



PRODUCT CATALOG



101 NEWARK WAY MAPLEWOOD, NJ 07040-3393
TEL: (800) 21 RAILS (72457) FAX: (973) 763-2585
Or visit our web site at: www.railsco.com

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G	Snow Detection Products
H	Batteries, Channels, Utility Boxes & Compressors

Car Retarders / Switch Heaters / Snow Detectors / Electric Switch Heater Control Systems
Automatic Switch Point Locks / Switch Point Clamps / Switch Point Protectors / Wheel
Stops / Compression Rail Anchors / Bridge Tie Anchors / C&D Batteries

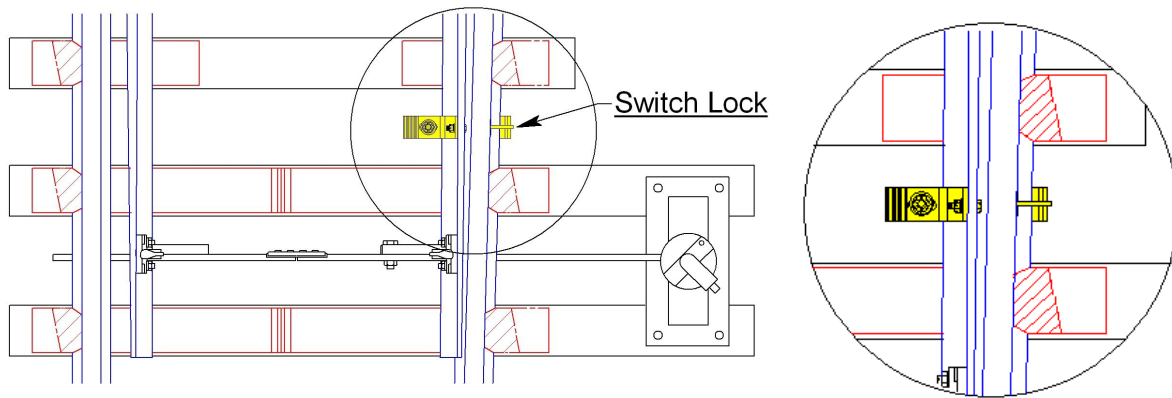


SWITCH POINT PRODUCTS

- **Automatic Switch Point Locks** **A2**
- **Switch Point Clamps** **A4**
- **Switch Point Protector** **A6**

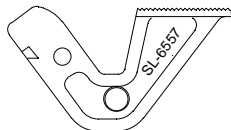
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Automatic Switch Point Locks



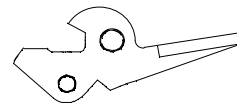
Rails' automatic switch point lock is a ruggedly constructed and reliable safety device, featuring a vandal proof folding pedal that folds and tucks into the web of the rail when padlocked, leaving nothing exposed.

The unit is attached to a normally closed switch point to hold it in its normal position at all times, preventing possible accidents to trains passing over or through the switch layout due to engine or car wheels "splitting" the switch. Facing point train operations are safeguarded. Switch points are locked in place against accidental movement even due to defective throw rods and hardware. The unit is automatic in its closing and locking action. To open the switch, just step down on the pedal, then operate the switch stand lever in the usual manner. To close the switch, operate the switch stand lever and the device automatically returns to its normal locked position. The pedal is then raised to the "folded" position and a padlock applied.



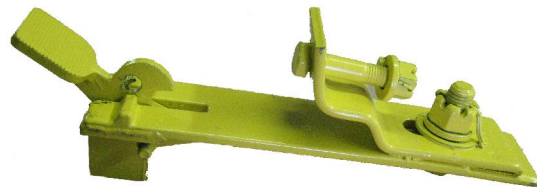
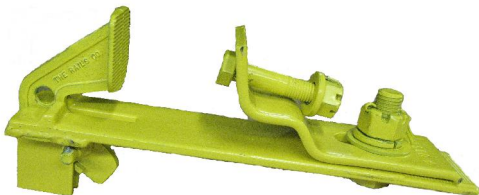
Folded Pedal
11/16" hole for standard padlock

Part #	Rail Base Size	Main Bolt Size	Color
SL-7742-1	5-1/2" and under	3/4"	Green
SL-7742-1-Y	5-1/2" and under	3/4"	Yellow
SL-7742-2	Over 5-1/2"	1"	Green
SL-7742-2-Y	Over 5-1/2"	1"	Yellow



Straight Pedal
11/16" hole for standard padlock

Part #	Rail Base Size	Main Bolt Size	Color
SL-6207-1	5-1/2" and under	3/4"	Green
SL-6207-1-Y	5-1/2" and under	3/4"	Yellow
SL-6207-2	Over 5-1/2"	1"	Green
SL-6207-2-Y	Over 5-1/2"	1"	Yellow



Installation Instructions

The Switch Point Lock should be positioned as close to the switch point as possible, where there is sufficient clearance.

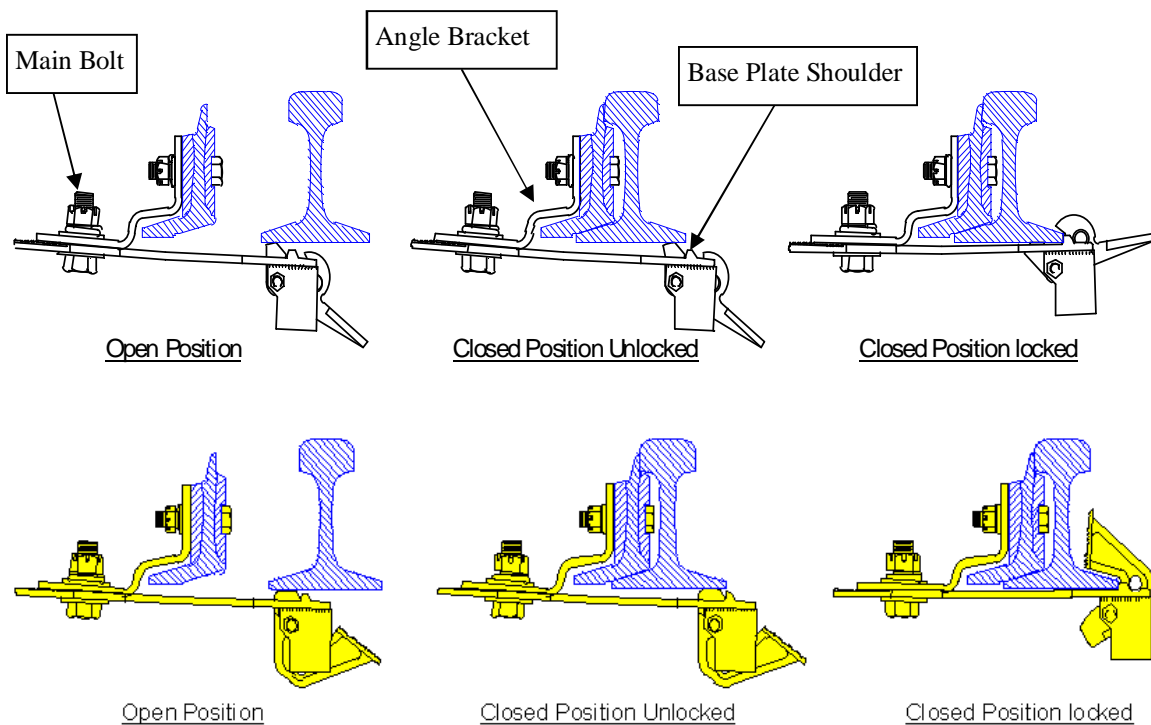
To install, remove the base plate and apply the angle bracket with the switch in open position. Square the angle bracket and pull the nut up tight.

Close the switch point and assemble the base plate to the angle bracket with foot pedal in “up” position, allowing about 1/8” clearance between the outside base of the rail and the shoulder of the base plate before the bolt is tightened.

Tighten the Main Bolt until the angle bracket and base plate faces are in full contact.

Step on the foot pedal and throw the switch to open position. The foot pedal remains in “down” position until the switch point is closed. When the point is closed, the base plate will snap up and lock the switch. It can’t be opened until the foot pedal is pushed in the “down” position. Secure castle nuts with cotter pins. Apply padlock if applicable.

CAUTION: DO NOT attempt to move foot pedal by hand—injury may occur. If foot pedal does not automatically snap back to the closed position, loosen the main bolt and adjust the base plate.



SWITCH POINT CLAMP SL-9050 series

A ruggedly constructed switch-point locking device designed for all standard rail sizes.(85# to 140#rail sections)

These clamps are available for all styles of switches.

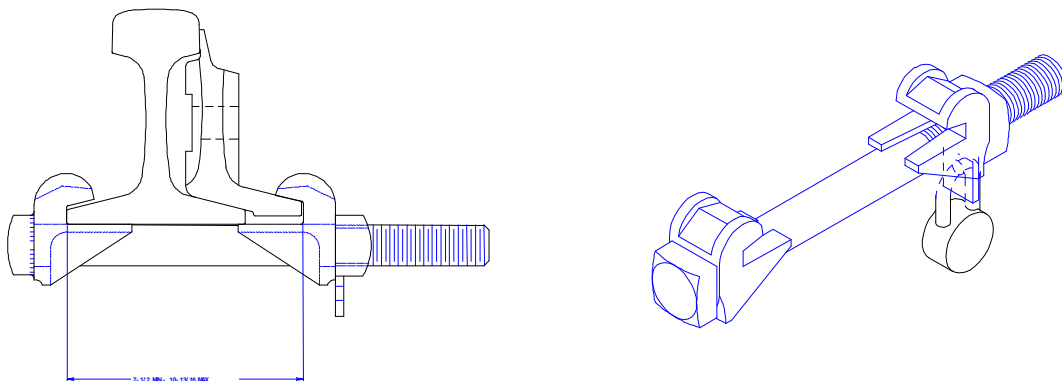
For use temporarily or permanently on sidings or track sections designated for maintenance or non-use. Provides protection against accidental switch opening or defective throw rods and hardware.

Adds extra protection on hand thrown siding switches

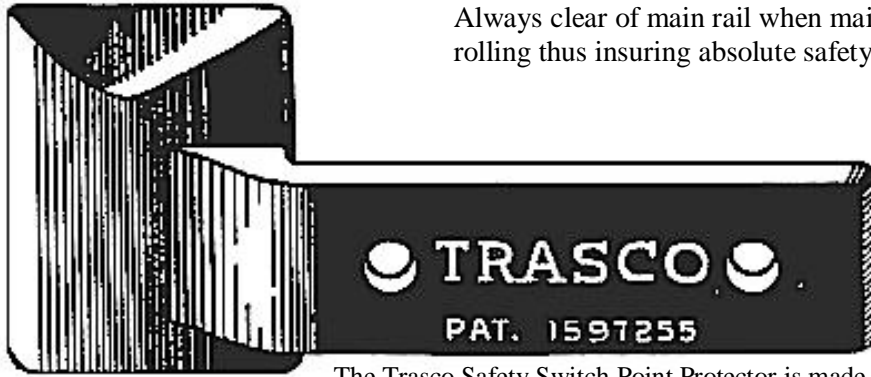
Accommodates a standard padlock (not supplied) with up to 7/16" shackle.

Easy installation; No hand tools are necessary.

Both the bolt and jaw meet ASTM-A36 material specifications and are equivalent to all standard gauge rod assemblies.



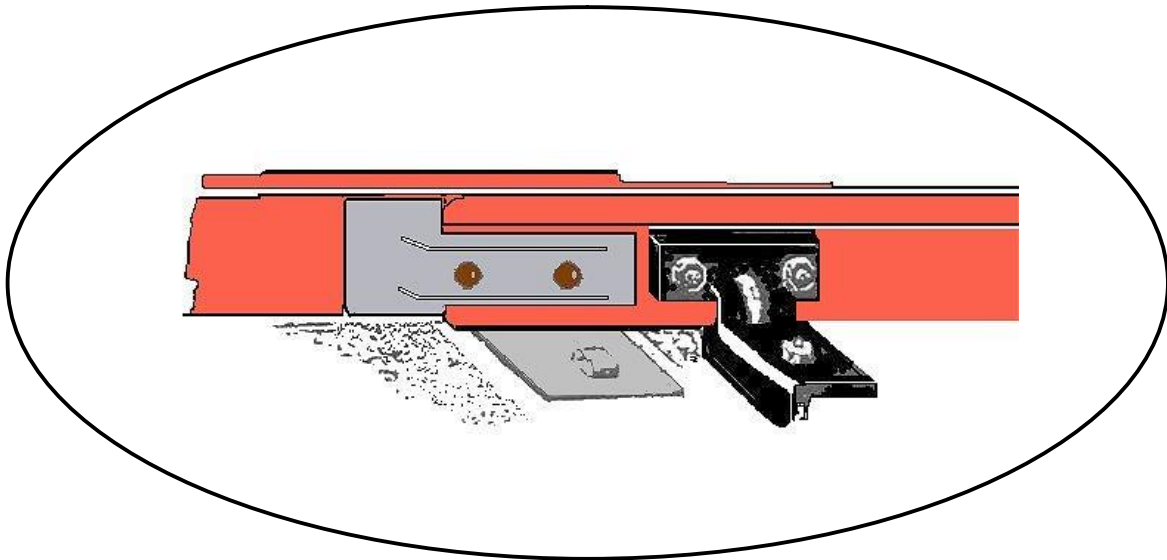
Safety Switch Point Protector



Always clear of main rail when main line wheels are rolling thus insuring absolute safety under high speed.

The Trasco Safety Switch Point Protector is made of Manganese steel

It will arrest the wear and prolong the life of the switch. It has been used in a number of cases to protect Manganese tipped switches, thus assuring long life to these expensive points. Special patterns are made to fit each design of switch point. The protector rests on the point rail base and when the switch is closed it rests on the base of the stock rail.



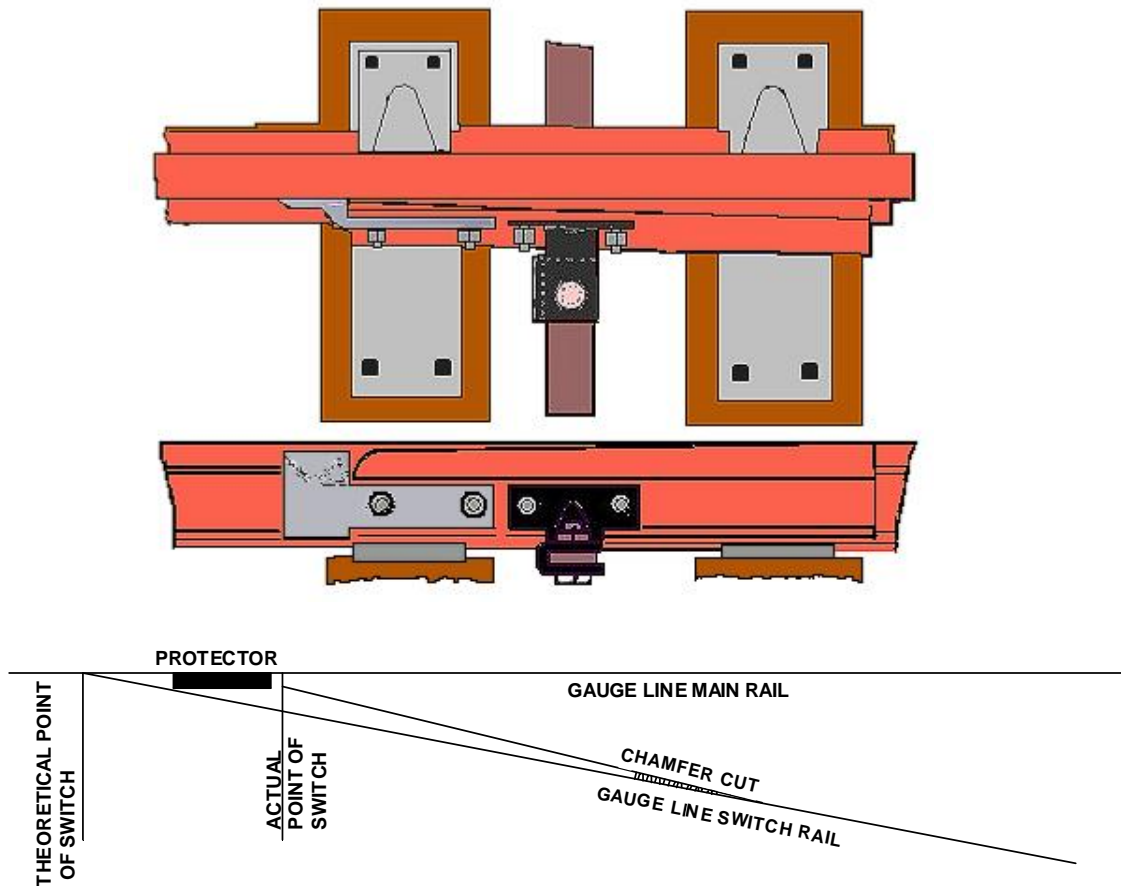
This protector is bolted to the switch point ahead of the tie bar clip

NO HOLES TO DRILL.

NO BOLTS TO BUY.

CLIP BOLTS FIT.

Safety Switch Point Protector



The Trasco Safety Switch Point Protector was primarily designed to arrest the wear on the point of a switch rail and thus prolong its life. It does this very effectively, sometimes to the extent of several times the life of the ordinary point. In addition to that, the cost of renewals is saved.

Its application is universal as it can be used on high speed track and facing point switches. On the straight run, when the switch is open, it does not touch the stock rail and when the switch is closed, it does not encroach upon the gauge line.

It fits the rails accurately and becomes a part of the switch. When interlocked, as on facing point switches, it is held between the web of the rail and the interlocking front foot. As a rule no holes are required to be drilled as the protector is provided with holes that match the first two holes in the switch point where the bolts are placed that usually hold the strap. No special bolts are required as clip bolts will fit.



RAIL/TRACK PRODUCTS

- Compression Rail Anchors B2
- Flexiclip® Rail Fasteners B4
- Bridge Tie Anchors B6
- Gauge Rods B8
- Automatic Track Lubrication Systems B9
- Fiberglass Switch Covers B10

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2-WAY HOLDING POWER
COMPRESSION RAIL ANCHORS
Economical, uniform anchorage...protection against pull-apart...
lower maintenance



FEWER ANCHORS PER MILE

One compression Rail Anchor holds in both directions so fewer anchors are required per mile. In addition, you benefit from the speed and cost efficiency of machine installation.

REDUCE ANCHOR INVENTORY

The standard Compression Rail Anchor fits all the rail sections. This not only simplifies rail anchor inventory, it reduces storage space and inventory investment.

HOLDS RAIL TO OUTSIDE SHOULDER

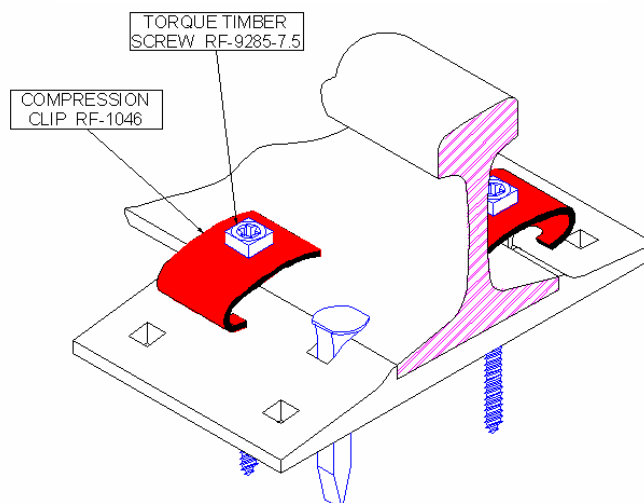
Compression Rail Anchors hold the rail to the outside shoulder of the tie plate. They resist rail movement on main line track, branch lines, turnouts, bridges, switches and crossings.

EFFECTIVE ANCHORING

Compression Rail Anchors reduce buckling stresses and provide definitive protection against "pull-aparts" in welded rail. Uniform holding maintains gaps at the end of the rail. Rails are effectively anchored, both ways, from the movement of application.

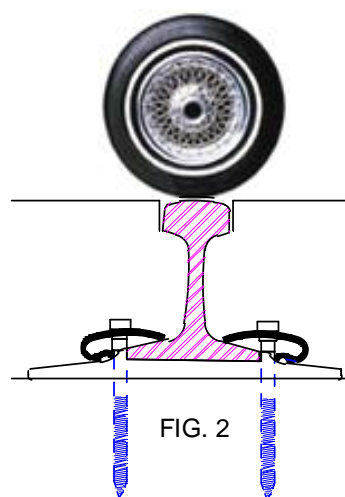
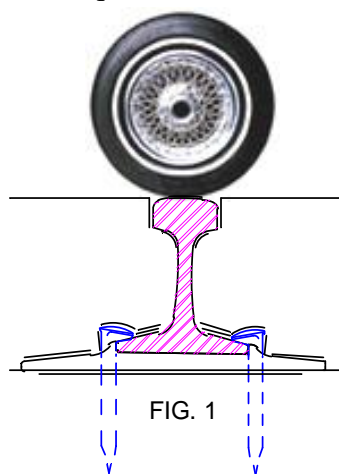
Car Retarders / Switch Heaters / Snow Detectors / Electric Switch Heater Control Systems
Automatic Switch Point Locks / Switch Point Clamps / Switch Point Protectors
Wheel Stops/ Compression Rail Anchors / Bridge Tie Anchors / C&D Batteries

Rails Company Compression Rail Fastener



With the combination of train and highway traffic, grade crossings are subject to millions of cycles of vertical motions, thus accelerating spike pull, tie wear and unstable sub grade, as shown in Fig. 1.

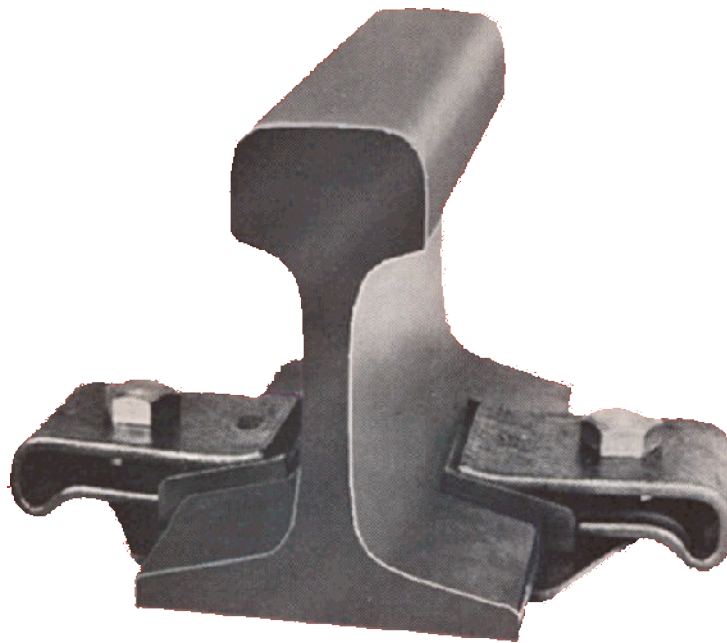
The Torque Timber Screw with the Compression Fastener, which acts as a spring, shown in Fig.2, will absorb more vertical movement of the rail without transmitting these forces to the Torque Timber Screw or the tie.



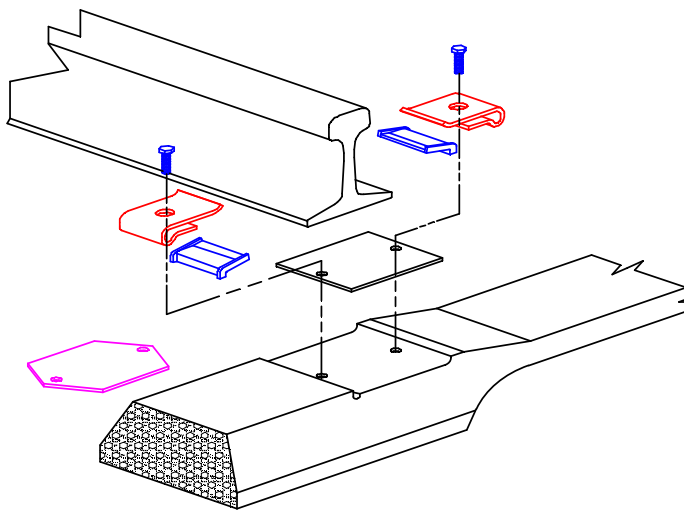
MATERIAL ORDERING REFERENCE

RF-1046	COMPRESSION CLIP (2 REQ'D.)
RF-9285-7.5	TORQUE TIMBER SCREW (2 REQ'D.)
or	5/8 x 7-1/2
RF-9585-7.5	TORQUE TIMBER SCREW (2 REQ'D.)
	3/4 x 7-1/2

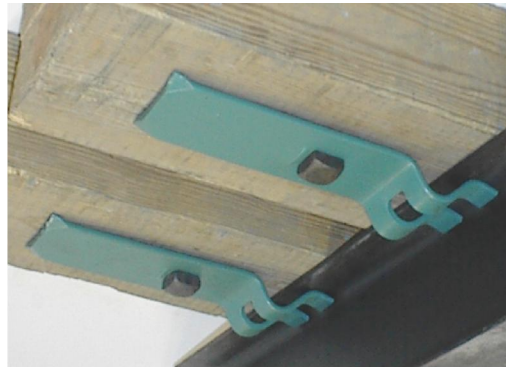
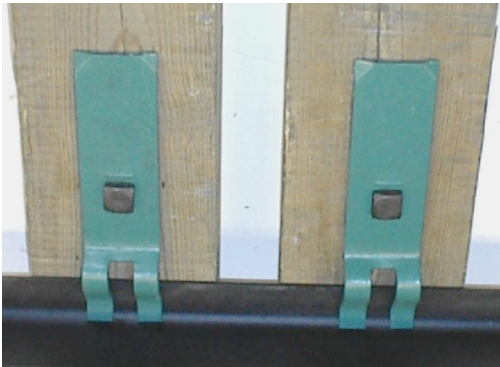
Flexiclip® Rail Fasteners



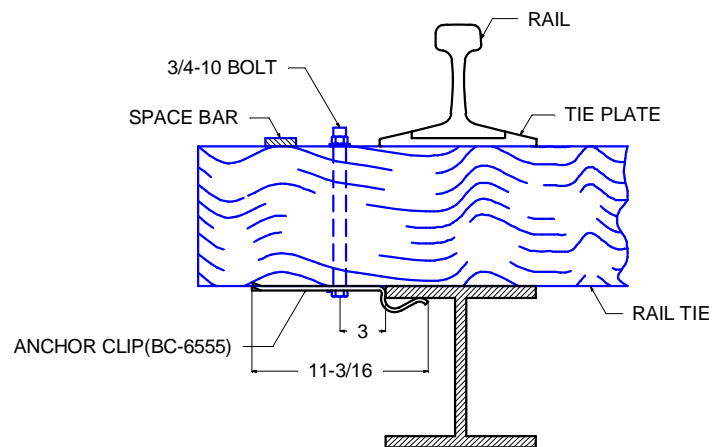
Flexiclip® Rail Fasteners are flexible fasteners designed specifically for use with welded rail on concrete ties. Their proven design prevents rail movement by applying positive holding power in all directions. Rails are anchored effectively, both ways, from the moment of application, providing both flexibility and prevention of rail slippage. One design fits all rail sections with gauge and field fasteners varying according to rail weight.



BC-6555
Bridge Tie Anchor
Effective Holding Power
Where Anchor Bolts Must Be Offset



The offset mounting hole of the BC-6555 Bridge Tie Anchor provides an improved means for fastening open deck bridge ties to supporting steel members where anchor bolts cannot coincide with the edge of the structure due to interference on the top.



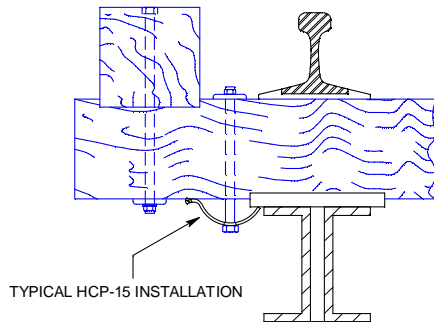
FORWARD END OF THE BC-6555 BRIDGE TIE ANCHOR EXERTS
SPRING TENSION AGAINST THE STEEL WORK WHILE THE ABUTTING
SURFACE PREVENTS LATERAL MOVEMENT OF THE TIE

This unique design exerts spring tension which provides a constant frictional force between the bottoms of the tie and the girder, thus holding them firmly together and preventing lateral movement. The spring action compensates for shrinkage, seating and stresses caused by flexing of the tie under wheel loads.

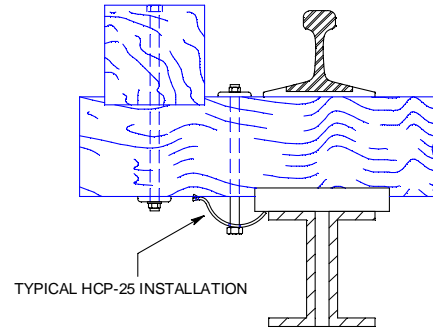
The BC-6555 Bridge Tie Anchors are made of high carbon, heat treated spring steel. They use standard 3/4" bridge deck bolts. An indentation in the fastening surface of the BC-6555 prevents the bolt from turning when being tightened from the top.

Ask us for complete information including dimensional drawings, or a quotation.

HCP Bridge Tie Anchors for welded steel bridge Structures

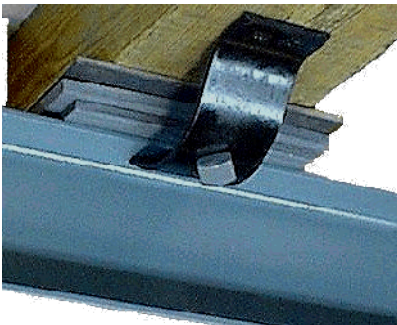


HCP-15 Bridge Tie Anchors are used to install open deck bridge ties on regular weight steel bridge members. They exert strong pressure, holding the tie and supporting member firmly together. The slotted bolt hole accommodates variations in the steel thickness.



HCP-25 Bridge Tie Anchor can be used with heavier, welded cover plates. The slotted bolt hole permits a different angle of application with equally effective holding power. Standard bridge deck bolts are used throughout.

Rails HCP Bridge Tie Anchors have been an industry standard for more than 25 years. Their spring steel construction, which provides a spring action that absorbs variations of pressure caused by flexing of the under heel loads, makes them the most practical means of bridge deck fastening. HCP Anchors replace expensive hook bolts which loosen due to tie deflection and shrinkage. They prevent skewed ties, split guard rails and other structural defects.



The length and contour of Rails Co. HCP Bridge Tie Anchors and the slotted shape of the bolt hole allow for variation in cover plate thickness with no loss in holding power.

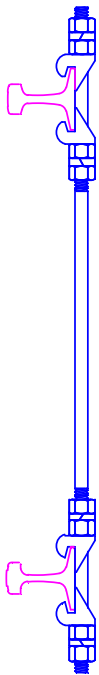


Three models are available:
HCP-15 for cover plate thickness to 1-1/2"
HCP-25 for cover plate thickness to 2-1/2"
HCP-45 for cover plate thickness to 4-1/2"

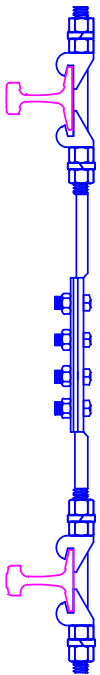
Gauge Rods

Rails Company Gauge Rods

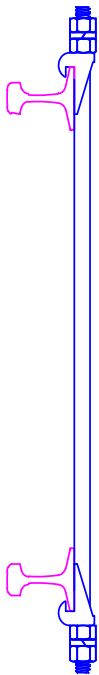
FITS ALL RAILS – PREVENTS WIDE OR NARROW GAUGE



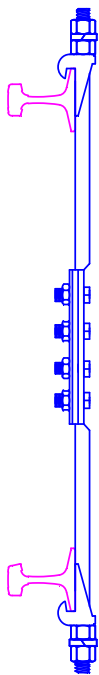
No. 1 TX-5000-001



No. 3 TX-5000-010



No. 4 TX-5000-020



No. 4A TX-5000-030

RAILROAD STANDARD

RODS - 1-1/4" Diameter specification steel

NUTS - Square

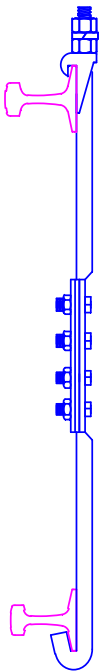
JAWS - High yield malleable iron

LOCK WASHERS - 3/8" Square section

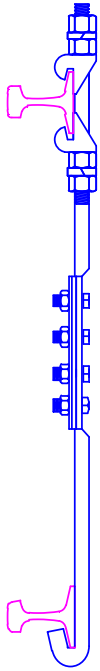
FIBER INSULATION - AAR Signal Section Specifications



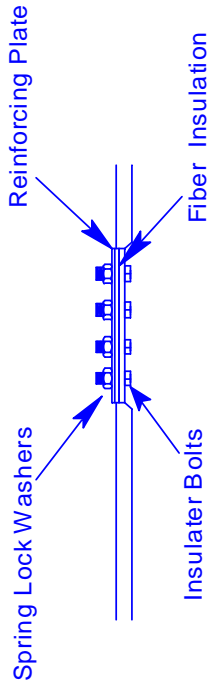
No. 5 TX-5000-040



No. 5A TX-5000-050



No. 6A TX-5000-090



TYPE PL AUTOMATIC TRACK LUBRICATION SYSTEM

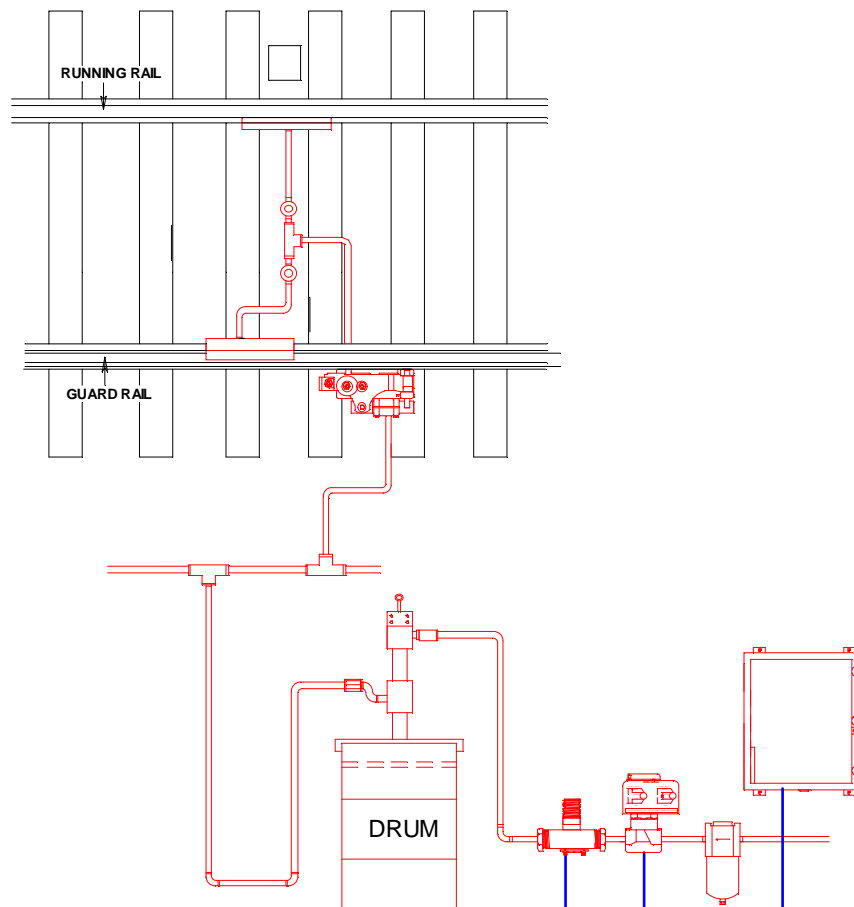
Rails' Type PL Automatic Track Lubrication System is a simple, low-cost, effective means for lubricating single rail, double rail and single rail-guard rail track installations. Proven in extensive service, it is preferred because it greatly reduces lubricant handling cost and practically eliminates contamination.

The system consists of a high pressure pump (supplied with drum cover and hoses for connection to air supply and grease lines), an electrical air control system, a tripper that automatically delivers a measured amount of lubricant to the wiping bars on the rail at the passage of each wheel.

Lubricant is delivered from the original factory drum (110 lb. Or 55 gal.) directly to the track. As many as 10 separate tracks may be serviced from one pump. The air control system provides automatic shut-off when the drum is empty or in case of pipeline failure.

The initial cost is low. Installation is fast and easy. No drilling of the rail is required. When the lubricant is empty, you merely remove the top from the new drum and place the pump and drum cover assembly on it. What could be simpler!

Ask us for complete information. Include a general layout of proposed locations and we'll provide a complete system quotation.



FIBERGLASS SWITCH COVERS



Fiberglass switch covers are designed to minimize hot air loss while providing reduced energy costs, keeping areas where they are installed protected from weather.

Rails Company fiberglass covers are available for switches with wood or concrete ties and can be used with Forced Air or Electric Melters.

Features:

- Hinged panels for easy inspections
- Load bearing construction
- Anti-slip surfaces
- Non-conductive composition
- Field Repairable
- Easy removal for maintenance





ROLLING STOCK TRACK PRODUCTS

- **Car Retarder** **C2**
- **Track Skates** **C3**
- **Wheel Stops** **C4**

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Car Retarder

13, 18 and 36 Foot long Retarder Systems



Rails Company Car Retarder Systems are available with or without hydraulic action. The retarder is made for stopping rolling stock in your hump yard or any yard you need to control free-wheeling rolling stock.

The Rails Co. Retarder System can be furnished for on-site assembly and installation by railroad personnel or contractors. Friction rails are included with each Retarder System. The railroad or contractor must supply running rail, ties, tie plates, spikes and anchors.

Car Retarders System can also be furnished completely assembled (panelized) on a 39 ft. running rail section of the customers-specified size. The panelized Retarder System includes both friction and running rails, ties, tie plates, and anchors and is ready to drop into a prepared track section.

The Rails Co. Retarder System comes in several convenient lengths and styles.

13 Ft. Inert (No power required)
13 Ft. Hydraulic (Power required)

18 Ft. Inert (No power required)
18 Ft. Hydraulic (Power required)

36 Ft. Inert (No power required)
36 Ft. Hydraulic (Power required)

The Rails Co. Retarder System can be provided to conform to your power source. For additional information about the Car Retarder Systems or any other Product line, contact our friendly sales staff.

36' Retarder



Power unit



36' Retarder



Track Skates

Preferred by Skate men



Rails/Trasco Track Skates are specially balanced to make easier to carry

Rails/Trasco Track Skates are long lasting lightweight units that are widely used in hump yards and industrial sidings to slow and stop a moving car or to hold a car steady on a flat track or track with a moderate downgrade.

Rails/Trasco Track Skates are constructed of a tough cast ductile alloy. Rails/Trasco Track Skates are Lightweight –only 27 lbs. – and feature a specially designed “hump” that catches and holds car wheels to prevent them from skidding out or rolling back. A heavy duty, no-curl tongue and a specially balanced hand hold makes them easy to carry. The Rails/Trasco Track Skates fit rails from 85 to 140 lbs. and are easily installed without using tools.

Rails/Trasco Track Skates are painted in bright safety yellow but are also available in a variety of other colors. **Rails/Trasco Track Skates** may also be supplied with reflective tape on the heel so they can be located more easily in the dark areas.



Optional reflective tape makes **Rails Co. Track Skate** easy to see in the dark.

Wheel Stops



STD. 1"x 5" TRACK BOLT

Weight: Pair – 292 lbs.



1" SQ NUT, LOCK & FLATWASHER

The Rails Company Type **WS-200** Wheel Stop is made of reinforced construction and designed to clamp to the rail head.

The Rails Company Wheel Stops are easy to install devices for use at stub ends of tracks. Thousands have been in service for years on many railroads, as well as industrial plants across the country. These Wheel Stops are generally interchangeable for all rail sections and installation does not require drilling of the rail.

The Rails Company Wheel Stops fit all conventional rail sections, 85# and up-, 33" diameter wheels.

Car Retarders / Switch Heaters / Snow Detectors / Electric Switch Heater Control Systems
Automatic Switch Point Locks / Switch Point Clamps / Switch Point Protectors
Wheel Stops/ Compression Rail Anchors / Bridge Tie Anchors / C&D Batteries



SWITCH HEATERS (GAS) & AIR BLOWER SYSTEMS

- Hot Air Blower Systems D2**
- HAB System Layout With Duct Tie D4**
- 15" Hot Air Blower System D5**
- Cold Air Blower Systems D6**
- Rail-Tel (RTS) Switch Heaters D8**
- LP Track Switch Heaters D10
(Low Pressure Natural Gas)**
- All Electric Hot Air Blower Systems D12**

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HOT AIR BLOWER SWITCH HEATER

For Single or Multiple Switch Applications

Gas, All-Electric or Oil fueled high pressure heating unit forces hot air throughout the switch area via ducts and nozzles.

Complete systems designed and proven for rugged service in severe weather. Keeps switches open and operative during snow, sleet or ice storms.

FEATURES

High Pressure Blower forces air around the combustion chamber and through the ductwork, providing even transfer and distribution of heat.

Hot air dries up snow. Leaves switch area clear and dry, minimizing the "snow plow" effect of passing trains.

Fast, Simple Installation. No complicated piping. Leaves switch area open for maintenance personnel. We've designed the system so you can customize it—just put it together.

Efficient Heating keeps operating costs low. Can be fueled by natural gas or propane and powered by various voltages, single or poly-phase.

Electronic Safety Circuits constantly monitor blower operation. Ensures safe and proper operation of the blower at all times.

Directional Air Flow through adjustable nozzles allows you to direct the airflow where it's needed.





HIGH
PERFORMANCE
FOR
EXTREME
WEATHER



The Hot Air Blower Switch Heater (HAB) provides track switch snow removal during severe winter conditions. This type heater has been engineered and constructed for dependable service, maximum heating efficiency and safety with minimum maintenance.

The oil, gas or electric powered units use a high-pressure blower to force an air stream around a combustion chamber to ensure even heat transfer. The motor shaft is fastened to the blower fan and, in the case of oil units, coupled to the specially designed fuel pump. This pump is adaptable to either single or dual fuel line feed.

The main duct, which passes under the tracks, is isolated to safeguard against possible track circuit interference. Various nozzle arrangements, duct isolation and heat retainers are available to provide maximum heating efficiency.

Local conditions, length of switches and user preference may dictate the use of higher horsepower or BTU blower units as well as the type of heat-distribution system accessories, such as heat-retaining shield layouts, modular ducting, etc.

In the control panel, two adjustable electronic timers are provided for safety. They ensure that burners fire properly within a predetermined period of time, preventing fuel build-up within the burner. One of these timers also continues blower operation after the burner shuts off to cool the unit.

Rails Co. HAB Switch Heaters are easy to install and maintain. Experience has proven their high reliability of operation under all weather conditions.

The HAB may be operated manually, remotely and/or automatically by the Rails Snow Detector.



Hot Air Blower System Layouts with Main Duct Tie

1- DUCT, FLEXIBLE

ALL LENGTHS AVAILABLE
(2 FT. MIN.) COMPRESSED

2- MAIN DUCT TIE ASSEMBLY WITH PANDROL FASTENERS

HAB-11000-6-115 - PANDROL eCLIP - 9.0"
HAB-11000-6-132 - PANDROL eCLIP - 9.0"
HAB-11060-6-115 - PANDROL SAFELOK - 9.0"
HAB-11060-6-132 - PANDROL SAFELOK - 9.0"

ABOVE DUCT TIES CAN BE FURNISHED
WITHOUT AIR OUTLETS FOR MULTIPLE
TRACKS AND CANTED RAIL SEAT.

3- NOZZLE, FLEXIBLE

4- TRANSITION, MOD DUCT

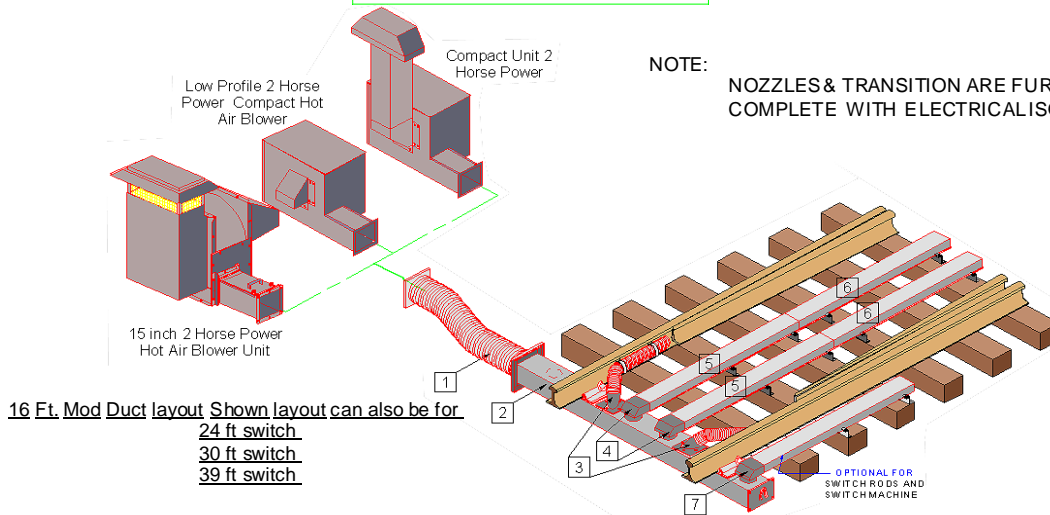
5- DUCT, MODULAR, 8 ft. LONG, OPEN

6- DUCT, MODULAR, 8 ft. LONG, CLOSED

7- CRANK ROD LAYOUT

NOTE:

NOZZLES & TRANSITION ARE FURNISHED
COMPLETE WITH ELECTRICAL ISOLATION KIT.



For single or Multiple Switch Application

The high pressure Hot Air Blowers forces hot air to the switch area via the main duct tie, flexible nozzles, and modular ducts. These systems keep switches open and operating during snow, sleet, and ice storms. The Hot Air Blower Units come in a variety of styles.

**The 15 inch with hi-low heat ability,
compact with up to 524,000 BTU output
Low Profile for those tight places.**

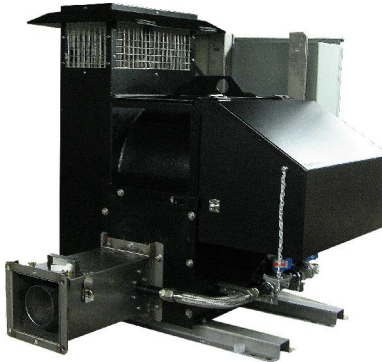
All the Hot Air Blower Units can operate on Natural or Propane Gas and can be supplied to meet your power needs:

240 volt single phase
240 volt three phase
480 volt single phase
480 volt three phase

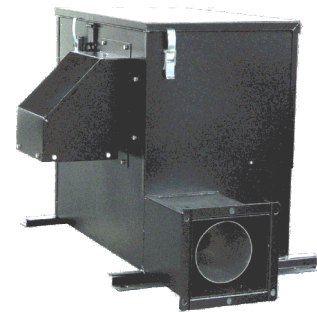
Layouts for 16 foot switch to 39 foot switch using 112# to 140# rail
above Layout shown with Main Duct Tie. Also available with rigid nozzles and standard main duct.



Compact



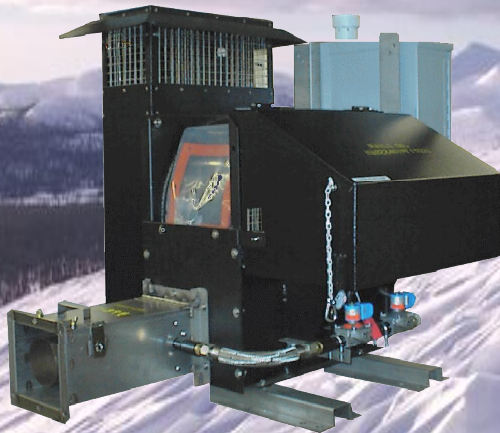
15"



Compact (Low Profile)

Rails Company 15" Hot Air Blower System.

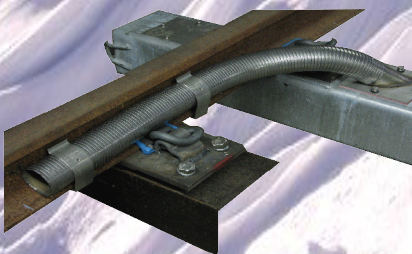
The blower is equipped with a high low heat function which automatically reduces BTU's when they are not needed, to cut down on costly fuel bills. With the Rails Company 15" Hot Air Blower you now have many options to choose from: Natural Gas, Propane Gas, or All-Electric. Also, choose the style of electric control and the use of Duct Ties for low maintenance cost. Please contact one of our representatives for more information.



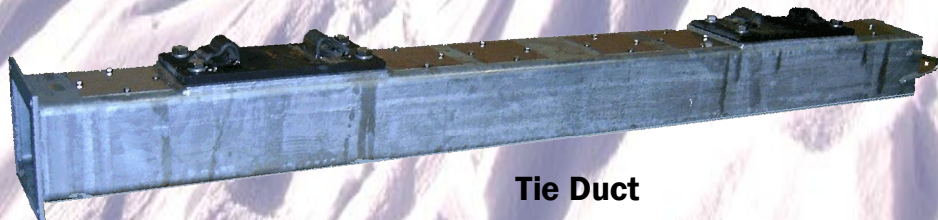
15" Hot Air Blower



Flexible Duct

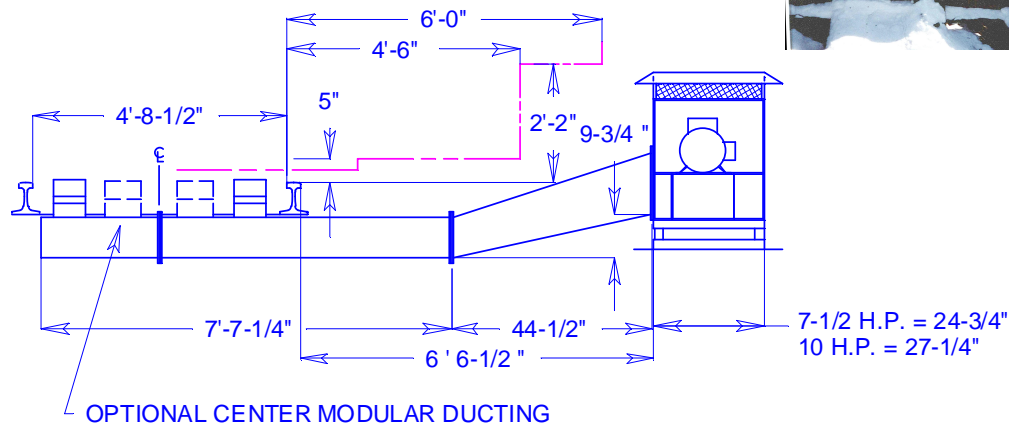
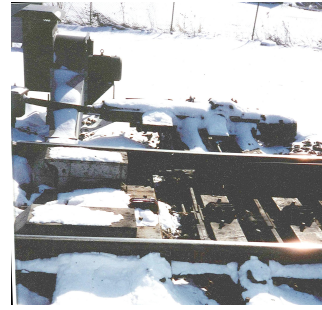


Flexible Nozzle



Tie Duct

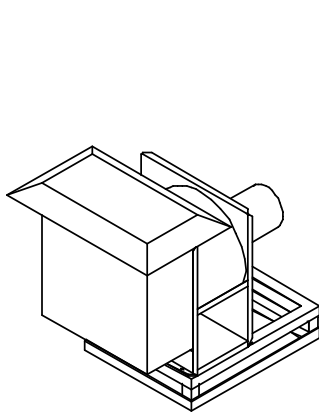
Cold Air Blower Systems



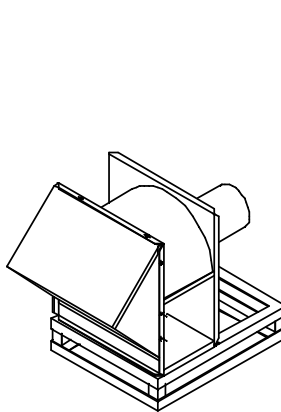
The Rails Co. Cold Air Blower (CAB) System removes snow from the switch point by delivering a stream of ambient temperature air at high velocity (2800 to 3700cfm), directed through nozzles and optional modular duct layout.

These electrically powered, low profile systems effectively keep switches clear in applications where heated air is not required and/or an alternate fuel source is unavailable or too costly.

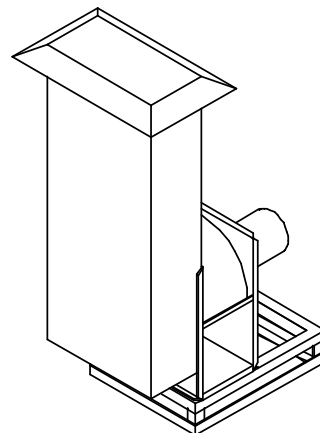
Standard systems consist of an electrically powered blower unit (available in 5 hp, 7.5 hp or 15hp), an air intake (available in three heights, see below) main duct, modular ducting and two nozzles. Center track modular ducts are optional.



*1: STANDARD AIR INTAKE



*2: LOW AIR INTAKE



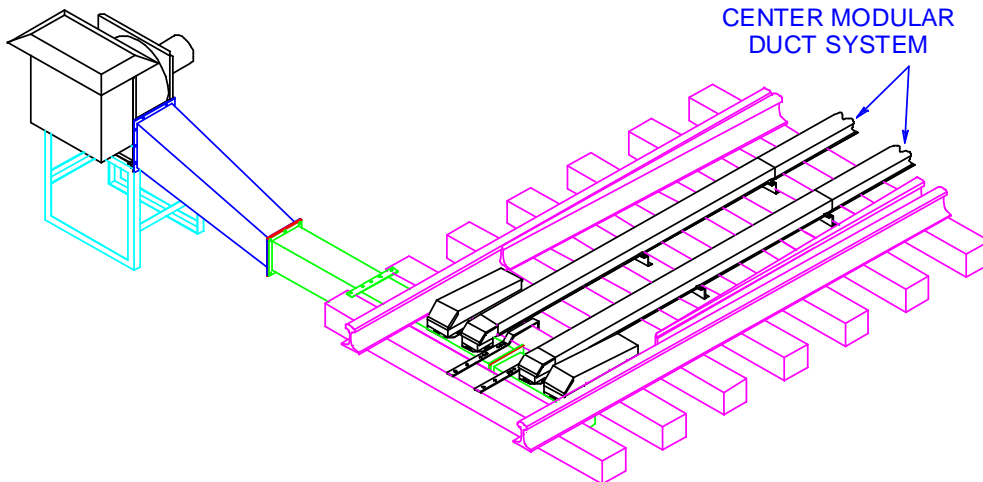
*3: EXTENDED AIR INTAKE

Cold Air Blower Systems

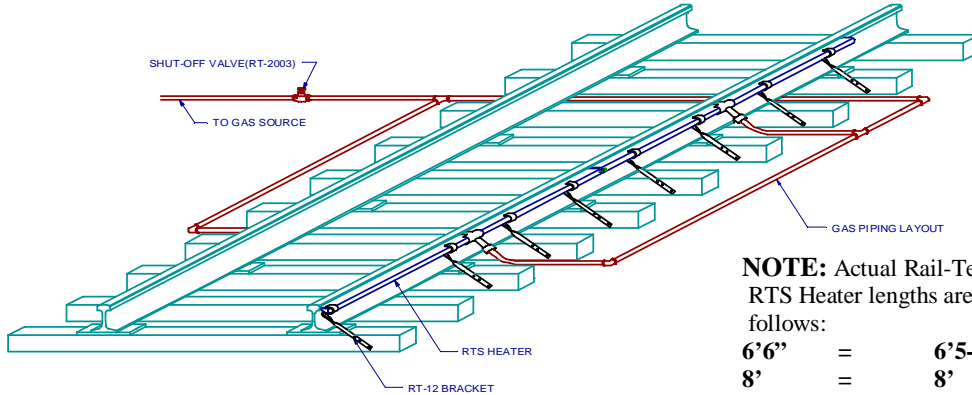
Controls are mounted on the blower. Systems may be operated manually, remotely or automatically using a Rails Co. Snow Detector. An ambient temperature sensor reduces run time, lowering operating cost

The (CAB) Cold Air Blower System is designed for low noise levels and is balanced to minimize vibration. All components that come in contact with the ballast, including the nozzles, are constructed of heavy gauge, stainless steel. Duct sections are electrically isolated.

Simple design and rugged construction ensure fast installation and lower maintenance. Extensive experience on railroads has proven that Rails Co. CAB System is a highly reliable, efficient and cost-effective way to keep switches open.



RAIL-TEL RTS SWITCH HEATER



NOTE: Actual Rail-Tel RTS Heater lengths are as follows:

6'6"	=	6'5-1/4"
8'	=	8'
10'	=	9'7"
11'6"	=	11'2"

UNIFORM HEAT Rail-Tel RTS Heaters apply uniform heat over the entire length of the switch... direct flame puts heat just where you want it...when you need it most.

PROPER COMBUSTION Proven inspirator design ensures correct combustion mixture regardless of weather or humidity.

ECONOMICAL Rail-Tel RTS Heaters operate on propane or natural gas. They provide controlled heat for any snow condition at low cost. Optional heat retaining shields increase efficiency in areas of high winds and/or very cold temperature.

DEPENDABLE Proven by years of experience. Rail-Tel RTS Heaters operate under all conditions...keep switches clear in high winds, drifting snow, and low temperatures.

SWITCH ROD HEATERS Available in 6'6", 8', 10', and 11'. Rail-Tel RTS Heaters can be provided with flash igniters fired by the heater on the rail.

CONFINED FLAME Exclusive construction features confine all open flame...with no chance of damage to rails, ties, track equipment or insulation.

AUTOMATIC IGNITION Rails Co. Solid-state controllers and Snow Sensing systems automatically start heaters as soon as the snow falls. Rail Co. Controls are available with AC or DC Automatic Ignition Systems. Rail-Tel RTS Heaters can also be manually controlled by dispatchers at a central control point.

LONG LIFE Rail-Tel RTS Heaters are built to last, with minimum maintenance, in the toughest weather or heavy traffic. Available in standard aluminized steel or in stainless steel for even greater reliability and service life.

Car Retarders / Switch Heaters / Snow Detectors / Electric Switch Heater Control Systems
Automatic Switch Point Locks / Switch Point Clamps / Switch Point Protectors / Wheel
Stops / Compression Rail Anchors / Bridge Tie Anchors / C&D Batteries

SIZE SWITCH	LAYOUT NO.	HTR. AHEAD OF POINT	HTR. LGTH PER PT.	HEATER LENGTHS
15 ft	No.8	1'6"	14'6"	2-8', 2-6'6"
15 ft	No.6	2'0"	16'	4-8'
16'6"	No.6	1'6"	16'	4-8'
16'6"	No.5	2'6"	18'	2-10', 2-8'
16'6"	No.7	3'6"	20'	4-10'
20 ft	No.7	1'0"	20'	4-10'
20 ft	No.4	3'6"	22'6"	4-8', 2-6'6"
20 ft	No.19	4'0"	23'	4-11'6"
20 ft	No.3	5'0"	24'	6-8'
22 ft	No.4	1'6"	22'6"	4-8', 2-6'6"
22 ft	No.3	3'0"	24'	6-8'
24 ft	No.4	1'6"	22'6"	4-8', 2-6'6"
24 ft	No.3	1'6"	24'	6-8'
24 ft	No.18	3'0"	26'	4-8', 2-10'
24 ft	No.18A	3'0"	26'	4-8', 2-10'
24 ft	No.2	5'0"	28'	4-10', 2-8'
27 ft	No.2	2'0"	28'	4-10', 2-8'
27 ft	No.1	5'0"	33'	6-10'
30 ft	No.1	1'6"	30'	6-10'
30 ft	No.2	1'6"	28'	4-10', 2-8'
30 ft	No.12	4'0"	33'	4-11'6", 2-10'
30 ft	No.13	5'6"	34'6"	6-11'6"
33 ft	No.13	2'6"	34'6"	6-11'6"
39 ft	No.15	1'6"	40'	8-10'
39 ft	No.14	4'0"	43'	4-10', 4-11'6"
45 ft	No.17	2'0"	46'	8-11'6"

DERAIL-LENGTHS	LAY OUT NO.	HEATER LENGTHS
Block D-R	No. 11A	1-6'6"
10 ft	No. 21	1-8'
10 ft	No. 11	1-10'
10 ft	No. 20	2-6'6"
15 ft	No 10A	1-8', 1-6'6"
15 ft	No 10	2-8'
16 ft	No 10	2-8'
16 ft	No 9	1-8', 1-10'
18 ft	No 9A	2-10'
16'6"	No 9A	2-10'
20 ft	No 9A	2-10'



Riser Box



Igniter

IT'S EASY TO ORDER

1. Specify the layout No. and switch Size from the charts above for switch with propane or natural gas at 10 psi.
2. Specify Piping layout No. and Heat Retaining Shield Layout No. (both same as Layout No.). Piping layout comes assembled, including a globe valve and excess flow valve.
3. Specify Automatic Ignition Assembly.

Heater layouts include Heaters, Brackets, Nails, Inspirator Wind-shields, Spuds, Hoses with ball check, and Connectors with cotter Pins. Gas consumption for each heater at 10 psi.

Propane 14 CFH No. 68 Spud
Natural 34 CFH No. 63 Spud

FOR OPERATION ON 115 VAC, 60Hz:

RT-8850 Automatic Ignition Assembly

Consists of:

- (1) RT-8030 Control, Single-Switch c/w Riser & Pedestal
- (1) HT-1000-10 Igniter, 10 VAC
- (1) ACV-1000-1 Valve, Solenoid, 3/4" , 115 VAC , c/w Strainer.

FOR OPERATION ON 12 VDC

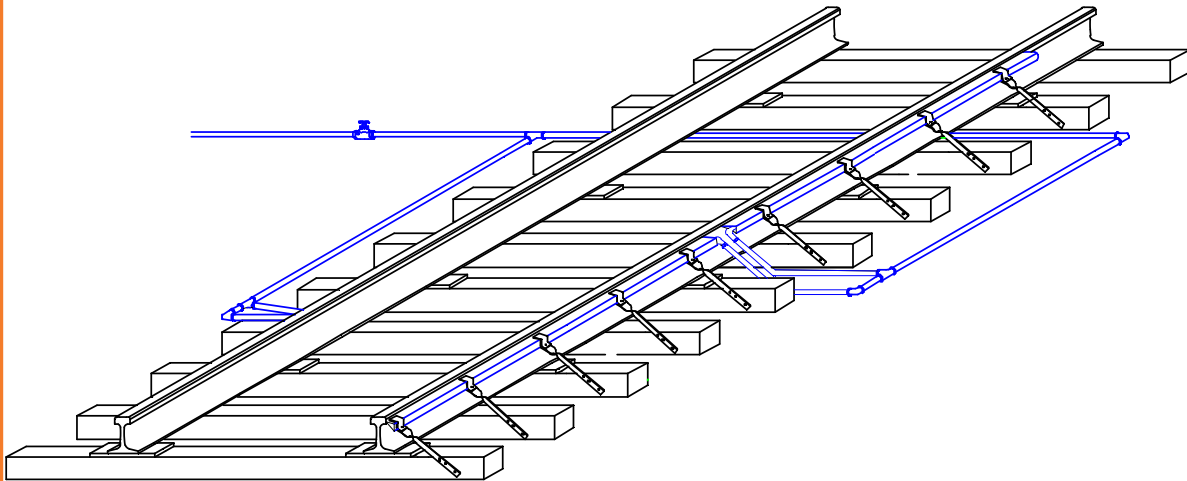
RT-6400 Automatic Ignition Assembly:

- (1) RT-6023 Control, Single-Switch c/w Time Delay, Control Relay & Terminals in a NEMA 12 Enclosure (14x12x6)
- (2) HT-1000-12 Igniter, 12 VDC
- (1) RT-7600-1 Valve, Solenoid, 3/4", 12 VDC, c/w Strainer.

For Automatic Start, Specify Rails Co. Snow Detector with:

- _____ (P) Pneumatic or (D) Digital
- _____ (1) or (2) Sensing Heads

LP TRACK SWITCH HEATERS (LOW PRESSURE NATURAL GAS)



FLEXIBLE PERFORMANCE New Type LP Heaters operate on natural gas, and deliver controlled heat for **any** snow condition – at low cost.

PROPER COMBUSTION Proven inspirator design ensures correct combustion mixture regardless of weather or humidity...Proven to be more economical because it burns all the gas (no wasted gas) with an improved flame.

UNIFORM HEAT The LP heaters apply uniform heat over the entire length of the switch... direct flame puts heat just where you want it... when you need it most!

DEPENDABLE LP Switch Heaters operate efficiently under all conditions, even drifting snow and low temperatures.

EASY INSTALLATION The LP Heater housings are designed standard for left or right use...less inventory problems.

LESS MAINTENANCE The gas inlet is designed to eliminate troublesome center casting connections..... ensuring top performance, even under constant heavy vibration conditions.

AUTOMATIC IGNITION Rails Co. LP Switch Heaters start automatically as soon as snow falls....or can be controlled by dispatchers at central points!

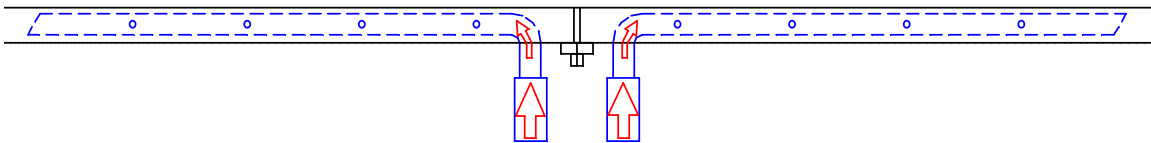
LONG LIFE LP Switch Heaters are built to last, with rugged construction from corrosion-resistant materials to withstand adverse weather conditions and heavy traffic!

Car Retarders / Switch Heaters / Snow Detectors / Electric Switch Heater Control Systems
Automatic Switch Point Locks / Switch Point Clamps / Switch Point Protectors / Wheel
Stops / Compression Rail Anchors / Bridge Tie Anchors / C&D Batteries

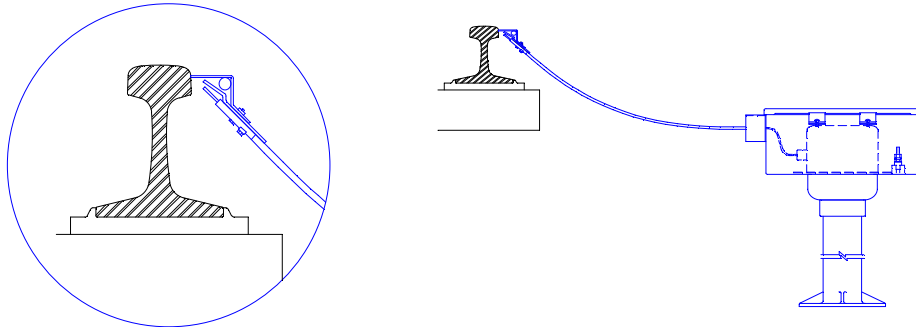
LP TRACK SWITCH HEATERS

TYPE LP (LOW PRESSURE NATURAL GAS) SWITCH HEATERS ARE BETTER...

HERE'S WHY



The LP Heaters have separate gas feed lines for adjoining heater lengths. Air entrainment holes on top of the heater assure proper combustion by admitting secondary air. Tie mounted brackets provide simple and secure fastening of heater against the rail.



TYPE LP HEATER LAYOUTS

Complete layouts to equip a switch with all necessary fittings, heaters, tie brackets, hose, etc.
(excluding piping)

16' 6"LP Layout No. 6
22'LP Layout No. 3
30'LP Layout No. 1
39'LP Layout No. 15
45'LP Layout No. 17

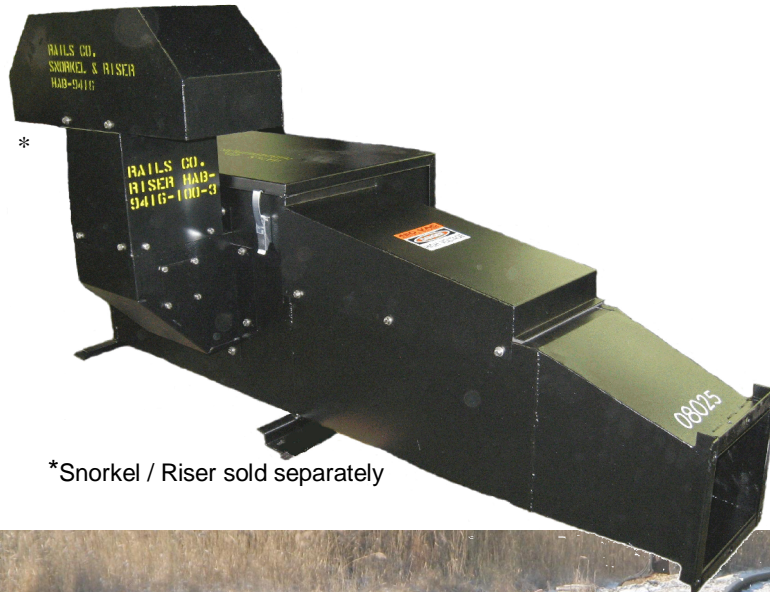
All Electric - Hot Air Blower, Switch Heater

**Models Available in
-48.7 KW (variable) and 20.3 KW-
-240V or 480V / Single Phase or 3 phase, and 575V/3P-**

48.7 KW Hot air blowers are variable and may be locally switched to run at 16.2KW / 32.4KW / 48.7KW for energy savings or more severe weather.

2HP motor, \approx 1500 CFM Air Flow
Steel or Aluminum construction
Can be used where gas service is not available
No local emissions - Internal Control

The heater may be operated manually, remotely and/or automatically with use of a Rails Company Snow Detector.



*Snorkel / Riser sold separately

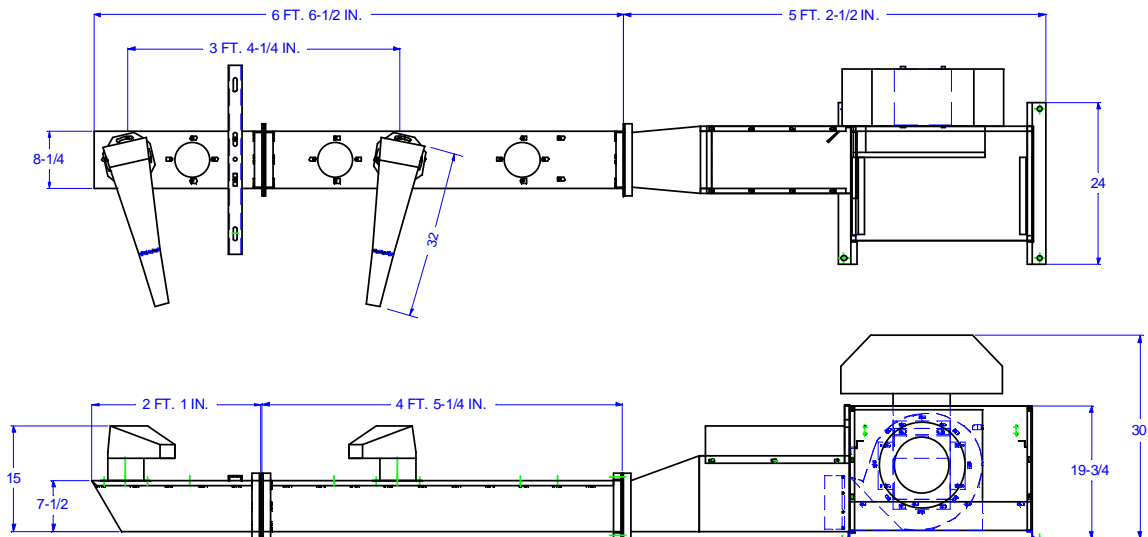


Volt	Phase	Number of Elements	Total Heat	Groups of heaters	KW per Group	Amps Per Group	Motor Amps	Motor Starting	Total Blower Amps
240	1	5	20.3KW	1 grp of 5	20.3	84.5	12	60	96.5
240	3	5	20.3KW	1 grp of 5	20.3	84.5	6.8	50	91.3
480	1	5	20.3KW	1 grp of 5	20.3	41.6	5.5	33	47.1
480	3	5	20.3KW	1 grp of 5	20.3	41.6	3.4	25	45
240	1	12	48.7KW	3 grps of 4	16.2	67.6	12	60	215
240	3	12	48.7KW	3 grps of 4	16.2	67.6	6.8	50	210
480	1	12	48.7KW	3 grps of 4	16.2	33.8	5.5	33	107
480	3	12	48.7KW	3 grps of 4	16.2	33.8	3.4	25	105

Minimum Duct configuration shown below includes heater unit, main duct and 2 nozzles

Heater may be used with any Rails Company main duct that utilizes the flat flange design (8.25"x7.5") and associated air distribution components.

Various nozzle arrangements, duct insulation and heat retainers are available to provide maximum heating efficiency.

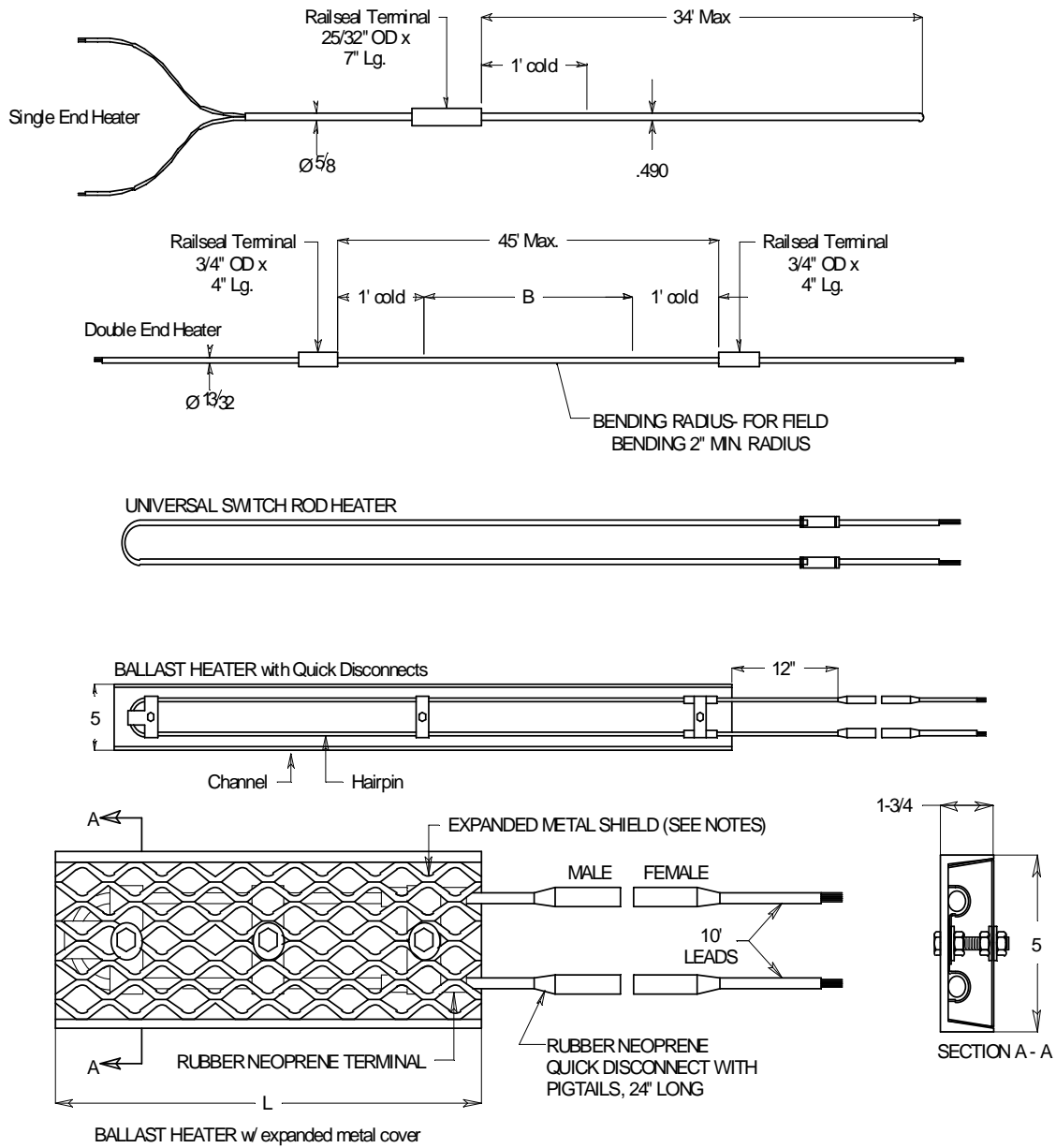




ELECTRIC SWITCH HEATERS AND ACCESSORIES

- **Tubular Electric Switch Heaters** **E2**
- **Tubular Electric Switch Rod Heaters** **E6**
- **Tubular Electric Ballast Heaters** **E7**
- **Insulated Heat Retainers** **E8**

101 NEWARK WAY MAPLEWOOD, NJ 07040-3393
TEL: (800) 21 RAILS (72457) FAX: (973) 763-2585
Or visit our web site at: www.railsco.com





TUBULAR ELECTRIC SWITCH HEATERS

Rails' Tubular Electric Switch Heaters keep switches open in severe winter weather. Quality alloy sheath construction ensures trouble-free operation and long service life.

Standard heaters for switches up to 45' in length are rated up to 500 watts/foot in various sizes and profiles (eg. round, flat, triangular, etc.) Custom voltages, lengths and wattages available.

Non-separable and quick-disconnect terminals available in standard 10' leads or lengths to suit.

Mounting hardware available as bolt-on or snap-on.

INSTALLATION: Heaters can be installed on either the field or gauge side of the rail with the active section extending beyond the switch point. Bolt-on heater mounting hardware typically requires 7/16" holes made in the rails every 18" to 24". Snap-on hardware requires no modifications to the track-work, but is for field side mounting only.

ORDERING INFORMATION: When ordering, specify:

- _____ quantity (quantity discounts available)
- _____ voltage
- _____ length between terminal housings
- _____ active heater length
- _____ watts per foot
- _____ type terminal
- _____ lead length

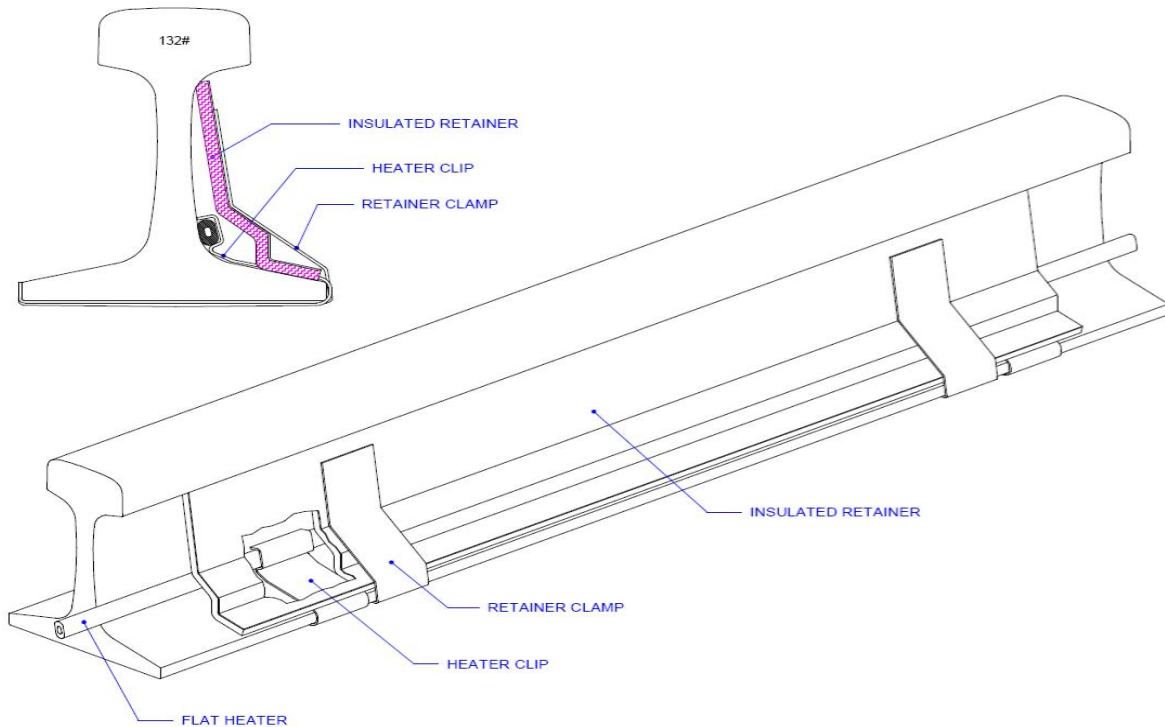
Switch Point Length (feet)	Active Length	Length Between Terminal Housings
15'	14'	16'
16'6"	15'6"	17'6"
20'	19'	21'
22'	21'	23'
24'	23'	25'
26'	25'	27'
27'	26'	28'
30'	29'	31'
33'	32'	34'
39'	38'	40'
45'	44'	46'

SPECIAL LENGTH HEATERS also available. Above sizing table applies to Double End heaters. For Single End heaters, heater length and switch point length are the same.

NOTE: Heaters may be shipped straight or coiled depending on length. They may be formed in the field—contact customer service.

Also available: Train Stop, Switch Rod, Ballast heaters. Custom formed heaters for special applications also available.

Heat Retainer Mounted Over Electric Heater On Field Side



Rails Insulated Heat Retainers inhibit watt losses field side, by insulating the rail web and the heater. The result is more BTU's available gauge side—faster, where they're needed most. Response and recovery time are shortened.

The insulation material is a non-asbestos, non-hygroscopic ceramic fiber or silicone material.

Insulated Heater Retainers can be used even when heaters are mounted gauge side—to insulate the rail.

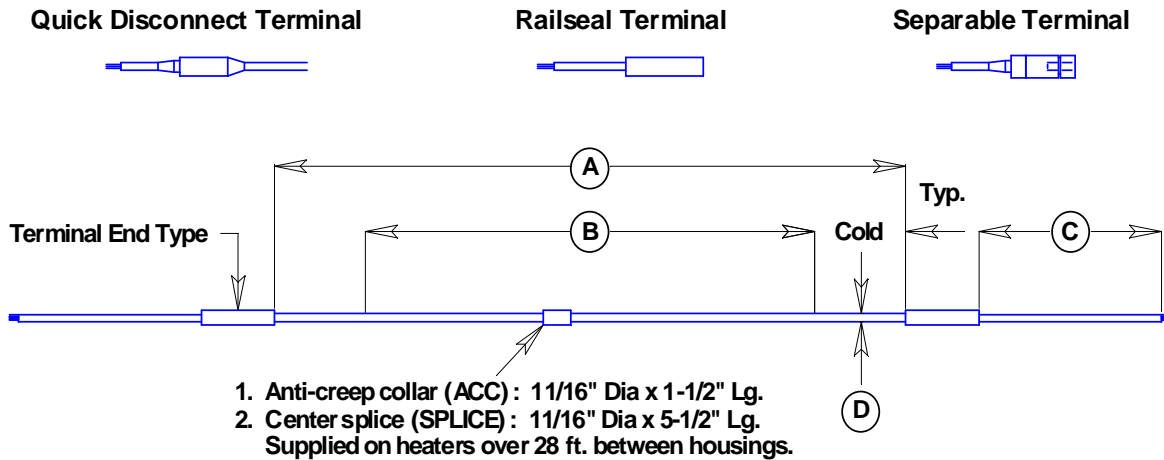
Heat Retainers are available for different heater mountings, various rail bases and different heater lengths. They are easily mounted with retainer clamps which snap on to the base of the rail with simple hand pressure.

When ordering, specify:

- _____ Quantity
- _____ System P/N
- _____ Length Between Terminals
- _____ Rail Size



TUBULAR ELECTRIC SWITCH HEATER

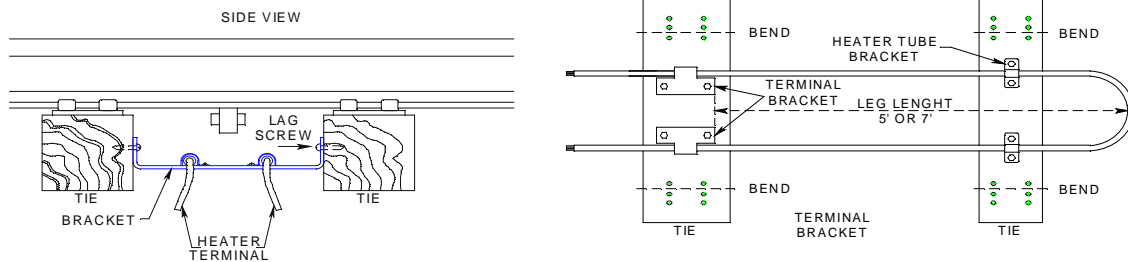


Rails Co. Tubular Electric Switch Heaters provide trouble-free, weatherproof, safe and economical protection from freeze-ups. They are constructed of stainless steel and conform to AAR specifications.

Heaters can be supplied in customer-specified voltages AC or DC with watts from 100-500 per. foot. Three types of terminals are available: RAILSEAL®, Separable and Quick-Disconnect. The RAILSEAL® Terminal provides a permanent seal against moisture. The Separable and Quick-Disconnect allow the user to remove heaters when not in use. Heaters are furnished with a standard 10 ft. #6AWG cable lead (C) on each end, unless otherwise specified. Mounting hardware can be supplied to support the heater at 18-inch intervals.

Installation: Depending on the length of the heater (A), heaters can be installed on either the field or gauge side of the rail with the active length (B) at least 12 inches ahead of the switch point. For gauge-side installation, holes are drilled in the neutral axis of the rail for heater support clips using a clearance drill for a 3/8" bolt. For field-side installation, snap-on clips are used and no drilling is necessary. All hardware is matched to the diameter (D) of the heater.

Tubular Electric Switch Rod Heater



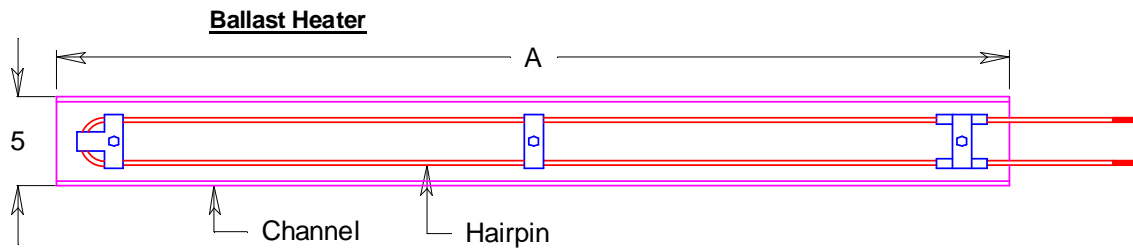
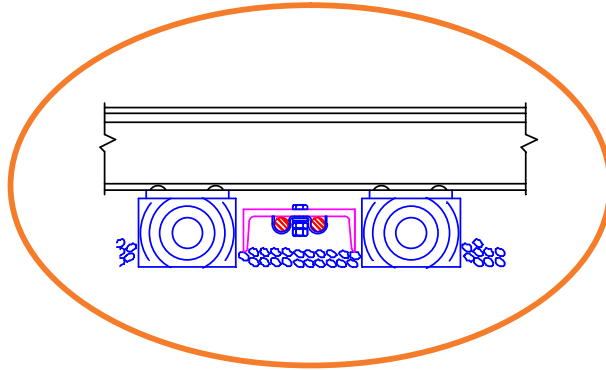
Rails Company **Switch Rod Heaters** protect switch rods from freeze ups all winter long. This gives you the opportunity to concentrate on keeping your rolling stock moving. The **Switch Rod Heater** is installed in the inconvenient crib spaces under the switch rods . Once installed the Rails Company **Switch Rod Heater** will do all the work. For added protection use the **Switch Rod Heater** with any one of our other styles of heaters such as Rails Company **Ballast Heater** or our very popular **Tubular Switch Heater**.

Rails Company **Switch Rod Heaters** are manufactured from corrosion resistant alloys and are moisture proof. The **Switch Rod Heater** meets AAR standards for physical and electrical requirements. The **Switch Rod Heater** can be supplied in customer-specified voltages AC or DC with watts of 100-500 per. foot.

Installation is simple. Bend the bracket to conform to the tie space and lag screw in place. Connect leads to the switch heater supply. Installation is now complete.

Tubular Electric Ballast Heater

This is a illustration on how the Ballast heater would be installed. The Ballast heater would not fill up the whole crib space



Rails Co. Tubular Electric Ballast Heaters provide trouble-free weatherproof, safe, and economical protection from freeze-ups. They are constructed of stainless steel and conform to AAR specifications.

Heaters can be supplied in customer-specified voltages AC or DC and wattage of 100-500 watts per foot. Two types of terminals are commonly used: RAIL-SEAL®, and Quick-Disconnect. The RAILSEAL® Terminal provides a permanent seal against moisture. The Quick-Disconnect allows the user to remove heaters when not in use. Heaters are furnished with a standard 10 ft. #6AWG cable lead on each end, unless otherwise specified. Mounting hardware can be supplied to support the heater at 18-inch intervals. (A) Equals length of the Ballast Heater.

Insulated Heat Retainers (Tamper Proof & Convection)



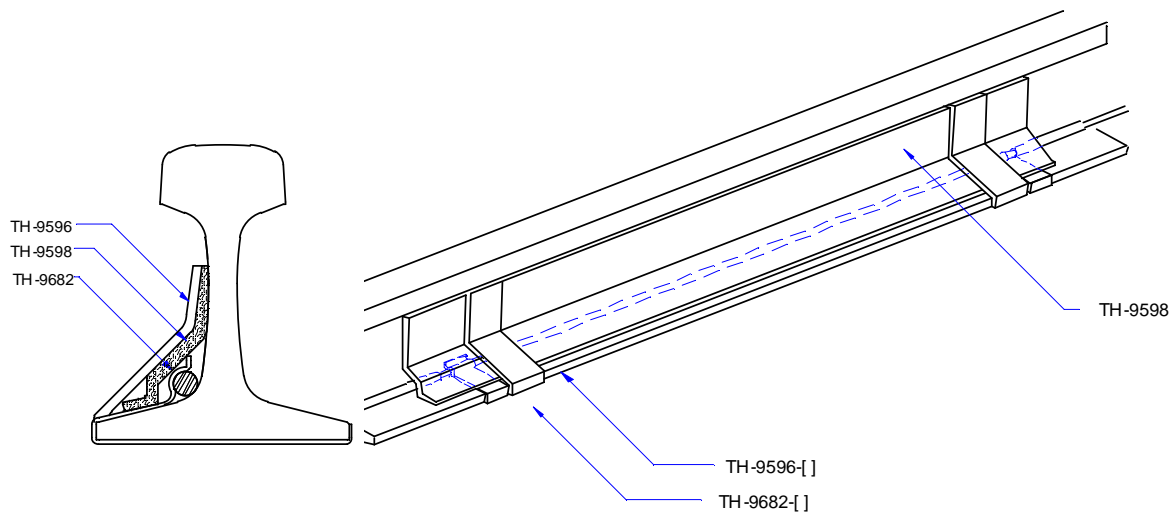
This design makes use of the insulated retainers which can be cut to permit mounting within the confines of the braces. The insulation lining on the heater side of the retaining shield inhibits heat loss to the environment and creates an effective oven; enclosing the tubular heater mounted in contact with the web of the rail on the outside.

This insulating concept enhances heat transfer to the rail, and minimizes the power requirement and is unique to Rails Co. heat retainer designs.

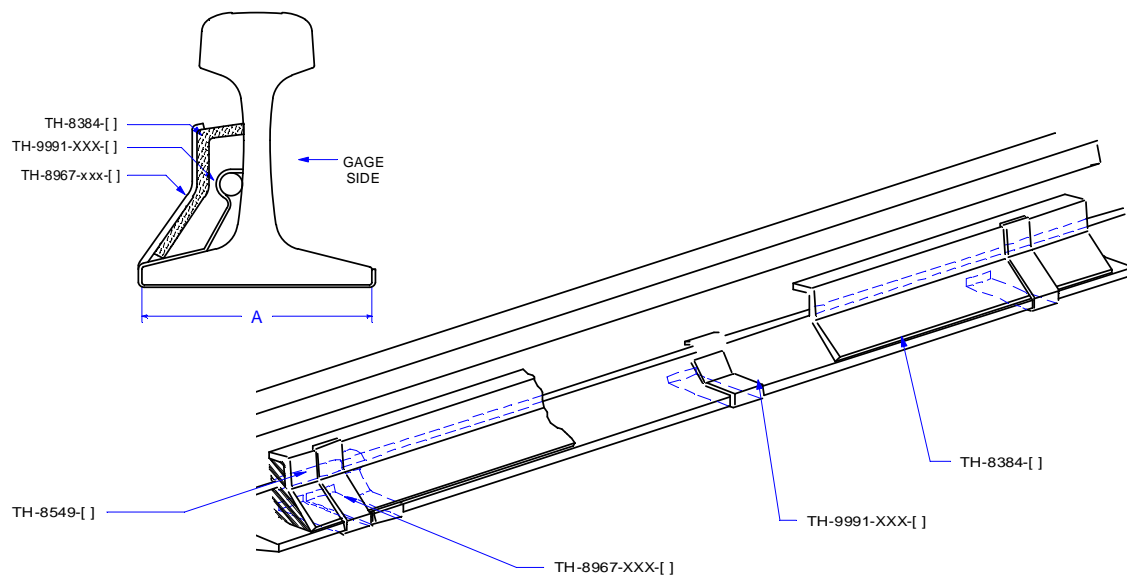
The insulation material is a ceramic fiber paper of 1/4 inch thickness, capable of withstanding temperatures of 2,300 degrees . It is non-hygroscopic in comparison with other less expensive materials like rock, wool or fiberglass. By providing an air space around the heating element, temperature rise and response times are considerably increased.

Once the heater is installed in the area at the base of the web, the heat retaining shield will be secure at the base of the rail by driving the clamp on to the rail with a light hammer blow.

Tamper Proof Insulated Heat Retainer With Base Mounted Heater Clip (TH-9598 Series)



Convection Insulated Heat Retainer With Base Mounted Heater Clip (TH-8384 Series)





ELECTRIC SWITCH HEATER CONTROLS

- **Electric Switch Heater Controls—AC & DC** **F2**
- **Electric Switch Heater Controls With
Heater Layout** **F4**

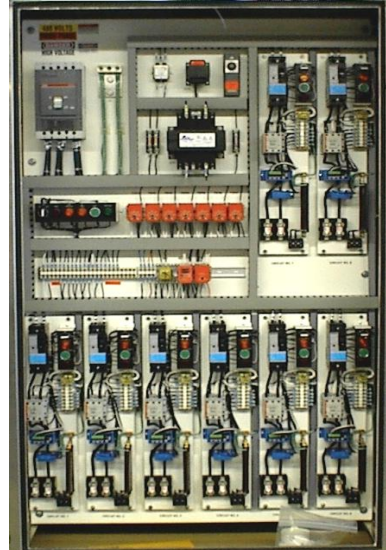
101 NEWARK WAY MAPLEWOOD, NJ 07040-3393
TEL: (800) 21 RAILS (72457) FAX: (973) 763-2585
Or visit our web site at: www.railsco.com

Electric Switch Heater Controls

DC Control



AC Control



- Improve the operation of electric switch heaters
- Provides a complete switch heating system
- Automatic or dispatcher controlled
- For new or retrofit installations

Rails Company Switch Heater Controls ensure that electric switch heaters operate efficiently and dependably to keep your switches open during snow, sleet or icy weather.

Each control panel is custom designed, incorporating the latest technology and finest components. The controls may be dispatcher operated or equipped for automatic operation with Rails Snow Detectors. The system may also incorporate rail temperature limit controls to reduce power consumption.

Each panel is a complete, pre-wired and tested package designed for easy installation and servicing. Heavy gauge, weather-tight steel or fiberglass enclosures provide protection from the most rugged weather conditions.

Controls are available for any make of tubular or flat electric switch heater, AC or DC, in all voltages; for new installations or as a retrofit to an existing location. Panels can be remotely located to eliminate trackside vibration.

Electric Switch Heater Controls

Rails Company Electric Heater Control Panels can be custom manufactured per order. All control panels are equipped with UL approved electrical components and are rated to meet or exceed the load requirements of the switch heaters to be controlled. Quotations are prepared based on individual requirements and include the following standard features unless otherwise specified:

NEMA Type 4 Enclosure

Individual Switch Heater Circuit Breaker(s)

Hasp for Padlock on Panel

Timeout Relay – 1 hour duration

Timeout Relay – 5 hour duration

Series/Parallel Switching (connects heaters in a series configuration after a set time period has passed)

Snow Detector

Rail Temperature Limit Control (turns heaters off when a certain rail temperature has been reached)

Ambient Temperature Control (turns heaters off above a set ambient temperature)

For prompt quotations, please specify the desired options and include the following:

Number of switches to be controlled from each control panel

Number of rail heaters and ballast heaters per switch

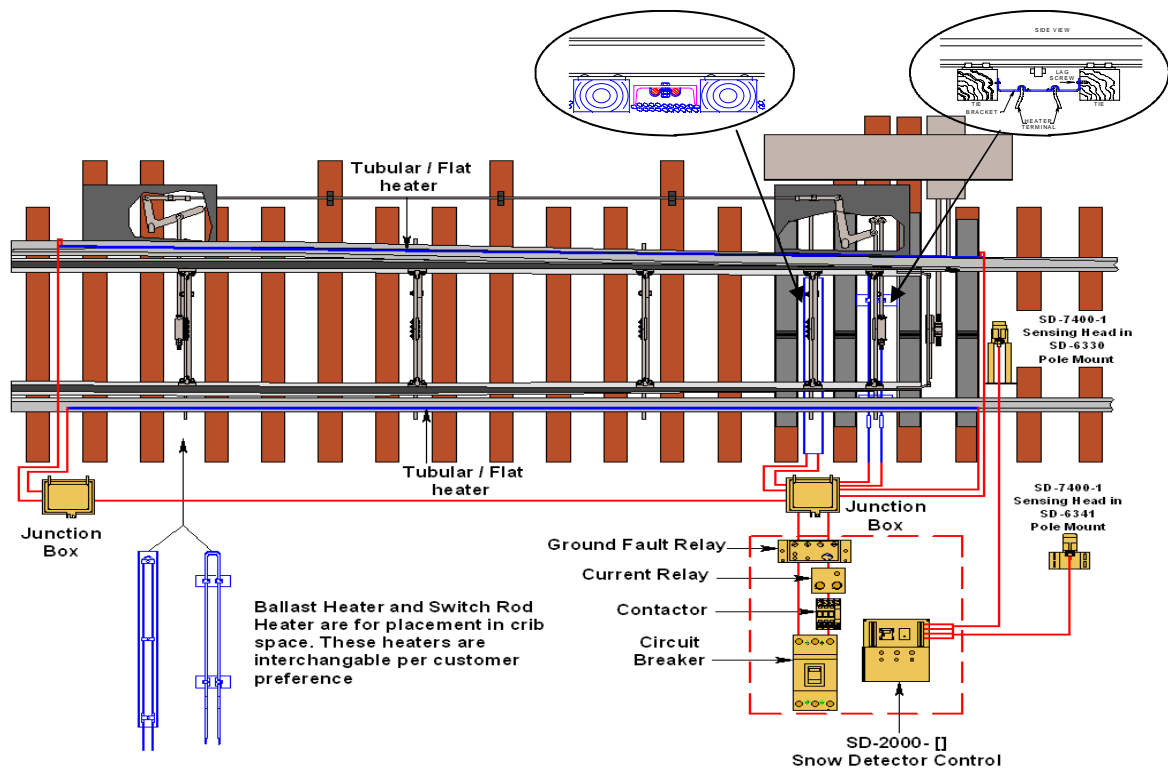
Current requirements for each switch

Voltage and phase for the panel

Any special features

Rails Company is a UL approved panel shop.

Electric Switch Heater Controls with Heater Layout



Features

- Circuit breaker or fuse protection
- Current "on" indication
- Built-in ground fault protection
- Remote or local operation
- High ambient limit temperature control
- Indication relay
- NEMA 4 enclosure with 3-point latch and padlock able handle or railway signal case

Options Available

- Rails Snow Detector for automatic operation
- Rail temperature limit control to reduce power consumption
- Under-over current detection
- Cascade start (multi-branch controls)
- Alarm or indication lamp (top of control)
- Control heater
- Ground fault set/test circuit
- Convenience outlet (GFI)
- Service lamp

Car Retarders • Switch Heaters • Snow Detectors • Electric Switch Heater Control Systems
Automatic Switch Point Locks • Switch Point Clamps • Switch Point Protectors • Wheel Stops
Compression Rail Anchors • Bridge Tie Anchors • C&D Batteries



SNOW DETECTION PRODUCTS

- **Snow Detection Systems** **G2**
- **Compact Snow Detector** **G4**

101 NEWARK WAY MAPLEWOOD, NJ 07040-3393
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Or visit our web site at: www.railsco.com

RAILS COMPANY SNOW DETECTION SYSTEMS

Activate snow melting equipment automatically

DETECTS SNOW



SD-7400-1
Sensing Head,
with 14' of Cable



SD-7900 Surface
Sensor



SD-10727-5A
Snow Detector
Control

- Provides automatic, efficient, economical operation of all types of snow melting equipment
- Activates railway snow melters to keep switches open in severe storm conditions
- Three types: pole, ground mounted, surface mounted
- Provides local control at remote points; eliminates need for supervision by dispatchers and CTC modifications
- Compact, easily installed, maintenance-free
- Foolproof. Operates only in snow, sleet, hail or ice...not during normal rainfall
- Controls all types of heating equipment

The instant a snow or ice storm starts, the Rails Company Snow Detector automatically activates switch-heating equipment and may transmit a signal to maintenance men. As soon as the storm is over, the Snow Detector turns heaters off. The device greatly reduces hazards caused by snow, freezing rain, hail or ice by prompt control of heaters and removal equipment.

The Snow Detector was invented and developed for railroad installations by the Rails Company. Throughout the United States and Canada, the unit has achieved a noteworthy record in keeping railroad switches open under extremely severe storm conditions. We constantly improve and upgrade the design and components to provide maximum performance.



SD-7200-2
Sensing Head
& Pole Mount



These sensing heads feature 4 independent sensing surfaces, one facing in each direction, to provide multiple sensing angles which can sense snow falling at virtually any angle.



SD-7200-1
Sensing Head,
Track Mount



SD-6330 Pole Mount,
Aluminum



SD-6341 Track
Mount, Aluminum



SD-1016
Temperature
Control



SD-7400-1
Sensing Head,
with 14' of cable

Standard System

Control Box: 12" x 14" x 6-1/2"

Temperature control: 4-1/2" x 2" x 2"

Standard or aluminum sensing head w/ 14' of cable.

Group or pole mount

Electrical requirements: 115 volts, 60 cycles, 21 watts

Each additional sensing head, 16 watts

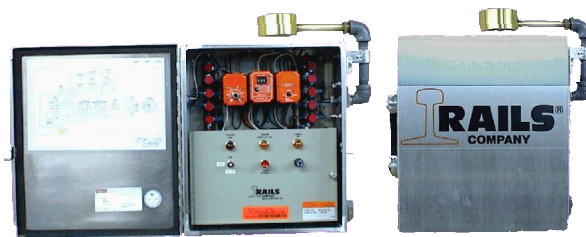
System Options

12 volts DC model available

As many as three sensing heads may be used with each Snow Detector

Various types of sensing heads may be used together

Various cable lengths for sensing heads are available. Specify lengths required.



SD-10727-5A
Snow Detector Control
with Surface Sensor (SD-7900)



SD-7200-3, 4 Surface Sensing
Head, Optional Upgrade For
Surface Sensor (SD-7900)

Rails Co "Compact" Snow Detector

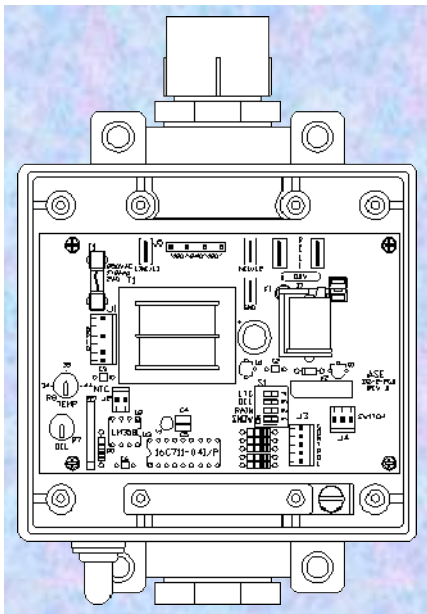
- Automatic Activation means Lower Deicing Costs
- Reliable Rain and Snow Detection
- Full 30A @ 240VAC Control
- Field Strap for 100-120/200-240 VAC Operation
- Replaceable Precipitation Sensor
- Easy Installation, Full Access to Electronics
- Adjustable Temperature Trigger Point
- Adjustable Delay Off Cycle
- Selectable Low Temperature Cutoff
- Smart "Manual On" Operates for One Delay Off Cycle



The unit is housed in a two gang PVC enclosure. The overall dimensions of the **control/sensor unit** are 4¾"(120) x 7"(178) x 2¾"(70). The unit weighs 2 pounds. The user may access all electronics by removing the four front cover screws.

Wiring is performed by terminating your existing wiring to the pre-installed pigtails (see below.) The **enclosure** is mounted by either attaching the mounting hub to a rigid ½" or ¾" conduit or by installing screws through the four mounting tabs provided.

The **control** can be powered from either a 100-120 VAC or 200-240 VAC 50/60Hz source. Peak power consumption is 15 watts. Voltage selection is performed by installing provided jumpers onto the printed circuit board. The unit provides a single 240VAC @ 30A normally open load contact set. This contact set is paralleled with a low power contact set to provide remote activation monitoring. Operational temperature range is -40°C to +85°C.



An environmentally sealed control switch is provided. The "Manual On" function activates the controlled equipment for testing and special operational conditions. The "Automatic" position allows the **controller** to handle all detections and control. The "Standby/Reset" position disables triggering and can also be used to clear the delay off timer (see below) from true or test activation. Remote control and monitor up to 1000 feet away is also available when the optional C/M cable listed is installed.

A new feature has been added to the SD-10728-1A. If the switch is placed in "Manual On" for less than 2 seconds, then switched back to "Automatic" the controller will execute one delay off cycle. The delay off cycle is determined by the DEL switch setting and the DEL adjustment, i.e., 2 minutes in "sensor" mode, 30-90 minutes in "controller" mode. This can be used to clear surfaces with a frost or hail buildup without the danger of leaving the system in a continuous "Manual On" condition. "Standby/Reset" can still be used to clear this delay off cycle.

Rails Co "Compact" Snow Detector

The table below outlines the operating modes for the **unit**. Trigger Temperature (**TT**) is adjustable from 34°F-44°F using an on-board control. When ambient air temperature (**AT**) is below this trigger point precipitation is assumed to be snow or freezing rain. When above the trigger point, precipitation is assumed to be rain.

"Delay Off" refers to the internal drying cycle timer. The timer is used to allow the **control** to dry the heated surface through evaporation once precipitation has stopped. The drying cycle reduces the chance that moisture left behind by the melting process will refreeze into ice. This timer is re-started by each precipitation detection. Therefore, the **snow detector** will continue to operate as long as precipitation and trigger temperature is detected, then for the "Delay Off" time once rain or snow stops. It is assumed that, when operating as a sensor, the unit is supplying an activation signal to an external control system. All "sensor" modes provide a minimum 2 minute closure to reducing cycling of the external controller. When in a "controller" mode the Delay Off time can be adjusted from 30-90 minutes. Proper adjustment assures drying without excessive runtime.

The Low Temperature Cutoff (**LTC**) option is typically used on deicing or snow melting systems with limited output capacity. If selected, the sensor will not trigger if precipitation is detected below 15°F. However, if the deicing system has been activated, precipitation continues, and the ambient temperature drops below 15°F, LTC will be ignored. This assures that water left behind on the surface during the heating cycle will not immediately refreeze into ice as a result of deactivating the deicing system.

Function	Ambient Temp (AT)	Delay Off	Suggested Application
Snow sensor w/o LTC	AT < TT	2 Min	Snow and ice alert, sensor for external deice/snow melt controller (unlimited heat)
Snow sensor w/ LTC	TT>AT>15°F	2 Min	Sensor for external deice/snow melt controller (limited heat)
Snow controller w/o LTC	AT < TT	30-90 Min	Stand-alone controller for satellite antenna/tower deicing and electric/hydraulic snow melting
Snow controller w/ LTC	TT>AT>15°F	30-90 Min	Stand-alone controller for satellite antenna/tower deicing and electric/hydraulic snow melting
Precipitation sensor	N/A	2 Min	Snow, ice and rain alert, Ku band rain and snow diversion
Precipitation controller	N/A	30-90 Min	Snow, ice and rain alert, Ku band rain and snow diversion
Rain sensor	AT>TT	2 Min	Rain alert, Ku band rain and snow diversion
Rain controller	AT>TT	30-90 Min	Ku band rain diversion

P/N: SD-10728-1A Specifications	
Dimensions	4 3/4" (120) x 7" (178) x 2 3/4" (70)
Weight	2 Lbs. (0.9 Kg)
Operating Temperature	-40°F to +185°F (-40°C to +85°C)
Enclosure Rating	NEMA 3R
Supply Power	100-120VAC/200-240VAC Field Selectable 15W maximum
Trigger Temperature	34°F-44°F (1.1°C-6.6°C) Field Selectable
Delay Off (Sensor)	2 Minutes
Delay Off (Controller)	30-90 Minutes Field Selectable
Load Contact Capacity	30A @ 240 VAC/100,000 operations minimum at full load
Monitor Contact Capacity	24 VDC/VAC 400mA 10W total



BATTERIES, CHANNELS, UTILITY BOXES & COMPRESSORS

- **Batteries** **H2**
- **Channel Systems & Underground Utility Boxes** **H4**
- **Junction Boxes** **H5**
- **Air Compressors** **H6**

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VALVE REGULATED LEAD-CALCIUM BATTERY FOR STANDBY APPLICATIONS

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C&D Technologies' Standby Power Division valve regulated lead-acid (VRLA) batteries are engineered to provide performance reliability and consistency over the life of the product. Designed using C&D's patented processes, these products offer long battery

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life with minimal maintenance. The versatile Liberty® Series 1000 10-year VRLA product fits virtually anywhere and provides superior performance in the most demanding applications.



SPECIFICATIONS

Electrolyte at 77F (25C)	1.300 specific gravity nominal sulfuric acid
System float voltages	2.25–2.27 volts per cell
Life expectancy	10 years, full float service at 77F (25C)
Container and cover	High-impact, flame-retardant thermoplastic Flammability ratings: UL 94-V0; ASTM D-635, self-extinguishing Oxygen index > 32
Safety vent system	Low-pressure release valve with flash arrester

Note: AC ripple current from the charger shall not exceed 5 percent of the 8-hour (ampere-hour) rating of the battery.

FEATURES AND BENEFITS

- Advanced, computer-controlled thermal cover-to-jar weld for greater reliability and consistency
- Automated, state-of-the-art, cast-on strap process ensures consistent, high-quality, low electrical-resistance welds
- Through-the-partition intercell connection shortens current paths and increases performance
- Copper-to-copper connections minimize resistance drop, especially at high rates, and shorten maintenance time by reducing the need for retorquing connections
- Patented C&D post seal design with secondary epoxy seal to increase integrity
 - Leak-free operation
 - Superior reliability
- Two-fold vent system, comprised of a low-pressure safety valve with flash arrester, minimizes bulging and prevents flashback explosion from external ignition source
- Thick radial grid design for both positive and negative plates improves current carrying capacity and performance resulting in long float life
- Fully automated filling operation results in uniform acid volume distribution and consistent float voltage
- Immobilized electrolyte technology using an absorbent glass mat design (AGM) offers safe handling and storage
- Non-spillable designation on most models for lower shipping cost
- High-impact resistant PVC container and cover provide excellent water vapor retention, preventing dry out and oxygen infiltration

MEASURABLE QUALITY AND OUTSTANDING PERFORMANCE

- 100 percent of cells tested for voltage and capacity
- Tested in accordance with Bellcore TR-NWT-000766 specifications
- 100 percent of cells tested to 95 percent capacity at the 8-hour rate to 1.75 Vpc

SPECIFICATIONS

	LS 12-25	LS 12-55	LS 12-80	LS 12-100	LS 6-200	LS 4-300	LS 2-600*
Nominal voltage	12 volts	12 volts	12 volts	12 volts	6 volts	4 volts	2 volts
Number of cells	6 / unit	6 / unit	6 / unit	6 / unit	3 / unit	2 / unit	1 / unit
Rated 8-hr capacity (ampere-hours to 1.75 Vpc)	25 Ah to 10.5 volts	52 Ah to 10.5 volts	80 Ah to 10.5 volts	100 Ah to 10.5 volts	200 Ah to 5.25 volts	300 Ah to 3.5 volts	600 Ah to 1.75 volts
Rated 15-min capacity (kilowatts to 1.67 Vpc) per cell	0.092	0.172	0.275	0.344	0.688	1.032	2.063
Internal resistance per cell	0.001730 Ohms	0.001570 Ohms	0.000940 Ohms	0.000786 Ohms	0.000393 Ohms	0.000262 Ohms	0.000131 Ohms
Short circuit current	1155 A	1274 A	2128 A	2545 A	5089 A	7634 A	15267 A
Unit height	7.11 in (181 mm)	9.20 in (251 mm)	9.90 in (251 mm)	9.90 in (251 mm)	9.90 in (251 mm)	9.90 in (251 mm)	9.90 in (251 mm)
Unit length (includes handles)	7.64 in (194 mm)	10.20 in (259 mm)	13.94 in (354 mm)	16.58 in (421 mm)	16.58 in (421 mm)	16.58 in (421 mm)	16.58 in (421 mm)
Unit width	5.20 in (132 mm)	6.80 in (173 mm)	6.84 in (174 mm)	6.84 in (174 mm)	6.84 in (174 mm)	6.84 in (174 mm)	6.84 in (174 mm)
Weight	23 lbs (10 kg)	56 lbs (25 kg)	79 lbs (36 kg)	95 lbs (43 kg)	95 lbs (43 kg)	95 lbs (43 kg)	95 lbs (43 kg)
Plate thickness							
positive	0.124 in (3.15 mm)				0.140 in (3.56 mm)		
negative	0.065 in (1.65 mm)				0.085 in (2.16 mm)		
Terminal characteristics	0.55 in diameter, threaded-brass insert, 0.50 in deep. Fasten with 10-32 stainless steel hex bolt/washer.		0.625 in diameter, threaded copper insert, 0.75 in deep. Fasten with 1/4-20 stainless steel hex bolt/washer.				

* 2 cells connected in parallel for 2-volt units

Channel Systems & Underground Utility Boxes

Channel Systems



Utilized by Railroad/Transit companies to contain power, control, communication, signal, and fibre optic cables at railroad Right-of-Ways, yards, stations, interlockings. Below is a brief list of features:

- Several widths & heights to choose from
- Optional dividers
- Made of a High Density Polymer Concrete material
- H-20 load rating at any point
- Easy access
- Covers weigh 1/4 the weight of concrete
- Dielectric material eliminates grounding
- Exceptional resistance to Freeze/Thaw

Underground Utility Boxes

Underground utility boxes can be used as splice boxes, equipment enclosures, meter boxes, pull-boxes, and valve boxes or whenever underground access is required. Below is a brief list of features:

- Several sizes, styles and colors to choose from
- Uses 20,000 P.S.I. polymer concrete
- Lightweight
- Designed for 5,000, 10,000 and 20,000 pound applications
- Unaffected by freeze/thaw
- Exceptional resistance to sunlight and chemicals
- Meets W.U.C. 3.6 & SCTE structural requirements
- Non-conductive, do not require electrical grounding



Contact a Rails Company Representative for full information.

JUNCTION BOXES



Fiberglass junction box mounted on pedestal for trackside application



Fiberglass junction box mounted on bracket for center track application



Cast iron junction box mounted on pedestal for trackside application

Rails Co. fiberglass and cast iron junction boxes are enclosures used to connect and extend circuits for electric switch heater layouts and other applications. They are used mostly for connecting wires in order to extend the circuit to a further location. Junction boxes are used for low voltage and high voltage applications.

Junction boxes are available with or without pre-drilled holes and cord grips for easy installation. Rails Co. Junction boxes also provide protection from the elements, chemical degradation, shock and vibration. The fiberglass series of junction boxes are available in a variety of sizes.

Advantages of Junction Box

- Simplifies the installation of switches, sockets and other utilities
- Gives enough space to accommodate wires while giving a clean external appearance
- Enables future expansion of the circuit easily
- Provides protection for electrical and communication wire connections

Applications of Junction Box

- As a protective casing for wire connections, switches and sockets; trackside or in buildings
- To protect equipment such as relays and switches
- To protect outdoor equipment from damages due to natural forces
- To enable submerging of equipment by providing a watertight enclosure
- To serve as a protective casing in hazardous environments

Portable Air Compressors



R70



RX70

The Rails R70/RX70 Portable Air Compressor is a self-contained, gas engine driven rotary screw air compressor capable of producing 70 cfm at 100 psi* continuously (85 cfm at 90 psi) with plenty of reserve—enough for a wide range of maintenance jobs. It can operate at ambient temperatures from –20°F to 100°F and can be used in dusty or sandy areas. Every R70/RX70 compressor is operated and tested at the factory before shipment.

-Lightweight, compact, versatile

The R70/RX70 is ideal for section gangs. It is small enough to be moved easily from job-site to job-site but has enough capacity for tamping, driving spikes, running impact wrenches, etc.— jobs that otherwise would require time-consuming hand operations or tie up a large compressor.

-Powerful, reliable engine

The power source is a reliable, fuel-efficient, overhead valve, V-twin cylinder, air cooled gasoline engine. The R70 features a 25HP Kohler Engine and the RX70 a 20HP Honda Engine.

-Rotary screw compression

The R70/RX70 features positive displacement, oil-flooded, single-stage rotary screw ends. Rotary screw compression provides constant air flow and pressure continuously, regardless of the amount of time it takes to get a job done. There is no need for air storage tanks or waiting for the system to “catch up”. The air ends are warranted for 2 years against defects in materials and workmanship and loss of capacity due to wear.

-Easily transportable

The R70/RX70 weighs under 500 lb. and can be transported on any class of truck or towed on a trailer mount. The compressor’s low profile assures clear visibility for safer, easier transporting.

Portable Air Compressors

SPECIFICATIONS

Dimensions

R70



RX70



Size:	30" wide x 40.5" long x 33" high	31" wide x 43" long x 31" high
Weight (dry)	Skid Mounted: 490 lb. (222 kg)	Wheel Mounted: 410 lb. (186 kg)

Engine

Type	Kohler 4-cycle, V-twin cylinder, overhead valve, air cooled, gasoline	Honda 4-cycle, V-twin cylinder, overhead valve, air cooled, gasoline
Model	CH25	GX20K1
Ignition	Electronic spark	Electric & Recoil
Power (@3600 RPM)-hp	25 hp	20 hp
Displacement-cu. In.	44 cu in	37.5 cu in
Bore-in. (mm), Stroke-in (mm)	3.27, 2.64	3.03, 2.60
Oil capacity (w/ filter)-US qt.	2.1	1.5
Battery Rating Volts	12v	12v
CCA at 0 Degree F	425 cca	275 cca
Fuel Tank Capacity	7.2 gal.	5.2 gal

Compressor

Type	Oil Flooded Rotary Screw	Oil Flooded Rotary Screw
Number of stages	One	One
Rated Delivery	70 cfm	70 cfm
Rated Operating Pressure	100 psig*	100 psig*
Operating Pressure Range	80 to 115 psig	80 to 115 psig
Ambient Operating Temp. Range	-20 deg. F to +100 deg. F	-20 deg. F to +105 deg. F
Oil Sump Capacity	1.6 gallons	1 gallon
Total System Volume	2.2 gallons	2.2 gallons
Air Service Connections	One 3/4" NPT	One 3/4" NPT
Type Cooling System	Oil to Air	Oil to Air
Type Air Intake System	Single Stage Dry	Single Stage Dry
Type of Control	0 to 100% Demand	0 to 100% Demand

*150 psig option available

Specifications Subject to Change Without Notice