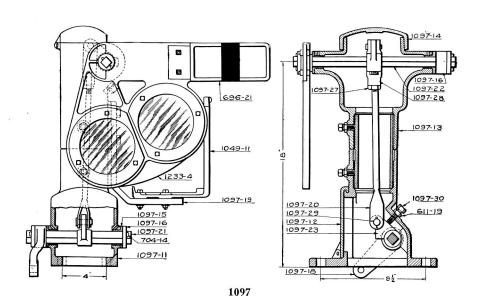
1914 CATALOGUE AND PRICE LIST

SECTION O

DWARF AND POT SIGNALS



R. S. A. DWARF SIGNAL



The Dwarf Signal illustrated is built in accordance with R. S. A. Drawing No. 1097, arranged for Pipe or Wire Operation. As the Signal is only 18" high, it is well out of the way of all projecting parts of passing trains, thus eliminating the objectionable feature of dwarf signals, viz.: broken blades, spectacles, lamps, etc. The operating crank may be turned at any angle in respect to the position of the Spectacle, making it possible to operate the Signal from any direction.

Application 1 shows a pipe operated signal with the pipe line coming to the Signal across under the rails. Application 2 shows a pipe operated signal with the pipe line running parallel with rails. No. 1097 shows the Signal equipped for Pipe Operation. No. 1097–1 shows this Signal equipped with escapement crank with spring for Wire Operation. Application 3 shows the Signal operated by wire with leads coming parallel to rails. Application 4 shows it with leads coming under and across the rails.

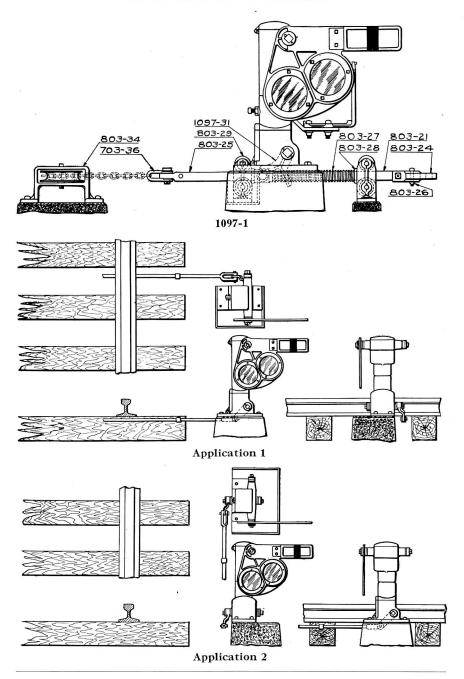
The Signal as shown operates through an angle of 0 deg. to 45 deg. in the Upper Right Hand Quadrant. We can furnish the Signal equipped to operate from 0 deg. to 90 deg. in two or three positions. The upper and lower cranks inside the Signal are interchangeable and are held in position by lugs cast on the frame instead of the usual pinning through the shaft. It is obvious that this method insures a stronger construction. The operating rod is adjustable; stops are provided which allow adjusting to fractions of one inch, a removable cover at top and a removable door at bottom are provided to facilitate inspection and adjusting. Standard R. S. A. Lamp Bracket is used.

Trade No.	DESCRIPTION	List Price
1097 1097–1	R. S. A. Dwarf Signal for Pipe Operation, complete as shown	\$40.50
1097-1	(no Chain, Wire or Anchor Bolts included)	45.00

List prices do not include Anchor Bolts, Chain, Wire Operating Jaws or Foundations.

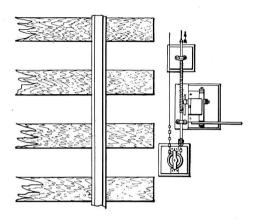


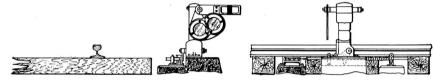
R. S. A. DWARF SIGNAL



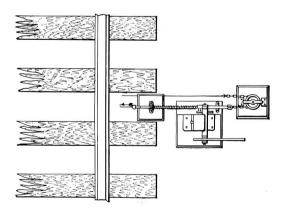


R. S. A. DWARF SIGNAL





Application 3

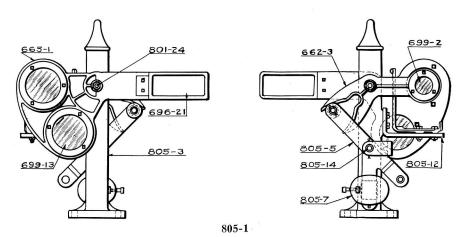




0-4



ONE ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL WITH ESCAPEMENT CRANK

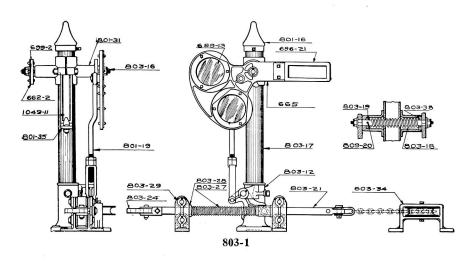


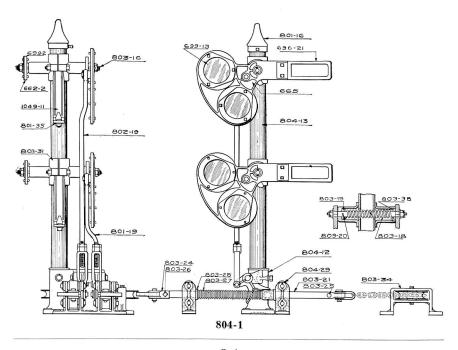
Lamps, Chain, Split Links, Wire and Wire Eyes are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Orders should specify color and number of Roundels. This Signal can be furnished with any style Semaphore Spectacle or Blade. Prices on application.

Trade No.	DESCRIPTION	List Price
805-1	One Arm 60 deg. Lower Quadrant Pipe Operated Dwarf Signal with Escape- ment Crank, complete as shown	\$28.00
805-2	ment Crank, complete as shown One Arm 60 deg. Lower Quadrant Wire Operated Dwarf Signal with Escape- ment Crank	29.2
805-3	Mast Only.	7.7
805-14	Pin for Crank with Cotter	.1
805-5	Balance Lever complete with 11 lb. Counterweight, Stud, Roller and Bolts	7.9
805-6	" " with Stud, Washer and Cotter	6.1
805-7	11 lb. Counterweight with Bolt and Nut.	1.1
805-8	"" Only	1.0
805-9	Stud with Cotter for Balance Lever.	1.0
805-11	Washer for Stud	.0
801-24	Washer for Stud Semaphore Shaft with Washers, Nuts and Cotters	1.5
665-1	Two Light 60 deg. Lower Quadrant Semaphore Spectacle complete with	1.0
000 1	Roundel Rings and Bolts	2.3
662-3	Roundel Rings and Bolts	2.0
002 3	Ring and Bolt	1.2
699-2	Ring and Bolt. Glass Roundels, 23%" dia. Specify Color	
699-13	53%" " " " "	
696-21	Blade complete with Bolts and Blade Plate	.8
805-12	Lamp Bracket complete with Support, Bolts and Cap Screws	3.6
805-13	" Support	2.0
1049-11	" "	1.8
930-1	One Way Vertical Chain Wheel complete	.9
703-46	Double Shackle complete with Pin and Cotter	.2
703-1	Wire Eyes	.0
703-11	Split Links, per C	3.6
703-16	1/4" Proof Chain, per ft	. 1
950 - 32	3/4" x 4" Lag Screws, per C	8.4
1097-26	74" Proof Chain, per ft. 34" x 4" Lag Screws, per C. 74" x 1" Square Head Machine Bolt and Nut for Balance Lever. 74" x 314" "Counterweight." "Counterweight."	. 0
720-16	5/8" x 3½" " " " Counterweight	.0
1194-10	3" x 1" Hexagon Cap Screw for fastening Lamp Bracket to Mast	.0
1049-15	1/2" x 2" Square Head Machine Bolts with Hexagon Nuts for fastening	
	Lamp Bracket to Support	.0
1049–16	½" Lock Washers	.0
805-10	Roller for Escapement Crank	. 1



ONE AND TWO ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL WITH SPRING ATTACHMENT







ONE AND TWO ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL WITH SPRING ATTACHMENT

Lamps, Chain, Split Links, Wire Eyes and Wire are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Specify color and number of Roundels. This Signal can be furnished with any style Semaphore Spectacle or Blade. Prices on application.

Trade No.	DESCRIPTION	List Price
803-1	One Arm 60 deg. Lower Quadrant Pipe Operated Dwarf Signal with Spring Attachment, complete as shown	\$28.00
803-2	One Arm 60 deg. Lower Quadrant Wire Operated Dwarf Signal with Spring attachment, complete as shown	28.00
804-1	Two Arm 60 deg. Lower Quadrant Pipe Operated Dwarf	
804-2	Signal with Spring Attachment, complete as shown Two Arm 60 deg. Lower Quadrant Wire Operated Dwarf	57.60
	Signal with Spring Attachment complete as shown	57.60
803-17	Mast Only	2.00
804-13	" "	4.05
803-11	Base with Set Screw	7.65
803-12	" Crank, Pin and Cotter	8.20
803–13 804–11	One Way Pin with Cotter	. 09
804-11	Base with Set Screw	7.65
804-14	" "Two Cranks, Pin and Separators	8.75
704-14	Two Way Pin with Cotter $\frac{3}{1.6}$ " x $1\frac{7}{4}$ " Cotter Pin, per C	.90
803-14	Crank Only.	.45
801–16	Pinnacle with Set Screw.	1.00
803–31	Semanhore Rearing complete with Front Half Poor Half and	
002.26	Bolts for fastening to Mast Front Half of Semaphore Bearing Rear Semaphore Shaft complete with Nuts, Washers, Cotters, Springs, Seat and Pin	2.16
803–36	Front Half of Semaphore Bearing	1.10
803–37 803–16	Samanhara Chaft complete with Nut- Walana Course	.95
803-10	Springs Seat and Din	1.80
803-19	Spring Seat for Shaft	.23
803–18	Spring Seat for Shaft. Coil Spring " "	.36
803-38	Shaft Collar	.09
803-20	Pin for fastening Collar to Shaft	.03
696-21	Blade complete with Clamps and Bolts	.81
665	Two Light 60 deg. Lower Quadrant Semaphore Spectacle complete with Operating Stud, Roundel Rings and Bolts for 53/8"	,
	Roundels	2.52
662-2	Back Spectacle complete with Roundel Ring and Bolts for	2.02
699–13	23/8" Roundels	.99

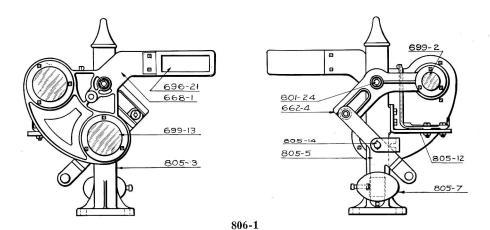


ONE ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL WITH SPRING ATTACHMENT

Trade No.	DESCRIPTION	List Price
699–2	Glass Roundels, 23/8" dia. Specify Color	
801-35	Lamp Bracket and Support complete with Bolts for fastening	
	to Mast	\$3.60
801-27	Lamp Bracket Support	2.03
1049-11	" "	1.80
1194-10	1/2" x 1" Hexagon Cap Screws for fastening Lamp Bracket to Bearing	0.4
1010 15	to Bearing	. 04
1049-15	2" x 2" Square Head Machine Boits with Hexagon Nut	.05
1049-16	Standard ½" Lock WashersOperating Rod complete with Screw Jaw, Hexagon Nut, Pin	.02
801–19	Operating Rod complete with Screw Jaw, Hexagon Nut, Pin	0.50
	and Cotter	2.52
801–32	Screw Jaw with Pin and Cotter	.45
801–33	" Only	.36
801-34	Jaw Pin and Cotter	.09
803-21	Operating Shaft complete with Operating Pin, Rivet, Stop Pin,	2.50
	Lug, Bolts and Shackle	2.52
803-22	Operating Stud Only	.41
803-23	Rivet for fastening Operating Stud to Shaft	.03
803-24	Lug for Operating Shaft	.32
803-25	Stop Pin for Operating Shaft	.04
803-26	%" x 2" Bolt for fastening Lug to Operating Shaft	.05
803-27	Coil Spring for Operating Shaft	.63
803-28	Spring Seat for RodOne Way Double Roller Stand complete with Roller Pins and	.09
803-29	One Way Double Roller Stand complete with Roller Pins and	1 52
002 20	CottersOne Way Roller Stand Only	1.53
803-30	Flanged Roller for above	.36
803-39	Flat " " "	.27
803-32	Din with Cattor for above	.09
803–33 803–34	Pin with Cotter for above	.09
803-34	Wheel, Pin and Cotter	1.35
803-35	One Way Chain Carrier Stand Only	.81
950-14	6" Chain Wheel Only	.21
950-14	Pin for above	.05
950-13	Cotter Pin for above, per C.	.96
703-36	Shackle with Pin and Cotter	.20
703–37	"Only	.10
703-1	Wire Eyes	.04
703-11	Split Links, per C	3.60
703–16	1/" Proof Chain per ft	.14
801-29	14" Proof Chain, per ft. 12" x 1" Square Head Set Screw for Base 38" x 34" " " " " Pinnacle	.04
801–30	3/8" x 3/1" " " " " Pinnacle	.03
801-28	3/" v 1" Heyagon Head Machine Bolts and Nuts for tasten-	
001 20	ing Semaphore Bearing	.16
802-19	Operating Rod for Upper Signal complete with Screw Jaw.	
	Hexagon Nut, Pin and Cotter	3.15
804-29	Two Way Double Roller Stand complete with Rollers, Pins	
	and Cotters	2.61
703-38	Pin with Cotter for Shackle	.10
804-31	Separator for Crank Stand	.07
804-30	Two Way Double Roller Stand	1.08



ONE ARM 90 DEG. LOWER QUADRANT DWARF SIGNAL



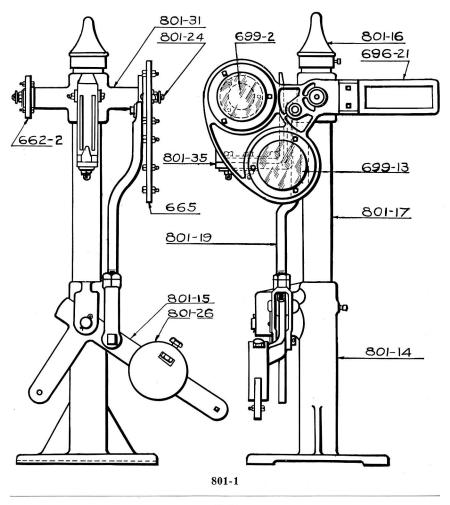
Lamps, Chain, Split Links, Wire Eyes and Wire are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Specify color and number of Roundels. This Signal can

Trade No.	DESCRIPTION	List Price
806-1	One Arm 90 deg. Lower Quadrant Pipe Operated Dwarf Signal, complete as	\$28.00
806-2	shown. One Arm 90 deg. Lower Quadrant Wire Operated Dwarf Signal, complete as shown.	29.25
805-3	Mast Only.	7.74
805-14	Pin for Balance Lever with Cotter.	.14
805-5	Balance Lever complete with 11 lb. Counterweight, Roller Stud and Bolts	7.92
805-6	" with Stud and Cotter	6.12
805-7	Counterweight with Bolts and Nut.	1.17
805-8	11 lb. Counterweight Only.	1.08
805-9	Stud with Cotter for Balance Lever	.14
805-10	Roller for Stud.	.18
805-11		.02
1097-26	Washer " ¼" x 1" Square Head Machine Bolt and Nut for Balance Lever. ¾" x 3½" " " Counterweight " " Counterweight	.03
720-16	56" v 312" " " " " " Counterweight	.09
801-24	Semaphore Shaft with Washers, Nuts and Cotters	1.53
668-1	Two Light 90 deg. Lower Quadrant Semaphore Spectacle complete with	1.00
000 1	Roundel Rings and Bolts for 53%" Roundels	3,00
662 - 4	Back Spectacle complete with Roundel Ring and Bolts for 23/6" Roundels	1.26
699-13	Glass Roundels, 55%" dia. Specify Color.	1.20
699-2	Glass Redukcis, 37% with Specify Color	
696-21	Blade complete with Clamps and Bolts	.81
805-12	Blade complete with Clamps and Bolts	3.00
805-13	" Support	2.03
1049-11	" " Support	1.80
1194-10	½" x 1" Hexagon Head Cap Screws	.04
1049-15	1/2" x 2" Square Head Machine Bolts with Hexagon Nuts	.05
1049-16	Standard ½" Lock Washers	.02
930-1	One Way Vertical Chain Wheel complete	.95
703-46	Double Shackle complete with Pin and Cotter.	.20
703-1	Wire Eye.	.04
703-11	Split Links, per C	3.60
703-16	7" Proof Chain, per ft.	.14
950-32	3/4" x 4" Lag Screws, per C	8.50

be furnished with any style Semaphore Spectacle or Blade. Prices on application.



ONE ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL





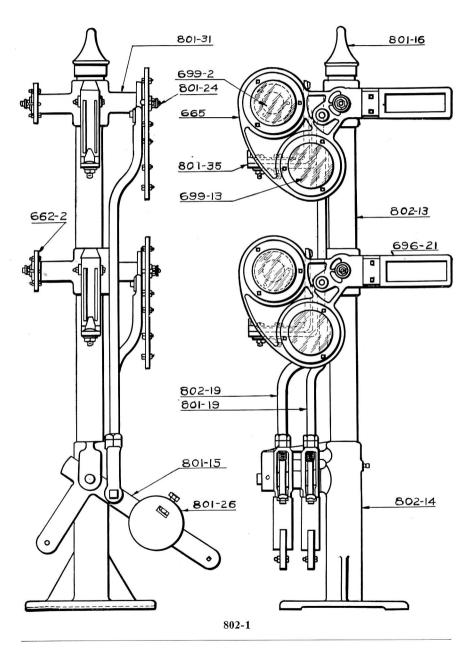
ONE ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL

Lamps, Chain, Split Links, Wire and Wire Eyes are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Orders should specify color and number of Roundels. This Signal can be furnished with any style Semaphore Spectacle or Blade. Prices on application.

phote ope	educte of Blade. Trices on application.	
Trade No.	DESCRIPTION	List Price
801-1	One Arm 60 deg. Lower Quadrant Pipe Operated Dwarf	
002 2	Signal, complete as shown One Arm 60 deg. Lower Quadrant Wire Operated Dwarf Signal	\$32.40
801-2	One Arm 60 deg. Lower Quadrant Wire Operated Dwarf Signal	33.75
801 - 17	Mast Only	2.00
801-16	Mast Only Pinnacle with Set Screw	1.00
801 - 14	Base complete with Balance Lever, 20 lb. Counterweight, Pin,	
	Cotter and Bolts	14.30
801-11	Base Only	7.65
801 - 25	Pin with Cotter for Balance Lever 4" x 3" Cotter Pin for Balance Lever Pin, per C	.18
994 - 12	1/4" x 3" Cotter Pin for Balance Lever Pin, per C	.88
801 - 15	Balance Lever with 20 lb. Counterweight and Bolts	6.30
801 - 18	" Only.	4.25
801 - 23	20 Ib. Counterweight Only. Same as above except with Bolt.	1.98
801 - 26	Same as above except with Bolt	2.07
720 - 16	58" x 3½" Square Head Bolt and Nut. 4" x 1" " Machine Bolt and Nut.	.09
1097 - 26	1/4" x 1" " Machine Bolt and Nut	.03
801-19	Operating Rod complete with Screw Jaw Heyagon Nut Pin	1,00
	and Cotter	2.52
801-32	Screw Jaw with Pin and Cotter	.45
801-33	Only	.36
801-34	Jaw Pin with Cotter 18" x 114" Cotter Pin for Jaw Pin, per C.	. 09
950-31	1/8" x 1 1/4" Cotter Pin for Jaw Pin, per C	.96
665	Two Light 60 deg. Lower Quadrant Semaphore Spectacle	
	complete with Spectacle Rings, Bolts and Operating Stud	2.52
662-2	Back Spectacle complete with Spectacle Ring and Bolts	.99
699–2	Glass Roundels, 23/8" dia. Specify Color	
699–13	" 53/8" " " " " " " " " " " " " " " " " " "	
696–21	Blade complete with Blade Plate and Bolts.	.81
801-24	Semaphore Shaft complete with Washers, Nuts and Cotters	1.53
801–31	"Bearing complete with Front Half, Rear Half and	
	Bolts for fastening to Mast	2.16
801–12	Front Half of Semaphore Bearing	1.10
801–13	Rear " " " "	.95
801-28	Rear " " " " " " " " " " " " " " " " " " "	
004 25	Semaphore Bearing to Mast Lamp Bracket and Support complete with Bolts for fastening	. 16
801–35	Lamp Bracket and Support complete with Bolts for fastening	
001 07	to Mast	3.60
801-27	Lamp Bracket Support	2.03
$1049-11 \\ 1194-10$	" '' '' x 1" Hexagon Cap Screws for fastening Lamp Bracket to	1.80
1194-10	½ X 1 Hexagon Cap Screws for fastening Lamp Bracket to	0.4
1049-15	Bearing	. 04
1049-13	Z X Z Square Head Machine Bolt and Nut for fastening	0.5
1049-16	Lamp Bracket	. 05
930–1	1/2" Lock Washers	.02
703–46	One Way Vertical Chain Wheel complete Double Shackle complete with Pins and Cotters	. 95
703-40	Wire Eve	. 20 . 04
703–11	Wire Eye	3.60
703–11	1/" Proof Chain perft	.14
801-29	1/2" x 1" Square Head Set Screw for Base	.04
801–30	3/4" Proof Chain, per ft. 3/4" x 1" Square Head Set Screw for Base. 3/4" x 3/4" " " " " Pinnacle. 3/4" x 4" Lag Screws, per C.	.03
950-32	3/" x 4" Lag Screws per C	8.40
700 02	74 A 1 Lug octows, per C	0.40



TWO ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL





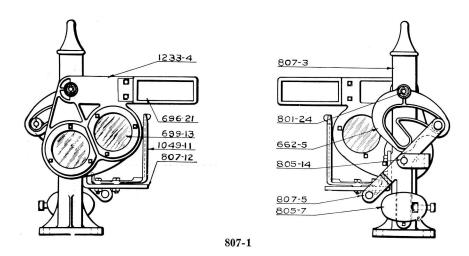
TWO ARM 60 DEG. LOWER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL

Lamps, Chain, Split Links, Wire and Wire Eyes are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Orders should specify color and number of Roundels. This Signal can be furnished with any style Semaphore Spectacle or Blade. Prices on application.

Trade No.	DESCRIPTION	List Price
802-1	Two Arm 60 deg. Lower Quadrant Pipe Operated Dwarf	@F1 7F
802-2	Signal, complete as shown	\$51.75 53.25
802-2	Mast Only	4.05
801–16	Pinnacle with Set Screw	1.00
802-14	Mast Only Pinnacle with Set Screw Base complete with Pin, Cotter, Two Balance Levers with	(20)
	20 lb. Counterweights and Bolts	20.69
802-11	Base Only	7.65
802-25	Pin with Cotter for Balance Lever	.27
994–12 801–15	Pin with Cotter for Balance Lever	6.30
801–13	" "Only	4.23
801–23	20 lb. Counterweight Only	1.98
801-26	Same as above with Bolt	2.07
720–16	Same as above with Bolt	.09
1097-26	1/4" x 1" " " " " " " " " " " " " " " " " "	. 03
801–19	Operating Rod for Lower Signal complete with Screw Jaw, Nut, Jaw Pin and Cotter	2.52
802-19	Same as above except for Upper Signal	3.15
801–32	Screw Jaw with Pin and Cotter	.45
801–33	" " Only	.36
801-34	Jaw Pin with Cotter	. 09
950-31	Jaw Pin with Cotter	.96
665	Semaphore Spectacle complete with Operating Stud, Roundel	2.52
662-2	Rings and BoltsBack Spectacle complete with Roundel Ring and Bolts	.99
699-2	Glass Roundels, 23/8" dia. Specify Color	
699-13	Glass Roundels, 23'8" dia. Specify Color	
696-21	Blade complete with Blade Plate and Bolts	.81
801-24	Semaphore Shaft complete with Nuts, Washers and Cotters Bearing "Front Half, Back Half and	1.53
801–31	Bolts for fastening to Mast	2.16
801-12	Front Half Semaphore Bearing.	1.10
801-13	Rear " " "	.95
801-28	Rear """ 34" x 4" Hexagon Head Machine Bolts and Nuts for fastening	20 10 100
	Semaphore Bearing to MastLamp Bracket and Support complete with Bolts for fastening	. 16
801–35	Lamp Bracket and Support complete with Bolts for fastening	2 60
801-27	to MastLamp Bracket Support	3.60 2.03
1049-11	" "	1.80
1194-10	1/2" x 1" Hexagon Cap Screws for fastening Lamp Bracket	
	to Bearing	.04
1049–15	1/2" x 2" Square Head Machine Bolts with Hexagon Nuts,	
1049-16	Lamp Bracket to Support	.05
930-2	½" Lock Washers	1.59
703-46	Double Shackle complete with Pins and Cotters	.20
703-1	Wire Eyes	.04
703-11	Split Links, per C	3.60
703–16	14" Proof Chain, per ft	. 14
801–29 801–30	14" Proof Chain, per ft. 12" x 1" Square Head Set Screw for Base. 36" x 34" " " " " " " "	.04
950-32	3/" x 4" Lag Screws, per C	8.40
	74 II 2 20g cerems, per c	0.10



ONE ARM 45 DEG. UPPER QUADRANT DWARF SIGNAL WITH ESCAPEMENT CRANK

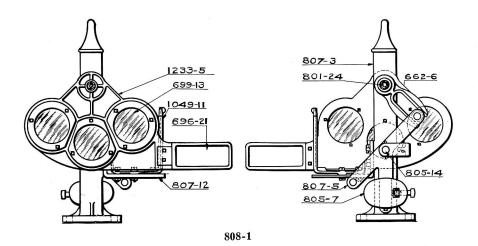


Lamps, Chain, Split Links, Wire Eyes and Wire are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Specify color and number of Roundels. This Signal can be furnished with any style Semaphore Spectacle or Blade. Prices on application.

Trade No.	DESCRIPTION	List Price
807-1	One Arm 45 deg. Upper Quadrant Pipe Operated Dwarf Signal, complete	
807-2	as shown. One Arm 45 deg. Upper Quadrant Wire Operated Dwarf Signal	\$25.50
807-3	Me Arm 45 deg. Upper Quadrant Wire Operated Dwarf Signal	26.90
805-14		7.74
807-5	Pin for Balance Lever with Cotter	. 14
807-6	Dalance Level complete with 11 lb, Counterweight, Roller, Stud and Rolls	8.3
	" with Stud and Cotter	6.5
805-7	Counterweight with Bolt and Nut.	1.1
805-8	11 lb. Counterweight Only	1.0
805-9	Stud with Cotter for Balance Lever	. 1
805-10	Roller for Stud	. 1
805-11	Washer " "	.0
1097-26	4. x 1" Square Head Machine Bolt and Nut for Balance Lever	.0
720-16	Washer " ¼".× 1" Square Head Machine Bolt and Nut for Balance Lever %8" × 3½" " Counterweight. " Counterweight. "	.0
801-24	Semaphore Shalt with Washers, Nuts and Cotter	1.5
1233-4	Two Light 45 deg. Upper Quadrant Semaphore Spectacle complete with	
	Roundel Rings and Bolts.	2.6
662-5	Escapement Crank.	.9
699-13	Glass Roundels, 538" dia. Specify Color	
696-21	Blade complete with Clamps and Bolts	.8
807-12	Lamp Bracket and Support complete with Two ½" x 1" Cap Screws	3.6
807-13	" Support Only	2.0
1049-11		1.8
1194-10	½" x 1" Hexagon Head Cap Screws	.0
1049-15	2 X Z Square Head Machine Bolts with Hexagon Nuts	.0.
1049-16	Standard '%'' Lock Washers	.0
930-1	One Way Vertical Chain Wheel complete	.9.
703-46	Double Shackle complete with Pin and Cotter	. 2
703-1	Wire Eyes.	.0
703-11	Split Links, per C	3.6
703-16	14" Proof Chain per It	. 1-
950-32	3/4" x 4" Lag Screws, per C.	8.40



ONE ARM 90 DEG. UPPER QUADRANT PIPE OR WIRE OPERATED DWARF SIGNAL

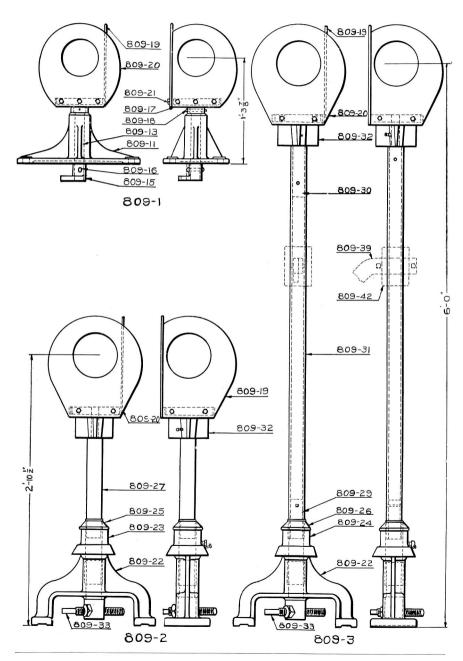


Lamps, Chain, Split Links, Wire Eyes and Wire are not included in list prices, but Signals are furnished complete with Roundels and Fittings as shown. Specify color and number of Roundels. This Signal can be furnished with any style Semaphore Spectacle or Blade. Prices on application.

Trade No.	DESCRIPTION	List Price
808-1	One Arm 90 deg. Upper Quadrant Pipe Operated Dwarf Signal, complete	\$28.80
808-2	as shown One Arm 90 deg. Upper Quadrant Wire Operated Dwarf Signal complete	30.15
	Mast Only	7.74
807-3	Pin for Balance Lever with Cotter	. 14
805-14	Balance Lever complete with 11 lb. Counterweight, Roller Stud and Bolts	8.37
807-5	Balance Lever complete with 11 lb. Counterweight, Roller Stud and Boits	6.57
807-6	" with Stud and Cotter	1.17
805-7	11 lb. Counterweight with Bolt and Nut	1.08
805-8	Only Stud with Cotter for Balance Lever	
805-9	Stud with Cotter for Balance Lever	.14
805-10	Roller for Stud	. 18
805-11	Washer " "	. 02
1097-26	1/4" x 1" Square Head Machine Bolt and Nut for Balance Lever	. 03
720-16	5/8" x 3½" " " Counterweight	. 09
801-24	Semaphore Shaft complete with Washer, Nuts and Cotters	1.53
1233-5	Three Light 90 deg. Upper Quadrant Semaphore Spectacle complete with Roundel Rings and Bolts.	5.85
662-6	Operating Crank	.90
699-13	Glass Roundels, 53/8" dia. Specify Color	
696-21	Blade complete with Clamps and Bolts	.81
807-12	Lamp Bracket and Support with Two ½"x1" Hexagon Cap Screws for fastening to Mast.	3.60
807-13	Lamp Bracket Support Only	2.03
1049-11	" " " "	1.80
1194-11	½" x 1" Hexagon Head Cap Screws.	.04
1049-15	½" x 2" Square Head Machine Bolts with Hexagon Nuts	.0.
1049-15	Standard ½" Lock Washers	.03
	One Way Vertical Chain Wheel complete	.9.
930-1	Double Shackle complete with Pin and Cotter.	. 20
703-46		.04
703-1	Wire Eyes	3.60
703-11	Split Links, per C	
703-16	1/4" Proof Chain, per ft	.1.
950 - 32	3/4" x 4" Lag Screws, per C	8.4



HIGH AND LOW POT SIGNALS





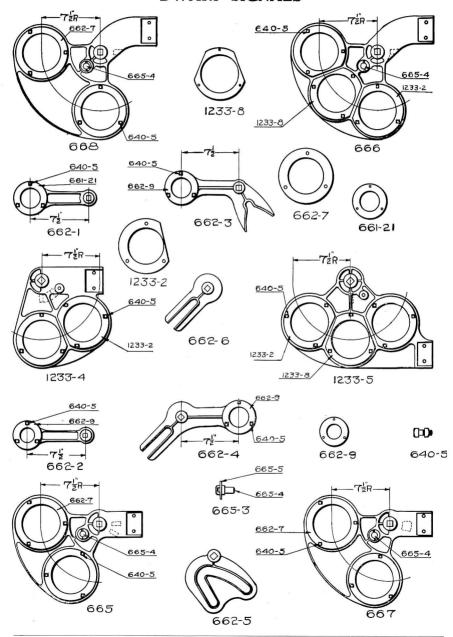
HIGH AND LOW POT SIGNALS

Lamps are not included in list prices, but Signals are furnished complete as shown.

Trade No.	DESCRIPTION	List Price
809-1	Low Pot Signal 1' 3 1/8" high, complete as shown	\$12.35
809-11	Base Only	3.87
809-12	" with Shaft Operating Crank, Lamp Base, Pin and Rivet	8.73
809-13	Shaft Only	.54
809-14	Shaft Only	1.44
809-15	Operating Crank Only	.72
809–16	Rivet for Operating Arm 3/8" x 2 1/4" Round Head	.03
809-17	Lamp Base Only	1.53
809–18	Dowel Pin for fastening Lamp Base to Shaft	.32
809–19	Inside Vane	1.17
809-20	Outside "	1.17
809-21	38" x 1/2" Hexagon Cap Screws for fastening Vanes to Lamp	
	BaseLow Pot Signal 2' 10½" high, complete as shown	.03
809-2	Low Pot Signal 2' 10½" high, complete as shown	19.45
809-3	High " " 6' high, complete as shown without support	26.10
809-4	Same as above except with Support	31.00
809-22	Base Only	4.68
809-23	Base Only Thrust Bearing Only for Low Signal with Set Screw and Screw for Oil Hole. Same as above except for High Pot Signal	4 47
000 04	for Oil Hole	1.17
809-24	Same as above except for High Pot Signal	1.53
809-25	Cover for Low Pot Signal	.18
809-26		3.78
809-27 809-28	Shaft Only for Low Pot Signal	4.32
809-28	Lame as above with Adjustable Crank and Nut	3.78
809-29	Lower Shaft for High Pot Signal Upper """	2.07
809-31	Pipe Post Only for High Signal	1.17
809–31	Lamp Socket Only with Set Screw	1.80
809-33	Adjustable Crank with Hexagon Nut	.54
809-34	1" Hexagon Nut for Adjustable Crank	.10
150-3	3/8" x 1" Square Head Set Screw for Lamp Base	.03
809-35	3/8" x 23/4" R. H. I. Rivets for Pipe Post to Shaft	.04
809–36	3%" x 2¾" R. H. I. Rivets for Pipe Post to Shaft	.05
809-37	Screw for Oil Hole	.01
809–38	Set Screw ½" x 1½" for Thrust Bearing	.04
809-39	Support complete with Clamp and Bolts	4.05
809-40	Only	3.24
1049-14	Only	
	fastening Clamp to Support	.05
809-41	Clamp Only	.72
809-42	Collar with Set Screw	. 54
801-29	½" x 1" Set Screw for above	.04



SPECTACLES, BACK SPECTACLES, ESCAPEMENT CRANKS AND OPERATING CRANKS FOR DWARF SIGNALS





SPECTACLES, BACK SPECTACLES, ESCAPEMENT CRANKS AND OPERATING CRANKS FOR DWARF SIGNALS

Trade No.	DESCRIPTION	List Price
665	Two Light 60 deg. Lower Quadrant Semaphore Spectacle with	
	Operating Stud, Roundel Rings and Bolts for 53/8" Roundels	\$2.52
665–1	Same as above except without Operating Stud	2.37
667	Two Light 75 deg. Lower Quadrant Semaphore Spectacle with Operating Stud, Roundel Rings and Bolts for 53%" Roundels	2.52
667-1	Same as above except without Operating Stud	2.37
668	Two Light 90 deg. Lower Quadrant Semaphore Spectacle com-	2.07
000	plete with Operating Stud, Roundel Rings and Bolts for	
	53/8" Roundels	3.15
668 - 1	Same as above without Operating Stud	3.00
666	Three Light 90 deg. Lower Quadrant Semaphore Spectacle	
	complete with Operating Stud, Roundel Rings and Bolts	
	for 53/8" Roundels	3.15
666-1	Same as above without Operating Stud	3.00
1233-4	R. S. A. Two Light 45 deg. Upper Quadrant Semaphore Spectacle complete with Roundel Ring and Bolts for 53/8"	
	Roundels	2.60
1233-6	Same as above with Operating Stud	2.75
1233-5	Three Light 90 deg. Upper Quadrant Semaphore Spectacle	2.70
	complete with Roundel Rings and Bolts	5.85
1233 - 7	Same as above except with Operating StudBack Spectacle complete with Roundel Ring and Bolts for	6.00
662-1		0.0
((0, 0	3" Roundels	.99
662-2 662-3	Same as above except for 23%" Roundels	.99
002-3	Roundel Ring and Bolts for 23/8" Roundels	1.26
662-4	Combined Operating Crank and Back Spectacle with Roundel	1.20
002 1	Combined Operating Crank and Back Spectacle with Roundel Ring and Bolts for 23/8" Roundels	1.26
662 - 5	Escapement Crank	.90
662-6	Operating Crank	.90
662-7	Roundel Ring for 53/8" Roundels	. 13
1233-2	53/8" "	.18
661–21 662–9	Operating Crank. Roundel Ring for 53/8" Roundels	.13
640-5	1/" x 3/" Square Head Machine Bolts and Nuts	.13
665-3	1/4" x 1/4" Square Head Machine Bolts and Nuts	.15
665-4	" and Cotter	.13
665-5	Washer for Operating Stud	.02
1233-8	Roundel Ring for 53%" Roundel	. 27