



EXPRESS 6

H I G H S P E E D R O L L E R G U I D E S

PUSHING THE ENVELOPE.

THE EXPRESS-6 ROLLER GUIDE IS THE ULTIMATE SOLUTION FOR THE MOST DEMANDING ELEVATOR APPLICATIONS. ENGINEERED FOR USE ON ELEVATORS THAT “PUSH THE ENVELOPE,” THE RUGGED DESIGN AND HEAVY CONSTRUCTION OF THE EXPRESS-6 MAKE IT IDEAL FOR THE VERY FASTEST ELEVATORS, AND THOSE WITH EXTREMELY CHALLENGING LOADS.

FEATURES OF THE EXPRESS-6 GUIDE:

1. Six-Wheel Construction improves ride quality and extends the application range. The tandem roller design allows the guide to “step over” misaligned rail joints with only minimal disturbance to the cab and its occupants. And by using six wheels where most other guides use just three, the Express-6 can withstand the higher loads associated with service and hospital cars. The added stability also helps compensate for unbalanced conditions.

2. Ten-Inch Roller Wheels spread impacts over a larger area of the wheel arc, providing a smoother, quieter ride. The large wheel also reduces RPM, reducing the possibility of bearing noise and lengthening wheel life.

3. Neoprene Rubber Roller Wheels are specially compounded and rigorously tested to ensure a smooth, silent ride. Only genuine ELSCO neoprene wheels provide the damping characteristics essential to ride quality, and only genuine ELSCO wheels are engineered with high “memory” characteristics that prevent flat spots. ELSCO rollers are precision ground to within .002 inches (.051mm) “Total Indicator Reading” for perfect roundness and concentricity, then 100% inspected under stress to ensure a secure bond between tire and hub.

4. Precision Ball Bearings guarantee years of silent use. ELSCO specifies bearings intended for the high RPMs and demanding loads of electric motors – conditions far more rigorous than typically seen in elevator applications. This means that even after years of operation and tens of millions of cycles, only ELSCO roller wheels remain completely silent. Each bearing bore is machined to a tolerance of five ten-thousandths (.0005) of an inch (.0127mm), and two bearings are pressed into each wheel by a computer-driven press, ensuring perfect fit and alignment.

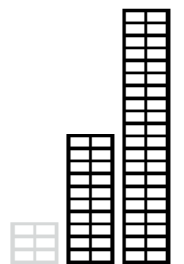
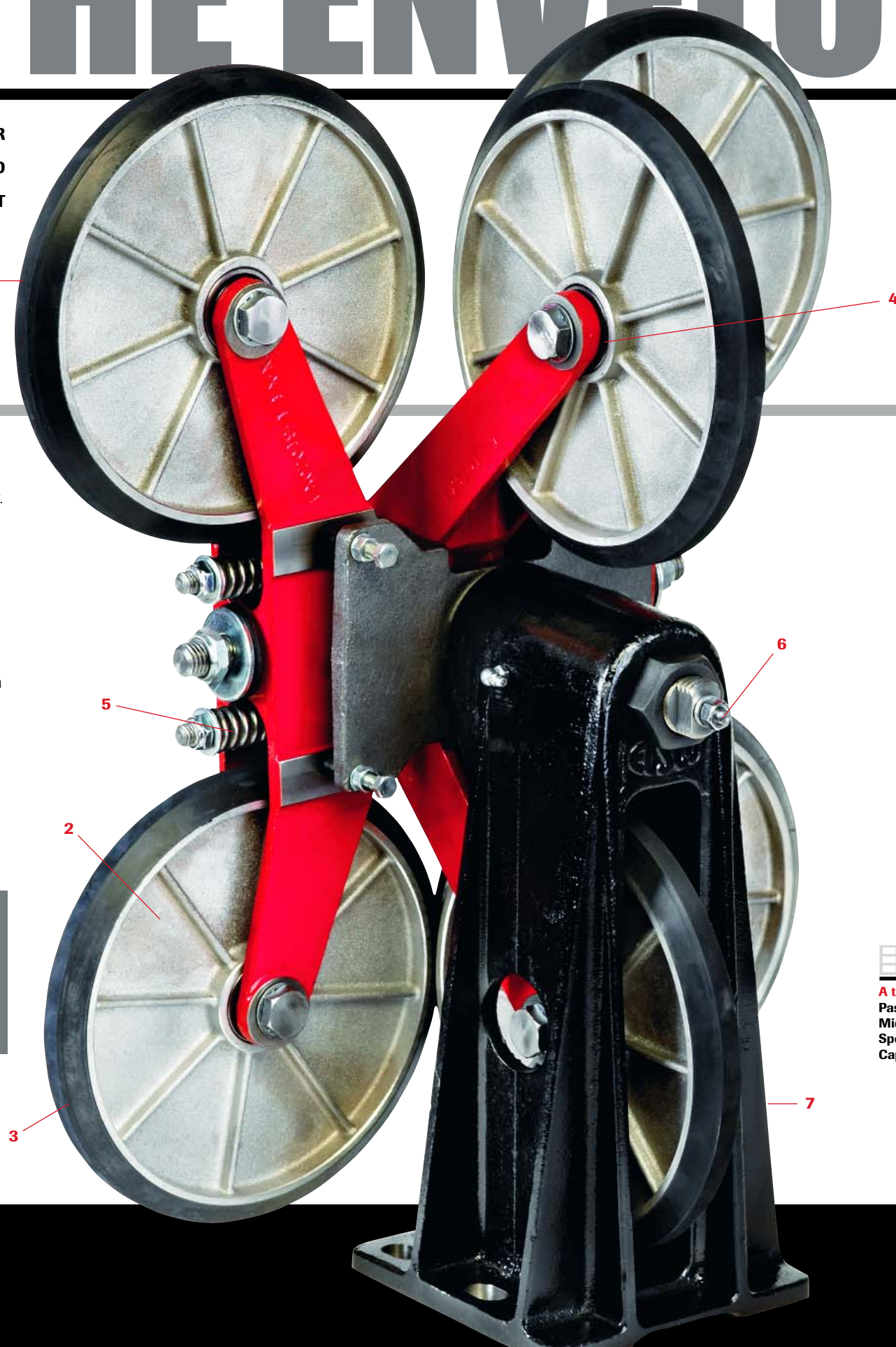
5. Fully Adjustable Stabilizing Springs allow the car to float between the rails, eliminating the bumps and vibrations that adversely affect ride quality.

6. Adjustable Stops enable precise control of the car’s overall postwise float between the rails. Adjustable stops are a standard feature on the Express-6 guide.

7. Durable Structural Components. ELSCO castings are made from high-tensile-strength ductile iron and aluminum for an optimal combination of strength, durability, and light weight. High quality guide hardware ensures long life and ease of adjustment in the field. All components are inspected and assembled to exacting standards for a lifetime of reliable performance.

ELSCO roller guides and swivel sliding guide shoes offer a cost-effective approach for improving elevator ride quality by reducing the need for expensive, labor-oriented solutions and ongoing maintenance. That’s why, to elevator contractors around the world, the ELSCO name is synonymous with quality and value. At ELSCO, We are ride quality.

Many factors must be considered when making a guide selection. Please call us to discuss your specific application.

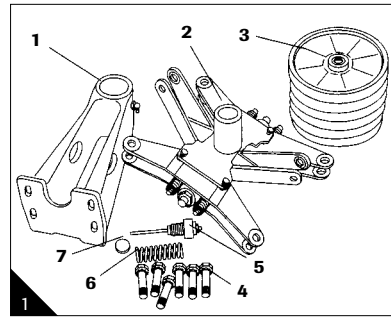


A typical installation:
Passenger Elevator Cabin guides for
Mid- to High-Rise Traction Elevator.
Speed: 1,800 fpm (9,0 m/s).
Capacity: 4,000 lbs. (1,800 kg).

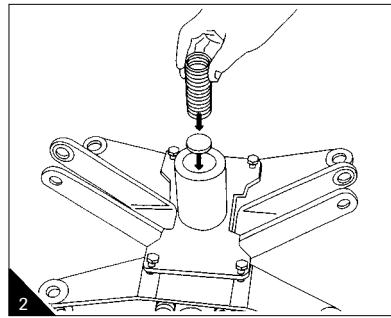
◀ See inside for mounting instructions.

ELSCO

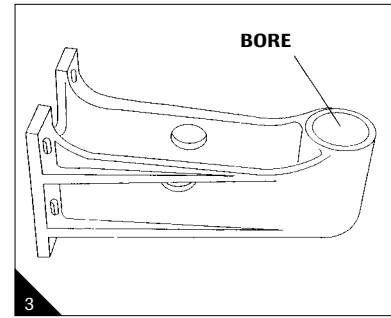
410.363.9020
info@elscoguides.com



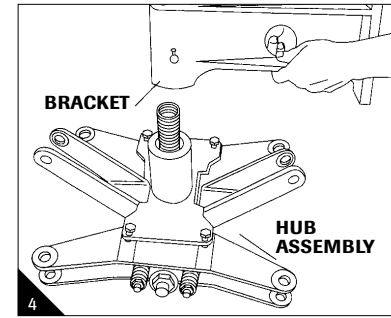
Each Express Guide consists of the following items: (1) Mounting Bracket, (2) Hub and Arm Assembly, (3) 6 Rollers, (4) 6 each Wheel Studs & Lockwashers, (5) Hub Adjusting Screw Assembly, (6) Spring, (7) Solid Stop Washer.



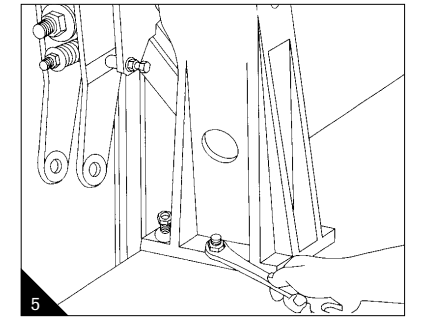
After verifying the proper location of the mounting holes (refer to mounting template), begin installation by inserting the solid stop washer into the hub. Now insert the spring into the hub. Coat the round shaft part of the hub with a light coat of grease.



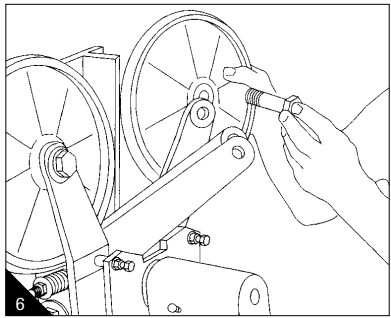
Apply a light coating of grease to the bracket bore.



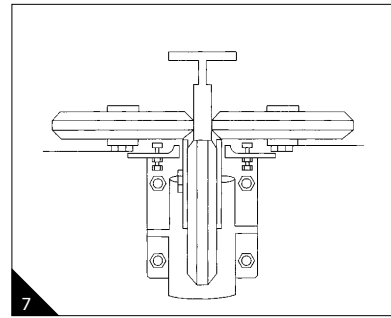
Place the bracket on the hub assembly.



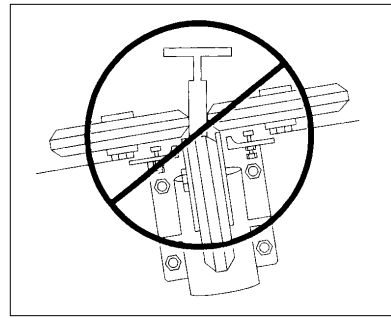
Position the hub and bracket assembly and install mounting hardware (not included) as required. Tighten lightly to hold guide assembly in place prior to final assembly.



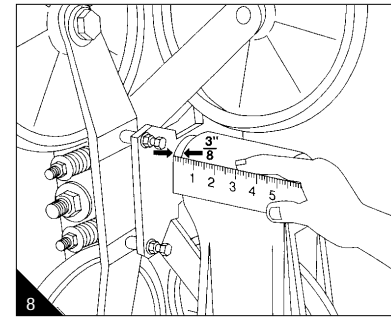
Install wheels, wheel studs and lockwashers and tighten securely.



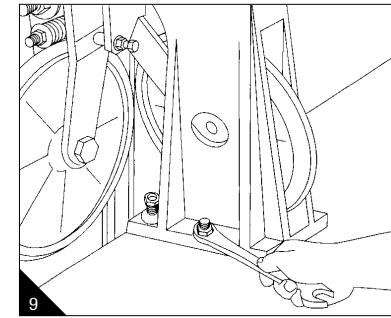
Be sure guides are aligned properly (as shown) before making any further adjustments.



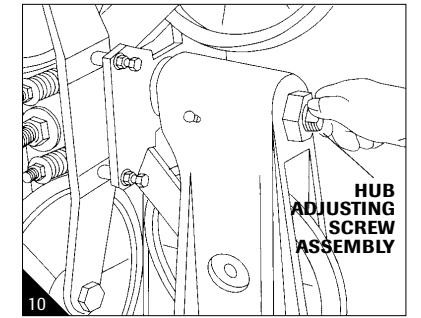
Improper alignment.



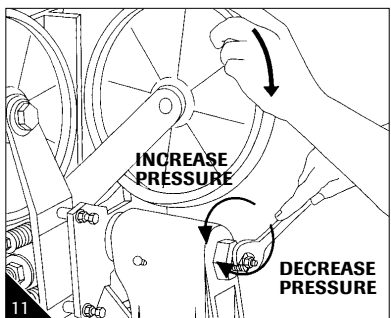
Set 3/8" gap (10mm) between wheel cluster assembly and bracket. **Note:** Be certain that both face roller wheels are firmly seated against the rail while making this adjustment.



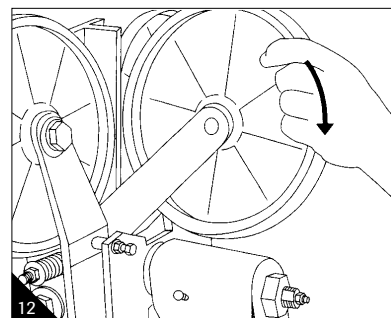
Tighten mounting bolts securely. At this point, install the remaining roller guides on top and/or beneath the elevator. Lubricate the fitting on each guide with general purpose grease until a small amount appears between the hub and the bracket.



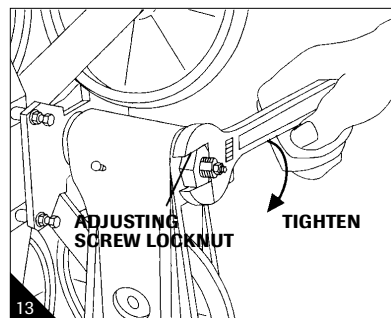
Install the hub, adjusting screw assembly and nut into bracket. Adjustment of the large screw regulates the pressure of the face roller wheels against the rail.



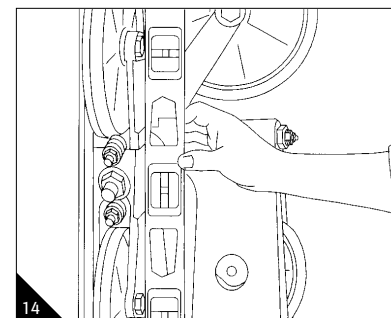
Turn the large hub adjusting screw until roller wheel tire is compressed 1/32" to 1/16" (1 to 2mm) on the rail. This represents approximately 25 to 50 lbs. (12 to 25kg) of wheel pressure. **Note:** If installing guides equipped with polyurethane roller wheels, refer to step 21 for allowable wheel pressure.



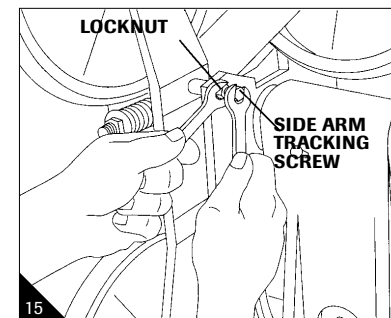
When properly adjusted, it will be possible to skid the face roller wheel by hand with moderate effort.



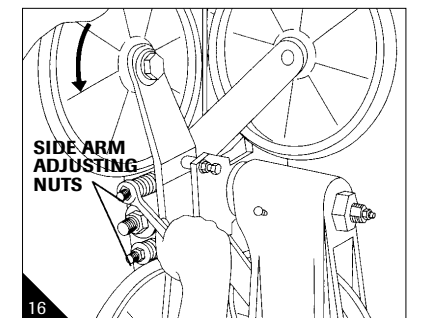
Be certain that both, face roller wheel pressure and recommended gap measurement (see step 8) are equal for each guide. **Caution: This gap measurement may now be greater than 3/8" (10mm), but should never exceed 1/2" (12mm).** Now, tighten adjusting screw locknut.



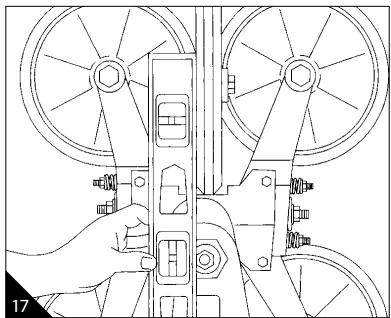
Each pair of side arm rollers should track parallel to the rail. To check tracking, place a level on the wheel stud heads or the machined surfaces where the tracking screw pads contact the arm, adjust if necessary (see figure 15).



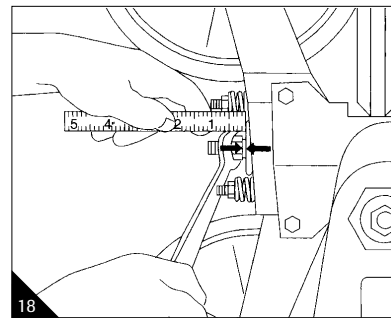
If it is necessary to adjust side arm tracking, loosen locknuts and turn side arm tracking screws until top and bottom roller wheels are parallel to the face of the rail. Now tighten locknuts. **Note:** If adjusted correctly, tracking screws should not restrict float or walking beam action of side arm assembly.



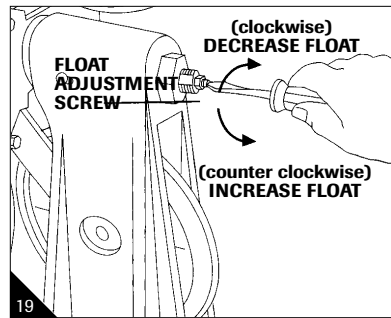
To adjust the side arm roller wheel pressure, turn side arm adjusting nuts until the roller wheels are compressed 1/32" to 1/16" (1 to 2mm). This adjustment also controls the centering and tracking of the face arm rollers (see figure 17).



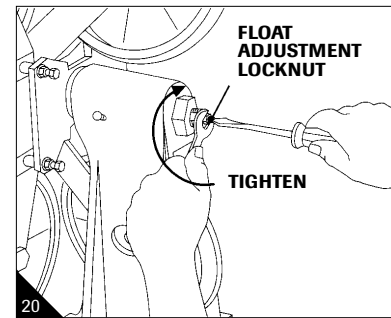
Check the face where the roller contacts the rail or use a level. The face rollers should also be centered on the rail.



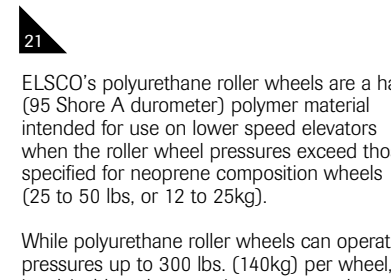
Set the positive stop to the recommended 1/8" gap (3mm).



To set postwise float, turn adjustment screw clockwise until it makes contact with solid stop washer (installed in step 2). At this point, there will be zero postwise float. To increase float, turn adjustment screw counter-clockwise. **Note:** Each full turn equals 1/16" (2mm). For best results, set the float at 3/16" to 5/16" (5mm to 8mm).

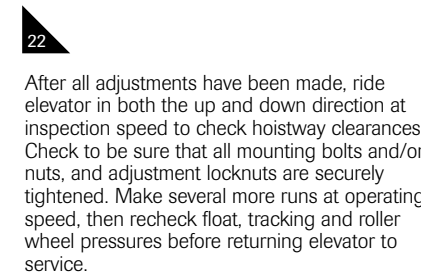


When the desired amount of postwise float is set, tighten locknut securely while holding float adjustment screw in place. **If installing guides equipped with polyurethane roller wheels, refer to step 21 for pertinent information.**



ELSCO's polyurethane roller wheels are a hard (95 Shore A durometer) polymer material intended for use on lower speed elevators when the roller wheel pressures exceed those specified for neoprene composition wheels (25 to 50 lbs, or 12 to 25kg).

While polyurethane roller wheels can operate at pressures up to 300 lbs. (140kg) per wheel, it is advisable to keep static pressure as low as possible to prevent flat spots from forming while the elevator is sitting. Flat spots can adversely affect ride quality by causing a rough and/or noisy ride. At higher pressures, it may not be possible to skid the roller wheels by hand.

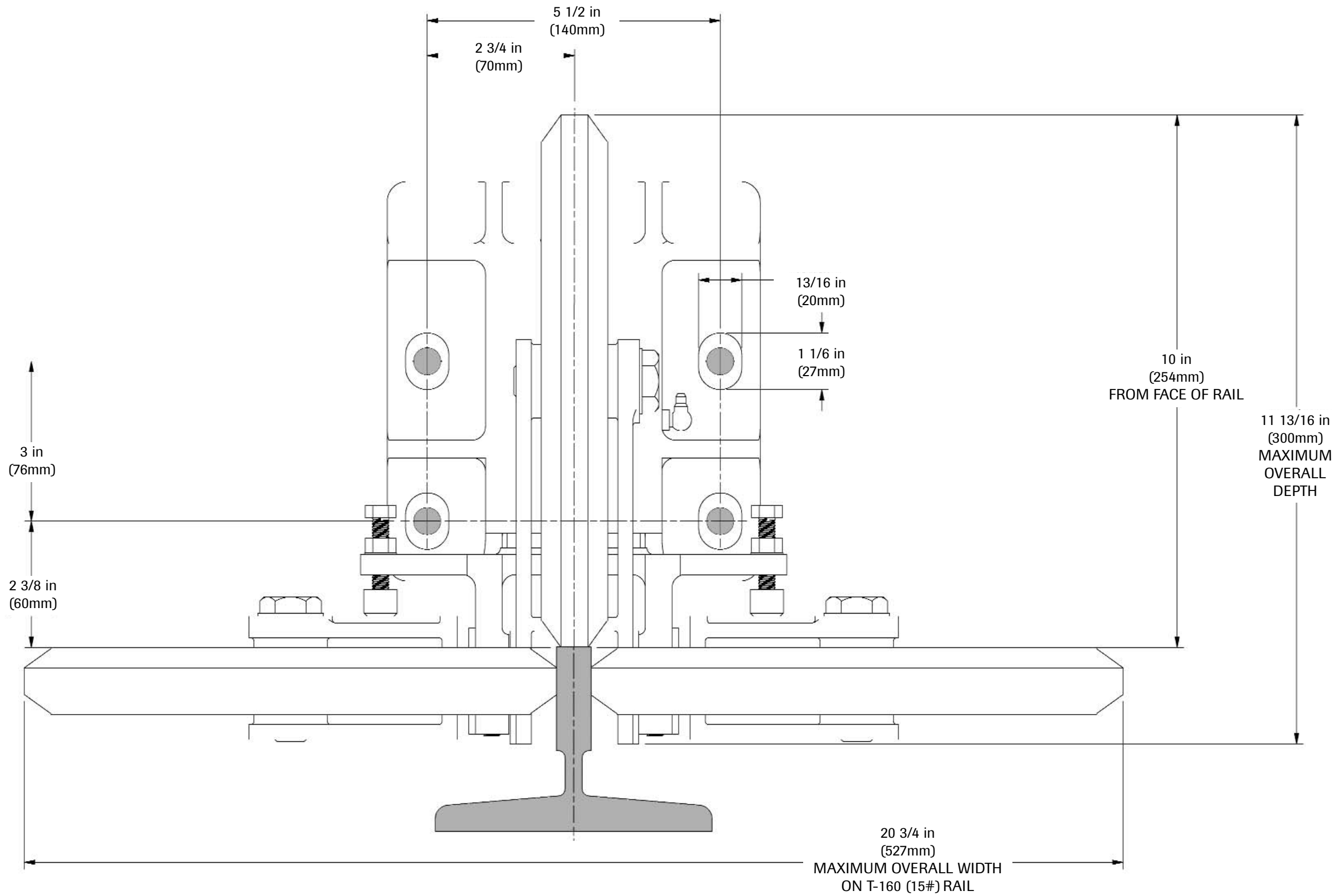


After all adjustments have been made, ride elevator in both the up and down direction at inspection speed to check hoistway clearances. Check to be sure that all mounting bolts and/or nuts, and adjustment locknuts are securely tightened. Make several more runs at operating speed, then recheck float, tracking and roller wheel pressures before returning elevator to service.



TEMPLATE SHOWN 1:2 SCALE

Express 6
Mounting Template





SPECIFICATIONS

Size and Weight

Height, Overall	26"	(660mm)
Width on 30 lb., 1-1/4" Rail	21-1/4"	(540mm)
Width on 15 lb., 5/8" Rail	20-5/8"	(524mm)
Depth, Overall Maximum	12-1/2"	(318mm)
Shipping Weight	97 lbs.	(44kg)

Mounting Bolt Holes

Four Slots..... 11/16" x 1-1/16" (17mm x 27mm)
 Bolt Hole Locations..... Refer to Mounting Template

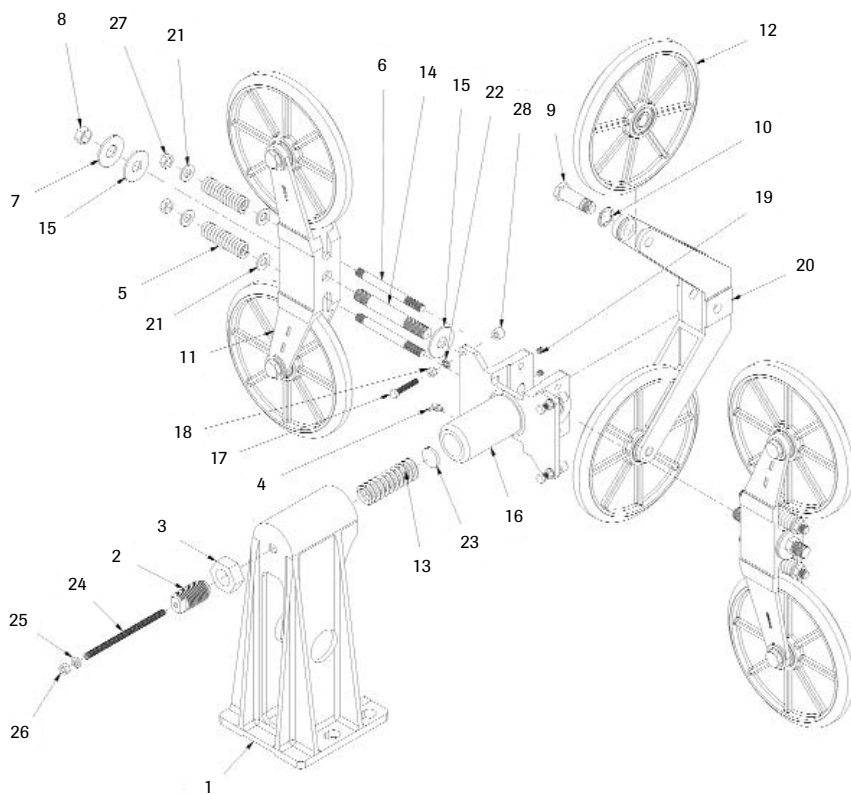
Roller Wheels

Thickness	1-1/4"	(32mm)
Neoprene Tread Width (face & side arm roller wheel)	1/2"	(13mm)
Polyurethane Tread Width (face roller wheel)	1/2"	(13mm)
(side arm roller wheel)	1/2"	(13mm)
Diameter	10"	(254mm)
Bearing I.D.	0.7874"	(20mm)
Runout (Total Indicator Reading)	0.002"	(.051mm)

Options and Factory Modifications Available

- Polyurethane composition roller wheels can be used to replace standard neoprene wheels in selected applications. Refer to the ELSCO guide selector chart or call an ELSCO guide specialist to determine proper applications. See our Frequently Asked Questions (FAQ) for more information about the trade-offs between neoprene and polyurethane wheel compositions.
- Cover plate kits are in stock and available for added safety and protection.
- Seismic retainer plates are available for select rail sizes. Call or e-mail for more information.

PARTS LIST



Express-6 Roller Guide

Key	Req.	Part #	Description
1	1	EX02017	Bracket
2	1	EA18327	Hub Adjustment Screw
3	1	EA19763	Hub Adjustment Locking Nut
4	1	EA18362	Grease Fitting
5	4	EX02025	Side Arm Spring
6	4	EX02015	Side Arm Spring Stud
7	2	EA18373	Flat Washer
8	2	EA18376	Locknut
9	6	EX02013	Wheel Stud
10	6	EA18388	Wheel Stud Lock Washer
11	2	EX02019	Side Arm
12	6		Roller Wheel - See Roller Wheel Options Below
13	1	EA18380	Hub Spring
14	2	EX02014	Side Arm Stud
15	4	EA18378	Rubber Washer
16	1	EX02016	Hub
17	4	EA19387	Side Arm Tracking Screw
18	4	EC18428	Hex Nut
19	6	EA19765	Set Screw
20	1	EX02018	Face Arm
21	8	EX02026	Flat Washer
22	4	EF04131	Lock Washer
23	1	EA18328	Solid Stop Washer
24	1	EA18326	Adjustable Stop Adjustment Screw
25	1	EA18330	Lock Washer
26	1	EA18329	Hex Nut
27	4	EC18422	Locknut
28	4	EX02020	Tracking Screw End Pad
Standard Roller Wheel Configuration for Typical Installations:			
9	3	EX02002	Standard Neoprene Roller Wheel Assembly, 10 in. (254 mm)
Polyurethane Roller Wheel Configuration for Heavy-Duty Installations:			
9	3	EX02003	Polyurethane Roller Wheel Assembly, 10 in. (254mm)

Notes:

- Top Level Assembly for Express-6 Roller Guide with Std. Neoprene Rollers is EX02000.
- Not typically recommended. Call ELSCO previous to ordering.
- Parts can be ordered together as a kit under part no. EA18331.
- Parts cannot be ordered individually, and must be ordered as a complete subassembly.