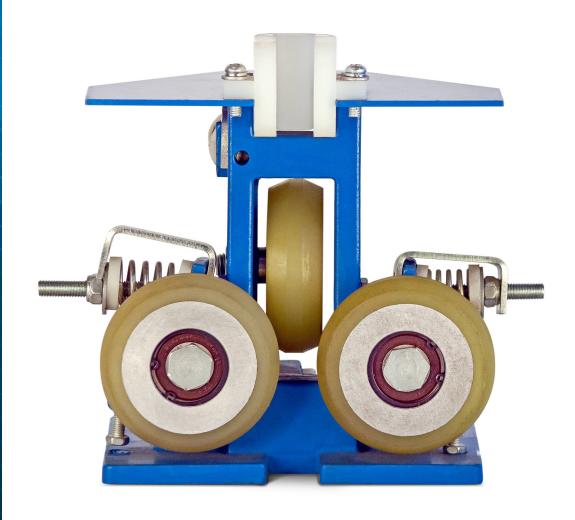
# 3 ¾" HIGH SPEED ROLLER GUIDE ASSEMBLY



www.delcoelevator.com info@delcoelevator.com | 1-866-900-3727



## 3¼" HIGH SPEED

With Stop Kit and Dust Cover



#### Best as High Speed Counterweight

Precision engineered for high speeds, this model is best suited for the counterweight when used in conjunction with Delco models C-08-0805 and C-08-0804 on the car side.

The most common application for these roller guide assemblies is for passenger or hospital elevators, as a guide system for the counterweight, in application with speeds up to 800fpm (4 m/s) and capacities up to 4000 Lbs (1815 Kg).

#### **Features**

This model comes with a stop kit, U bracket, dustcover and plastic alignment guide. Special features include fully adjustable stabilizing springs, high precision bearings and a cast iron frame.

The Delco 3-1/4" high speed roller guide assembly is reliable, durable and guaranteed to provide a smooth, quality engineered ride.

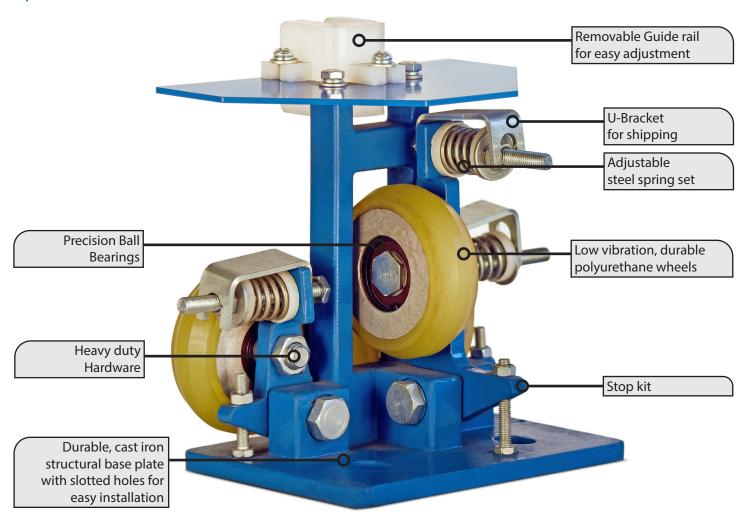






# 3¼" HIGH SPEED

**Specifications** 



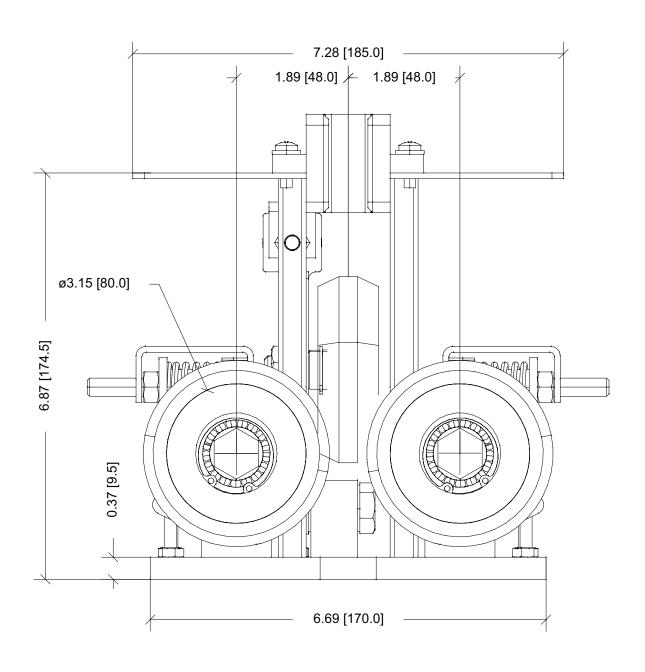
C-08-0807

Capacity	up to 3527 Lbs (1600 Kg)
Speed	up to 688 fpm (3.5m/s)
Guide Rail Width	10mm (27/64"), 16mm (5/8")
Roller Diameter	3 1/4" (82.55mm)
Roller Material	Polyurethane
Roller Hardness	80±5 (Durometer Shore A)
Structural Frame	Cast Iron
Ball Bearings	NSK 6003DU
Weight	11 Lbs (5 Kg)



## 3¼" HIGH SPEED

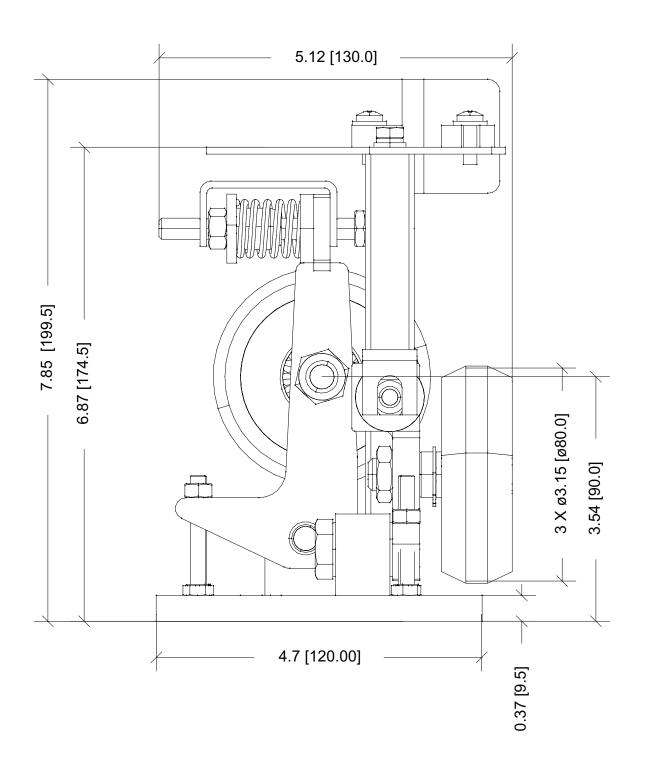
**Diagram Front View** 





## 3¼" HIGH SPEED

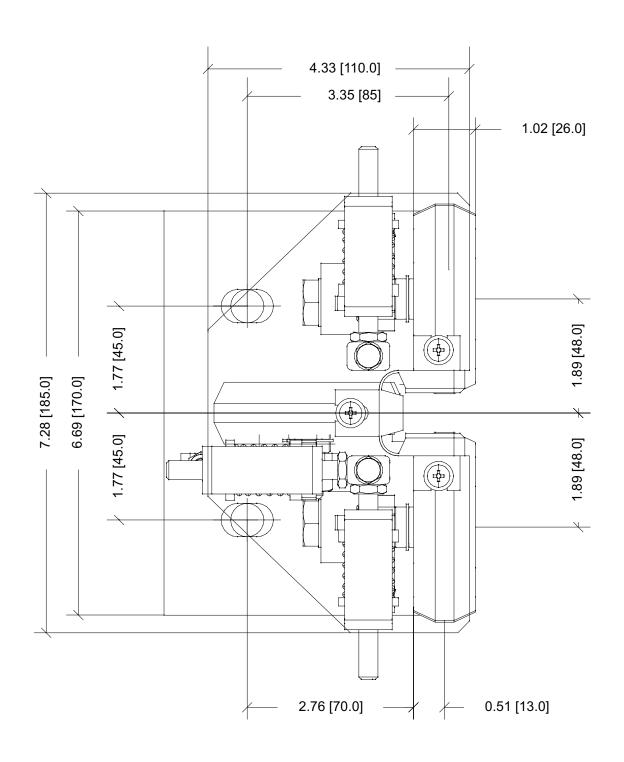
Diagram Side View





## 1/4" HIGH SPEED

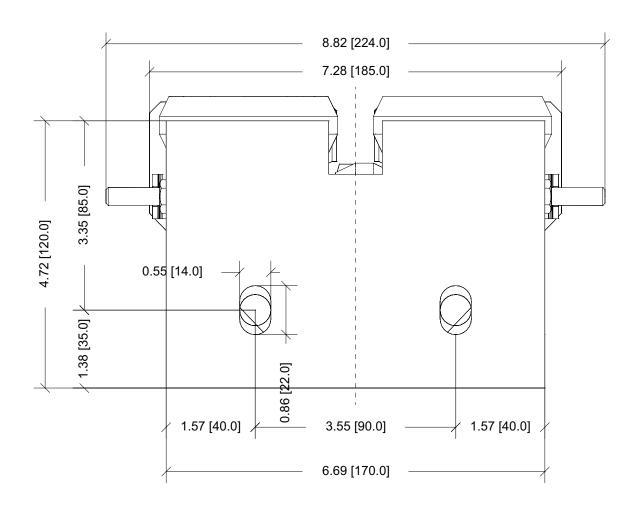
**Diagram Top View** 





## 1/4" HIGH SPEED

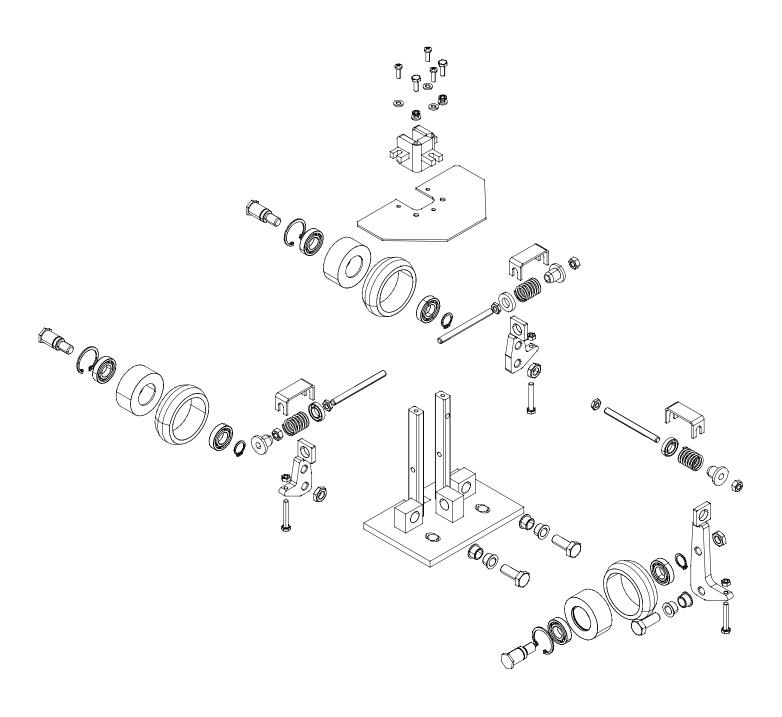
Diagram Baseplate View





# 3¼" HIGH SPEED

**Exploded View** 





## 3½" HIGH SPEED

#### Installation Guide

Note: The following instructions are a guideline only. The installation process may need to be adjusted depending on the specific project and variable pre-existing conditions. Installations must be performed by a certified mechanic.

#### 1. Hole Pattern Alignment

- On new installations use a roller guide mounting hole template to determine the position of the mounting holes in the car/counterweight frame before drilling. Mark and drill holes in the frames, ensuring that the hole size is appropriate for the hardware recommended for the installation.
- For modernization applications check if existing hole pattern or studs match the mounting hole pattern on the guide rail. If the holes locations don't line up a custom made adaptor plate or bracket is required.

#### 2. Remove U-Brackets

The U-brackets are only for shipping and can now be removed. Loosen the lock nuts on the stop kit. Back up bolt on the stop kit to achieve a gap with the bottom plate (See Diagram 1). Back up nut on the spring rod to reduce spring load until U bracket is free. Repeat steps to remove U brackets from all wheels.

#### 3. Release Pressure from Wheels

Backup the lock nut on the spring rod enough that the spring is not compressed.

#### 4. Position Guide on Rails

Position guide over the mounting holes or studs. Make sure that the guide rail is engaged with the white plastic guide, mounted on top of the guide rail (See Diagram 2). This will ensure that the guide is centered on the rail.

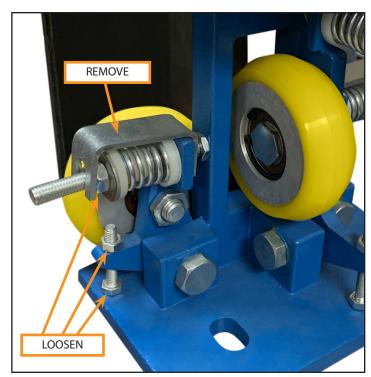


Diagram 1

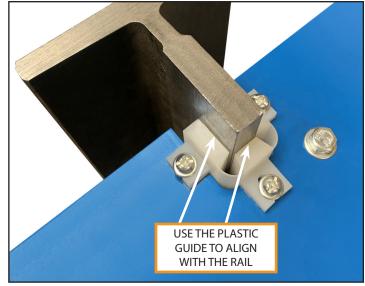


Diagram 2



## 3¼" HIGH SPEED

#### **Installation Guide**

#### 5. Recommended Hardware

Use M12 Class 8.8 or 1/2-13 Grade
5 Hex Head bolts and/or nuts
together with matching grade split lock washers and flat washers.



 Ensure the length of the bolt used will provide a minimum of 1.5 x diameter thread engagement.

#### 6. Tighten Connection

• Securely tighten the mounting bolts and/or nuts until split washer is fully compressed.

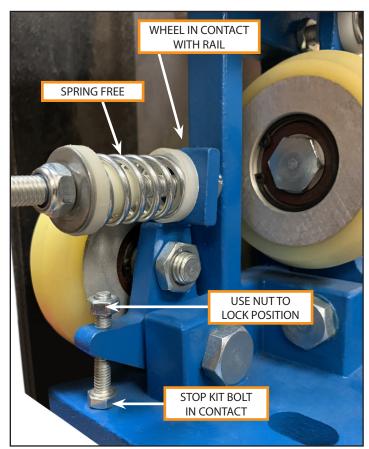
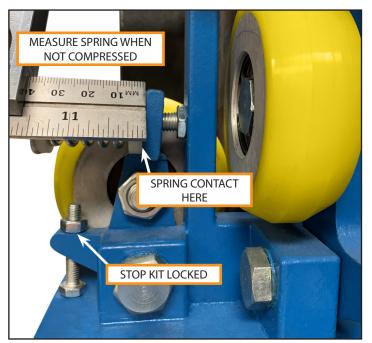


Diagram 3

#### 7. Pressure Adjustment for Side Arm Wheels

- Make sure the face of the side arm wheels are tracking in the center of the rail.
- Rotate the stop kit bolt until wheel makes contact with the rail. Tighten the lock nut on the stop kit to lock the position. Repeat operation on the other side. Turn the nut on the spring rod until the spring is in contact with the arm and the washer, but the spring is not yet compressed (See Diagram 3). Repeate the operation on the other side.
- Measure the height of the spring (See Diagram 4).
- Using a wrench turn the lock nut to compress the spring until the spring is compressed 3-5mm from free length. Repeat the operation on the other side. The pressure of the two stabilizing springs should be the same.
- To ensure the correct pressure is achieved on the wheel, check that wheels can be skidded by hand on the rail with moderate effort.



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Diagram 4



## 3¼" HIGH SPEED

#### Installation Guide

#### 8. Pressure Adjustment for Front Arm Wheel

- Make sure the face arm wheels are tracking in the center of the rail.
- Rotate the stop kit bolt until wheel makes contact with the rail. Tighten the lock nut on the stop kit to lock the postion. Turn the nut on the spring rod until the spring is in contact with the arm and the washer, but the spring is not yet compressed.
- Measure the height of the spring.
- Using a wrench turn the lock nut to compress the spring until the spring is compressed 2-4 mm.
- To ensure the correct pressure is achieved on the wheel, check that wheels can be skidded by hand on the rail with moderate effort.

#### 9. Remove the Guide

Remove the white plastic alignment guide (See Diagram 5).

#### 10. Complete Installation

- Install the remaining roller guides on top and/or underneath the elevator/counterweight.
- Repeat the same steps for the lower roller guide assembly (when applicable).

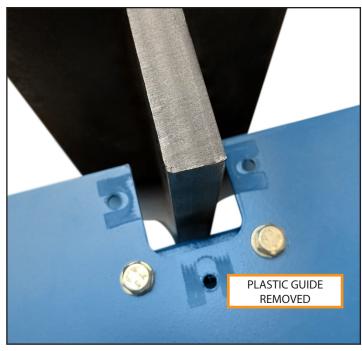


Diagram 5

#### Important!

- Do not oil the guide rail. Oiling will cause
- Check the roller guide assembly regularly after correct installation to ensure that it is running evenly and smoothly.
- Be sure to replace the guide wheels as soon as any uneven abrasion on the roller surface or cracks are observed on the springs.



## ROLLER GUIDES

#### 8 Models | up to 3000 KG | up to 1200 fpm

With over 12,000 Delco Roller Guide Assemblies installed and running every day, our products are being relied on by hundreds of elevator contractors.

CAPACITY: 0 – 6615 LBS (3000 KG) SPEED: 0 – 1200 FPM (6.0M/S)

Meeting the requirements for over 90% of elevator installations. Delco offers 8 different RGA models. Low-rise, mid-rise and high-rise buildings throughout North America use Delco Roller Guides.

Easy to install and easy to maintain, Delco Roller Guides are manufactured with high precision, using the best materials, to provide many years of worry-free operation in many different elevator installation situations.

#### Delco's roller guides are made with the best materials.

#### Rollers

High quality polyurethane roller tires, with a hardness of 80±5 (Durometer Shore A) provide a comfortable, smooth ride. Polyurethane has a high compression strength and doesn't create flat spots, ensuring reliable operation for many vears.

#### Frame materials

The cast iron frames and heavy duty hardware ensures a long life in all elevator hoistway environments.

#### **Precision Ball Bearings**

Delco Roller Guides are made with NSK ball bearings manufactured in Japan, recognized world-wide as the most reliable, high performance bearings.

#### **Product Line**



3" SPRING FREE C-08-0815 (16 mm) C-08-0817 (10 mm)



31/4" STANDARD C-08-0810



31/4" HIGH SPEED C-08-0807



5" STANDARD C-08-0805



6" STANDARD C-08-0804



6" SPRING FREE C-08-0806



7%" STANDARD C-08-0808



10" HIGH SPEED C-08-0803



## SELECTION GUIDE

Passenger Elevator	0-500fpm (0-2.5m/s)		600-800fpm (3.0-4.0m/s)		1000-1200fpm (5.0-6.0m/s)	
	Delco Car	Delco CWT	Delco Car	Delco CWT	Delco Car	Delco CWT
<3000lbs (<1350kg)	C-08-0805 C-08-0804	C-08-0810 C-08-0807 C-08-0815	C-08-0804	C-08-0807	C-08-0803	N/A
3500lbs (1600kg)	C-08-0805 C-08-0804	C-08-0810 C-08-0807 C-08-0815	C-08-0804	C-08-0807	C-08-0803	N/A
4000lbs (1800kg)	C-08-0804	C-08-0810 C-08-0807 C-08-0806	C-08-0804	C-08-0807	C-08-0803	N/A
4500lbs (2050kg)	C-08-0808	C-08-0806	C-08-0808	C-08-0806	C-08-0803	N/A
5000lbs (2300kg)	C-08-0808	C-08-0806	C-08-0808	C-08-0806	C-08-0803	N/A
6000lbs (2700kg)	C-08-0808	C-08-0806	C-08-0808	C-08-0806	C-08-0803	N/A
7000lbs (3200kg)	C-08-0803	C-08-0806	C-08-0803	C-08-0806	N/A	N/A

Hospital Elevator	0-250fpm (0-1.25m/s)		300-500fpm (1.5-2.5m/s)		600-800fpm (3.0-4.0m/s)		1000-1200fpm (5.0-6.0m/s)	
	Car	CWT	Car	CWT	Car	CWT	Car	CWT
<3000lbs (<1350kg)	C-08-0805 C-08-0804	C-08-0810 C-08-0807 C-08-0815	C-08-0805 C-08-0804	C-08-0810 C-08-0807 C-08-0815	C-08-0804	C-08-0807 C-08-0815	C-08-0803	N/A
3500lbs (1600kg)	C-08-0805 C-08-0804	C-08-0810 C-08-0807 C-08-0815	C-08-0805 C-08-0804	C-08-0810 C-08-0807 C-08-0815	C-08-0804	C-08-0807	C-08-0803	N/A
4000lbs (1800kg)	C-08-0804	C-08-0806	C-08-0804	C-08-0806	C-08-0804	C-08-0807	C-08-0803	N/A
4500lbs (2050kg)	C-08-0808	C-08-0806	C-08-0808	C-08-0806	C-08-0808	C-08-0806	N/A	N/A
5000lbs (2300kg)	C-08-0808	C-08-0806	C-08-0808	C-08-0806	C-08-0808	C-08-0806	N/A	N/A
6000lbs (2700kg)	C-08-0808	C-08-0806	C-08-0808	C-08-0806	C-08-0808	C-08-0806	N/A	N/A
7000lbs (3200kg)	C-08-0803	C-08-0806	C-08-0803	C-08-0806	C-08-0803	C-08-0806	N/A	N/A

#### Freight Elevator

For freight elevator applications the Roller Guide Assembly selection will be based on the number of guide rails. For applications with 2 guide rails, refer to the Passenger Elevator chart above. For applications with 4 or more guide rails, please contact us.

Please note that this table is only to be used as a guideline. Roller Guide Assembly selection must take many other criteria into consideration that can't be accounted for in this chart. Please contact us for selection assistance.



