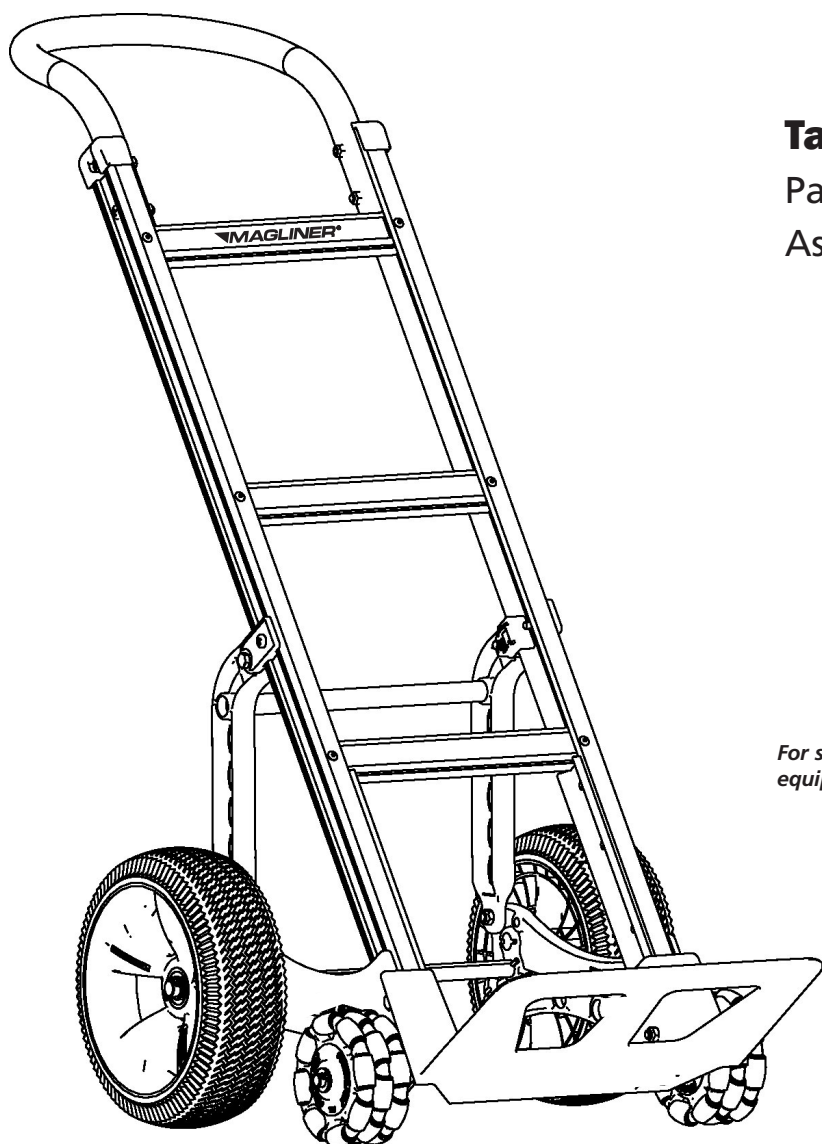


# ASSEMBLY INSTRUCTIONS

## Self-Stabilizing Hand Truck

### Table of Contents:

Parts List .....	2
Assembly Instructions .....	3-6



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

**MAGLINER®**

[www.magliner.com](http://www.magliner.com)

## TOOLS REQUIRED

- (2) 1/2" COMBINATION WRENCH OR SOCKET
- (1) #3 PHILLIPS SCREWDRIVER
- (1) HAMMER
- (1) PLIERS
- (1) 7/16" COMBINATION WRENCH OR SOCKET

## PARTS LIST

Item	Description	Qty.	Part No.
1	Handle	1	Varies
2	Frame	1	Varies
3	RH wheel bracket	1	210123
4	LH wheel bracket	1	210124
5	Nose plate	1	Varies
6	18" axle (16.81" for 815 wheels only)	1	22101 (or 22100)
7	Wheel	2	Varies
8	Side channel reinforcements	2	302001
9	Support arm	2	302900
10	Support clamp body	2	302901
11	Support clamp jaw	2	302902
12	Lift bar	1	302903
Kickstand/Multi-Directional Wheel Pack consists of items below:			
13	Kickstand assembly (includes kickstand, spring, axle, washers and roll pins)	1	302908 (double row caster) 302909 (triple row caster)
14	1/2" washer - thick	4	80782
15	1/2" washer - thin	6	80783
16	Cotter pin for wheel axle - 1/8" x 1" long	2	81077
17	Multi-directional wheel	2	130502 (double row) 130503 (triple row)
Hardware Pack 301034 consists of items below:			
18	Roll pin - 1/8" x 1-1/8"	2	190104
19	Hex head screw - 5/16"-18 x 1-1/2" long	2	80013
20	Hex head screw - 5/16"-18 x 1" long	2	80011
21	Hex head screw - 5/16"-18 x 2" long	4	80015
22	Hex lock nut - 5/16"-18	8	80676
23	5/8" washer - thin	2	80707
24	5/8" washer - thick	4	80705
16	Cotter pin for wheel axle - 1/8" x 1" long	2	81077
26	Pan head machine screw - 1/4"-20 x 1-1/2" long	4	80105
27	Pan head machine screw - 1/4"-20 x 3/4" long	2	80256
28	Hex lock nut - 1/4"-20	6	80675

The following assembly sequence is recommended:

## STEP 1: ASSEMBLE THE NOSE, WHEEL BRACKETS AND MULTI-DIRECTIONAL WHEELS TO THE FRAME. (Refer to Figures 1a and 1b)

Use a workbench or table of convenient height and place all components in view and within reach.

1. Position the side channel reinforcements (8) on the inside of the long legs of the frame (2) making certain holes are aligned. While holding the reinforcements in place with each hand, slide the legs and reinforcements down and over the raised areas on the heel of the nose (5) casting or extruded nose brackets.
2. Position the right hand wheel bracket (3) to the outside of the frame leg. Insert two 5/16"-18 x 2" long hex head bolts (21) from the outside of the frame through the wheel bracket, frame, reinforcement and nose. This will prevent the parts from sliding out of position during further assembly.
3. Install two 5/16"-18 hex head lock nuts (22). Do not fully tighten the two nuts at this time! Refer to Figure 1a.
4. Position the kickstand assembly (13) so that the spring is to the left of the black kickstand and the ribbed side of the kickstand is facing up towards the back of the hand truck frame (see Figure 1a).
5. Insert the right hand end of the kickstand axle into the small hole closest to the frame in the right hand wheel bracket. Rotate the axle until the roll pin "locks" into position in the wheel bracket.
6. Position the left hand wheel bracket (4) by sliding it over the axle to the outside of the frame leg and insert two 5/16"-18 hex head bolts from the outside of the frame similar to Step 2 (above).
7. Install two 5/16"-18 hex head lock nuts. **Do not tighten the two nuts at this time!**
8. Slide one thick washer (14), one thin washer (15) and one multi-directional wheel (17) onto the axle up to the wheel bracket so that the text on the caster faces away from the frame. Finally slide one or more thin washers (15) onto the axle up to the multi-directional wheel (use the optimal number of outside washers to minimize side-to-side movement of the wheel on the axle).
9. Insert one cotter pin (16) through the hole at the end of the axle and spread the ends of the cotter pin apart using the pliers.
10. Repeat Steps 8 and 9 for the second wheel.

Figure 1a

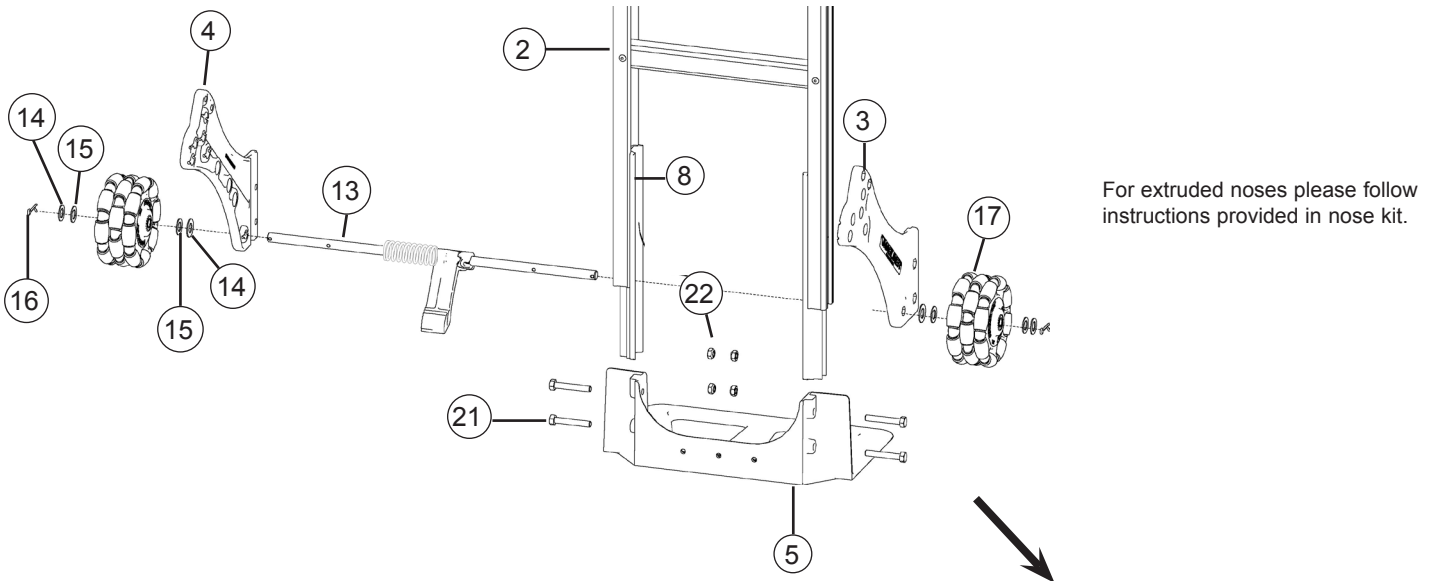
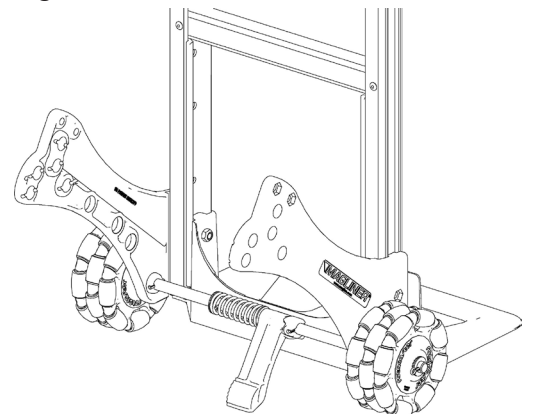


Figure 1b



## STEP 2: ASSEMBLE THE SUPPORT ARMS TO THE FRAME. (Refer to Figures 2a-2c)

1. Position one support arm (9) as shown in Figure 2a against the wheel bracket. Place one 5/16"-18 x 1" long hex head bolt (20) through the bottom hole in the support arm and the small hole in the back of the wheel bracket. Secure with one 5/16"-18 hex lock nut (22) onto the bolt - do not fully tighten! Repeat for the other side.
2. Place one support clamp body (10) against the outside of the frame side channel and rotate the support arm upward. Install a support clamp jaw (11) against the inside of the frame side channel as shown in Figure 2a insets, making sure the hole in the clamp body is aligned with the hole in the support arm.
3. Insert one 5/16"-18 x 1-1/2" long hex head bolt (19) through the holes of the clamp body, support arm and support clamp jaw. Fasten with one hex lock nut onto the bolt - do not fully tighten! NOTE: Make sure as you tighten the lock nut that all clamp components clamp to the side channel. You will install the hardware to fasten the clamp body to the frame in the final step.
4. Place one end of the lift bar (12) into the round cavity at the top of the assembled support arm. Rotate the second support arm upward to align the lift bar with the opposite cavity and squeeze brace arms together.
5. Repeat steps 2 and 3 to install the clamp assembly to the frame side channel.
6. Check all components for proper location at this time. Make any adjustments required. Securely tighten all bolts at this time, including the nose and wheel bracket bolts. (Tighten to 100-120 in.-lbs.)
7. Install one 1/4"-20 x 3/4" long pan head machine screw (27) through the hole in the support clamp body and the frame side rail. Securely fasten with one 1/4"-20 hex lock nut (28). Repeat for the other side. (Tighten to 50-60 in.-lbs. torque.)

Figure 2a

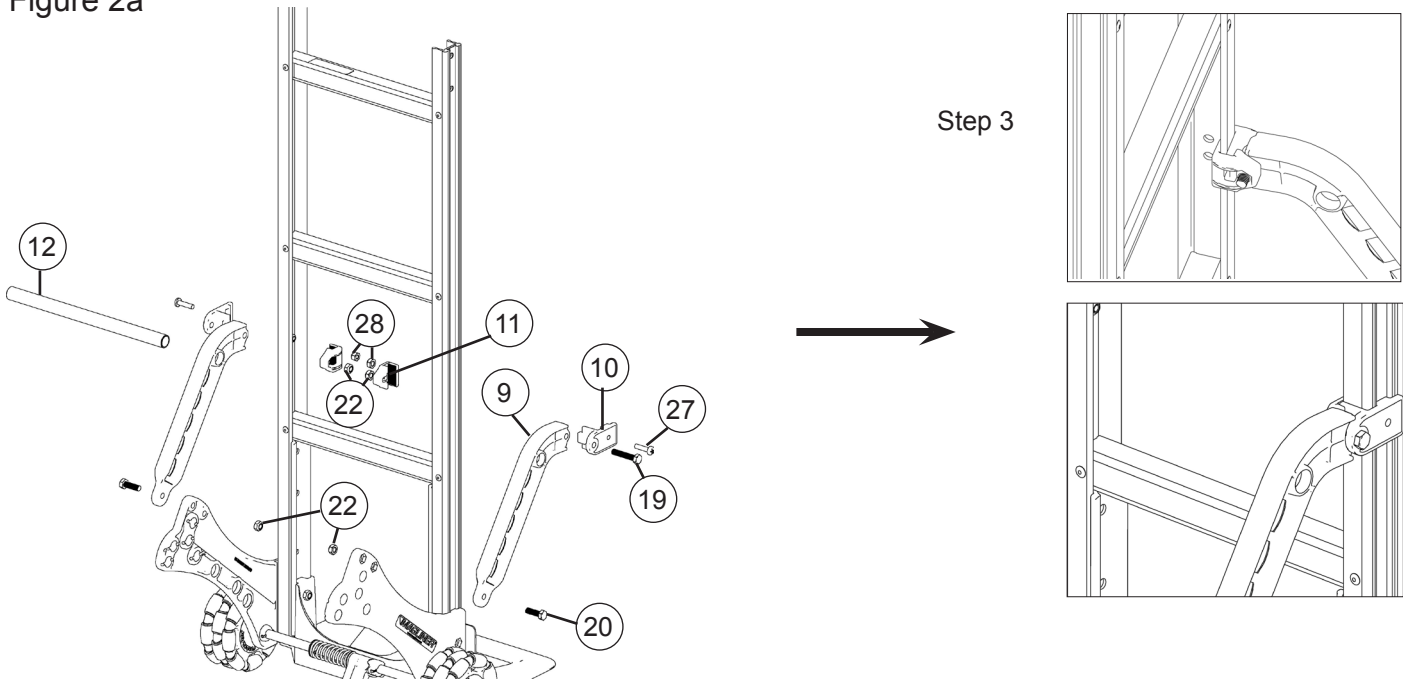


Figure 2b

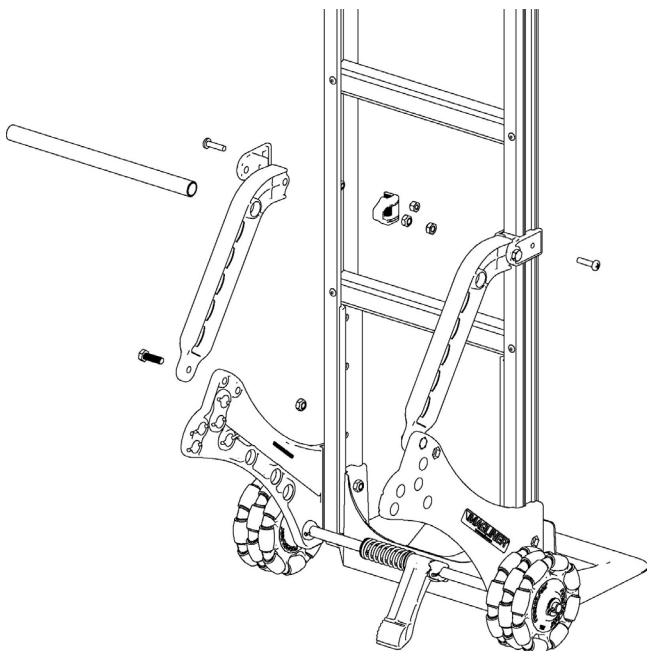
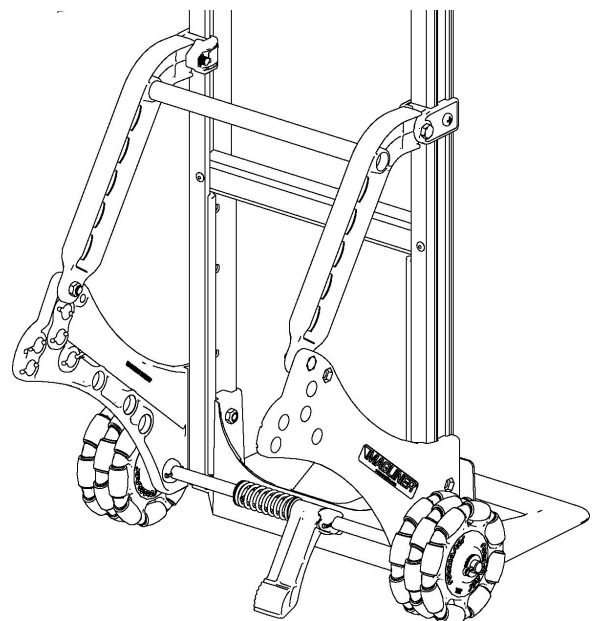


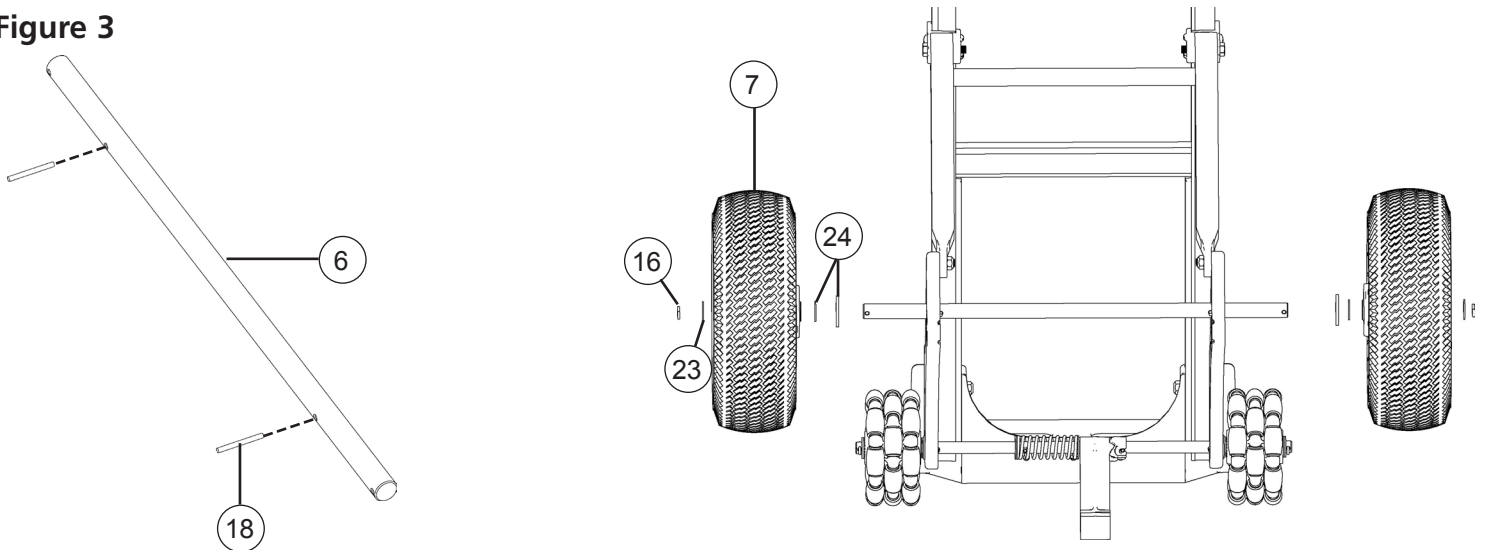
Figure 2c



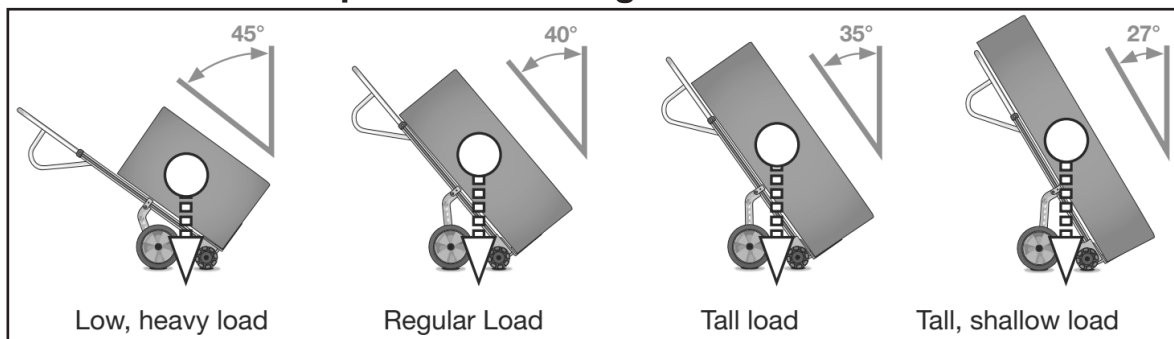
## STEP 3: ASSEMBLING THE WHEELS. (Refer to Figure 3)

1. Install one roll pin (18) in the axle and center the pin on the axle (6), tapping lightly with a hammer (refer to Figure 3). Repeat for the second roll pin.
2. Insert the axle through the desired axle hole in the wheel bracket. **NOTE:** Rotate axle until roll pin "locks" into position in the wheel bracket. See Figure 3 for proper axle position based on the wheel diameter and the desired frame angle when hand truck is reclined.
3. (FOR 815 WHEELS ONLY) Slide one thick 5/8" washer (24) on the axle. (Refer to Figure 3) (FOR ALL OTHER WHEELS) Slide two thick 5/8" washers on the axle. (Refer to Figure 3)
4. Slide one wheel (7) on the axle, making sure that the long hub portion is toward or next to the wheel bracket.
5. Slide one thin 5/8" washer (23) on the axle. (Refer to Figure 3)
6. Insert cotter pin (16) through the hole on the end of the axle and spread the ends of the cotter pin apart with the pliers.
7. Repeat above assembly sequence for the second wheel.

Figure 3



### Set-up the recline angle to suit the load



REAR AXLE POSITION	WHEEL DIA	RECLINE ANGLE (MEASURED OFF VERTICAL)
A	8"	45°
	10"	40°
B	8"	40°
	10"	35°
C	8"	38°
	10"	(see position E)
D	8"	32°
	10"	27°
E	8"	37°
	10"	32°

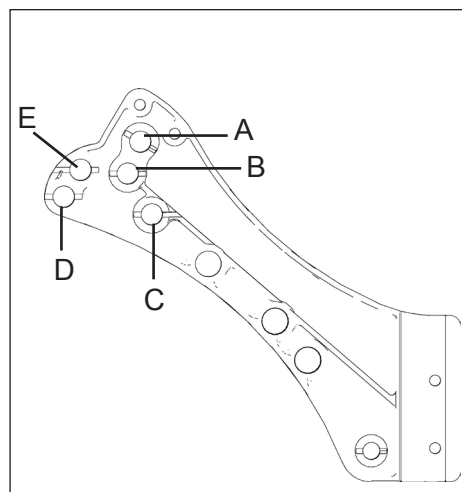
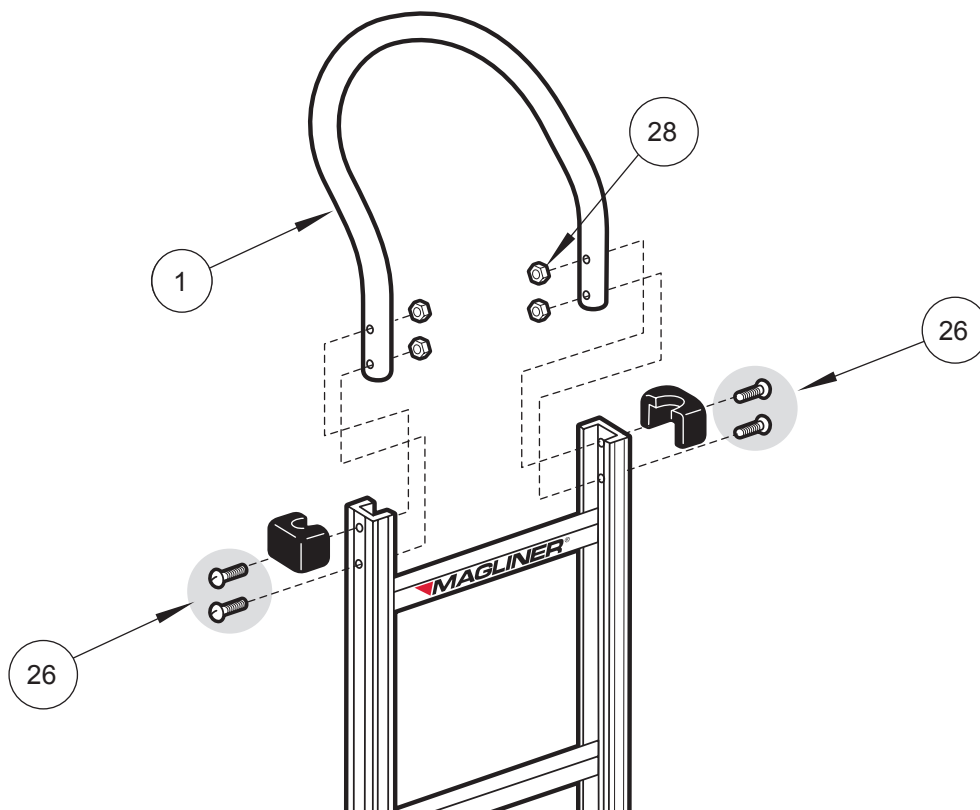


Figure 4



**STEP 4: ASSEMBLING THE HANDLE (Refer to Figure 4)**

- a. Place black frame caps on frame. Position the handle (1) between the frame rails and line up holes. Fasten with four 1/4"-20 x 1-1/2" long pan head screws (26) and hex head lock nuts (28). Securely tighten (1/4"-20 screws to 50-60 in.-lbs. torque).

**YOU ARE NOW READY TO PUT YOUR MAGLINER HAND TRUCK TO WORK.**



[www.magliner.com](http://www.magliner.com)

Magline, Inc., 1205 West Cedar Street, Standish, MI 48658 • (800) 624-5463 • (989) 512-1000