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# CATALOGUE AND PRICE LIST

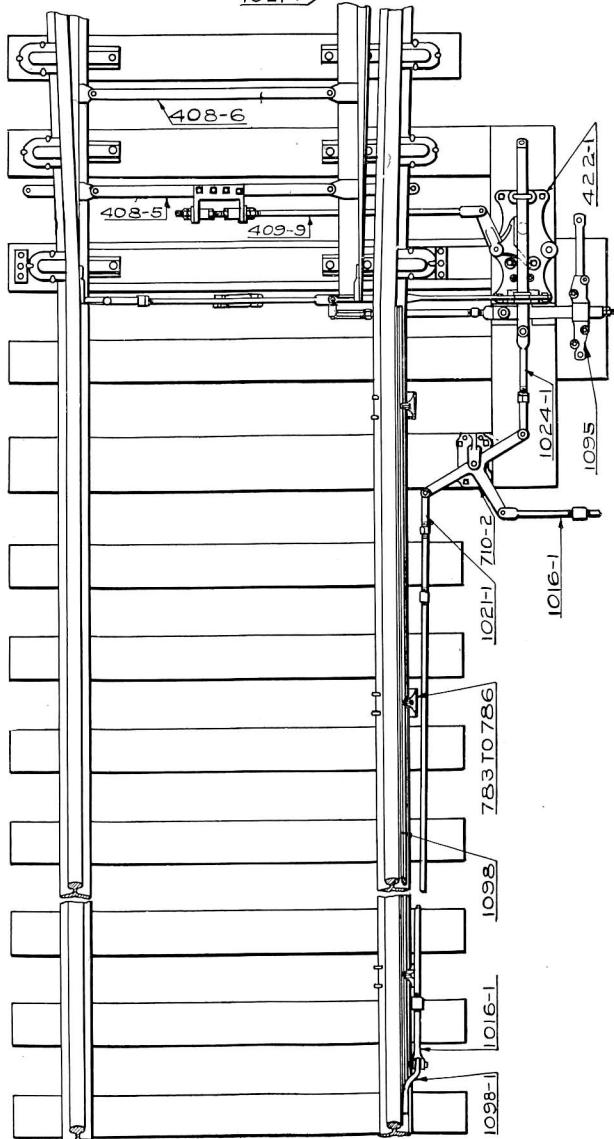
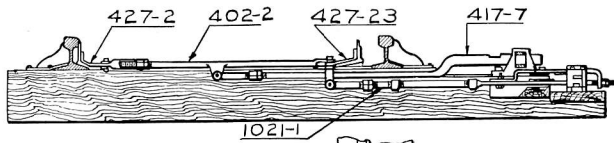
## SECTION T

### SWITCH OPERATING AND LOCKING DEVICES

Switch Layouts  
Rail Clips  
Detector Bars  
Switch and Lock Movements  
Locks—Plunger and Bolt  
Front Rods—Plain and Insulated  
Lock Rods—Plain and Insulated  
Tie Rods—Plain and Insulated  
Throw Rods—Plain and Insulated



## SWITCH AND LOCK MOVEMENT WITH R. S. A. BOLT LOCK

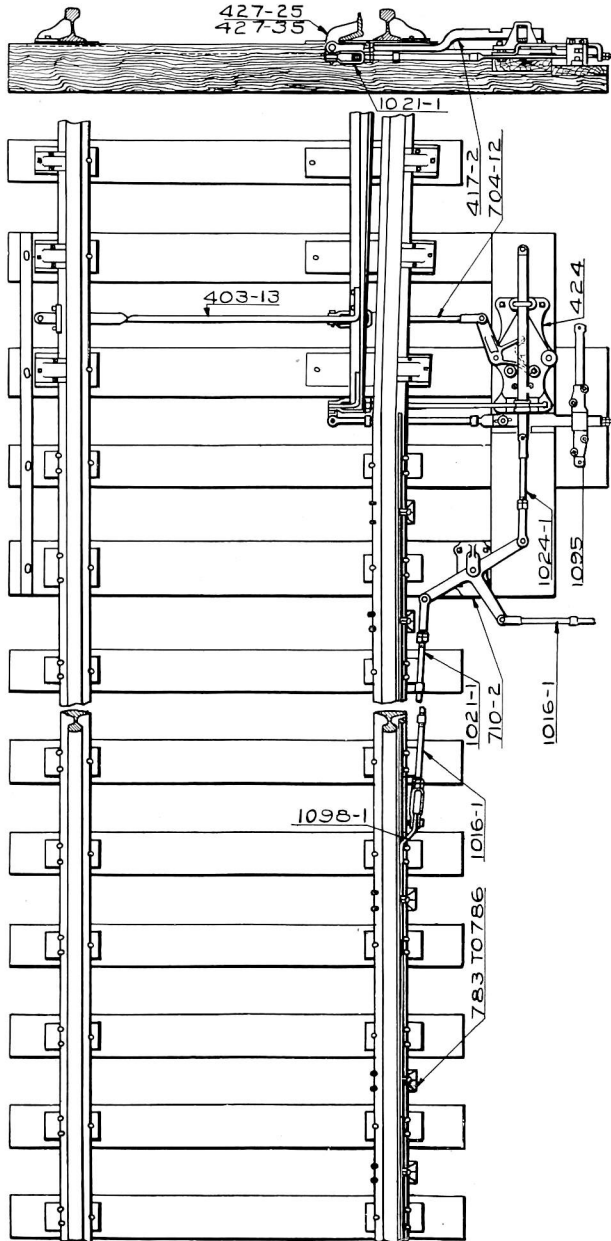


2401-1

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DERAIL WITH SWITCH AND LOCK MOVEMENT,  
ONE DETECTOR BAR AHEAD OF POINTS,  
AND ONE UNIT R. S. A. BOLT LOCK

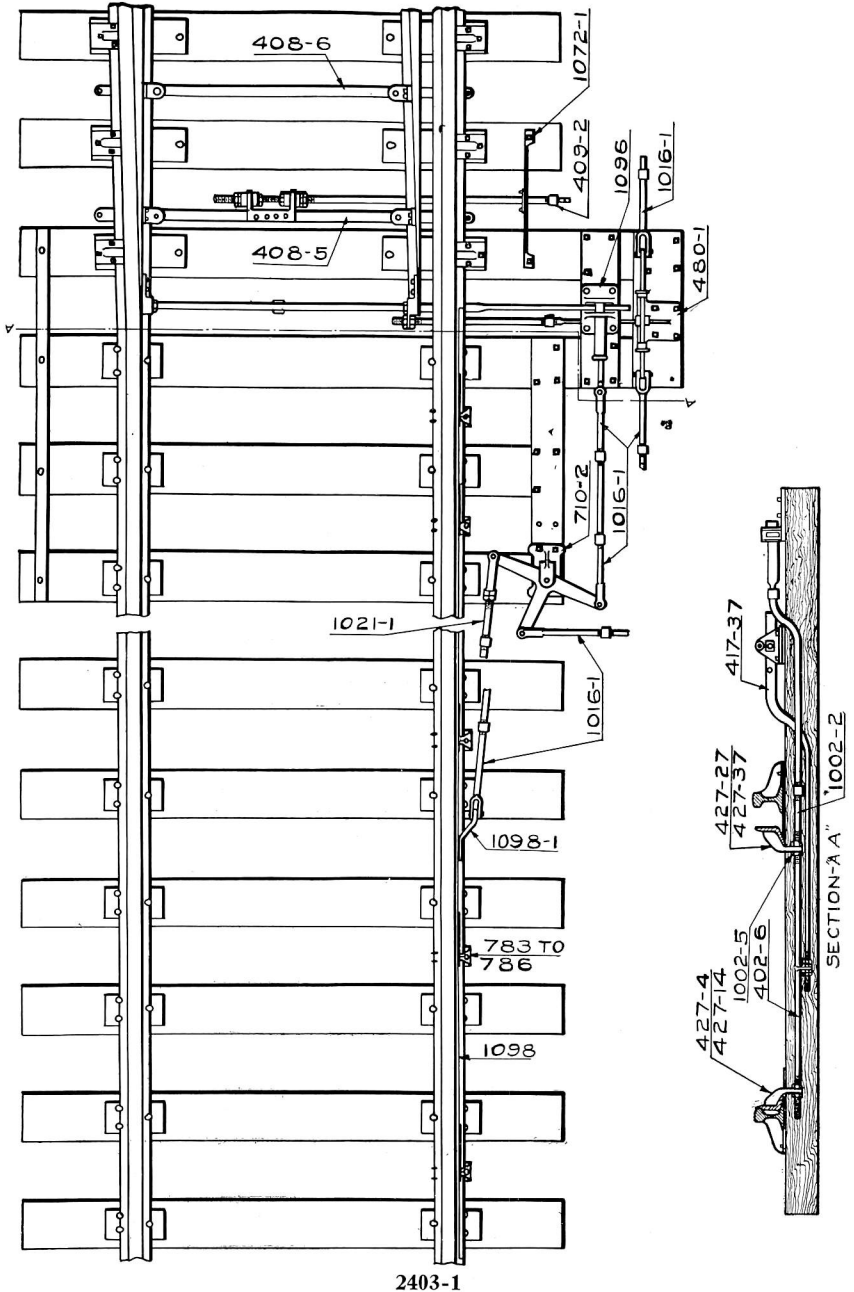


2402-1



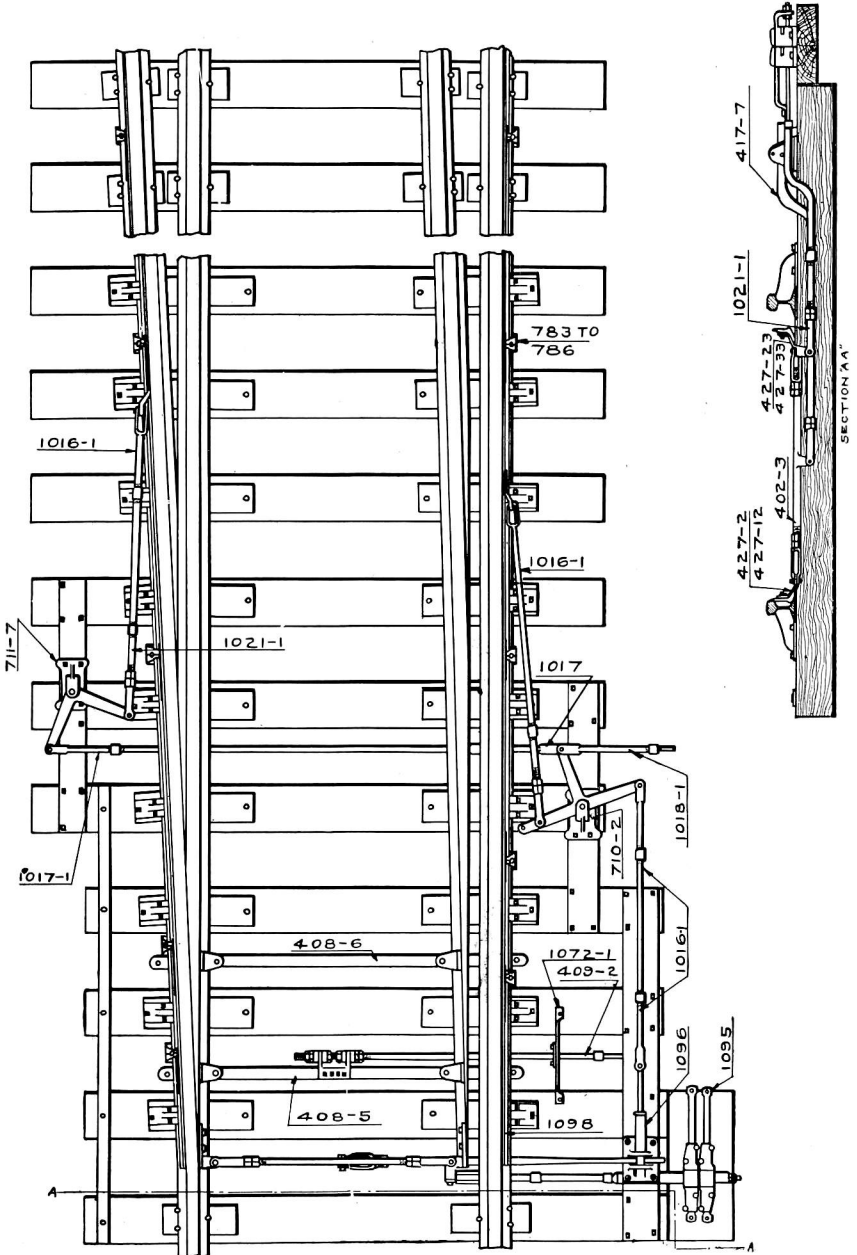


## SINGLE SLIP SWITCH WITH ONE FACING POINT LOCK, ONE DETECTOR BAR AND ONE BOLT LOCK





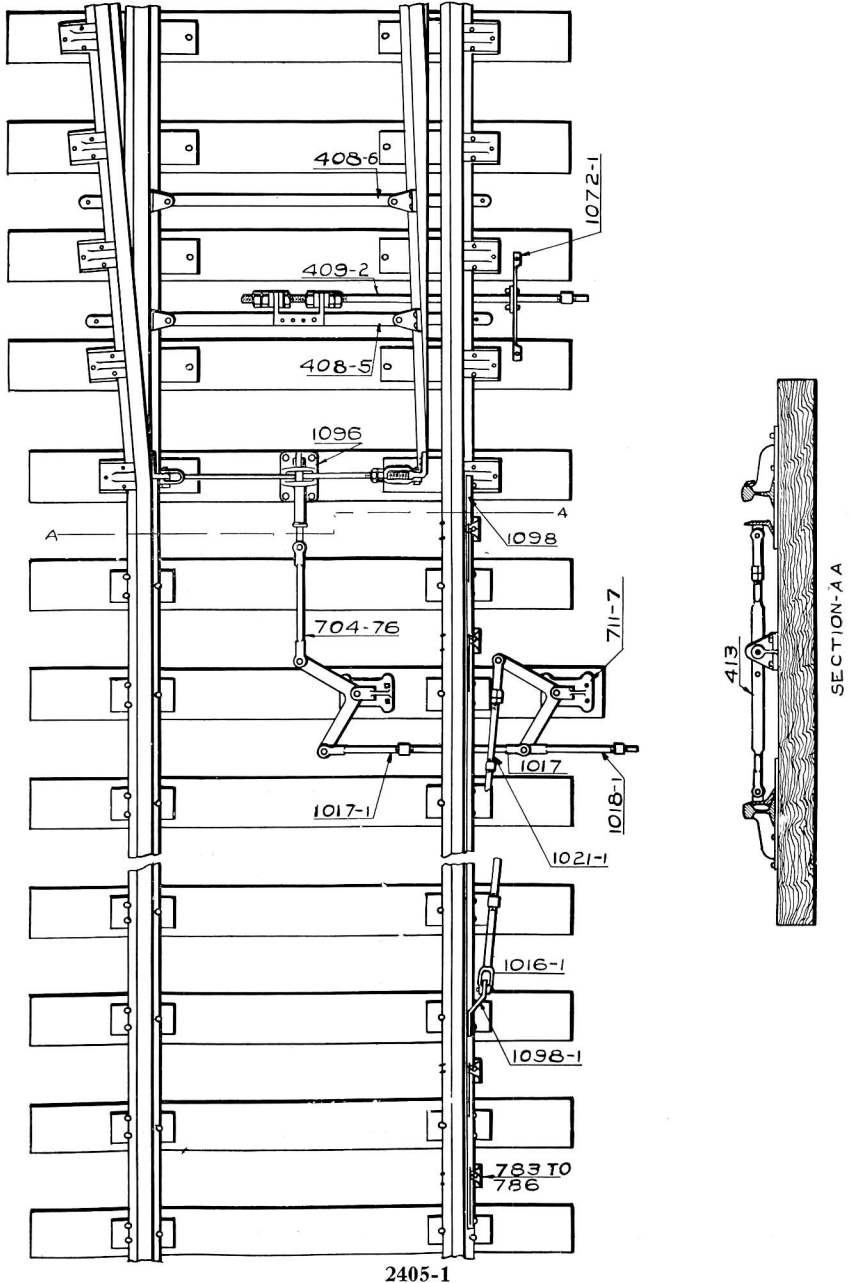
# SINGLE SLIP SWITCH WITH ONE FACING POINT LOCK, TWO DETECTOR BARS BEHIND SWITCH POINTS AND TWO UNIT R. S. A. BOLT LOCK

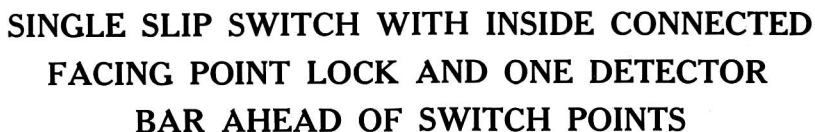


2404-1

**SINGLE SLIP SWITCH WITH ONE FACING POINT  
LOCK, TWO DETECTOR BARS BEHIND SWITCH  
POINTS AND TWO UNIT R. S. A. BOLT LOCK**

## SINGLE SLIP SWITCH WITH INSIDE CONNECTED FACING POINT LOCK AND ONE DETECTOR BAR AHEAD OF SWITCH POINTS

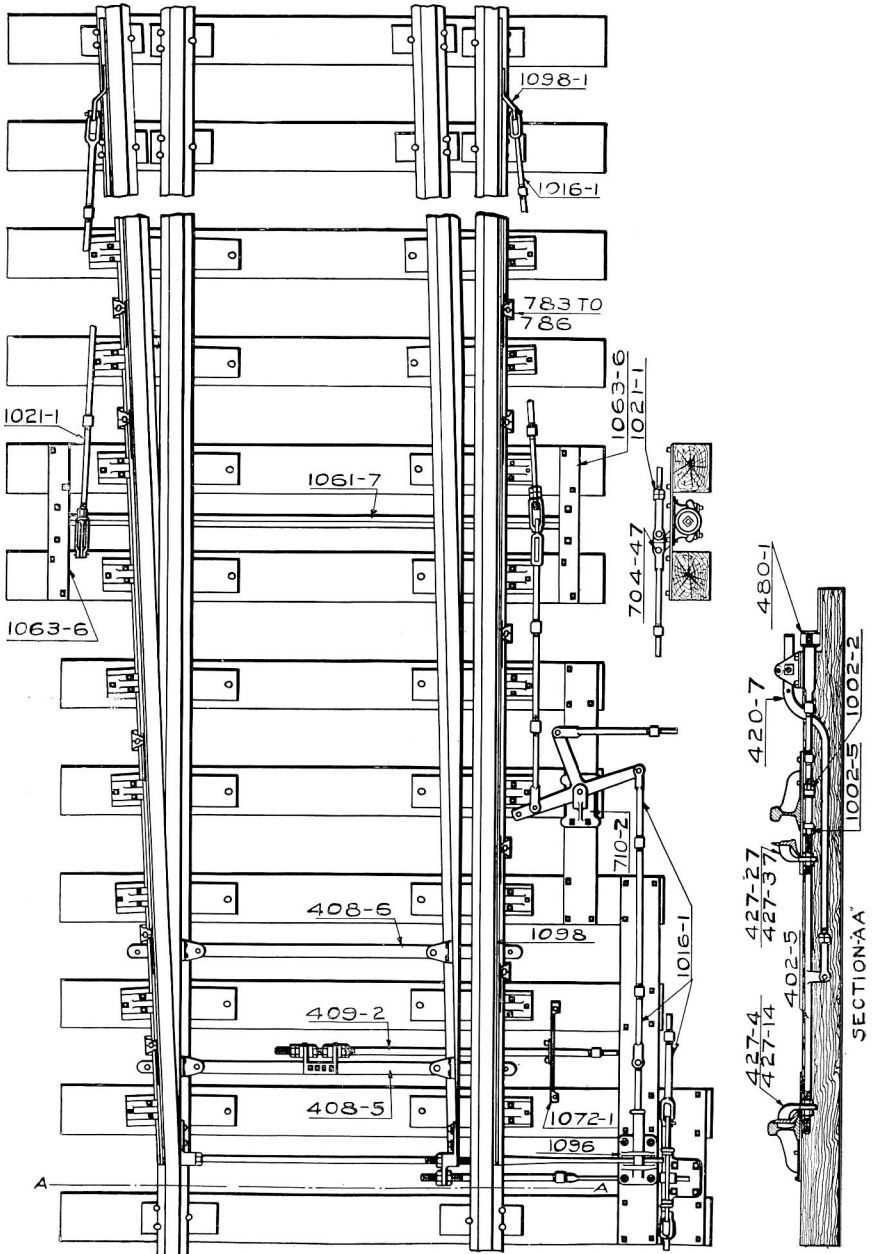




Trade No.	DESCRIPTION	List Price
2405-1	Single Slip Switch complete with $\frac{3}{8}$ " x $2\frac{1}{4}$ " x 53 feet Detector Bar, Driving Lug, Motion Plate Type Rail Clips, Motion Plates, Solid Jaws, Screw Jaws, Solid Links, 90 deg. Horizontal Cranks, Facing Point Lock, Lock Rod, Front Rod, Throw Rod with Switch Adjustment, Transverse Pipe Carrier and Tie Rods.	
2405-2	Same as above except with Radial Type Detector Bar Rail Clips, Links, Guides and Stops.	
	For $\frac{1}{2}$ " x $2\frac{1}{4}$ " x 53 feet Detector Bar, add to above list prices	
	For each additional foot of $\frac{3}{8}$ " x $2\frac{1}{4}$ " Detector Bar, add to above list prices.	
	For each additional foot of $\frac{1}{2}$ " x $2\frac{1}{4}$ " Detector Bar, add to above list prices.	
1098	<b>R. S. A. Detector Bar</b>	
783	Motion Plate Detector Bar Rail Clip with Short Motion Plate and Web Bolts.	\$2.07
784	Same as above except with Hook Bolts.	2.12
785	Motion Plate Detector Bar Rail Clip with Long Motion Plate and Web Bolts.	2.18
786	Same as above except with Hook Bolts.	2.23
779	Short Radial Type Rail Clip with Link and Hook Bolts.	1.80
789	Same as above except with Web Bolts and Forged Bracket.	3.45
787	Long Radial Type Rail Clip with Link and Web Bolts.	2.65
788	Same as above except with Hook Bolts.	2.70
778-1	Radial Type Detector Bar Guide and Stop with Hook Bolt.	.90
778-3	Same as above except with Web Bolt.	.50
1098-1	<b>R. S. A. Detector Bar Driving Lug.</b>	
1016-1	" " Solid Jaw with Pin and Cotter	1.44
1017	" " " Offset Solid Jaw	2.14
1017-1	Same as above except with Pin and Cotter	2.25
1018-1	<b>R. S. A. Solid Wide Jaw with Pin and Cotter</b>	2.16
1021-1	" " " Screw Jaw with Pin and Cotter.	2.21
704-76	Solid Link with Pins and Cotter.	2.81
711-7	One Way 90 deg. Horizontal Crank, $11\frac{3}{4}$ " x $11\frac{3}{4}$ ", complete with Stand Pin and Cotter.	3.87
1096	<b>R. S. A. Facing Point Lock.</b>	4.05
413	Front Rod complete.	8.25
409-2	Throw Rod with Switch Adjustment.	8.76
408-5	Tie Rod with Switch Point Lugs drilled for Switch Adjustment	8.50
408-6	" " " " "	8.35
1072-1	<b>R. S. A. Transverse Pipe Carrier.</b>	1.22



**SINGLE SLIP SWITCH WITH ONE FACING POINT LOCK,  
ONE BOLT LOCK AND TWO DETECTOR BARS BEHIND  
SWITCH POINTS OPERATED BY LOW R. S. A.  
ROCKER SHAFTS**

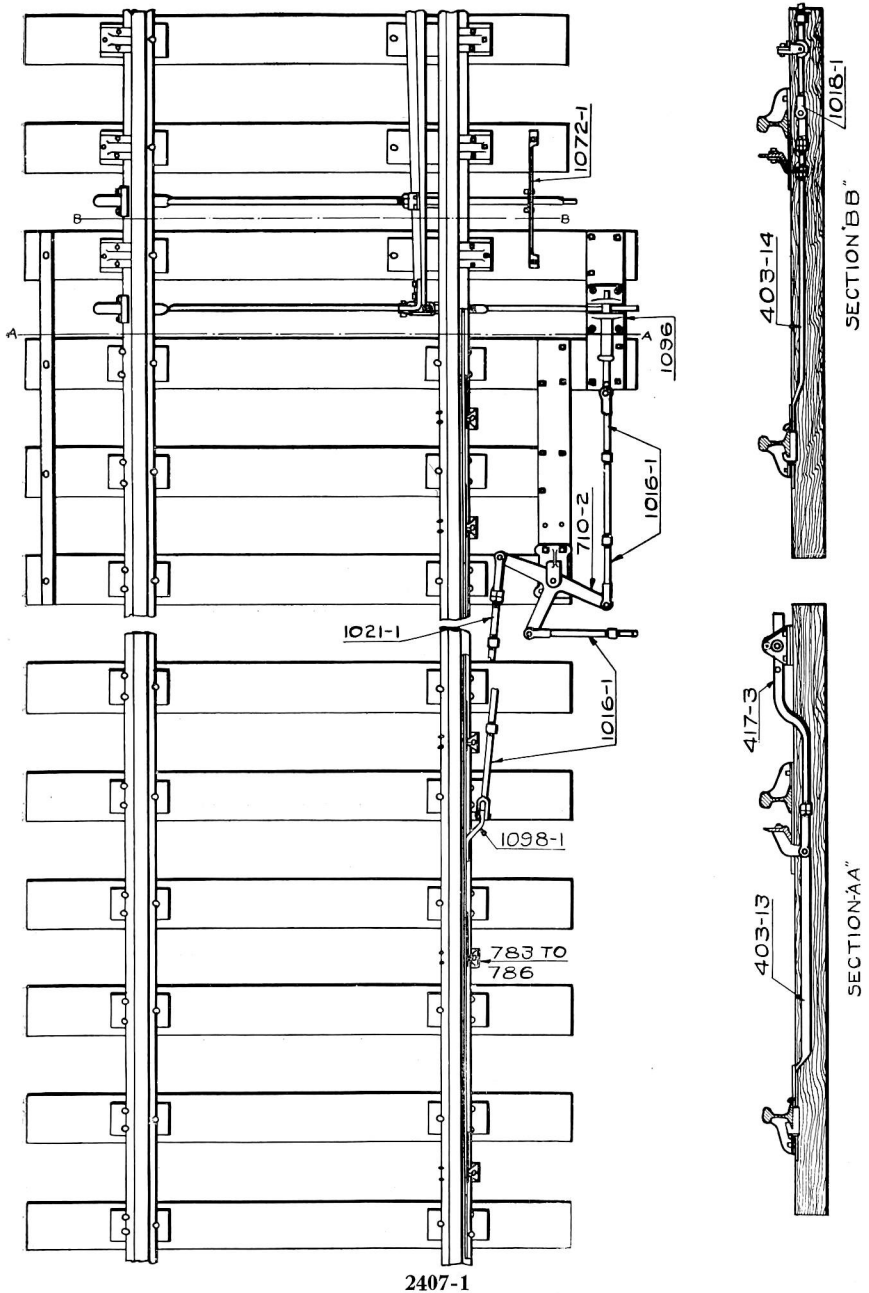








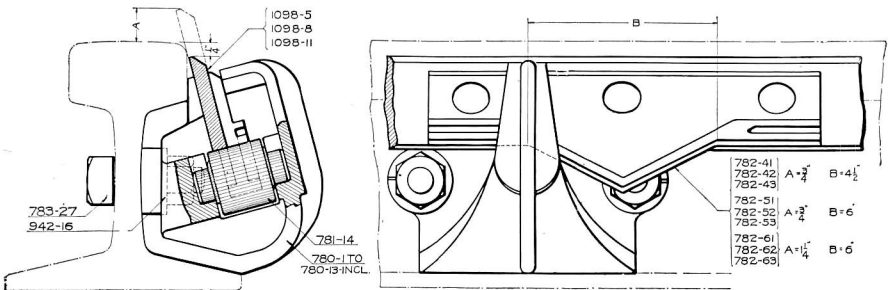
# DERAIL WITH ONE FACING POINT LOCK AND ONE DETECTOR BAR AHEAD OF POINTS



2407-1



## SHORT MOTION PLATE DETECTOR BAR RAIL CLIPS WEB BOLT TYPE

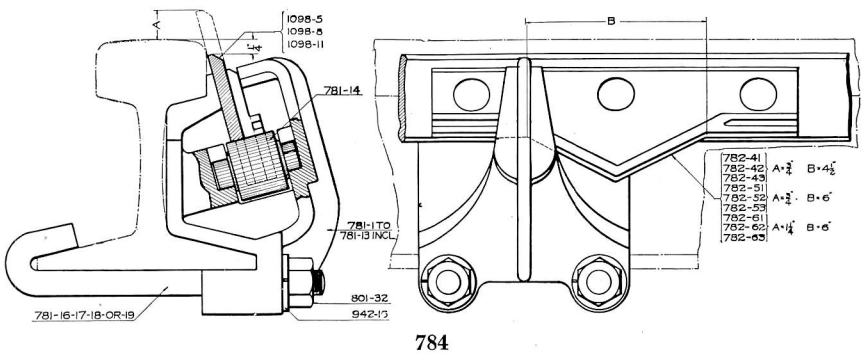


783

Trade No.	DESCRIPTION	List Price
783-1	Rail Clip complete without Motion Plate for 60 lb. A. S. C. E. Rail.....	\$1.50
783-2	Same as above except with Motion Plate.....	2.07
783-3	Rail Clip complete without Motion Plate for 65 lb. A. S. C. E. Rail.....	1.50
783-4	Same as above except with Motion Plate.....	2.07
783-5	Rail Clip complete without Motion Plate for 70 lb. A. S. C. E. Rail.....	1.50
783-6	Same as above except with Motion Plate.....	2.07
783-7	Rail Clip complete without Motion Plate for 75 lb. A. S. C. E. Rail.....	1.50
783-8	Same as above except with Motion Plate.....	2.07
783-9	Rail Clip complete without Motion Plate for 80 lb. A. S. C. E. Rail.....	1.50
783-10	Same as above except with Motion Plate.....	2.07
783-11	Rail Clip complete without Motion Plate for 85 lb. A. S. C. E. Rail.....	1.50
783-12	Same as above except with Motion Plate.....	2.07
783-13	Rail Clip complete without Motion Plate for 90 lb. A. S. C. E. Rail.....	1.50
783-14	Same as above except with Motion Plate.....	2.07
783-15	Rail Clip complete without Motion Plate for 95 lb. A. S. C. E. Rail.....	1.50
783-16	Same as above except with Motion Plate.....	2.07
783-17	Rail Clip complete without Motion Plate for 100 lb. A. S. C. E. Rail.....	1.50
783-18	Same as above except with Motion Plate.....	2.07

T-17

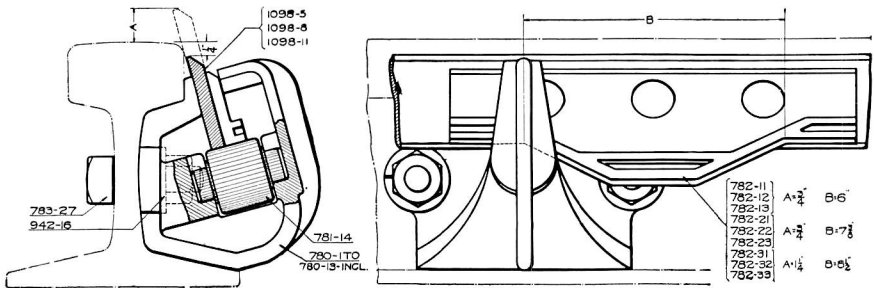
## SHORT MOTION PLATE DETECTOR BAR RAIL CLIPS HOOK BOLT TYPE



Trade No.	DESCRIPTION	List Price
784-1	Rail Clip complete without Motion Plate for 60 lb. A. S. C. E. Rail. . . . .	\$1.55
784-2	Same as above except with Motion Plate. . . . .	2.12
784-3	Rail Clip complete without Motion Plate for 65 lb. A. S. C. E. Rail. . . . .	1.55
784-4	Same as above except with Motion Plate. . . . .	2.12
784-5	Rail Clip complete without Motion Plate for 70 lb. A. S. C. E. Rail. . . . .	1.55
784-6	Same as above except with Motion Plate. . . . .	2.12
784-7	Rail Clip complete without Motion Plate for 75 lb. A. S. C. E. Rail. . . . .	1.55
784-8	Same as above except with Motion Plate. . . . .	2.12
784-9	Rail Clip complete without Motion Plate for 80 lb. A. S. C. E. Rail. . . . .	1.55
784-10	Same as above except with Motion Plate. . . . .	2.12
784-11	Rail Clip complete without Motion Plate for 85 lb. A. S. C. E. Rail. . . . .	1.55
784-12	Same as above except with Motion Plate. . . . .	2.12
784-13	Rail Clip complete without Motion Plate for 90 lb. A. S. C. E. Rail. . . . .	1.55
784-14	Same as above except with Motion Plate. . . . .	2.12
784-15	Rail Clip complete without Motion Plate for 95 lb. A. S. C. E. Rail. . . . .	1.55
784-16	Same as above except with Motion Plate. . . . .	2.12
784-17	Rail Clip complete without Motion Plate for 100 lb. A. S. C. E. Rail. . . . .	1.55
784-18	Same as above except with Motion Plate. . . . .	2.12

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## LONG MOTION PLATE DETECTOR BAR RAIL CLIPS WEB BOLT TYPE



Trade No.	DESCRIPTION	List Price
785-1	Rail Clip complete without Motion Plate for 60 lb. A. S. C. E. Rail.....	\$1. 50
785-2	Same as above except with Motion Plate.....	2. 18
785-3	Rail Clip complete without Motion Plate for 65 lb. A. S. C. E. Rail.....	1. 50
785-4	Same as above except with Motion Plate.....	2. 18
785-5	Rail Clip complete without Motion Plate for 70 lb. A. S. C. E. Rail.....	1. 50
785-6	Same as above except with Motion Plate.....	2. 18
785-7	Rail Clip complete without Motion Plate for 75 lb. A. S. C. E. Rail.....	1. 50
785-8	Same as above except with Motion Plate.....	2. 18
785-9	Rail Clip complete without Motion Plate for 80 lb. A. S. C. E. Rail.....	1. 50
785-10	Same as above except with Motion Plate.....	2. 18
785-11	Rail Clip complete without Motion Plate for 85 lb. A. S. C. E. Rail.....	1. 50
785-12	Same as above except with Motion Plate.....	2. 18
785-13	Rail Clip complete without Motion Plate for 90 lb. A. S. C. E. Rail.....	1. 50
785-14	Same as above except with Motion Plate.....	2. 18
785-15	Rail Clip complete without Motion Plate for 95 lb. A. S. C. E. Rail.....	1. 50
785-16	Same as above except with Motion Plate.....	2. 18
785-17	Rail Clip complete without Motion Plate for 100 lb. A. S. C. E. Rail.....	1. 50
785-18	Same as above with Motion Plate.....	2. 18

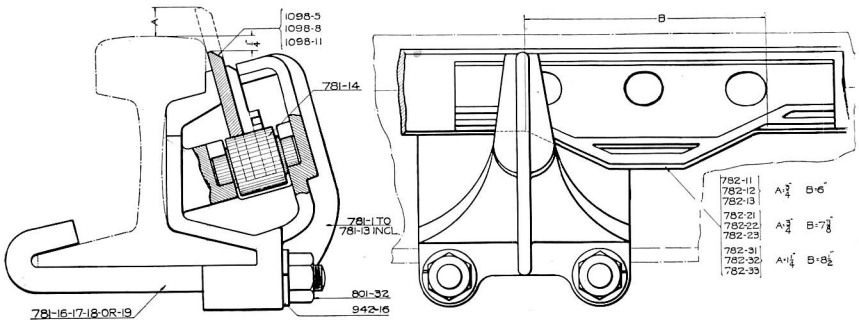




## LONG MOTION PLATE DETECTOR BAR RAIL CLIPS WEB BOLT TYPE

Trade No.	DESCRIPTION	List Price
785-19	Rail Clip complete without Motion Plate for 90 lb. A. R. A. Rail Type "A".....	\$1.50
785-20	Same as above except with Motion Plate.....	2.18
785-21	Rail Clip complete without Motion Plate for 90 lb. A. R. A. Rail Type "B".....	1.50
785-22	Same as above with Motion Plate.....	2.18
785-23	Rail Clip complete without Motion Plate for 100 lb. A. R. A. Rail Type "A".....	1.50
785-24	Same as above with Motion Plate.....	2.18
785-25	Rail Clip complete without Motion Plate for 100 lb. A. R. A. Rail Type "B".....	1.50
785-26	Same as above except with Motion Plate.....	2.18
780-1	Rail Clip Only for 60 lb. A. S. C. E. Rail.....	.95
780-2	" " " " 65 " " " " " " " ".....	.95
780-3	" " " " 70 " " " " " " " ".....	.95
780-4	" " " " 75 " " " " " " " ".....	.95
780-5	" " " " 80 " " " " " " " ".....	.95
780-6	" " " " 85 " " " " " " " ".....	.95
780-7	" " " " 90 " " " " " " " ".....	.95
780-8	" " " " 95 " " " " " " " ".....	.95
780-9	" " " " 100 " " " " " " " ".....	.95
780-10	" " " " 90 " Type "A" A. R. A. Rail.....	.95
780-11	" " " " 90 " " "B" " " " " " ".....	.95
780-12	" " " " 100 " " "A" " " " " " ".....	.95
780-13	" " " " 100 " " "B" " " " " " ".....	.95
781-14	Roller for Motion Plate.....	.26
783-27	$\frac{3}{8}$ " x 2" Square Head Machine Bolt with Hexagon Nut.....	.13
942-16	$\frac{3}{8}$ " Standard Lock Washer.....	.02
782-11	Long Motion Plate with Rivets for $\frac{3}{8}$ " Detector Bar.....	.69
782-12	Same as above except for $\frac{7}{8}$ " Detector Bar.....	.69
782-13	" " " " " " $\frac{1}{2}$ " " " " " " " " ".....	.69
782-21	Long Motion Plate with Rivets for $\frac{3}{8}$ " Detector Bar.....	.68
782-22	Same as above except for $\frac{7}{8}$ " Detector Bar.....	.68
782-23	" " " " " " $\frac{1}{2}$ " " " " " " " ".....	.68
782-31	Long Motion Plate with Rivets for $\frac{3}{8}$ " Detector Bar.....	.69
782-32	Same as above except for $\frac{7}{8}$ " Detector Bar.....	.69
782-33	" " " " " " $\frac{1}{2}$ " " " " " " " ".....	.69
1098-5	R. S. A. Detector Bar, $\frac{3}{8}$ " x $2\frac{1}{4}$ ". Specify length.....	.....
1098-8	" " " " " " $\frac{1}{2}$ " x $2\frac{1}{4}$ ". Specify length.....	.....
1098-11	Detector Bar $\frac{7}{8}$ " x $2\frac{1}{4}$ ". Specify length.....	.....

## LONG MOTION PLATE DETECTOR BAR RAIL CLIPS HOOK BOLT TYPE



Trade No.	DESCRIPTION	List Price
786-1	Rail clip complete without Motion Plate for 60 lb. A. S. C. E. Rail.....	\$1. 55
786-2	Same as above except with Motion Plate.....	2. 23
786-3	Rail Clip complete without Motion Plate for 65 lb. A. S. C. E. Rail.....	1. 55
786-4	Same as above except with Motion Plate.....	2. 23
786-5	Rail Clip complete without Motion Plate for 70 lb. A. S. C. E. Rail.....	1. 55
786-6	Same as above except with Motion Plate.....	2. 23
786-7	Rail Clip complete without Motion Plate for 75 lb. A. S. C. E. Rail.....	1. 55
786-8	Same as above except with Motion Plate.....	2. 23
786-9	Rail Clip complete without Motion Plate for 80 lb. A. S. C. E. Rail.....	1. 55
786-10	Same as above except with Motion Plate.....	2. 23
786-11	Rail Clip complete without Motion Plate for 85 lb. A. S. C. E. Rail.....	1. 55
786-12	Same as above except with Motion Plate.....	2. 23
786-13	Rail Clip complete without Motion Plate for 90 lb. A. S. C. E. Rail.....	1. 55
786-14	Same as above except with Motion Plate.....	2. 23
786-15	Rail Clip complete without Motion Plate for 95 lb. A. S. C. E. Rail.....	1. 55
786-16	Same as above except with Motion Plate.....	2. 23
786-17	Rail Clip complete without Motion Plate for 100 lb. A. S. C. E. Rail.....	1. 55
786-18	Same as above except with Motion Plate.....	2. 23

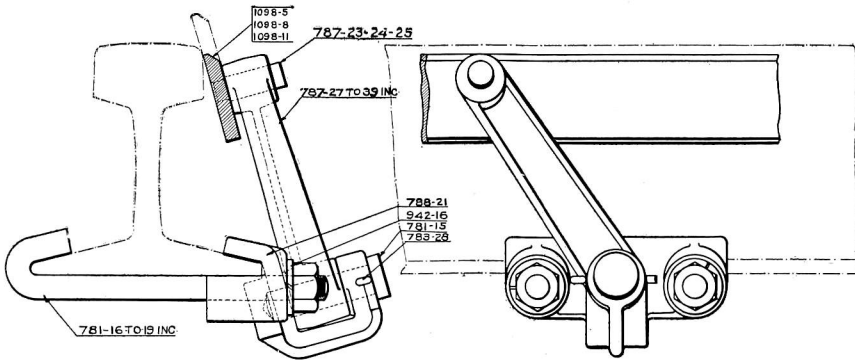


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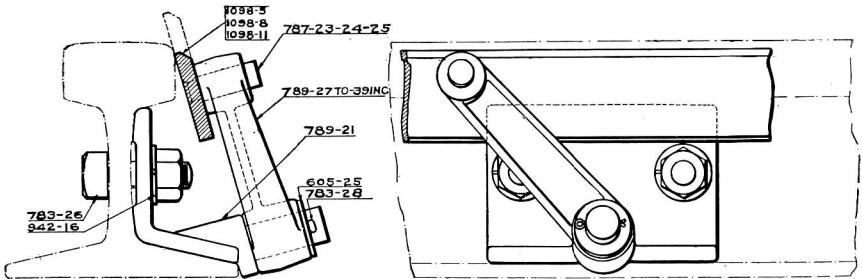


## RADIAL TYPE DETECTOR BAR RAIL CLIPS, HOOK BOLT TYPE



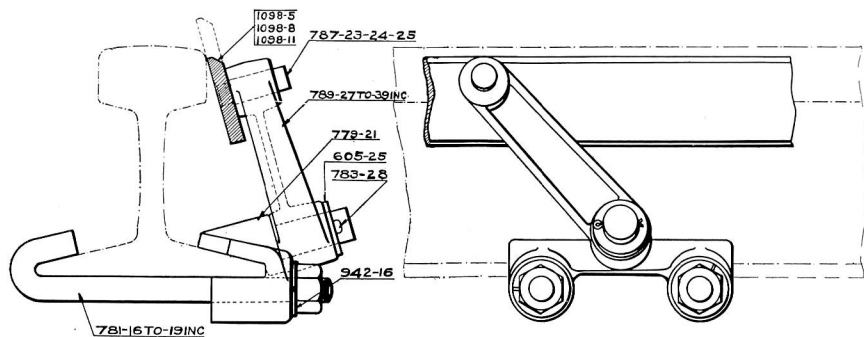
Trade No.	DESCRIPTION	List Price
788-1	Rail Clip complete with Link, Link Stud, Bar Stud, Cotter and Hook Bolts for 60 lb. A. S. C. E. Rail . . . . .	\$2.70
788-2	Same as above except for 65 lb. A. S. C. E. Rail . . . . .	2.70
788-3	“ “ “ “ “ 70 “ “ “ “ “ “ . . . . .	2.70
788-4	“ “ “ “ “ 75 “ “ “ “ “ “ . . . . .	2.70
788-5	“ “ “ “ “ 80 “ “ “ “ “ “ . . . . .	2.70
788-6	“ “ “ “ “ 85 “ “ “ “ “ “ . . . . .	2.70
788-7	“ “ “ “ “ 90 “ “ “ “ “ “ . . . . .	2.70
788-8	“ “ “ “ “ 95 “ “ “ “ “ “ . . . . .	2.70
788-9	“ “ “ “ “ 100 “ “ “ “ “ “ . . . . .	2.70
788-10	“ “ “ “ “ 90 “ Type “A” A. R. A. Rail . . . . .	2.70
788-11	“ “ “ “ “ 90 “ “ “ “ “ “ “ . . . . .	2.70
788-12	“ “ “ “ “ 100 “ “ “ “ “ “ “ . . . . .	2.70
788-13	“ “ “ “ “ 100 “ “ “ “ “ “ “ . . . . .	2.70
788-21	Rail Clip Only . . . . .	1.65
787-23	Operating Stud for $\frac{3}{8}$ " Detector Bars . . . . .	.10
787-24	“ “ “ $\frac{7}{16}$ " “ “ . . . . .	.10
787-25	“ “ “ $\frac{1}{2}$ " “ “ . . . . .	.10
781-15	Link Stud Only . . . . .	.16
783-28	$\frac{3}{16}$ " x $2\frac{1}{2}$ " Cotter Pin . . . . .	.01
781-16	Hook Bolts for 60 lb. and 65 lb. A. S. C. E. Rail Clip . . . . .	.16
781-17	“ “ “ 70 lb., 75 lb. and 80 lb. A. S. C. E. and 90 lb. Type “B” A. R. A. Rails . . . . .	.16
781-18	Hook Bolts for 85 lb. A. S. C. E. Rails . . . . .	.16
781-19	“ “ “ 90 lb., 95 lb. and 100 lb. A. S. C. E. and 90 lb. Type “A” and 100 lb. Type “A” and “B” A. R. A. Rails . . . . .	.16
942-16	$\frac{5}{8}$ " Standard Lock Washer . . . . .	.02
787-27	Link Only for 60 lb. A. S. C. E. Rail . . . . .	.50
787-28	“ “ “ 65 “ “ “ “ “ “ . . . . .	.50
787-29	“ “ “ 70 “ “ “ “ “ “ . . . . .	.50
787-30	“ “ “ 75 “ “ “ “ “ “ . . . . .	.50
787-31	“ “ “ 80 “ “ “ “ “ “ . . . . .	.50
787-32	“ “ “ 85 “ “ “ “ “ “ . . . . .	.50
787-33	“ “ “ 90 “ “ “ “ “ “ . . . . .	.50
787-34	“ “ “ 95 “ “ “ “ “ “ . . . . .	.50
787-35	“ “ “ 100 “ “ “ “ “ “ . . . . .	.50
787-36	“ “ “ 90 “ Type “A” A. R. A. Rail . . . . .	.50
787-37	“ “ “ 90 “ “ “ “ “ “ . . . . .	.50
787-38	“ “ “ 100 “ “ “ “ “ “ . . . . .	.50
787-39	“ “ “ 100 “ “ “ “ “ “ . . . . .	.50
1098-5	R. S. A. Detector Bar $\frac{3}{8}$ " x $2\frac{1}{4}$ ". Specify length . . . . .	
1098-8	“ “ “ $\frac{1}{2}$ " x $2\frac{1}{4}$ " . . . . .	
1098-11	Detector Bar $\frac{7}{16}$ " x $2\frac{1}{4}$ ". Specify length . . . . .	

## RADIAL TYPE DETECTOR BAR RAIL CLIPS WEB BOLT TYPE



Trade No.	DESCRIPTION	List Price
789-1	Rail Clip complete with Link, Link Stud, Bar Stud, Washer, Cotter and Web Bolts for 60 lb. A. S. C. E. Rail .....	\$3.45
789-2	Same as above except for 65 " " " " " " .....	3.45
789-3	" " " " " " 70 " " " " " " .....	3.45
789-4	" " " " " " 75 " " " " " " .....	3.45
789-5	" " " " " " 80 " " " " " " .....	3.45
789-6	" " " " " " 85 " " " " " " .....	3.45
789-7	" " " " " " 90 " " " " " " .....	3.45
789-8	" " " " " " 95 " " " " " " .....	3.45
789-9	" " " " " " 100 " " " " " " .....	3.45
789-10	" " " " " " 90 " Type "A" A. R. A. Rail .....	3.45
789-11	" " " " " " 90 " " "B" " " " " " .....	3.45
789-12	" " " " " " 100 " " "A" " " " " " .....	3.45
789-13	" " " " " " 100 " " "B" " " " " " .....	3.45
789-21	Rail Clip Only (Forged) .....	2.64
787-23	Operating Stud for $\frac{3}{8}$ " Detector Bar .....	.10
787-24	" " " " $\frac{1}{8}$ " " " " " .....	.10
787-25	" " " " $\frac{1}{2}$ " " " " " .....	.10
783-28	$\frac{3}{16}$ " x $2\frac{1}{2}$ " Cotter Pin .....	.01
605-25	1" Standard Iron Washer .....	.02
783-26	$\frac{5}{8}$ " x 2" Square Head Bolt with Hexagon Nut .....	.13
942-16	$\frac{5}{8}$ " Standard Lock Washer .....	.02
789-27	Link Only for 60 lb. A. S. C. E. Rail .....	.50
789-28	" " " 65 " " " " " " .....	.50
789-29	" " " 70 " " " " " " .....	.50
789-30	" " " 75 " " " " " " .....	.50
789-31	" " " 80 " " " " " " .....	.50
789-32	" " " 85 " " " " " " .....	.50
789-33	" " " 90 " " " " " " .....	.50
789-34	" " " 95 " " " " " " .....	.50
789-35	" " " 100 " " " " " " .....	.50
789-36	" " " 90 " Type "A" A. R. A. Rail .....	.50
789-37	" " " 90 " " "B" " " " " " .....	.50
789-38	" " " 100 " " "A" " " " " " .....	.50
789-39	" " " 100 " " "B" " " " " " .....	.50
1098-5	R. S. A. Detector Bar $\frac{3}{8}$ " x $2\frac{1}{4}$ ". Specify length .....	.....
1098-8	" " " " " $\frac{1}{2}$ " x $2\frac{1}{4}$ ". .....	.....
1098-11	Detector Bar $\frac{7}{8}$ " x $2\frac{1}{4}$ ". Specify length .....	.....

## RADIAL TYPE DETECTOR BAR RAIL CLIPS, HOOK BOLT TYPE



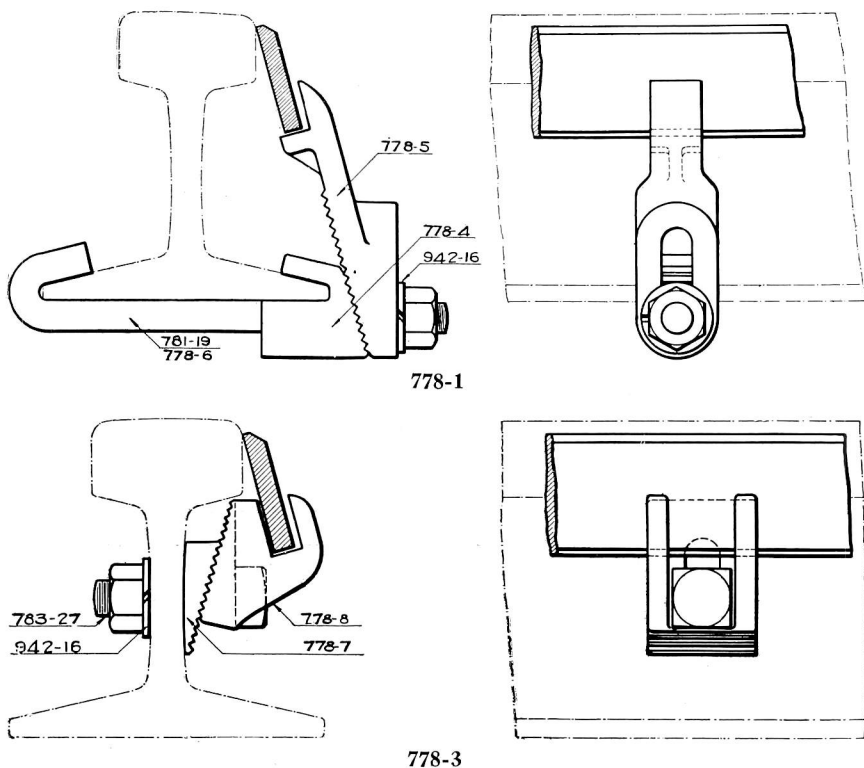
Trade No.	DESCRIPTION	List Price
779-1	Rail Clip complete with Link, Link Stud, Bar Stud, Washer, Cotter and Hook Bolts for 60 lb. A. S. C. E. Rail .....	\$1.80
779-2	Same as above except for 65 lb. A. S. C. E. Rail .....	1.80
779-3	" " " " " 70 " " " " " " .....	1.80
779-4	" " " " " 75 " " " " " " .....	1.80
779-5	" " " " " 80 " " " " " " .....	1.80
779-6	" " " " " 85 " " " " " " .....	1.80
779-7	" " " " " 90 " " " " " " .....	1.80
779-8	" " " " " 95 " " " " " " .....	1.80
779-9	" " " " " 100 " " " " " " .....	1.80
779-10	" " " " " 90 " Type "A" A. R. A. Rail ....	1.80
779-11	" " " " " 90 " "B" " " " " " .....	1.80
779-12	" " " " " 100 " "A" " " " " " .....	1.80
779-13	" " " " " 100 " "B" " " " " " .....	1.80
779-21	Rail Clip Only .....	.80
787-23	Operating Stud for $\frac{3}{8}$ " Detector Bar .....	.10
787-24	" " " " $\frac{7}{16}$ " " " " " " .....	.10
787-25	" " " " $\frac{1}{2}$ " " " " " " .....	.10
789-26	Link Stud Only .....	.01
783-28	$\frac{8}{16}$ " x $2\frac{1}{2}$ " Cotter Pin .....	.02
605-25	$1\frac{1}{2}$ " Standard Iron Washer .....	.16
781-16	Hook Bolt for 60 lb. and 65 lb. A. S. C. E. Rails .....	.16
781-17	" " " 70 lb., 75 lb. and 80 lb. A. S. C. E. and 90 lb. Type "B" A. R. A. Rails .....	.16
781-18	Hook Bolt for 85 lb. A. S. C. E. Rail .....	.16
781-19	" " " 90 lb., 95 lb. and 100 lb. A. S. C. E., 90 lb. Type "A" and 100 lb. Type "A" and "B" A. R. A. Rails .	.16
942-16	$\frac{5}{8}$ " Standard Lock Washer .....	.50
789-27	Link Only for 60 lb. A. S. C. E. Rail .....	.02
789-28	" " " 65 " " " " " " .....	.50
789-29	" " " 70 " " " " " " .....	.50
789-30	" " " 75 " " " " " " .....	.50
789-31	" " " 80 " " " " " " .....	.50
789-32	" " " 85 " " " " " " .....	.50
789-33	" " " 90 " " " " " " .....	.50
789-34	" " " 95 " " " " " " .....	.50
789-35	" " " 100 " " " " " " .....	.50
779-36	" " " 90 " Type "A" A. R. A. Rail .....	.50
789-37	" " " 90 " "B" " " " " " .....	.50
789-38	" " " 100 " "A" " " " " " .....	.50
789-39	" " " 100 " "B" " " " " " .....	.50
1098-5	R. S. A. Detector Bar, $\frac{3}{8}$ " x $2\frac{1}{4}$ ", Specify length .....	.
1098-8	" " " " $\frac{1}{2}$ " x $2\frac{1}{4}$ " " " " " " .....	.
1098-11	Detector Bar, $\frac{7}{16}$ " x $2\frac{1}{4}$ ", Specify length .....	.





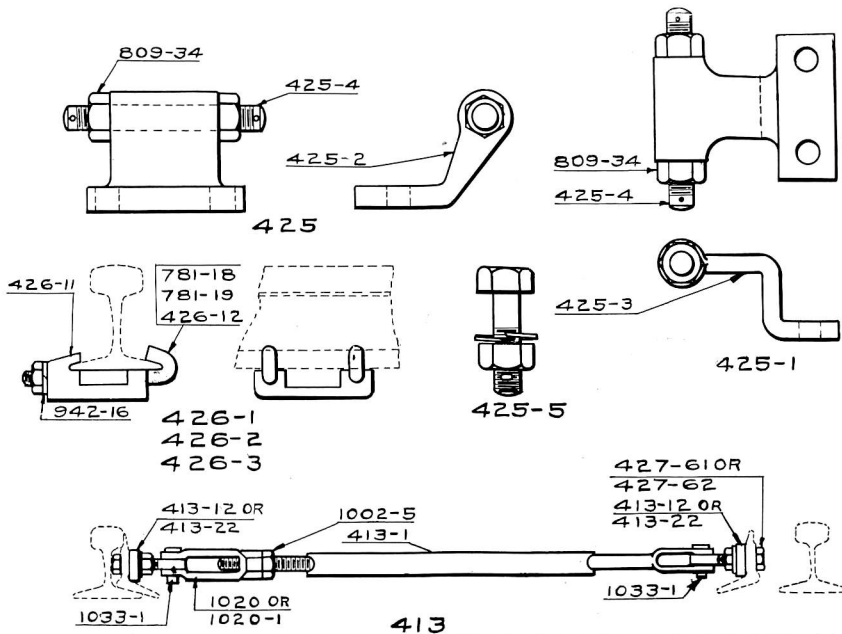


## DETECTOR BAR GUIDES AND STOPS



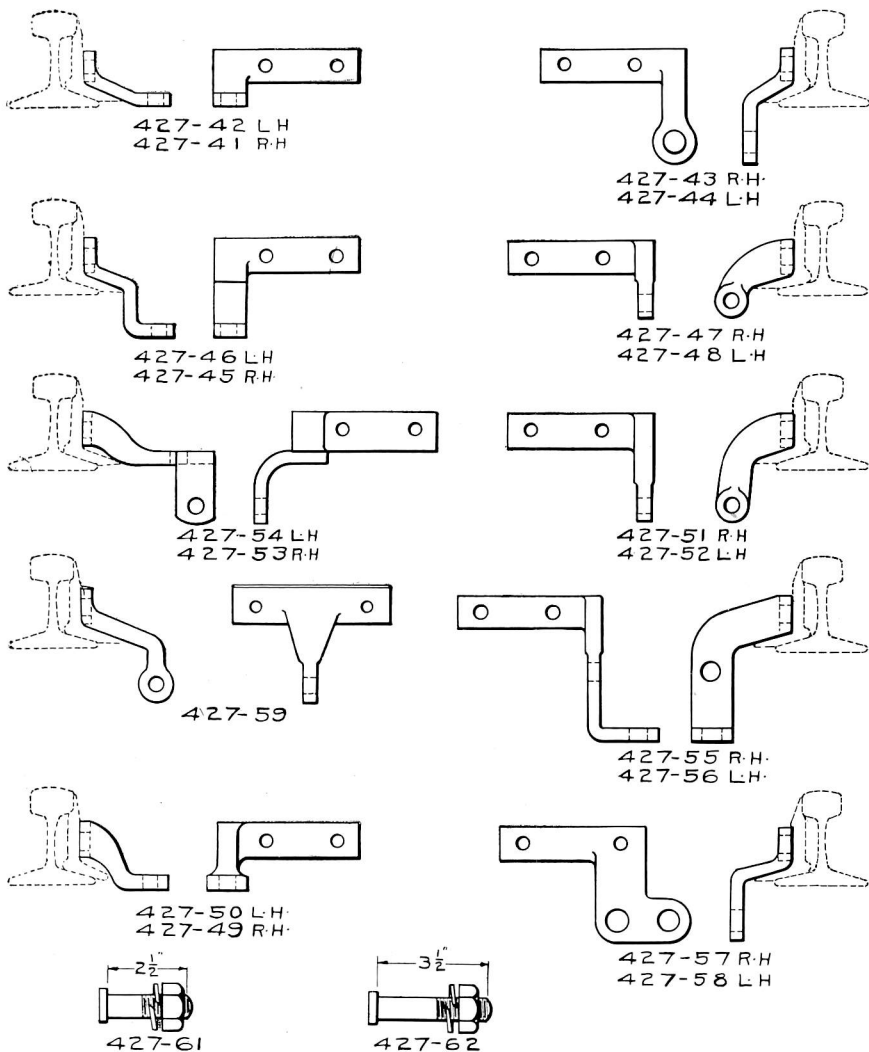
Trade No.	DESCRIPTION	List Price
778-1	Adjustable Detector Bar Guide and Stop complete as shown for 60 lb., 65 lb., 70 lb., 75 lb. and 80 lb. A. S. C. E. 90 lb. Type "A" and "B" and 100 lb. Type "B" A. R. A. Rails.	\$0.90
778-2	Same as above except for 85 lb., 90 lb., 95 lb. and 100 lb. A. S. C. E. and 100 lb. Type "A" A. R. A. Rails.	.90
778-3	Adjustable Bar Guide and Stop Web Bolt Type, complete as shown.	.50
778-4	Rail Clip Only	.32
778-5	Guide and Stop Piece Only	.42
781-19	Hook Bolt for 60 lb., 65 lb., 70 lb., 75 lb. and 80 lb. A. S. C. E. 90 lb. Type "A" and "B" and 100 lb. Type "B" A. R. A. Rails.	.16
778-6	Hook Bolt for 85 lb., 90 lb., 95 lb. and 100 lb. A. S. C. E. and 100 lb. Type "A" A. R. A. Rails.	.16
942-16	$\frac{5}{8}$ " Lock Washer	.02
778-7	Adjustable Detector Bar Stop, Rail Half.	.11
778-8	Adjustable Detector Bar Stop, Bar	.22
783-27	$\frac{5}{8}$ " x 2" Square Head Machine Bolt with Hexagon Nut.	.13

## POINT SEPARATOR, DERAIL GUIDES AND COMBINATION LOCK AND FRONT ROD



Trade No.	DESCRIPTION	List Price
425	Point Separator complete as shown with Adjusting Studs, Hexagon Nuts and Bolts for fastening, Malleable Bracket.	\$2.75
425-1	Same as above except with Forged Bracket.	3.50
425-2	Malleable Bracket for Point Separator.	1.93
425-3	Forged " " " "	2.75
425-4	Adjusting Stud " " " "	.32
809-34	1" Standard Hexagon Nut.	.10
425-5	$\frac{3}{4}$ " x $2\frac{3}{4}$ " Square Head Machine Bolt with Nut, Lock Washer and Cotter	.16
426-1	Derail Rod Guide with Hook Bolts for 60 lb., 65 lb., 70 lb. A. S. C. E. and 90 lb. Type "B" A. R. A. Rail.	.85
426-2	Same as above except for 75 lb., 80 lb. and 85 lb. A. S. C. E. 90 lb. Type "A" and 100 lb. Type "B" A. R. A. Rails.	.85
426-3	Same as above except for 90 lb., 95 lb. and 100 lb. A. S. C. E. and 100 lb. Type "A" A. R. A. Rail.	.85
426-11	Derail Rod Guide Only.	.53
781-18	Hook Bolt for 426-1 Derail Rod Guide.	.16
781-19	" " 426-2 " " " "	.16
426-12	" " 426-3 " " " "	.16
942-16	$\frac{5}{8}$ " Lock Washer.	.02
413	Combined Front and Lock Rod complete as shown with Forged Screw Jaw, Jaw Pin, Nut and Switch Point Lugs.	8.25
413-11	Same as above except with Malleable Screw Jaw.	7.93
413-1	Solid Jaw End Only.	5.22
1020	R. S. A. Forged Screw Jaw.	.86
1020-1	Screw Jaw, Malleable Iron.	.54
1002-5	$1\frac{1}{2}$ " Hexagon Nut, $\frac{3}{8}$ " thick.	.18
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{3}{4}$ " with Cotter.	.11
704-14	$\frac{3}{8}$ " x $1\frac{1}{2}$ " Cotter Pin for above, per C.	.90
413-2	Switch Point Lug Only.	1.37
413-12	Same as above with Bolts for Switch Points.	1.65
413-22	" " " " Reinforced Switch Points.	1.69
427-61	$\frac{3}{4}$ " x $2\frac{1}{2}$ " Flat Head Bolts with Hexagon Nut and Lock Washer for fastening Switch Point Lugs to Switch Points.	.14
427-62	$\frac{3}{4}$ " x $3\frac{1}{2}$ " Flat Head Bolts with Hexagon Nut and Lock Washer for fastening Switch Point Lugs to Reinforced Switch Points.	.16

## SWITCH POINT LUGS

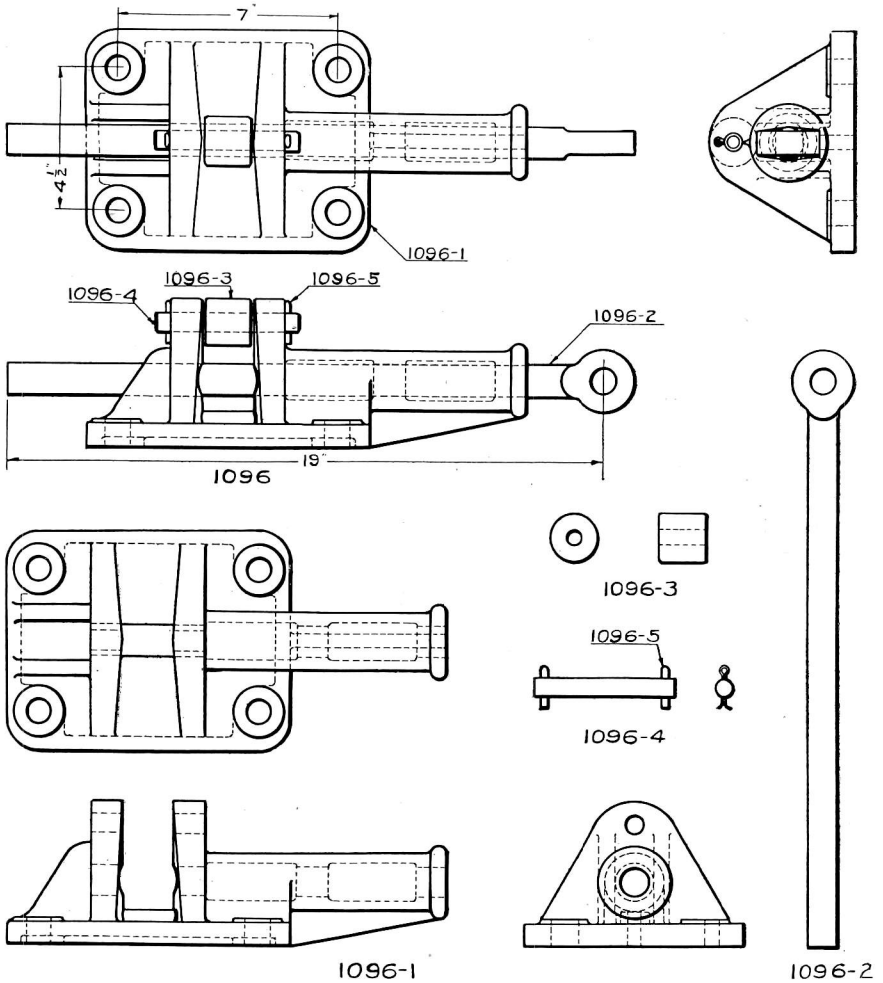




## SWITCH POINT LUGS

Trade No.	DESCRIPTION	List Price
427-41	Right Hand Switch Point Lug for Single Slip Switch or Deraill.	\$1.15
427-1	Same as above with Two 427-61 Bolts for Switch Points.	1.43
427-11	" " " " 427-62 Bolts for Reinforced Switch Points.	1.47
427-42	Left Hand Switch Point Lug for Single Slip Switch or Deraill.	1.15
427-2	Same as above with Two 427-61 Bolts for Switch Points.	1.47
427-12	" " " " 427-62	1.47
427-43	Right Hand Switch Point Lugs for Slip Switches or M. P. F.	4.78
427-3	Same as above with Two 427-61 Bolts for Switch Points.	5.06
427-13	" " " " 427-62 Bolts for Reinforced Switch Point.	5.10
427-44	Left Hand Switch Point Lug for Slip Switches or M. P. F.	4.78
427-4	Same as above with Two 427-61 Bolts for Switch Points.	5.06
427-14	" " " " 427-62 Bolts for Reinforced Switch Point.	5.10
427-45	Right Hand Switch Point Lug for Double Slip Switch or M. P. F.	2.42
427-5	Same as above with Two 427-61 Bolts for Switch Points.	2.70
427-15	" " " " 427-62 Bolts for Reinforced Switch Point.	2.74
427-46	Left Hand Switch Point Lug for Double Slip Switch or M. P. F.	2.42
427-6	Same as above with Two 427-61 Bolts for Switch Points.	2.70
427-16	" " " " 427-62 Bolts for Reinforced Switch Point.	2.74
427-47	Right Hand Switch Point Lug for Vertical Tie Rods.	2.91
427-7	Same as above with Two 427-61 Bolts for Switch Point.	3.19
427-17	" " " " 427-62 Bolts for Reinforced Switch Point.	3.23
427-48	Left Hand Switch Point Lug for Vertical Tie Rods.	2.91
427-8	Same as above with Two 427-61 Bolts for Switch Points.	3.19
427-18	" " " " 427-62 Bolts for Reinforced Switch Point.	3.23
427-49	Right Hand Switch Point Lug for Horizontal Tie Rods.	2.47
427-9	Same as above with Two 427-61 Bolts for Switch Point.	2.75
427-19	" " " " 427-62 Bolts for Reinforced Switch Point.	2.79
427-50	Left Hand Switch Point Lug for Horizontal Tie Rods.	2.47
427-10	Same as above with Two 427-61 Bolts for Switch Points.	2.75
427-20	" " " " 427-62 Bolts for Reinforced Switch Point.	2.79
427-51	Right Hand Switch Point Lugs for Vertical Tie Rods.	2.91
427-21	Same as above with Two 427-61 Bolts for Switch Points.	3.19
427-21	" " " " 427-62 Bolts for Reinforced Switch Point.	3.23
427-52	Left Hand Switch Point Lug for Vertical Switch Points.	2.91
427-22	Same as above with Two 427-61 Bolts for Switch Points.	3.19
427-32	" " " " 427-62 Bolts for Reinforced Switch Point.	3.23
427-53	Right Hand Switch Point Lug with Independent Lug for Bolt Lock.	4.84
427-23	Same as above with Two 427-61 Bolts for Switch Points.	5.12
427-33	" " " " 427-62 Bolts for Reinforced Switch Point.	5.16
427-54	Left Hand Switch Point Lug with Independent Lug for Bolt Locks.	4.84
427-24	Same as above with Two 427-61 Bolts for Switch Points.	5.12
427-34	" " " " 427-62 Bolts for Reinforced Switch Point.	5.16
427-55	Right Hand Switch Point Lug with Independent Lug for Bolt Lock.	4.95
427-25	Same as above with Two 427-61 Bolts for Switch Points.	5.23
427-35	" " " " 427-62 Bolts for Reinforced Switch Point.	5.27
427-56	Left Hand Switch Point Lug with Independent Lug for Bolt Lock.	4.95
427-26	Same as above with Two 427-61 Bolts for Switch Points.	5.23
427-36	" " " " 427-62 Bolts for Reinforced Switch Point.	5.27
427-59	Switch Point Lug for Deraill Lock Rod.	2.36
427-29	Same as above with Two 427-61 Bolts for Switch Points.	2.64
427-39	" " " " 427-62 Bolts for Reinforced Switch Point.	2.68
427-61	3/4" x 2 1/2" Flat Head Bolts with Hexagon Nut and Lock Washer for fasten- ing Switch Point Lug to Switch Point.	14
427-62	3/4" x 3" Flat Head Bolt with Hexagon Nut and Lock Washer for fasten- ing Switch Point Lug to Reinforced Switch Point.	16
427-57	Right Hand Switch Point Lug with Hole for Bolt Lock Rod.	5.22
427-27	Same as above with Two 427-61 Bolts for Switch Point.	5.50
427-37	" " " " 427-62 Bolts for Reinforced Switch Point.	5.54
427-58	Left Hand Switch Point Lug with Hole for Bolt Lock Rod.	5.22
427-28	Same as above with Two 427-61 Bolts for Switch Points.	5.50
427-38	" " " " 427-62 Bolts for Reinforced Switch Point.	5.54

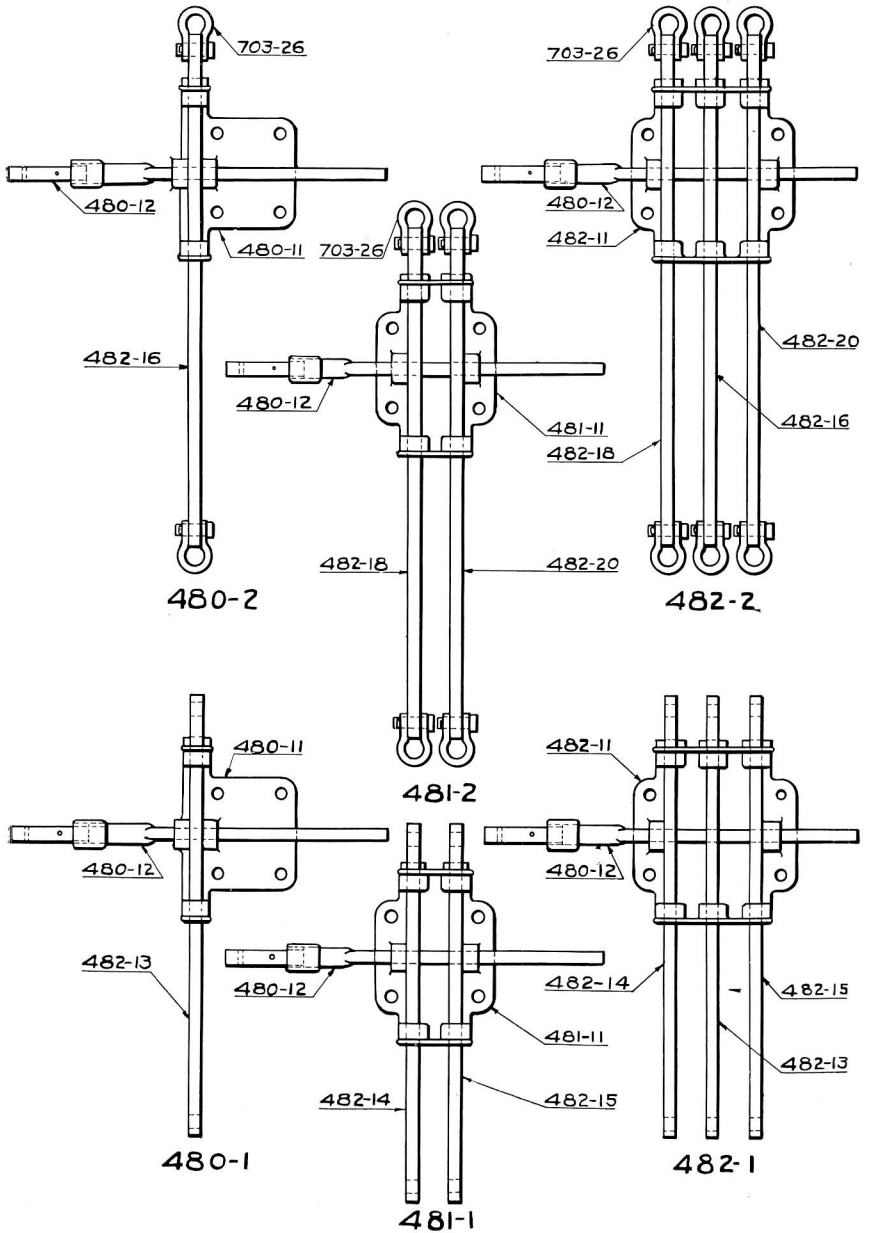
## R. S. A. PLUNGER LOCK



Trade No.	DESCRIPTION	List Price
1096	R. S. A. Plunger Lock, complete as shown.....	\$4.05
1096-1	Plunger Lock Stand.....	3.02
1096-2	".....	.90
1096-3	Roller.....	.23
1096-4	Pin with Two $\frac{3}{16}$ " x 1" Cotter.....	.09
1096-5	$\frac{3}{16}$ " x 1" Cotter Pins, per C.....	.90



## BOLT LOCKS FOR PIPE AND WIRE CONNECTIONS



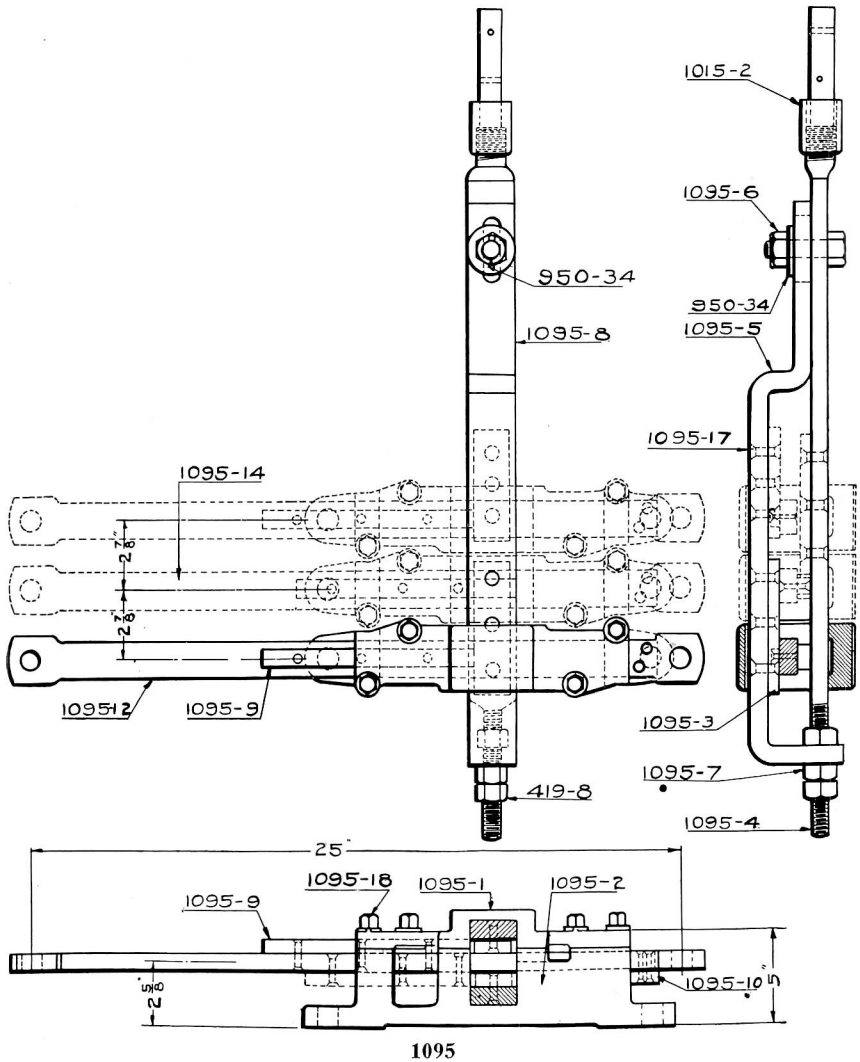




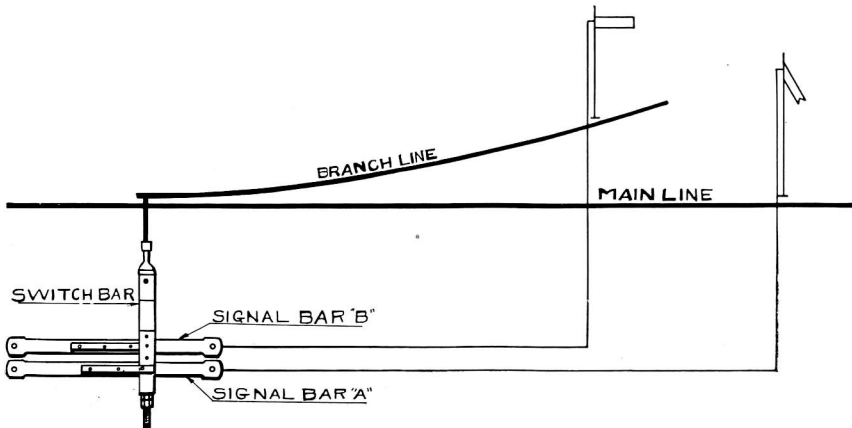
## BOLT LOCKS FOR PIPE OR WIRE CONNECTIONS

Trade No.	DESCRIPTION	List Price
480-1	One Way Bolt Lock Pipe Operated, complete as shown . . . . .	\$5.90
480-2	Same as above except Wire Operated . . . . .	6.45
481-1	Two Way Bolt Lock Pipe Operated, complete as shown . . . . .	9.50
481-2	Same as above except Wire Operated . . . . .	10.60
482-1	Three Way Bolt Lock Pipe Operated, complete as shown . . . . .	12.75
482-2	Same as above except Wire Operated . . . . .	14.40
480-11	Base for One Way Bolt Lock . . . . .	2.75
481-11	“ “ Two “ “ “ “ . . . . .	4.30
482-11	“ “ Three “ “ “ “ . . . . .	5.50
480-12	Switch Bar with Coupling . . . . .	1.60
1015-2	1" x 2 1/4" Coupling, Black . . . . .	.27
482-13	Signal Bar with Stop Pin for Pipe Operated Signal . . . . .	1.54
482-14	Same as above except Left Hand Beveled . . . . .	1.98
482-15	“ “ “ “ Right “ “ “ . . . . .	1.98
482-16	Signal Bar with Stop Pin Shackles, Jaw Pins and Cotters for Wire Operated Signal . . . . .	2.14
482-17	Same as above without Shackles, Jaw Pins and Cotters . . . . .	1.76
482-18	Signal Bar with Stop Pin, Shackles, Jaw Pins and Cotters for Wire Operated Signal, Left Hand Bevel . . . . .	2.58
482-19	Same as above without Shackles, Jaw Pins or Cotter . . . . .	2.20
482-20	Signal Bar with Stop Pin, Shackles, Jaw Pins and Cotters for Wire Operated Signals, Right Hand Bevel . . . . .	2.58
482-21	Same as above except without Shackles, Jaw Pins and Cotters . . . . .	2.20
703-26	Standard 7/8" Shackle with Pin and Cotter . . . . .	.22
703-27	Shackle Only . . . . .	.11
703-28	7/8" x 2 1/4" Square Head Jaw Pin with Cotter for Shackle . . . . .	.11
950-32	3/4" x 4" Lag Screws, per C. . . . .	8.40
950-33	Cast Washer, 3/4", per C. . . . .	9.50
950-34	Wrought Iron Washer, 3/4", each . . . . .	.02
950-35	3/4" x 6" Square Head Machine Bolt and Nut, per C. . . . .	15.40
950-36	3/4" x 7" “ “ “ “ “ “ “ “ “ “ . . . . .	15.40
950-37	3/4" x 8" “ “ “ “ “ “ “ “ “ “ . . . . .	17.60

## R. S. A. MULTIPLE UNIT BOLT LOCKS



## R. S. A. MULTIPLE UNIT BOLT LOCKS

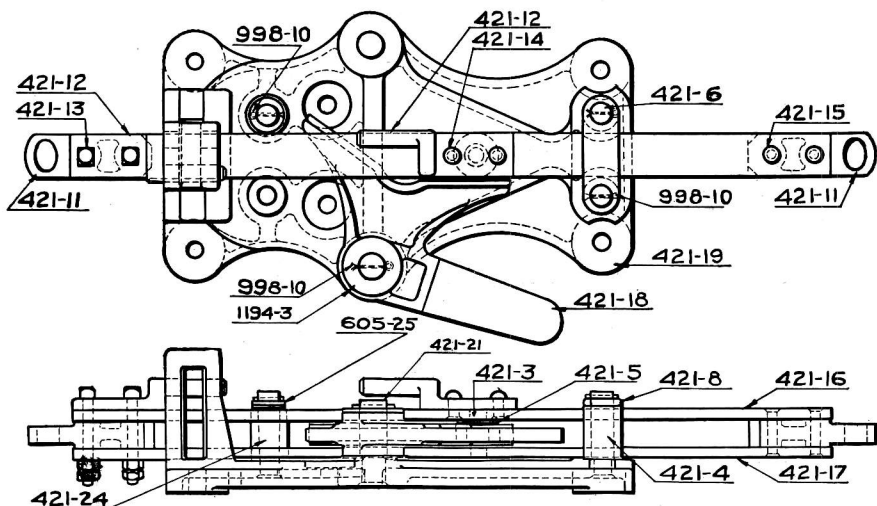


The Bolt Lock illustrated on the preceding page is in accordance with R. S. A. Drawing No. 1095, and is so arranged that any number of units may be mounted alongside of each other and spaced on  $2\frac{7}{8}$ " Centers. The Units can be so arranged that any number of Signal Bars are locked, until switch points are moved, or switch points cannot be moved until any number of Signal Bars have been operated or any combination of the two conditions is possible. Orders for Multiple Units should be accompanied with necessary information as to what each Unit is to accomplish.

Application above shows one of the most common conditions met with in practice; a Two Unit Multiple Bolt Lock is used, it will be seen that switch cannot be thrown until after the operation of Signal Bar "A" which operation puts the Distant Signal on main line in the Stop Position, the operation of switch locks it in that position until switch is again set for main line traffic. Signal Bar "B" operates signal on branch track, and can only be operated after switch is set for branch line traffic. Switch is then locked in that position until signal on branch line is returned to stop position.

Trade No.	DESCRIPTION	List Price
1095	R. S. A. One Way Multiple Unit Bolt Lock.....	.....
1095-16	Same as above except Two Way.....	.....
1095-15	Three ".....	.....
1095-1	Cover for Bolt Lock Stand.....	.....
1095-2	Base " " ".....	.....
1095-3	Lock Rod Locking Dog.....	.....
1095-4	Tang End Bar for Lock Rod.....	.....
1095-5	Slotted " " " ".....	.....
1095-6	Bolt complete with Washer, Cotter and Nut.....	.....
1095-7	Sleeve for Lock Rod.....	.....
1095-8	Adjustable Lock Rod complete.....	.....
1095-9	Lock Dog for Signal Bars.....	.....
1095-10	Stop Plate " " ".....	.....
1095-11	End Signal Bar Only.....	.....
1095-12	" " complete with Lock Dog and Stop.....	.....
1095-13	Center Signal Bar Only.....	.....
1095-14	" " complete with Lock Dog and Stop.....	.....
1095-17	$\frac{1}{4}$ " x $1\frac{1}{2}$ " Countersunk Head Iron Rivets.....	.....
1095-18	$\frac{1}{2}$ " x $1\frac{3}{4}$ " Hexagon Head Cap Screws.....	.....
419-8	$\frac{3}{4}$ " Iron Hexagon Nut.....	.....
950-34	$\frac{3}{4}$ " Standard Iron Washer.....	.....
1095-19	$\frac{9}{16}$ " x $1\frac{1}{8}$ " Cotter Pin.....	.....

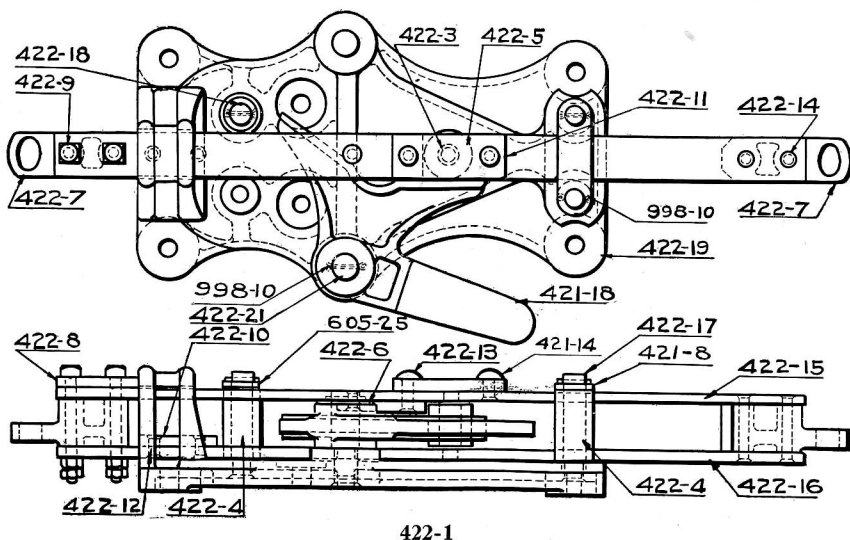
## SWITCH AND LOCK MOVEMENT



The Switch and Lock Movement illustrated above is substantially constructed, the Escapement Crank is undrilled, as the drilling depends on the stroke of the switch; this movement is used with a Drilled Lock Rod.

Trade No.	DESCRIPTION	List Price
421-1	Switch and Lock Movement complete as shown for 8½" Stroke	\$17.05
421-2	Same as above except for 12" Stroke	17.15
421-19	Base Only	6.10
421-6	Bearing Stud for Guide Roller	.26
421-4	Guide Roller	.30
421-8	Cap for Guide Rollers	.13
998-10	¼" x 2" Cotter Pin for Roller Studs, per C.	.88
421-24	Stud for Side Thrust Guide Roller	.23
605-25	1" Standard Iron Washer	.02
421-16	Upper Slide Bar for 421-1 Movement	.89
421-19	Same as above except for 421-2 Movement	.96
421-17	Lower Slide Bar for 421-1 Movement	.89
421-20	Same as above except for 421-2 Movement	.96
421-11	Lug for Slide Bar	.36
421-12	Locking Plunger	.30
421-18	Escapement Crank	1.32
421-21	Pin for Escapement Crank	.30
1194-3	1¼" Standard Iron Washer for Escapement Crank Pin	.02
421-3	Operating Roller Pin	.18
421-5	"	.40
421-15	½" x 2¼" C. S. Head Rivets for Lug to Sliding Bar	.02
421-14	½" x 1⅞" R. H. I. Rivets for Locking Plunger to Bar	.02
421-13	½" x 3½" Square Head Machine Bolts with Two Hexagon Nuts for Locking Plunger and Lug to Sliding Bar	.08

## SWITCH AND LOCK MOVEMENT

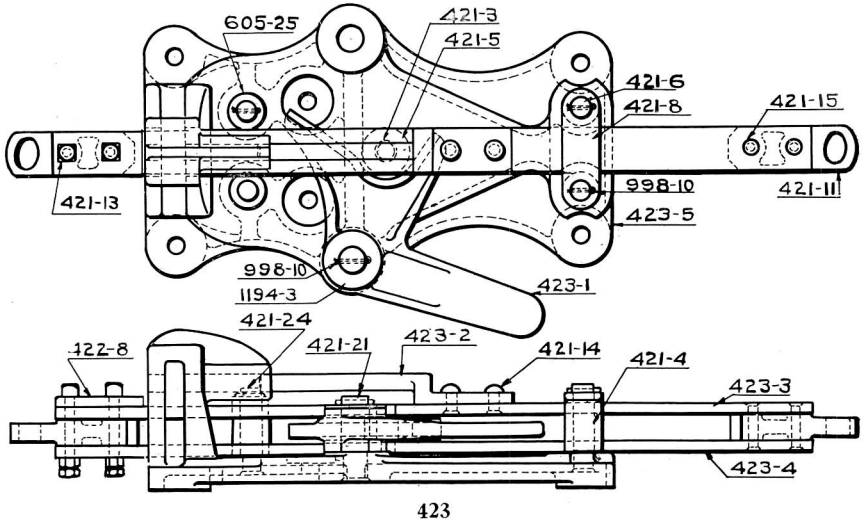


422-1

This style Switch and Lock Movement is identical with our No. 421 style, except that Notched Lock Rod is used in place of Slotted Rod.

Trade No.	DESCRIPTION	List Price
422-1	Switch and Lock Movement complete as shown for 8½" Stroke	\$18.65
422-2	Same as above except for 12" Stroke	18.80
422-19	Base Only	6.65
422-17	Stud for Guide Roller	.26
422-4	Guide Roller	.30
421-8	Cap for Guide Roller	.13
998-10	¼" x 2" Cotter Pin for Guide Rollers, per C.	.88
422-18	Stud for Side Thrust Guide Roller	.23
605-25	1" Standard Iron Washer	.02
422-15	Upper Slide Bar for No. 422-1 Movement	.79
422-19	Same as above except for No. 422-2 Movement	.89
422-16	Lower Slide Bar for No. 422-1 Movement	.79
422-20	Same as above except for No. 422-2 Movement	.89
422-7	Lug for Slide Bar	.36
422-6	Upper Locking Dog	.33
422-10	Lower " "	.26
422-11	Stop for Slide Bar	.17
422-8	End Stop for Slide Bar	.17
421-18	Escapement Crank	1.32
422-21	Pin for Escapement Crank	.30
422-3	Operating Roller Pin	.18
422-5	" "	.40
422-9	½" x 4½" Square Head Machine Bolt with Two Hexagon Nuts for fastening Stop and Lug to Slide Bars	.08
422-12	½" x 1⅞" C. S. H. Rivets for fastening Locking Dog to Slide Bar	.02
422-13	½" x 1⅞" R. H. I. Rivet for fastening Upper Lock Dog and Stop to Slide Bar	.02
421-14	½" x 1⅞" R. H. I. Rivet for fastening Stop to Slide Bar	.02
422-14	½" x 3⅞" C. S. H. " " " " Lug " " "	.02

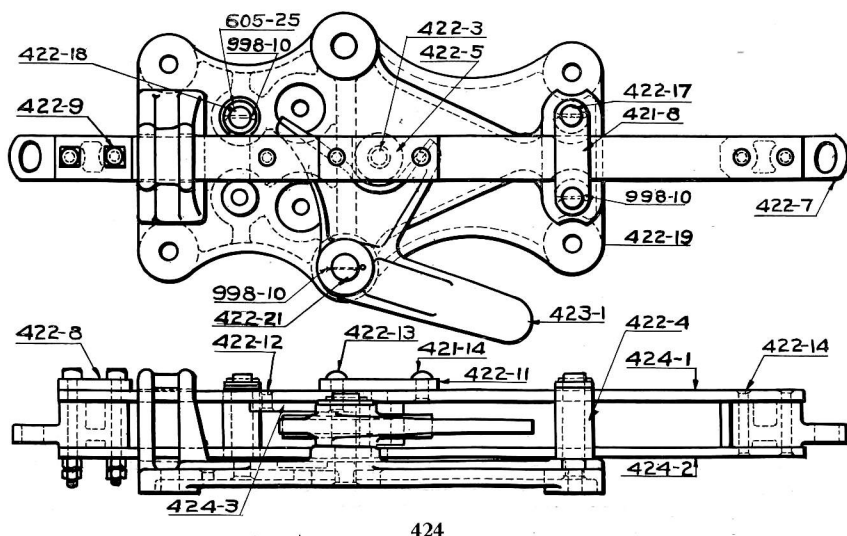
## SWITCH AND LOCK MOVEMENT



This design is practically the same as our No. 421 Type except that it is designed to be used to operate a derail and lock it in the closed position only, it is of the plunger type locking arranged for Drilled Lock Rod.

Trade No.	DESCRIPTION	List Price
423	Switch and Lock Movement complete as shown for 8½" Stroke	\$20.30
423-5	Base Only.....	7.97
421-6	Bearing Stud for Guide Roller.....	.26
421-4	Guide Roller.....	.30
421-8	Cap for Guide Rollers.....	.13
998-10	¼" x 2" Cotter Pins for Roller Studs, per C.....	.88
421-24	Stud for Side Thrust Roller.....	.23
605-25	1" Standard Iron Washer.....	.02
423-3	Upper Slide Bar.....	.96
423-4	Lower ".....	.96
421-11	Lug for Slide Bars.....	.36
423-2	Locking Plunger.....	.79
422-8	End Stop for Slide Bars.....	.17
423-1	Escapement Crank.....	1.32
421-21	Pin for Escapement Crank.....	.30
1194-3	¼" Standard Iron Washer.....	.02
421-3	Operating Roller-Pin.....	.18
421-5	".....	.40
421-15	½" x 2¼" C. S. H. Rivets for fastening Lug to Slide Bar....	.02
421-14	½" x 1½" R. H. I. Rivet for fastening Locking Plunger to Slide Bar.....	.02
421-13	½" x 3½" Square Head Machine Bolts with Two Hexagon Nuts for fastening Lug and Stop to Slide Bar.....	.08

## SWITCH AND LOCK MOVEMENT

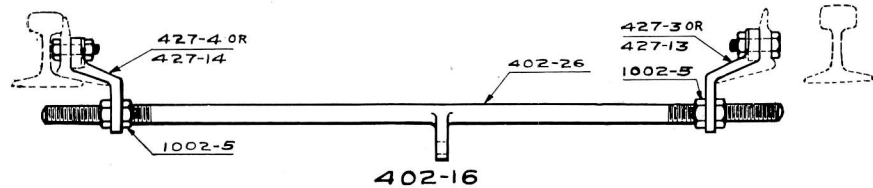
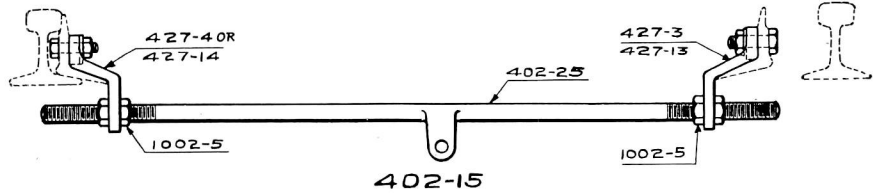
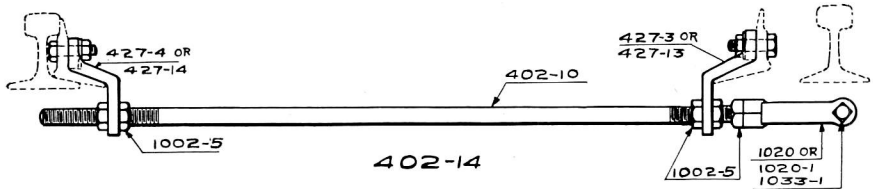
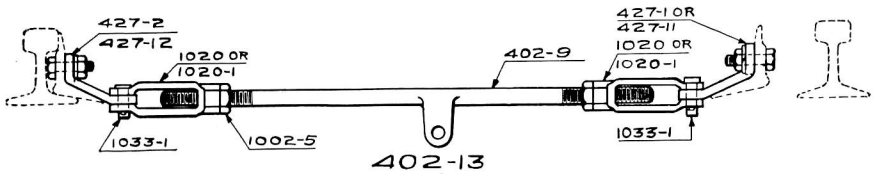
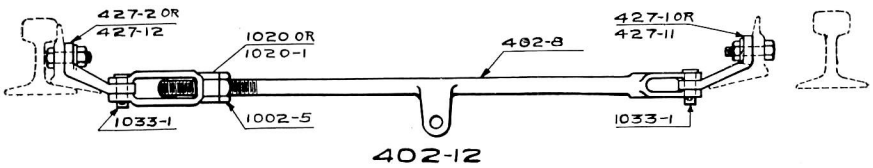
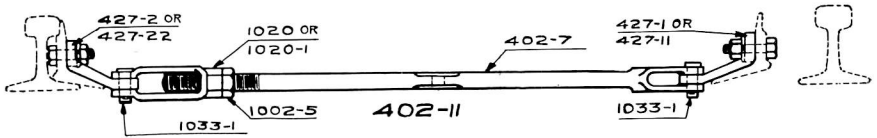


424

This is a duplicate of our No. 423 Type Movement, except that this Movement is arranged to be used with a Notched Lock Rod.

Trade No.	DESCRIPTION	List Price
424	Switch and Lock Movement complete as shown, $8\frac{1}{2}$ " Stroke	\$19.95
422-19	Base Only	6.65
422-17	Stud for Guide Roller	.26
422-4	Guide Roller	.30
421-8	Cap for Guide Roller	.13
998-10	$\frac{1}{4}$ " x 2" Cotter Pins for Roller Studs, per C.	.88
422-18	Stud for Side Thrust Roller	.23
605-25	1" Standard Iron Washer	.02
424-1	Upper Slide Bar	.96
424-2	Lower " "	.96
422-7	Lug for Slide Bars	.36
424-3	Lock Dog	.33
422-11	Stop for Slide Bar	.17
422-8	End Stop for Slide Bar	.17
423-1	Escapement Crank	1.32
422-21	Pin for Escapement Crank	.30
422-3	Operating Roller Pin	.18
422-5	" "	.40
422-9	$\frac{1}{2}$ " x $4\frac{1}{2}$ " Square Head Machine Bolts with Two Hexagon Nuts for fastening Lug and Stop to Slide Bars	.08
422-12	$\frac{1}{2}$ " x $1\frac{1}{8}$ " C. S. H. Iron Rivets for fastening Lock Dog to Slide Bar	.02
422-13	$\frac{1}{2}$ " x $1\frac{5}{8}$ " R. H. I. Rivets for fastening Lock Dog to Slide Bar	.02
421-14	$\frac{1}{2}$ " x $1\frac{1}{8}$ " R. H. I. Rivet for fastening Stop to Slide Bar	.02
422-14	$\frac{1}{2}$ " x $3\frac{1}{8}$ " C. S. H. Iron Rivets for fastening Lug to Slide Bar	.02

## FRONT RODS FOR SINGLE SLIP SWITCHES



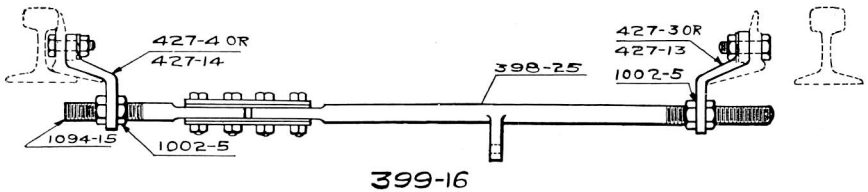
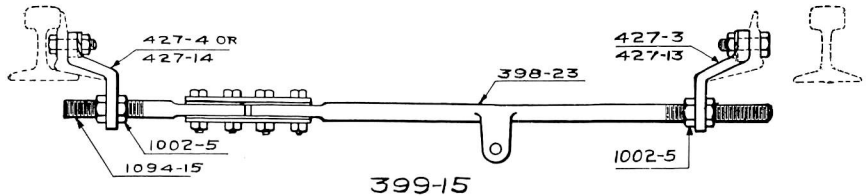
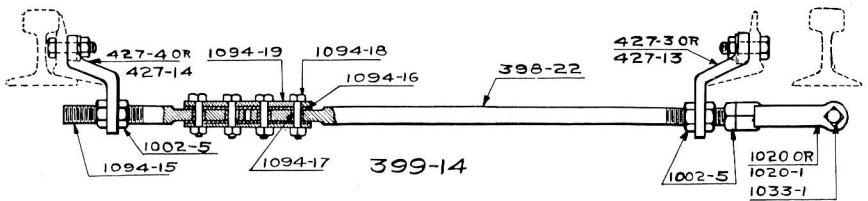
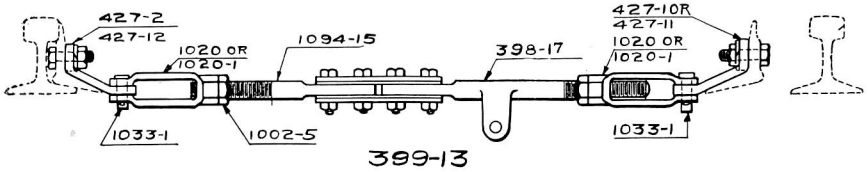
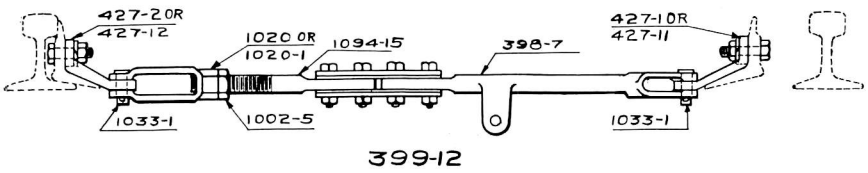
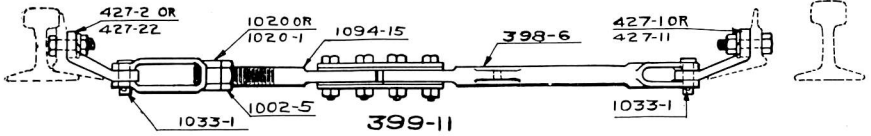




## T-45

## FRONT RODS FOR SINGLE SLIP SWITCHES

(Insulated)

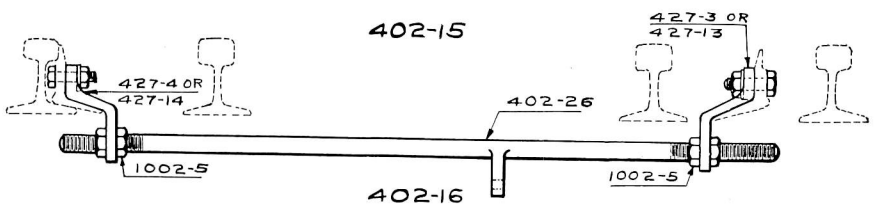
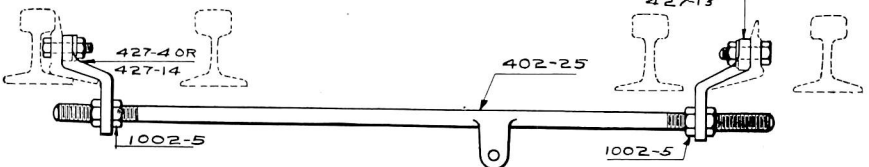
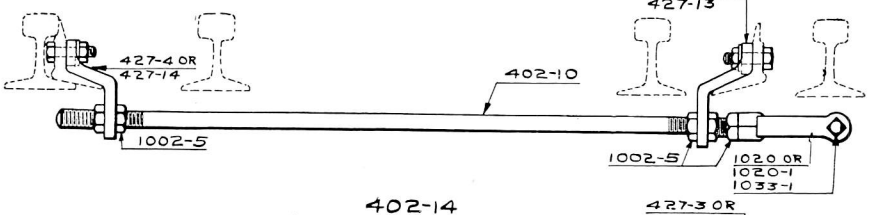
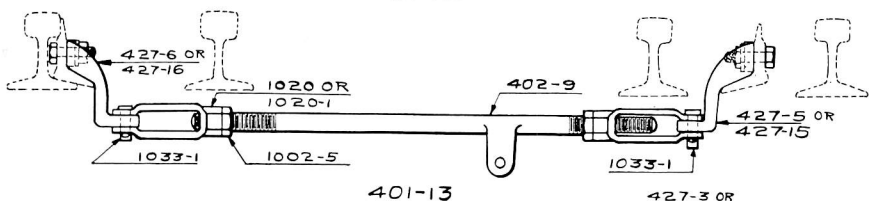
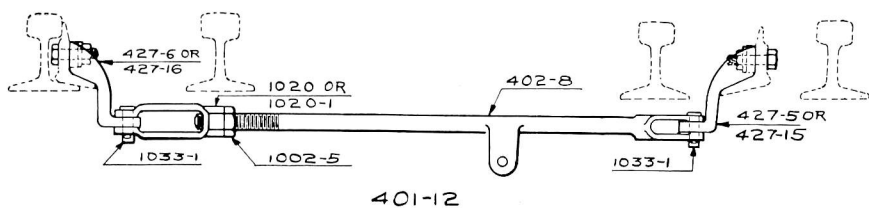
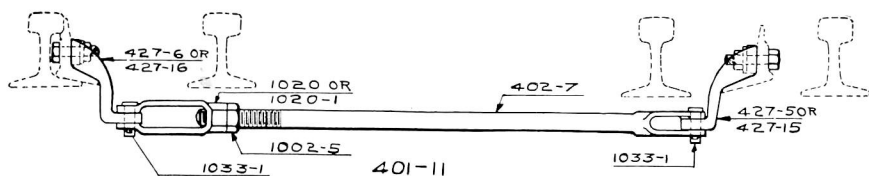


## FRONT RODS FOR SINGLE SLIP SWITCHES

(Insulated)

Trade No.	DESCRIPTION	List Price
399-11	Insulated Front Rod with Lateral Lug complete as shown with Forged Screw Jaw and Switch Point Lugs. . . . .	\$10.64
399-31	Same as above except with Malleable Screw Jaw. . . . .	10.32
399-1	“ “ “ with Forged Screw Jaw but without Switch Point Lugs. . . . .	7.74
399-21	Same as above with Malleable Screw Jaw but without Switch Point Lugs. . . . .	7.42
399-12	Insulated Front Rod with Vertical Lug complete as shown with Forged Screw Jaw and Switch Point Lugs. . . . .	10.64
399-32	Same as above except with Malleable Screw Jaw. . . . .	10.32
399-2	“ “ “ with Forged Screw Jaw but without Switch Point Lugs. . . . .	7.74
399-22	Same as above with Malleable Screw Jaw but without Switch Point Lugs. . . . .	7.42
399-13	Insulated Front Rod with Vertical Lug complete as shown with Forged Screw Jaw and Switch Point Lugs. . . . .	10.10
399-33	Same as above except with Malleable Screw Jaws. . . . .	9.46
399-3	“ “ “ with Forged Screw Jaws but without Switch Point Lugs. . . . .	7.20
399-23	Same as above except with Malleable Screw Jaws but without Switch Point Lugs. . . . .	6.56
399-14	Insulated Front Rod complete as shown with Forged Screw Jaw and Switch Point Lugs. . . . .	16.21
399-34	Same as above except with Malleable Screw Jaw. . . . .	15.89
399-4	“ “ “ with Forged Screw Jaw but without Switch Point Lugs. . . . .	6.05
399-24	Same as above except with Malleable Screw Jaw but without Switch Point Lugs. . . . .	5.73
399-15	Insulated Front Rod with Vertical Lug complete as shown with Switch Point Lugs. . . . .	15.51
399-5	Same as above except without Switch Point Lugs. . . . .	5.35
399-16	Insulated Front Rod with Vertical Lug complete as shown with Switch Point Lugs. . . . .	18.22
399-6	Same as above except without Switch Point Lugs. . . . .	8.06
398-6	Half Rod with Lateral Lug and Solid Jaw. . . . .	3.60
398-7	“ “ “ Vertical “ “ “ . . . . .	3.60
398-17	Threaded Half Rod with Lug. . . . .	2.02
398-22	“ “ “ . . . . .	1.30
398-23	“ “ “ with Vertical Lug for Jaw. . . . .	1.75
398-25	“ “ “ “ “ “ Rod. . . . .	4.46
1094-15	“ Rod. . . . .	1.12
1094-19	Splice Plate. . . . .	.36
1094-16	Fibre “ . . . . .	.18
1094-17	Fibre Bushing, per C. . . . .	5.40
1094-18	$\frac{5}{8}$ " x $2\frac{1}{2}$ " Square Head Machine Bolt and Nut. . . . .	.11
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{1}{4}$ " with Cotter . . . . .	.11
704-14	$\frac{3}{16}$ " x $1\frac{1}{2}$ " Cotter Pins, per C. . . . .	.90
1020	R. S. A. Screw Jaw Forging. . . . .	.86
1020-1	Screw Jaw Malleable Iron. . . . .	.54
1002-5	$1\frac{1}{4}$ " Hexagon Nut, $\frac{3}{4}$ " thick. . . . .	.18
427-1	Right Hand Switch Point Lug with Bolts. . . . .	1.43
427-2	Same as above except Left Hand. . . . .	1.43
427-11	R.H. Switch Point Lug with Bolts for Reinforced Switch Point . . . . .	1.47
427-12	Same as above except Left Hand. . . . .	1.47
427-3	Right Hand Switch Point Lug with Bolts. . . . .	5.06
427-4	Same as above except Left Hand. . . . .	5.06
427-13	R.H. Switch Point Lug with Bolts for Reinforced Switch Point . . . . .	5.10
427-14	Same as above except Left Hand. . . . .	5.10

## FRONT RODS FOR MOVABLE POINT FROGS



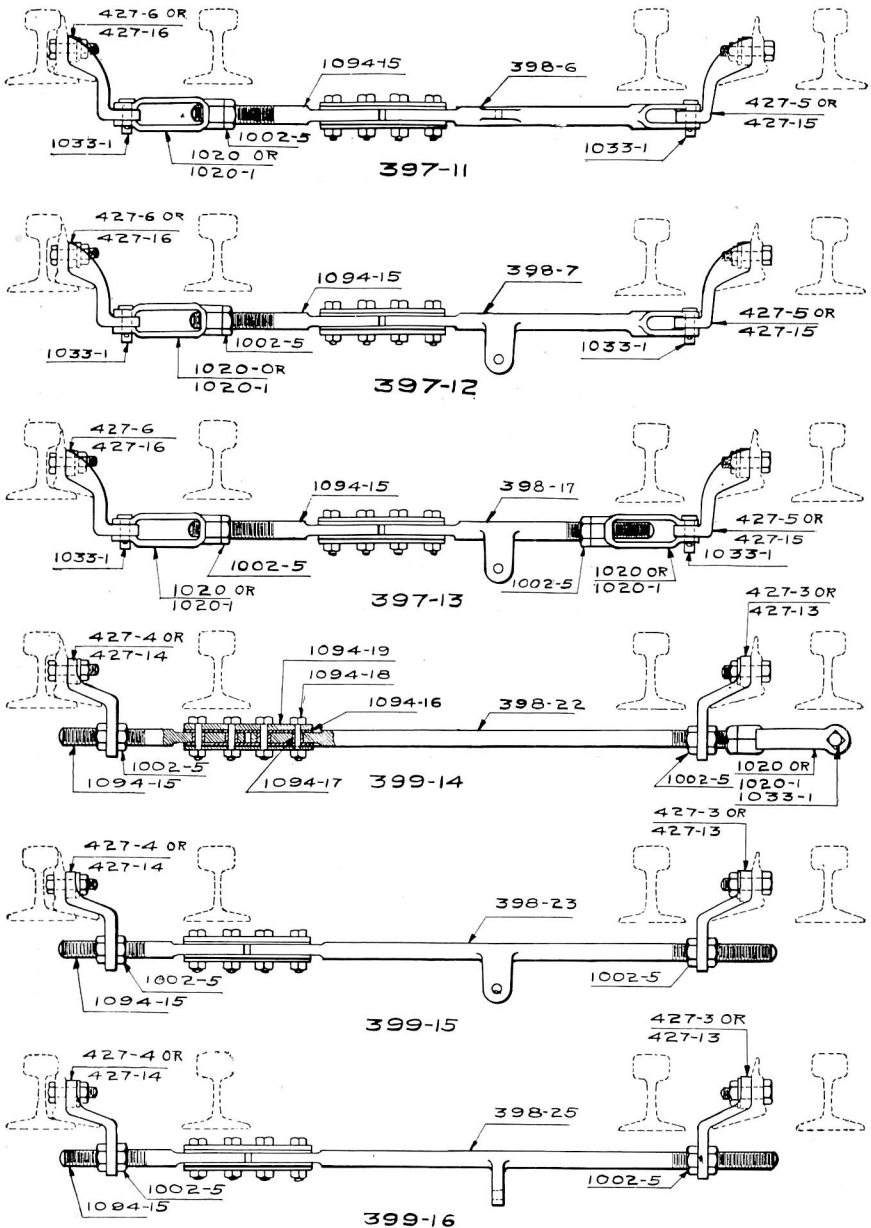


## FRONT RODS FOR MOVABLE POINT FROGS

Trade No.	DESCRIPTION	List Price
401-11	Front Rod with Lateral Lug complete as shown with Forged Screw Jaw and Switch Point Lugs.....	\$10.40
401-31	Same as above except with Malleable Screw Jaw and Switch Point Lugs.....	10.08
402-1	Same as above with Forged Screw Jaw but without Switch Point Lugs.....	5.00
402-21	Same as above with Malleable Screw Jaw but without Switch Point Lugs.....	4.68
401-12	Front Rod with Vertical Lug complete as shown with Forged Screw Jaw and Switch Point Lugs.....	10.40
401-32	Same as above except with Malleable Screw Jaw and Switch Point Lugs.....	10.08
402-2	Same as above with Forged Screw Jaw but without Switch Point Lugs.....	5.00
402-22	Same as above with Malleable Screw Jaw but without Switch Point Lugs.....	4.68
401-13	Front Rod with Lug complete as shown with Forged Screw Jaws and Switch Point Lugs.....	10.89
401-33	Same as above except with Malleable Screw Jaws and Switch Point Lugs.....	10.25
402-3	Same as above with Forged Screw Jaw but without Switch Point Lugs.....	5.49
402-23	Same as above with Malleable Screw Jaw but without Switch Point Lugs.....	5.17
402-14	Front Rod complete as shown with Forged Screw Jaw and Switch Point Lugs.....	14.34
402-34	Same as above except with Malleable Screw Jaw and Switch Point Lugs.....	14.02
402-4	Same as above with Forged Screw Jaw but without Switch Point Lugs.....	4.18
402-24	Same as above with Malleable Screw Jaw but without Switch Point Lugs.....	3.86
402-15	Front Rod with Vertical Lug complete as shown with Switch Point Lugs.....	14.38
402-5	Same as above except without Switch Point Lugs.....	4.22
402-16	Front Rod with Vertical Lugs complete as shown with Switch Point Lugs.....	17.09
402-6	Same as above except without Switch Point Lugs.....	6.93
402-7	Front Rod with Lateral Lug and Solid Jaws.....	3.74
402-8	“ “ “ Vertical “ “ “ “.....	3.74
402-9	Threaded Rod with Lug.....	3.19
402-10	“ “ “ “.....	2.31
402-25	“ “ “ with Lug for Jaw.....	3.50
402-26	“ “ “ “ Rod.....	6.21
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{1}{4}$ " with Cotter Pin.....	.11
704-14	$\frac{3}{8}$ " x $1\frac{1}{2}$ " Cotter Pins, per C.....	.90
1020	R. S. A. Screw Jaw Forged.....	.86
1020-1	Screw Jaw, Malleable Iron.....	.54
1002-5	$1\frac{1}{4}$ " Hexagon Nuts, $\frac{3}{4}$ " thick.....	.18
427-5	Right Hand Switch Point Lug with Bolts.....	2.70
427-6	Same as above except Left Hand.....	2.70
427-15	Right Hand Switch Point Lug with Bolts for Reinforced Switch Points.....	2.74
427-16	Same as above except Left Hand.....	2.74
427-3	Right Hand Switch Point Lug with Bolts.....	5.06
427-4	Same as above except Left Hand.....	5.06
427-13	Right Hand Switch Point Lug with Bolts for Reinforced Switch Points.....	5.10
427-14	Same as above except Left Hand.....	5.10

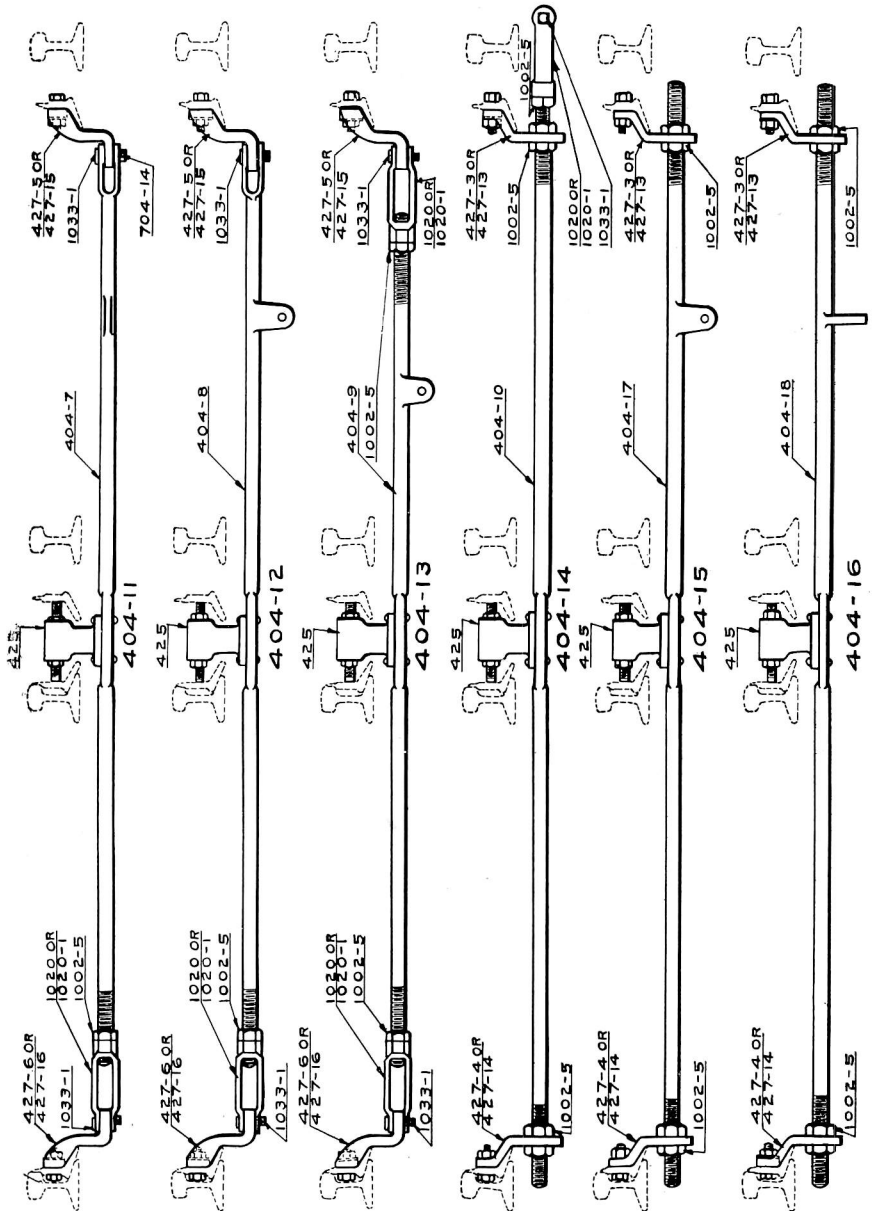
## FRONT RODS FOR MOVABLE POINT FROGS

(Insulated)



T-51

## FRONT RODS FOR DOUBLE SLIP SWITCHES FOR ONE LOCK ROD







## FRONT RODS FOR DOUBLE SLIP SWITCHES FOR ONE LOCK ROD

Trade No.	DESCRIPTION	List Price
404-11	Front Rod with Lateral Lug complete as shown with Forged Screw Jaw, Switch Point Lugs and Point Separator . . . . .	\$16.84
404-31	Same as above except with Malleable Screw Jaw . . . . .	16.52
404-1	“ “ “ with Forged Screw Jaw but without Switch Point Lugs or Point Separator . . . . .	8.69
404-21	Same as above with Malleable Screw Jaw but without Switch Point Lugs or Point Separator . . . . .	8.37
404-12	Front Rod with Vertical Lug complete as shown with Forged Screw Jaw, Switch Point Lugs and Point Separator . . . . .	16.84
404-32	Same as above except with Malleable Screw Jaw . . . . .	16.52
404-2	“ “ “ with Forged Screw Jaw but without Switch Point Lugs or Point Separator . . . . .	8.69
404-22	Same as above with Malleable Screw Jaw but without Switch Point Lugs or Point Separator . . . . .	8.37
404-13	Front Rod with Vertical Lug complete as shown with Forged Screw Jaws, Switch Point Lugs and Point Separator . . . . .	16.30
404-33	Same as above except with Malleable Screw Jaws . . . . .	15.66
404-3	“ “ “ with Forged Screw Jaws but without Switch Point Lugs or Point Separator . . . . .	8.15
404-23	Same as above with Malleable Screw Jaws but without Switch Point Lugs or Point Separator . . . . .	7.51
404-14	Front Rod complete as shown with Forged Screw Jaw, Switch Point Lugs and Point Separator . . . . .	20.47
404-34	Same as above except with Malleable Screw Jaw . . . . .	20.15
404-4	“ “ “ with Forged Screw Jaw but without Switch Point Lugs or Point Separator . . . . .	7.56
404-24	Same as above with Malleable Screw Jaw but without Switch Point Lugs or Point Separator . . . . .	7.24
404-15	Front Rod with Vertical Lug complete as shown with Switch Point Lugs and Point Separator . . . . .	19.77
404-5	Same as above except without Switch Point Lugs and Point Separator . . . . .	6.86
404-16	Front Rod with Vertical Lug complete as shown with Switch Point Lugs and Point Separator . . . . .	22.48
404-6	Same as above except without Switch Point Lugs or Point Separator . . . . .	9.57
404-7	Rod with Lateral Lug and Solid Jaw . . . . .	7.43
404-8	“ “ Vertical “ “ “ . . . . .	7.43
404-9	Threaded Rod with Vertical Lug for Jaw . . . . .	5.85
404-10	“ “ Only . . . . .	5.69
404-17	“ “ with Vertical Lug for Jaw . . . . .	6.14
404-18	“ “ “ Rod . . . . .	8.85
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{1}{4}$ " with Cotter . . . . .	.11
704-14	$\frac{3}{8}$ " x $1\frac{1}{2}$ " Cotter Pin for above, per C. . . . .	.90
1020	R. S. A. Screw Jaw Forging . . . . .	.86
1020-1	Screw Jaw, Malleable Iron . . . . .	.54
1002-5	$1\frac{1}{4}$ " Hexagon Nut, $\frac{3}{4}$ " thick . . . . .	.18
427-5	Right Hand Switch Point Lug with Bolts . . . . .	2.70
427-6	Same as above except Left Hand . . . . .	2.70
427-15	Right Hand Switch Point Lug with Bolts for Reinforced Switch Points . . . . .	2.74
427-16	Same as above except Left Hand . . . . .	2.74
427-3	Right Hand Switch Point Lug with Bolts . . . . .	5.06
427-4	Same as above except Left Hand . . . . .	5.06
427-13	R. H. Switch Point Lug with Bolts for Reinforced Switch Point . . . . .	5.10
427-14	Same as above except Left Hand . . . . .	5.10
425	Point Separator complete with Bolts for fastening Malleable Bracket . . . . .	2.75
425-1	Same as above except Forged Bracket . . . . .	3.50



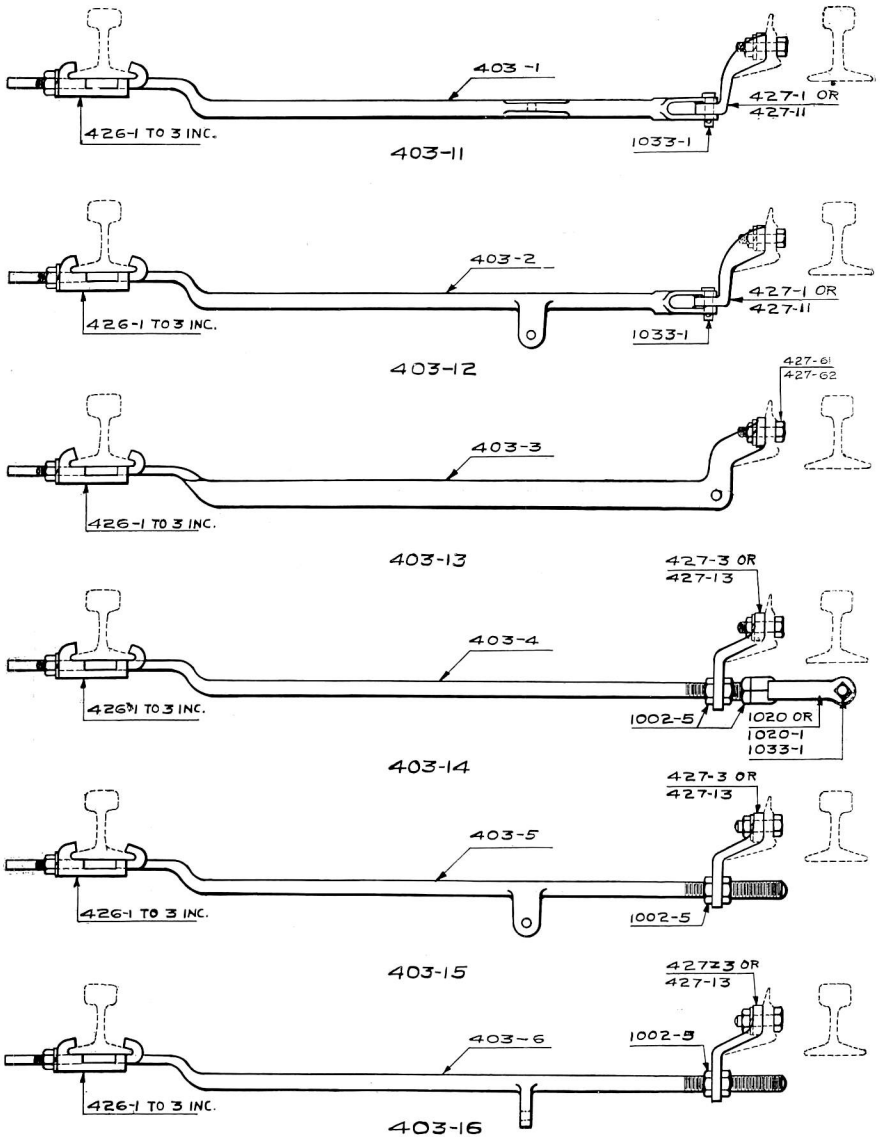


## FRONT RODS FOR DOUBLE SLIP SWITCHES FOR ONE LOCK ROD

(Insulated)

Trade No.	DESCRIPTION	List Price
405-11	Front Rod with Lateral Lug complete as shown with Forged Screw Jaw, Switch Point Lugs and Point Separator.....	\$19.65
405-31	Same as above except with Malleable Screw Jaw.....	19.33
405-1	Same as above except with Forged Screw Jaw but without Switch Point Lugs or Point Separator.....	11.50
405-21	Same as above with Malleable Screw Jaw but without Switch Point Lugs or Point Separator.....	11.18
405-12	Front Rod with Vertical Lug complete as shown with Forged Screw Jaw, Switch Point Lugs and Point Separators.....	19.65
405-32	Same as above except with Malleable Screw Jaw.....	19.33
405-2	Same as above except with Forged Screw Jaw but without Switch Point Lugs or Point Separator.....	11.50
402-22	Same as above with Malleable Screw Jaw but without Switch Point Lugs or Point Separator.....	11.18
405-13	Front Rod with Vertical Lug complete as shown with Forged Screw Jaws, Switch Point Lugs and Point Separator.....	19.11
405-33	Same as above except with Malleable Screw Jaws.....	18.47
405-3	Same as above except with Forged Screw Jaws but without Switch Point Lugs or Point Separator.....	10.96
405-23	Same as above with Malleable Screw Jaws but without Switch Point Lugs or Point Separator.....	10.32
405-14	Front Rod complete as shown with Forged Screw Jaws, Switch Point Lugs and Point Separator.....	22.85
405-34	Same as above except with Malleable Screw Jaw.....	22.53
405-4	Same as above except with Forged Screw Jaw but without Switch Point Lugs or Point Separator.....	9.94
405-24	Same as above with Malleable Screw Jaw but without Switch Point Lugs or Point Separator.....	9.62
405-15	Front Rod with Vertical Lug complete as shown with Switch Point Lugs and Point Separator.....	22.15
405-5	Same as above except without Switch Point Lugs or Point Separator.....	9.24
405-16	Front Rod with Vertical Lug complete as shown with Switch Point Lugs and Point Separator.....	24.86
405-6	Same as above except without Switch Point Lugs or Point Separator.....	11.95
398-6	Half Rod with Lateral Lug and Solid Jaw.....	3.60
398-7	Half Rod with Vertical Lug.....	3.60
398-17	Threaded Half Rod with Lug.....	2.02
398-22	Threaded Half Rod with Lug for Jaw.....	1.30
398-23	Threaded Half Rod with Lug for Jaw.....	1.75
398-25	Threaded Half Rod with Lug for Jaw.....	4.46
405-18	Threaded Half Rod.....	1.25
1094-15	Threaded Half Rod.....	1.12
405-17	Center Rod.....	2.00
1094-19	Splice Plate.....	.36
1094-16	Fibre.....	.18
1094-17	Bushing, per C.....	5.40
1094-18	5/8" x 2 1/2" Square Head Machine Bolt and Nut.....	.11
1033-1	R. S. A. Jaw Pin, 7/8" x 2 1/2" with Cotter.....	.11
704-14	3/4" x 1 1/2" Cotter Pin for above, per C.....	.90
1020	R. S. A. Screw Jaw Forging.....	.86
1020-1	Screw Jaw, Malleable Iron.....	.54
1002-5	1 1/4" Hexagon Nut, 3/4" thick.....	.18
427-5	Right Hand Switch Point Lug with Bolts.....	2.70
427-6	Same as above except Left Hand.....	2.70
427-15	R. H. Switch Point Lug with Bolts for Reinforced Switch Point.....	2.74
427-16	Same as above except Left Hand.....	2.74
427-3	Right Hand Switch Point Lug with Bolts.....	5.06
427-4	Same as above except Left Hand.....	5.06
427-13	Right Hand Switch Point Lug with Bolts for Reinforced Switch Points.....	5.10
427-14	Same as above except Left Hand.....	5.10
425	Point Separator complete with Bolts for fastening, Malleable Bracket.....	2.75
425-1	Same as above except with Forged Bracket.....	3.50

## FRONT RODS FOR DERAIL



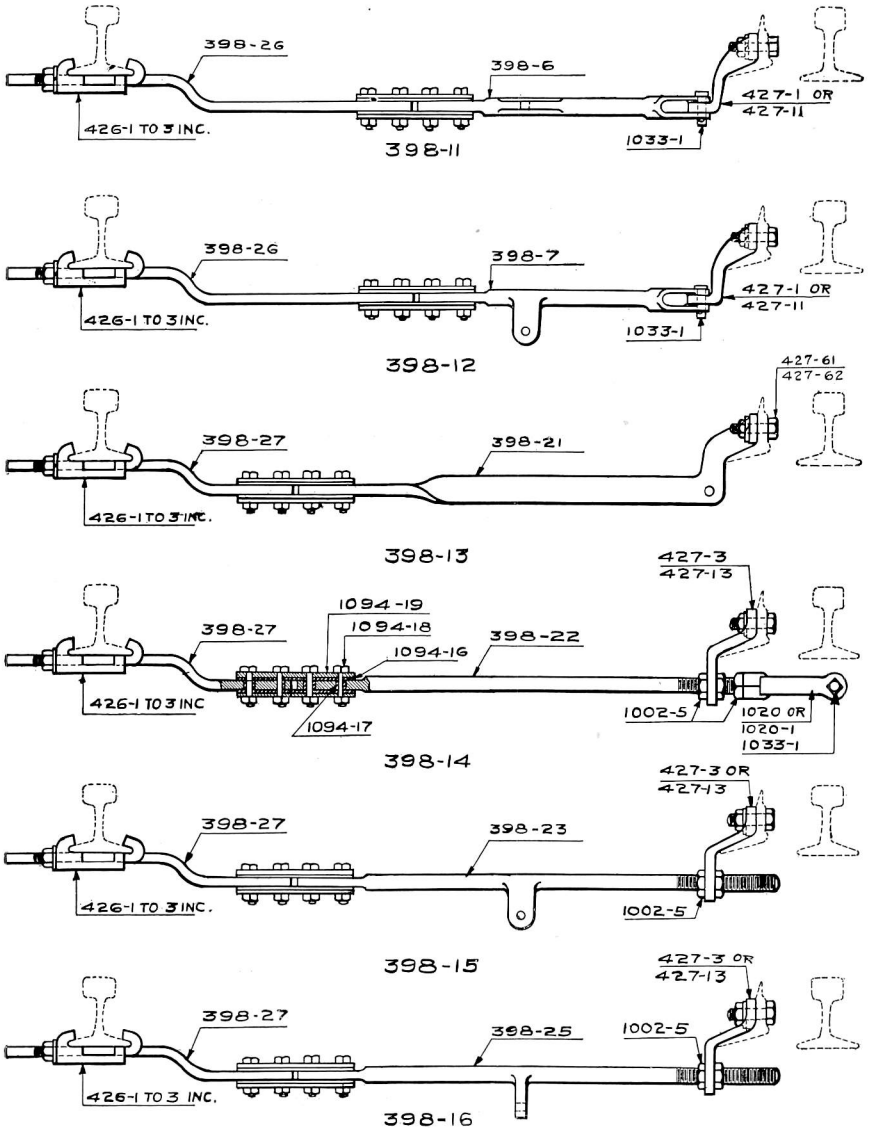


## FRONT RODS FOR DERAIL

Trade No.	DESCRIPTION	List Price
403-11	Front Rod for Derail with Lateral Lug complete with Switch Point Lug and Guide.....	\$6.66
403-1	Same as above except without Switch Point Lug and Guide...	4.36
403-12	Front Rod for Derail with Vertical Lug complete with Switch Point Lug and Guide.....	6.66
403-2	Same as above except without Switch Point Lug and Guide...	4.36
403-13	Front Rod for Derail complete as shown with Guide.....	15.34
403-3	Same as above without Guide or Bolts.....	14.19
403-14	Adjustable Front Rod for Derail complete as shown with Forged Screw Jaw, Switch Point Lug and Guide.....	10.60
403-24	Same as above except with Malleable Screw Jaw.....	10.28
403-4	“ “ “ “ without Screw Jaw, Nuts, Switch Point, Lug or Guide.....	3.34
403-15	Adjustable Front Rod for Derail with Vertical Lug complete as shown with Switch Point Lug and Guide.....	9.28
403-5	Same as above except without Nuts, Switch Point Lug or Guide.....	2.99
403-16	Adjustable Front Rod for Derail with Vertical Lug complete as shown with Switch Point Lug and Guide.....	11.99
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{1}{4}$ " with Cotter.....	.11
704-14	$\frac{3}{8}$ " x $1\frac{1}{2}$ " Cotter Pins, per C.....	.90
1020	R. S. A. Screw Jaw Forging.....	.86
1020-1	Screw Jaw, Malleable Iron.....	.54
1002-5	$1\frac{1}{4}$ " Hexagon Nut, $\frac{3}{4}$ " thick.....	.18
427-1	Right Hand Switch Point Lug with Bolts.....	1.43
427-2	Same as above except Left Hand.....	1.43
427-11	Right Hand Switch Point Lug with Bolts for Reinforced Switch Point.....	1.47
427-12	Same as above except Left Hand.....	1.47
427-3	Right Hand Switch Point Lug with Bolts.....	5.06
427-4	Same as above except Left Hand.....	5.06
427-13	Right Hand Switch Point Lug with Bolts for Reinforced Switch Points.....	5.10
427-14	Same as above except Left Hand.....	5.10
426-1	Guide for Derail Rod with Hook Bolts for 60 lb., 65 lb. and 70 lb. A. S. C. E. and 90 lb. Type "B" A. R. A. Rail.....	.85
426-2	Same as above except with Hook Bolts for 75 lb., 80 lb. and 85 lb. A. S. C. E. 90 lb. Type "A" and 100 lb. Type "B" A. R. A. Rail.....	.85
426-3	Same as above except with Hook Bolts for 90 lb., 95 lb. and 100 lb. A. S. C. E. and 100 lb. Type "A" A. R. A. Rail....	.85
427-61	$\frac{3}{4}$ " x $2\frac{1}{2}$ " Square Head Machine Bolt and Nut with Cotter and Lock Washer.....	.14
427-62	$\frac{3}{4}$ " x $3\frac{1}{2}$ " Square Head Machine Bolt and Nut with Cotter and Lock Washer.....	.16
403-6	Adjustable Front Rod for Derail with Vertical Lug complete as shown without Switch Point Lug or Guide.....	5.70

## FRONT RODS FOR DERAILS

( Insulated )



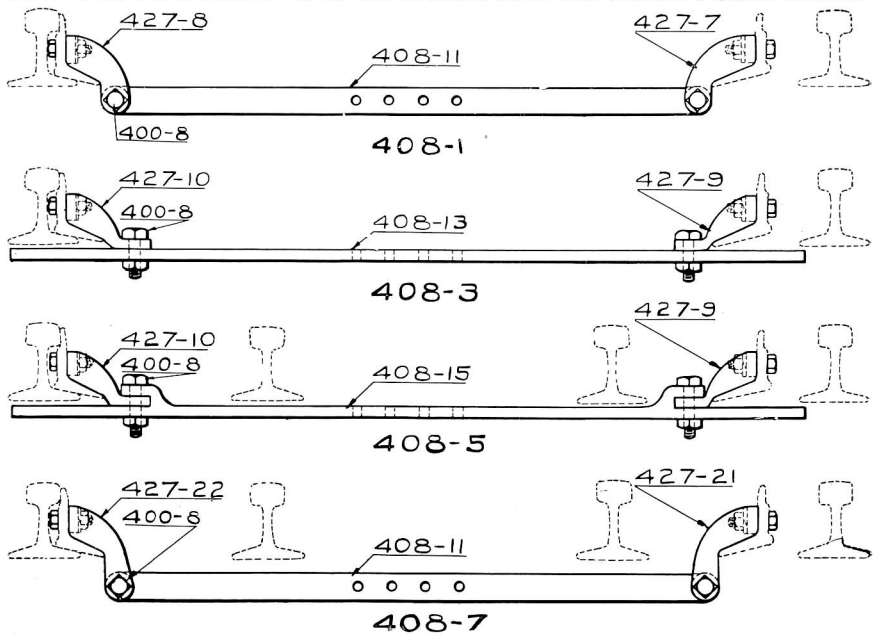


## FRONT RODS FOR DERAIL

(Insulated)

Trade No.	DESCRIPTION	List Price
398-11	Insulated Front Rod for Derail with Lateral Lug complete as shown with Switch Point Lug and Guide.....	\$8.87
398-1	Same as above except without Switch Point Lug or Guide....	6.57
398-12	Insulated Front Rod for Derail with Vertical Lug complete as shown with Switch Point Lug and Guide.....	8.87
398-2	Same as above except without Switch Point Lug or Guide...	6.57
398-13	Insulated Front Rod for Derail complete as shown without Guide.....	17.81
398-3	Same as above except without Guide or Bolts.....	16.66
398-14	Adjustable Insulated Front Rod for Derail complete as shown with Forged Screw Jaw, Switch Point Lug and Guide.....	11.40
398-24	Same as above except with Malleable Screw Jaw.....	11.08
398-4	“ “ “ without Screw Jaw, Nuts, Switch Point Lug or Guide.....	3.96
398-15	Adjustable Insulated Front Rod for Derail with Vertical Lug complete as shown with Switch Point Lug and Guide.....	10.70
398-5	Same as above except without Nuts, Switch Point Lug or Guide.....	4.41
398-16	Adjustable Insulated Front Rod for Derail with Vertical Lug complete as shown with Switch Point Lug and Guide.....	13.41
398-10	Same as above except without Nuts, Switch Point Lug or Guide.....	7.12
398-6	Half Rod with Lateral Lug.....	3.60
398-7	“ “ “ Vertical “.....	3.60
398-21	Combination Half Rod and Switch Point.....	14.00
398-22	Threaded Half Rod.....	1.30
398-23	“ “ “ with Vertical Lug for Jaw.....	1.75
398-25	“ “ “ Rod.....	4.46
398-26	Half Rod Flat Stub End.....	1.10
398-27	“ “ “ “.....	.90
1094-19	Splice Plate.....	.36
1094-16	Fibre “.....	.18
1094-17	“ Bushing, per C.....	5.40
1094-18	5/8" x 2 1/2" Square Head Machine Bolts and Nuts.....	.11
1033-1	R. S. A. Jaw Pin, 7/8" x 2 1/4" with Cotter.....	.11
704-14	3/8" x 1 1/2" Cotter Pins, per C.....	.90
1020	R. S. A. Screw Jaw Forging.....	.86
1020-1	Screw Jaw, Malleable Iron.....	.54
1002-5	1 1/4" Hexagon Nut, 3/4" thick.....	.18
427-1	Right Hand Switch Point Lug with Bolts.....	1.43
427-2	Same as above except Left Hand.....	1.43
427-11	Right Hand Switch Point Lug with Bolts for Reinforced Points.....	1.47
427-12	Same as above except Left Hand.....	1.47
427-3	Right Hand Switch Point Lug with Bolts.....	5.06
427-4	Same as above except Left Hand.....	5.06
427-13	Right Hand Switch Point Lug with Bolts for Reinforced Switch Points.....	5.10
427-14	Same as above except Left Hand.....	5.10
426-1	Guide for Derail Rod for 60 lb., 65 lb. and 70 lb. A. S. C. E. Rail and 90 lb. Type "A" A. R. A. Rail.....	.85
426-2	Same as above except for 75 lb., 80 lb., 85 lb. A. S. C. E. and 90 lb. Type "A" and 100 lb. Type "B" A. R. A. Rail.....	.85
426-3	Same as above except for 90 lb., 95 lb. and 100 lb. A. S. C. E. and 100 lb. Type "A" A. R. A. Rails.....	.85

## TIE RODS FOR SINGLE SLIP SWITCHES AND MOVABLE POINT FROGS

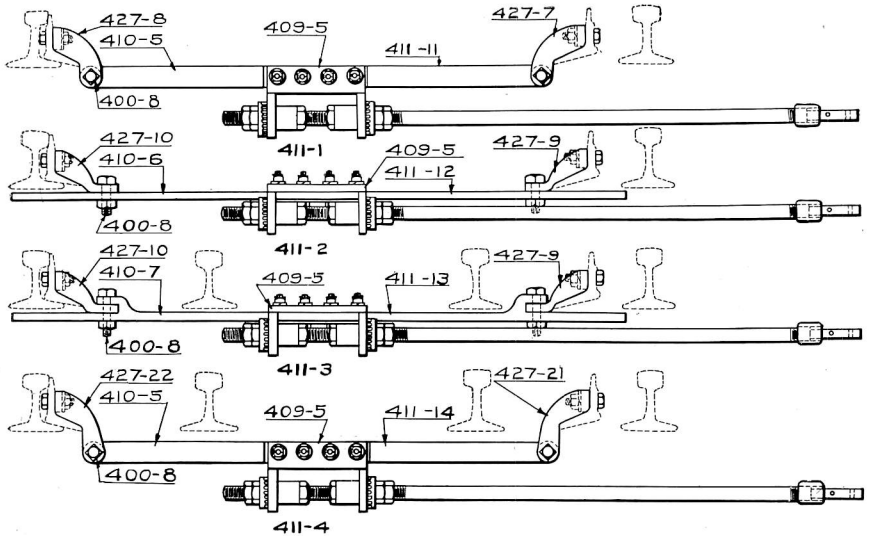


Trade No.	DESCRIPTION	List Price
408-1	Tie Rod for Single Slip Switches complete as shown with Switch Point Lugs drilled for Switch Throw Rod Adjustment	\$8.50
408-2	Same as above except not drilled for Switch Throw Rod Adjustment	8.35
408-11	Tie Rod Only drilled for Switch Adjustment.....	1.75
408-12	Same as above but not drilled for Adjustment.....	1.60
408-3	Tie Rod for Slip Switch or Movable Point Frogs drilled for Switch Throw Rod Adjustment.....	7.60
408-4	Same as above except not drilled for Adjustment.....	7.45
408-13	Tie Rod Only drilled for Switch Adjustment.....	1.75
408-14	“ “ “ not drilled for Switch Adjustment.....	1.60
408-5	“ “ “ for Slip Switches or Movable Point Frogs complete as shown with Switch Point Lugs drilled for Switch Throw Rod Adjustment.....	8.50
408-6	Same as above except not drilled for Adjustment.....	8.35
408-15	Tie Rod Only drilled for Adjustment.....	2.65
408-16	“ “ “ not drilled for Adjustment.....	2.50
408-7	“ “ “ for Movable Point Frogs complete as shown with Switch Point Lugs drilled for Switch Throw Rod Adjustment.....	8.50
408-8	Same as above except not drilled for Adjustment.....	8.35
427-7	Right Hand Switch Point Lug with Bolts for fastening to Switch Point and Bolt for Tie Rod.....	3.19
427-8	Same as above except Left Hand.....	3.19
427-9	Right Hand Switch Point Lug with Bolts for fastening to Switch Points and Bolt for Tie Rod.....	2.75
427-10	Same as above except Left Hand.....	2.75
427-21	Right Hand Switch Point Lug with Bolts for fastening to Switch Point and Bolt for Tie Rod.....	3.19
427-22	Same as above except Left Hand.....	3.19
400-8	$\frac{5}{8}$ " x 2 $\frac{1}{2}$ " Square Head Machine Bolt and Nut with Cotter Pin and Lock Washer.....	.18



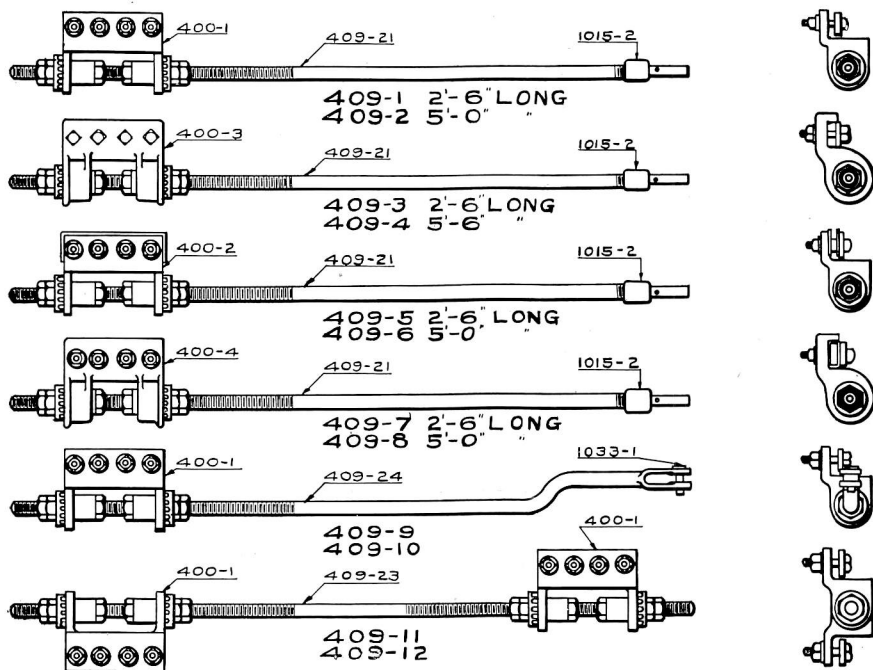


## INSULATED TIE RODS WITH SWITCH THROW RODS



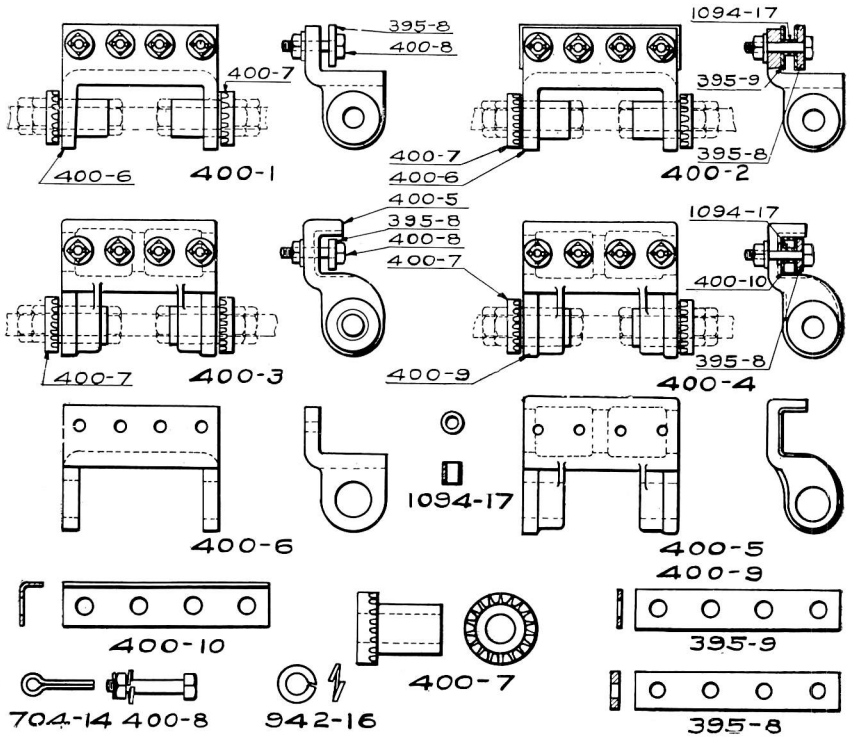
Trade No.	DESCRIPTION	List Price
411-1	Insulated Tie Rod complete as shown with Switch Point Lugs, Forged Switch Adjustment and 5' Throw Rod. ....	\$17.64
411-11	Same as above without Switch Point Lugs. ....	11.26
411-2	Insulated Tie Rod complete as shown with Switch Point Lugs, Forged Switch Adjustment and 5' Throw Rod. ....	16.76
411-12	Same as above except without Switch Point Lugs. ....	11.26
411-3	Insulated Tie Rod complete as shown with Switch Point Lugs, Forged Switch Adjustment and 5' Throw Rod. ....	17.66
411-13	Same as above without Switch Point Lugs. ....	12.16
411-4	Insulated Tie Rod complete as shown with Switch Point Lugs, Forged Switch Adjustment and 5' Throw Rod. ....	17.64
411-14	Same as above without Switch Point Lugs. ....	11.26
	When Cast Switch Adjustments are wanted, deduct from above prices. ....	1.75
	When 2' 6" Throw Rod is required, deduct from above prices	.40
410-5	Half Rod for 411-1, 411-4, 411-11 and 411-14. ....	.90
410-6	" " " 411-2 and 411-12. ....	.90
410-7	" " " 411-3 " 411-13. ....	1.35
409-5	Throw Rod, 2' 6" long with Insulation and Forged Adjustment	9.10
409-6	Same as above except 5' long. ....	9.40
409-7	Throw Rod 2' 6" long with Insulation and Cast Adjustment. .	6.98
409-8	Same as above except 5' Throw Rod. ....	7.39
427-7	Right Hand Switch Point Lug with Bolts for fastening to Switch Point and Bolt for Tie Rod. ....	3.19
427-8	Same as above except Left Hand. ....	3.19
427-9	Right Hand Switch Point Lug with Bolts for fastening to Switch Point and Bolt for Tie Rod. ....	2.75
427-10	Same as above except Left Hand. ....	2.75
427-21	Right Hand Switch Point Lug with Bolts for fastening to Switch Point and Bolt for Tie Rod. ....	3.19
427-22	Same as above except Left Hand. ....	3.19
400-8	$\frac{5}{8}$ " x $3\frac{1}{2}$ " Square Head Machine Bolt and Nut with Cotter Pin and Lock Washer. ....	.18

## THROW RODS FOR SWITCHES



Trade No.	DESCRIPTION	List Price
409-1	Throw Rod 2' 6" long complete as shown with Forged Switch Adjustment	\$8.46
409-2	Same as above except Throw Rod 5' long	8.76
409-3	Throw Rod 2' 6" long complete as shown with Cast Switch Adjustment	6.54
409-4	Same as above except Throw Rod 5' long	6.84
409-5	Insulated Throw Rod 2' 6" long complete as shown with Forged Switch Adjustment	9.10
409-6	Same as above except Throw Rod 5' long	9.40
409-7	Insulated Throw Rod 2' 6" long complete as shown with Cast Switch Adjustment	6.98
409-8	Same as above except Throw Rod 5' long	7.39
409-9	Solid Jaw End Switch Adjustment complete as shown with Forged Adjustment	10.94
409-10	Same as above except with Cast Adjustment	9.02
409-11	Double Switch Adjustment complete as shown with Forged Adjustment	16.47
409-12	Same as above except with Cast Adjustment	12.63
409-21	Throw Rod 2' 6" long with Coupling	1.70
409-22	" 5' long with Coupling	2.00
409-23	1 1/2" Threaded Rod for Double Switch Adjustment	2.95
409-24	1 1/2" " with Solid Jaw End and Jaw Pin for Double Switch Adjustment	4.18
1002-5	1 1/2" Hexagon Nut, 3/4" thick	.18
1015-2	1" x 2 1/2" Coupling	.27
1033-1	R. S. A. Jaw Pin, 7/8" x 2 1/2" with Cotter	.11
704-14	3/8" x 1 1/2" Cotter Pin for above, per C.	.90
400-1	Forged Switch Adjustment, not Insulated	5.68
400-2	Same as above except Insulated	6.32
400-3	Cast Switch Adjustment, not Insulated	3.76
400-4	Same as above except Insulated	4.50

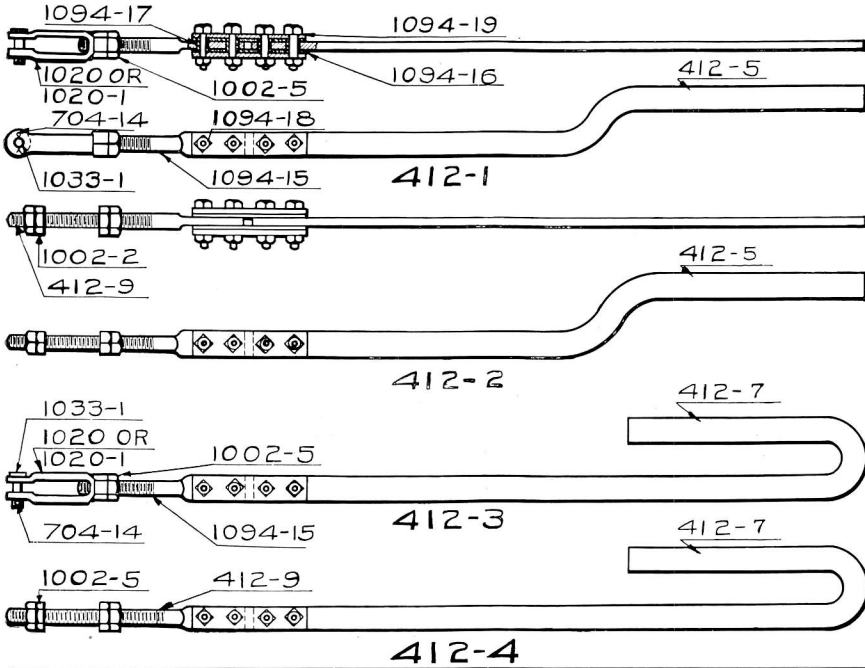
## SWITCH AND DERAIL ADJUSTMENTS



Trade No.	DESCRIPTION	List Price
400-1	Switch and Derail Adjustment complete as shown (Forged Bracket) no Nuts or Rod.....	\$5.68
400-2	Same as above except Insulated.....	6.32
400-3	Switch and Derail Adjustment complete as shown (Cast Bracket) no Nuts or Rod.....	3.76
400-4	Same as above except Insulated.....	4.50
400-6	Forged Bracket Only.....	3.68
400-5	Cast Bracket for Non-Insulated Adjustment.....	1.76
400-9	“ “ “ Insulated Adjustment.....	1.76
400-7	Bushing for Bracket.....	.44
400-8	$\frac{5}{8}$ " x $3\frac{1}{2}$ " Square Head Machine Bolt and Nut with Lock Washer and Cotter.....	.18
942-16	$\frac{5}{8}$ " Lock Washer.....	.02
704-14	$\frac{3}{16}$ " x $1\frac{1}{2}$ " Cotter Pin, per C.....	.90
395-8	Splice Plate for Insulated Adjustment.....	.40
395-9	Fibre “ “ Forged Bracket.....	.20
400-10	“ “ “ Cast “.....	.25
1094-17	“ Bushing, per C.....	5.40



## INSULATED LOCK ROD

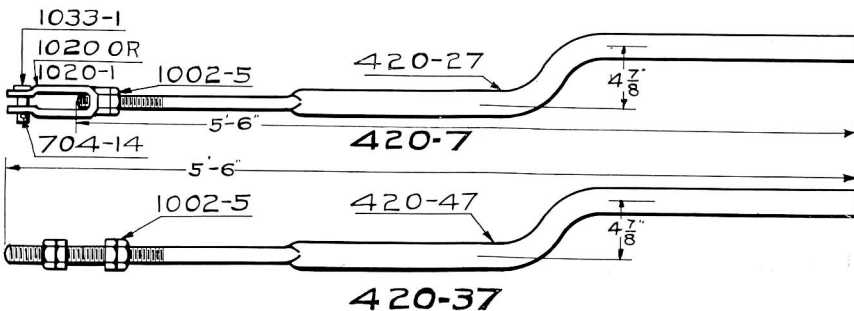


Trade No.	DESCRIPTION	List Price
412-1	Insulated Lock Rod complete as shown, $4\frac{7}{8}$ " Offset with Forged Screw Jaw.....	\$5.38
412-11	Same as above except with Malleable Screw Jaw.....	5.06
412-21	" " " " with Forged Screw Jaw and $3\frac{7}{8}$ " Offset.....	5.38
412-31	" " " " Malleable Screw Jaw and $3\frac{7}{8}$ " Offset.....	5.06
412-2	Insulated Lock Rod complete as shown, $4\frac{7}{8}$ " Offset.....	5.08
412-22	Same as above except $3\frac{7}{8}$ " Offset.....	5.08
412-3	Insulated Lock Rod complete as shown, $4\frac{7}{8}$ " Offset with Forged Screw Jaw.....	6.35
412-13	Same as above except with Malleable Screw Jaw.....	6.03
412-23	" " " " with Forged Screw Jaw and $3\frac{7}{8}$ " Offset....	6.35
412-33	" " " " Malleable Screw Jaw and $3\frac{7}{8}$ " Offset....	6.03
412-4	Insulated Lock Rod complete as shown, $4\frac{7}{8}$ " Offset.....	6.05
412-14	Same as above except $3\frac{7}{8}$ " Offset.....	6.05
412-5	Offset Rod 5' 6" long, $4\frac{7}{8}$ " ".....	1.35
412-6	" " 5' 6" " $3\frac{7}{8}$ " ".....	1.35
412-7	Bent " 5' 6" " $4\frac{7}{8}$ " ".....	2.32
412-8	" " 5' 6" " $3\frac{7}{8}$ " ".....	2.32
1094-15	Threaded Rod.....	1.12
412-9	" ".....	1.25
1020	R. S. A. Screw Jaw Forging.....	.86
1020-1	Screw Jaw Malleable, Iron.....	.54
1002-5	$1\frac{1}{4}$ " Hexagon Nut, $\frac{3}{4}$ " thick.....	.18
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{1}{4}$ " with Cotter.....	.11
704-14	$\frac{3}{16}$ " x $1\frac{1}{2}$ " Cotter Pin, per C.....	.90
1094-19	Splice Plate.....	.36
1094-16	Fibre ".....	.18
1094-17	Bushing, per C.....	5.40
1094-18	$\frac{5}{8}$ " x $2\frac{1}{2}$ " Square Head Machine Bolt and Nut.....	.11





## LOCK RODS

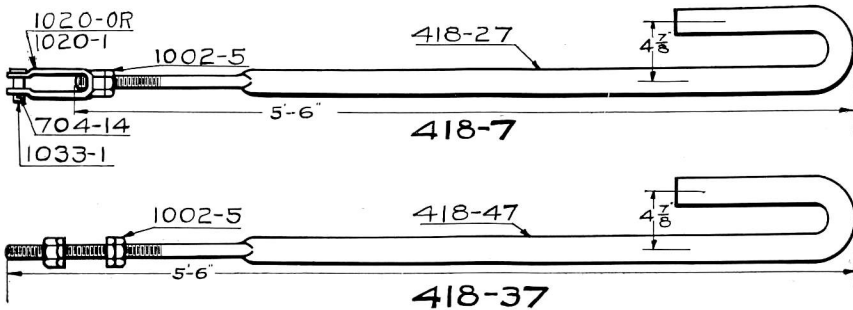


Trade No.	DESCRIPTION	List Price
420-1	Lock Rod complete, 2' 6" long with Forged Screw Jaw, Nut and Jaw Pin..	\$3.94
420-11	Same as above except Malleable Iron Screw Jaw.....	3.62
420-21	without Screw Jaw, Jaw Pin or Hexagon Nut.....	2.79
420-2	Lock Rod complete, 3' long with Forged Screw Jaw, Nut and Jaw Pin. . .	4.09
420-12	Same as above with Malleable Screw Jaw.....	3.77
420-22	without Screw Jaw, Jaw Pin or Hexagon Nut.....	2.94
420-3	Lock Rod complete, 3' 6" long with Forged Screw Jaw, Nut and Jaw Pin..	4.24
420-13	Same as above except with Malleable Screw Jaw.....	3.92
420-23	without Screw Jaw, Jaw Pin or Hexagon Nut.....	3.09
420-4	Lock Rod complete, 4' long with Forged Screw Jaw, Nut and Jaw Pin.....	4.39
420-14	Same as above except with Malleable Screw Jaw.....	4.07
420-24	without Screw Jaw, Jaw Pin or Hexagon Nut.....	3.24
420-5	Lock Rod complete, 4' 6" long, with Forged Screw Jaw, Nut and Jaw Pin..	4.54
420-15	Same as above with Malleable Screw Jaw.....	4.22
420-25	without Screw Jaw, Jaw Pin or Hexagon Nut.....	3.39
420-6	Lock Rod complete, 5' long, with Forged Screw Jaw, Nut and Jaw Pin....	4.69
420-16	Same as above except with Malleable Screw Jaw.....	4.37
420-26	without Screw Jaw, Jaw Pin or Hexagon Nut.....	3.54
420-7	Lock Rod complete, as shown, 5' 6" long, with Forged Screw Jaw, Nut and Jaw Pin.....	4.84
420-17	Same as above except with Malleable Screw Jaw.....	4.52
420-27	without Screw Jaw, Jaw Pin or Hexagon Nut.....	3.69
420-31	Lock Rod Threaded complete with Four Hexagon Nuts 2' 6" long.....	3.51
420-41	Same as above without Hexagon Nuts.....	2.79
420-32	Lock Rod Threaded complete with Four Hexagon Nuts, 3' long.....	3.66
420-42	Same as above without Hexagon Nuts.....	2.94
420-33	Lock Rod Threaded with Four Hexagon Nuts, 3' 6" long.....	3.81
420-43	Same as above without Hexagon Nuts.....	3.09
420-34	Lock Rod Threaded complete with Four Hexagon Nuts, 4' long.....	3.96
420-44	Same as above without Hexagon Nuts.....	3.24
420-35	Lock Rod Threaded complete with Four Hexagon Nuts, 4' 6" long.....	4.11
420-45	Same as above except without Hexagon Nuts.....	3.39
420-36	Lock Rod Threaded complete with Four Hexagon Nuts, 5' long.....	4.26
420-46	Same as above except without Hexagon Nuts.....	3.54
420-37	Lock Rod complete as shown, 5' 6" long.....	4.41
420-47	Same as above except without Hexagon Nuts.....	3.69
1020	R. S. A. Screw Jaw Forging.....	.86
1020-1	Screw Jaw, Malleable Iron.....	.54
1002-5	1 1/4" Hexagon Nuts, 3/4" thick.....	.18
1033-1	R. S. A. Jaw Pin, 3/8" x 2 1/4".....	.11
704-14	3/8" x 1 1/2" Cotter Pin for above, per C.....	.90





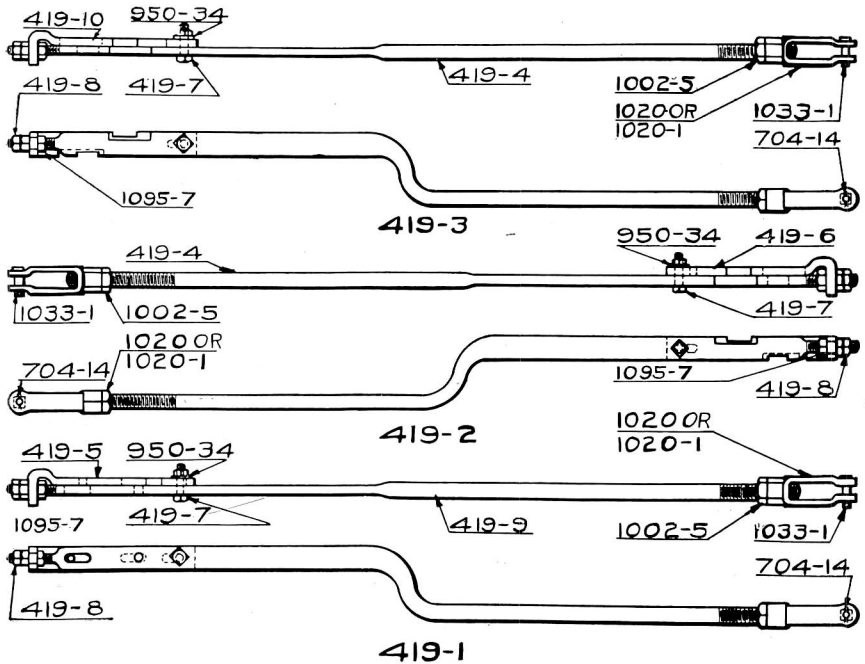
## LOCK RODS



Trade No.	DESCRIPTION	List Price
418-1	Lock Rod complete, 2' 6" long with Forged Screw Jaw, Nut and Jaw Pin..	\$5.47
418-11	Same as above except with Malleable Screw Jaw.....	5.15
418-21	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.32
418-2	Lock Rod complete, 3' long with Forged Screw Jaw, Nut and Jaw Pin....	5.53
418-12	Same as above except with Malleable Screw Jaw.....	5.21
418-22	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.38
418-3	Lock Rod complete, 3' 6" long with Forged Screw Jaw, Nut and Jaw Pin..	5.59
418-13	Same as above except with Malleable Screw Jaw.....	5.27
418-23	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.44
418-4	Lock Rod complete, 4' long with Forged Screw Jaw, Nut and Jaw Pin....	5.65
418-14	Same as above except with Malleable Screw Jaw.....	5.33
418-24	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.50
418-5	Lock Rod complete, 4' 6" long with Forged Screw Jaw, Nut and Jaw Pin..	5.71
418-15	Same as above except with Malleable Screw Jaw.....	5.39
418-25	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.56
418-6	Lock Rod complete, 5' long with Forged Screw Jaw, Nut and Jaw Pin....	5.77
418-16	Same as above except with Malleable Screw Jaw.....	5.45
418-26	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.62
418-7	Lock Rod complete as shown, 5' 6" long, with Forged Screw Jaw, Nut and Jaw Pin.....	5.83
418-17	Same as above except with Malleable Screw Jaw.....	5.51
418-27	Same as above except without Screw Jaw, Jaw Pin or Hexagon Nut.....	4.68
418-31	Lock Rod Threaded complete with Four Hexagon Nuts, 2' 6" long.....	5.04
418-41	Same as above without Hexagon Nuts.....	4.32
418-32	Lock Rod Threaded complete with Four Hexagon Nuts, 3' long.....	5.10
418-42	Same as above without Hexagon Nuts.....	4.38
418-33	Lock Rod Threaded complete with Four Hexagon Nuts, 3' 6" long.....	5.16
418-43	Same as above without Hexagon Nuts.....	4.44
418-34	Lock Rod Threaded complete with Four Hexagon Nuts, 4' long.....	5.22
418-44	Same as above without Hexagon Nuts.....	4.50
418-35	Lock Rod Threaded complete with Four Hexagon Nuts, 4' 6" long.....	5.28
418-45	Same as above without Hexagon Nuts.....	4.56
418-36	Lock Rod Threaded complete with Four Hexagon Nuts, 5' long.....	5.34
418-46	Same as above without Hexagon Nuts.....	4.62
418-37	Lock Rod complete as shown, 5' 6" long.....	5.40
418-47	Same as above without Hexagon Nuts.....	4.68
1020	R. S. A. Screw Jaw, Forging.....	.86
1020-1	Screw Jaw, Malleable Iron.....	.54
1002-5	1 1/4" Hexagon Nut, 3/8" thick.....	.18
1033-1	R. S. A. Jaw Pin, 7/8" x 2 1/4", with Cotter.....	.11
704-14	3/16" x 1 1/2" Cotter Pin for above, per C.....	.90

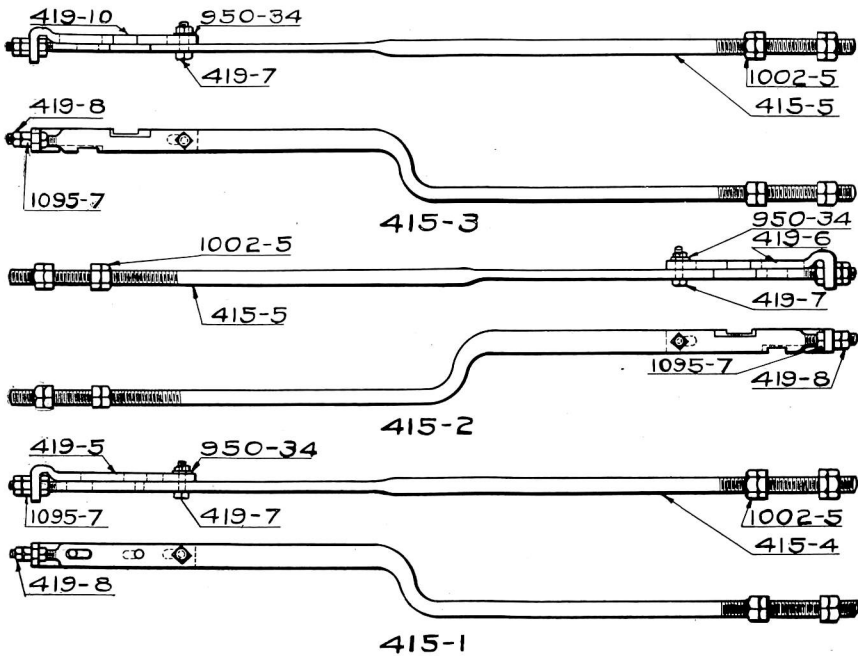


## ADJUSTABLE LOCK RODS



Trade No.	DESCRIPTION	List Price
419-1	Adjustable Lock Rod for Facing Point Lock or Switch and Lock Movement, complete as shown.....	\$13.35
419-11	Same as above except with Malleable Screw Jaw.....	13.02
419-2	Right Hand Adjustable Lock Rod for Switch and Lock Movement, complete as shown.....	13.35
419-12	Same as above except with Malleable Screw Jaw.....	13.02
419-3	Left Hand Adjustable Lock Rod for Switch and Lock Movement, complete as shown.....	13.35
419-13	Same as above except with Malleable Screw Jaw.....	13.02
419-9	Lock Rod Drilled and Threaded for 419-1 and 419-11.....	5.87
419-4	“ “ “ “ “ “ 419-2, 419-12, 419-3 and 419-13.....	5.87
419-5	Adjustable Lock Plate Drilled and Slotted for 419-1 and 419-11.....	4.35
419-6	Adjustable Lock Plate Drilled and Notched for 419-2 and 419-12.....	4.35
419-10	Adjustable Lock Plate Drilled and Notched for 419-3 and 419-13.....	4.35
419-7	$\frac{3}{4}$ " x $2\frac{3}{4}$ " Square Head Machine Bolt and Nut.....	.13
950-34	$\frac{3}{4}$ " Standard Iron Washer.....	.02
419-8	$\frac{3}{4}$ " “ “ Hexagon Nut.....	.08
1020	R. S. A. Screw Jaw Forged.....	.86
1020-1	Same as above except Malleable Iron.....	.54
1002-5	$1\frac{1}{4}$ " Hexagon Nut, $\frac{3}{4}$ " thick.....	.18
1033-1	R. S. A. Jaw Pin, $\frac{7}{8}$ " x $2\frac{1}{4}$ " with Cotter.....	.11
704-14	$\frac{3}{8}$ " x $1\frac{1}{2}$ " Cotter Pin for above, per C.....	.90
1095-7	Adjusting Nut.....	1.65

## ADJUSTABLE LOCK RODS



Trade No.	DESCRIPTION	List Price
415-1	Adjustable Lock Rod for Facing Point Lock or Switch and Lock Movement, complete as shown.....	\$12.92
415-2	Right Hand Adjustable Lock Rod for Switch and Lock Movement, complete as shown.....	12.92
415-3	Same as above except Left Hand.....	12.92
415-4	Lock Rod Drilled and Threaded for 415-1.....	5.87
415-5	“ “ “ “ “ 415-2 and 415-3.....	5.87
419-5	Adjustable Lock Plate Drilled and Slotted for 415-1.....	4.35
419-6	“ “ “ “ “ Notched for 415-2.....	4.35
419-10	“ “ “ “ “ 415-3.....	4.35
419-7	$\frac{3}{4}$ " x $2\frac{3}{4}$ " Square Head Machine Bolt and Nut.....	.13
950-34	$\frac{3}{4}$ " Standard Iron Washer.....	.02
419-8	$\frac{3}{4}$ " Hexagon Nut.....	.08
1002-5	$1\frac{1}{4}$ " Hexagon Nut, $\frac{3}{4}$ " thick.....	.18
1095-7	Adjusting Sleeve and Nut.....	1.65