

Model 956 Circuit Controller

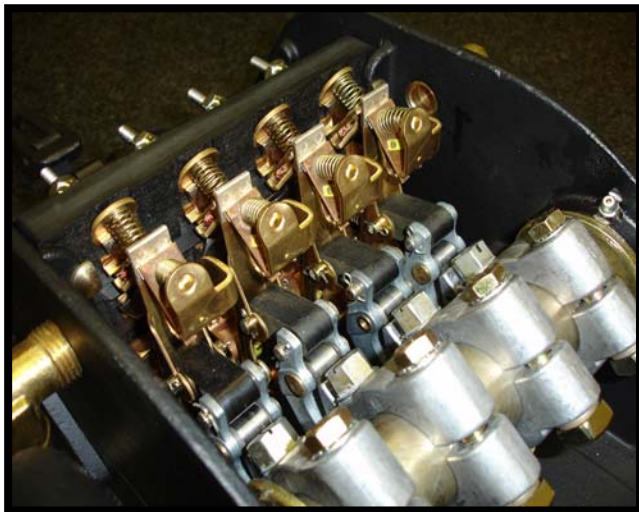
Description:

The Model 956 Circuit Controller meets the rigorous demands of the rail industry – high sensitivity, reliability, and rugged strength to withstand great mechanical stress under a wide range of environmental conditions. The Model 956 consists of four sets of front-back contacts housed in a cast-aluminum cover. A mechanical linkage to the controller actuates the contacts. Thus, the controller may be used to integrate the positions of various devices with suitable control circuits. Commonly used with switches to detect switch positions, Model 956 controllers can also detect the



FEATURES

- **RUGGED** – heavily reinforced case, 1 ½-inch cold-drawn steel shaft, corrosion and wear-resistant cams, spring steel cam surfaces.
- **SENSITIVE** – a 5-degree movement of the crank transfers the contacts.
- **RELIABLE** – positive action contact mechanism, spring contact pressure, withstands vibration.



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Protection

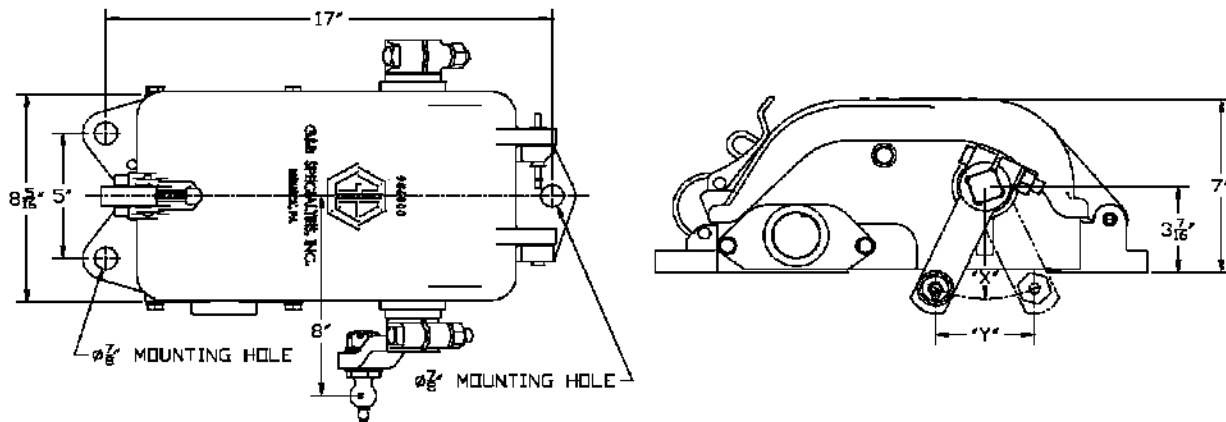
The operating mechanisms are very sensitive to detectable motion, yet isolate the contacts from vibration. The cam faces and the cam shaft are concentric—they rotate parallel to each other. Thus, crank movements due to vibration cannot affect the contact fingers. Contacts do not chatter, unless vibrations reach a level high enough to overcome the force exerted by the contact spring. The controller contacts are held tightly closed. In the roller style, the combined effect of cam and front-contact spring pressure on the contact fingers provides high front-contact pressure. Contact springs hold the fingers firmly against the back contacts. The rocker assemblies in the push/pull style use cam and spring pressure to hold the contacts firmly, in their closed position. The contact fingers move only when the crank position changes—not with

Contact Arrangement

Since the front and back contacts are articulated, they cannot take a permanent set due to bending. Firmly seated in locking grooves, the supports keep the contacts properly aligned. Coil springs between the contacts and their supports give high contact pressure and long contact wipe. Flexible copper braid electrically bonds each contact to its support. The contact fingers are channel shaped for increased strength. Contact springs hold the fingers tightly against the contacts. Silver contact surfaces provide high electri-

Adjustment

Each of the four cams can be separately adjusted to operate its associated contacts at any desired position of the actuating device. Any cam can be adjusted easily—and with great accuracy—by loosening the clamping screw and turning the adjusting screw. Precisely fitted to hobbled threads in the shaft, the cam can be moved around the shaft to the exact position desired. Tightening the clamping locks the cam securely in position. The screws are easy to reach—no need to disconnect the external linkage and rotate the shaft un-



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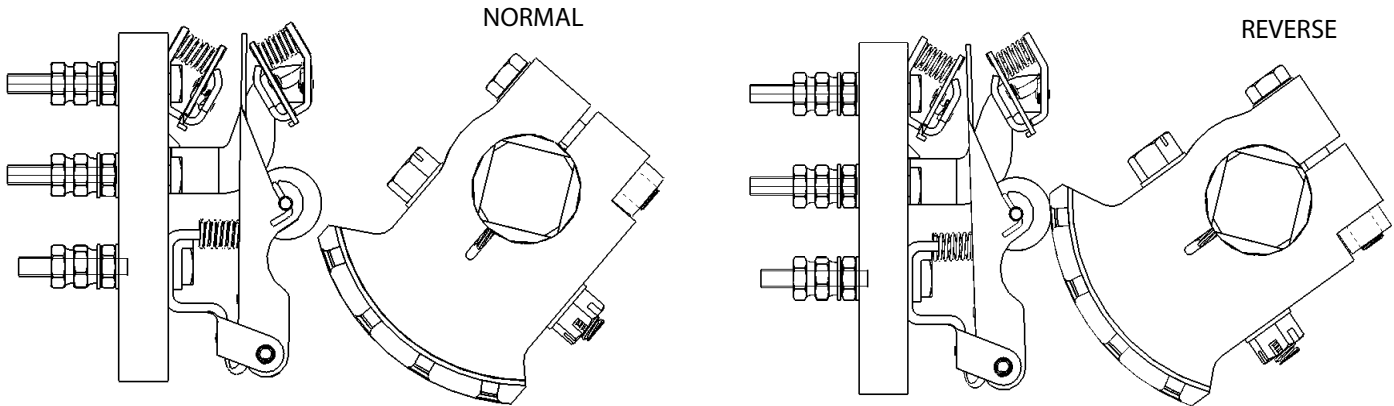
535 West Third Street

Berwick, PA 18603

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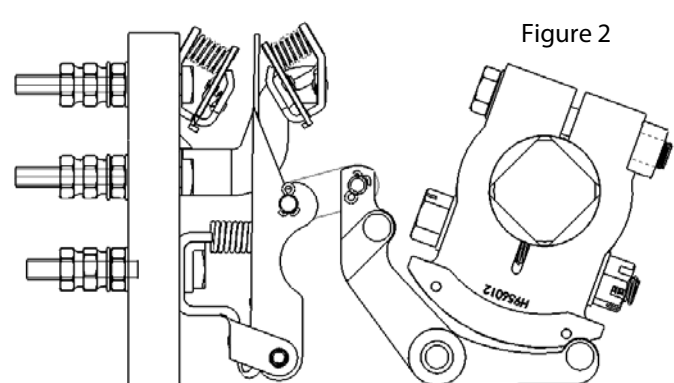
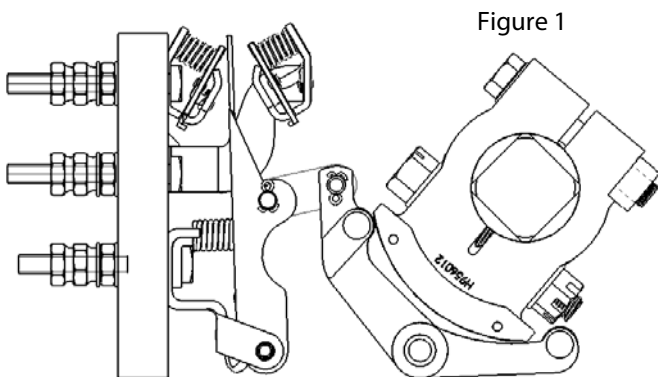
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Throw of Cranks					
Crank Ref	Centers of Crank	Circuit Controller	Max Throw	Min Throw	Max Throw
4	5 3/8"	Model 956J	6"	3 1/2"	5 1/2"
4	5 3/8"	Model 956K	7"	3 1/2"	5 1/2"
5	4 1/2"	Model 956J	5"	3"	4 5/8"
5	4 1/2"	Model 956K	5 7/8"	3"	4 5/8"
				With Centering Attachment	



Model 956J Cam and Roller

With the switch in the normal position, the pressure of the contact spring holds the contact finger firmly against the back contact. When the switch points are moved toward reverse, the hardened steel cam face presses against the roller attached to the contact finger. The roller moves up on the cam face, and the contact finger moves, against the pressure of the contact spring, to open the back contact and close the front contact.



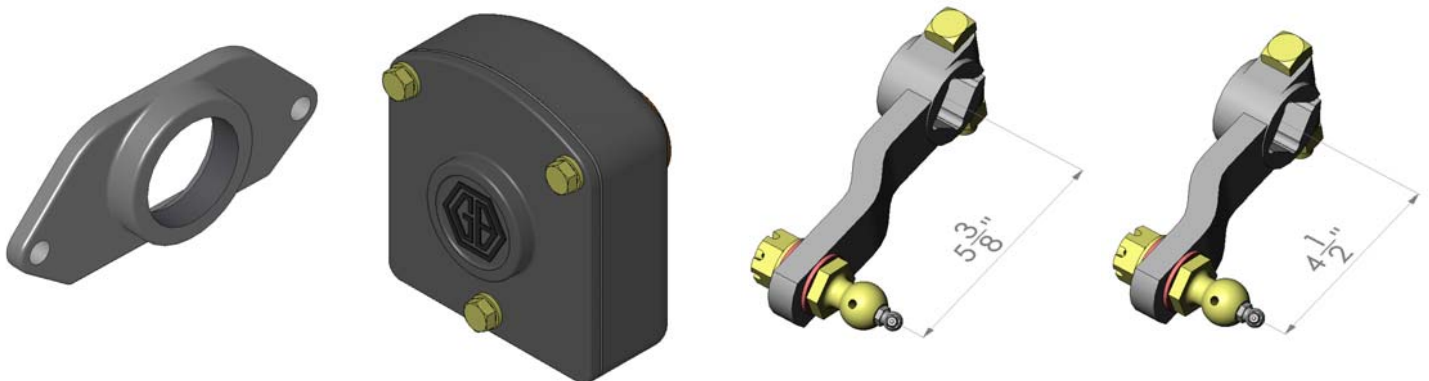
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Model 956K Push-Pull

With the switch in the position to rotate the camshaft clockwise, as shown in figure 1, the cam holds the down, positioning the contact finger against the back contact. When the switch points are moved, the clockwise rotation of the camshaft causes the cam to press down on the upper roller of the rocker, as shown in Figure 2. The rocker pivots, moving the contact finger against the pressure of the contact spring to open the back contact and close the front contact.

ORDERING INFORMATION

ITEM	DESCRIPTION	G&B NUMBER	OEM NUMBER
1	Circuit Controller, Single Roller	956001-030-01	A81-100 (7J)
2	Circuit Controller, Double Roller	956001-031-01	A81-105 (7K)
3	Cap for Wire Outlet, 1-1/2" Std. Pipe	956017-001	A81-130
4	Crank, Insulated—1" Offset, 5-3/8" Centers	956661-033-01 (Ref 4)	A81-135
5	Crank, Insulated—1" Offset, 4-1/2" Centers	956661-034-01 (Ref 5)	A81-137
6	Centering Device	956020-001-01	A81-151



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