use	
Е	Do not use	

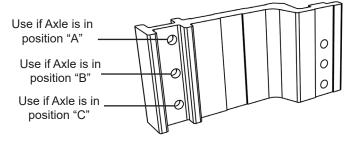


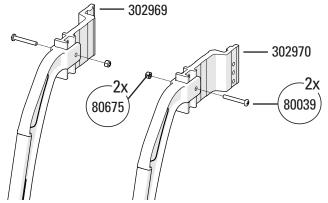
Note: Stair climbing option compatible with 10" wheels only.



Install each stair climber/bracket assembly to an adapter bracket. Finger tighten only for now. The axle location in the wheel bracket determines which hole in the bracket is used - see diagram below.





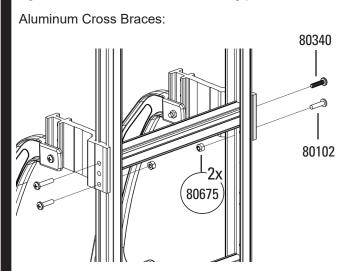


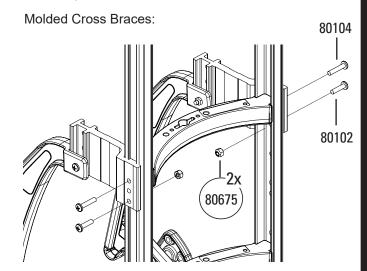
Attach the stair climber assembly to the hand truck frame using the images below as a guide for securing the bracket to the hand truck.

39" Frames

Remove the bolt securing the middle brace to the frame from one side of the frame (for molded cross braces, make sure the lock nut in the cross brace stays in place). Rotate the C5 and bracket assembly toward the frame and align the key of bracket with the outside of the frame. Replace the removed screw with the 1/4"-20 thread forming screw for aluminum frames and the 1/4"-20 x 1-1/4" long pan head screw for molded cross brace frames.

If a hole does not exist in the frame in the bottom hole location of bracket, drill a hole using a 5/16" drill using the bracket as a guide. Secure with 1/4"-20 x 1" long pan head screw and hex lock nut. Repeat for the other side.

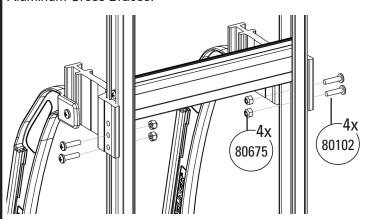




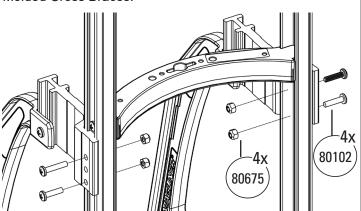
52" Frames

For all frames: Rotate the C5 and bracket assembly toward the frame and align the key of bracket with the outside of the frame. If a hole does not exist in the frame in the bottom hole location of bracket, drill a hole using a 5/16" drill using the bracket as a guide. Secure with 1/4"-20 x 1" long pan head screw and hex lock nut. Repeat for the other side.

Aluminum Cross Braces:



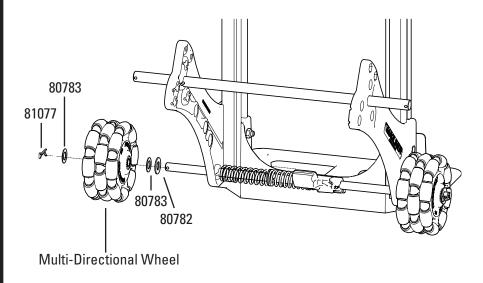
Molded Cross Braces:



Make any final adjustments and tighten all fasteners to the specifications shown in the chart below:

Fastener Torque Specification Chart		
Туре	Torque Specifications	
5/16"-18 Hex Thread Cutting Bolts (attaches stair climber to glide bracket)	140-150 inlbs.	
5/16"-18 Hex Head Screws	120-140 inlbs.	
1/4"-20 Pan Head Screws	50-60 inlbs.	
1/4"-20 Screws Connecting to Frame Cross Brace	110-130 inlbs.	

13

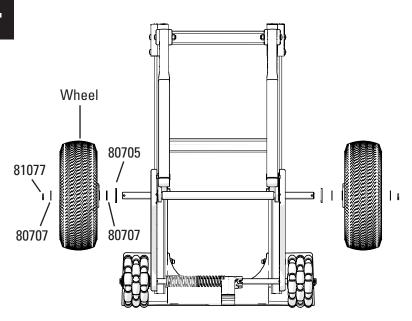


IMPORTANT NOTE:

 Use the optimal number of extra washers in the kit to minimize side-to-side movement of the wheel on the axle which may vary slightly from diagram.

Multi-Directional Wheel	Part Number
Double row	130502
Triple row	130503

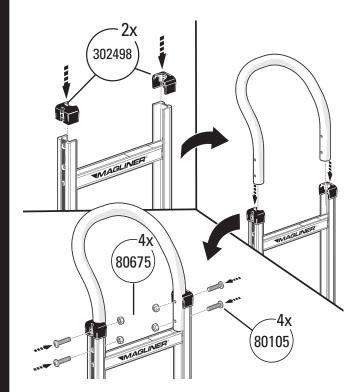
14



WASHER CONFIGURATIONS		
MAINEEN II	WASHERS	
WHEEL #	80705 (THICK)	80707 (THIN)
111070, 111075, 111080	(2) Inside	(1) Outside
All other wheels (as shown)	(1) Inside	1) Inside, (1) Outside

Quantities listed are per wheel. THESE ARE GUIDELINES ONLY - the exact washer configuration can vary for each hand truck.

Place black frame caps on frame. Position the handle and fasten with handle hardware. Securely tighten (1/4"-20 screws to 50-60 in.-lbs. torque).



Handle Hardware Packs		
Part Number Description		
in 301033	Handle Only (bolt 80105)	
80112	Handle + Hi-U Extension, or Handle + U-brace	
80114	Handle + U-brace + Hi-U Extension	

16

- a. Make sure the top of the top cross brace is clean and free of debris. If needed, clean the cross brace with a mild solvent. Let completely dry.
- b. Apply truck loading adhesive label (part number 98389) to the top of the top cross brace as shown below.

Aluminum Cross Braces



Polymer Cross Braces

