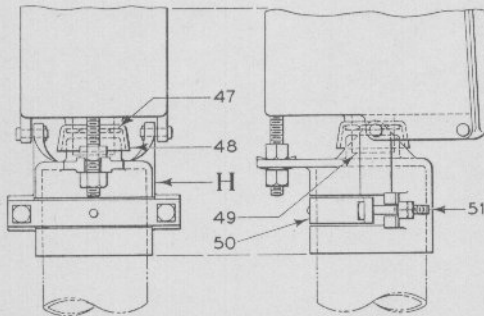
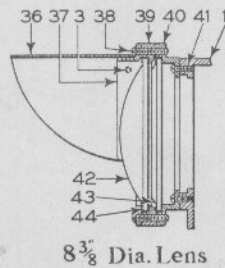


A - 6 3/8 Dia. Lens
B - 8 3/8 Dia. Lens



D - 6 3/8 Dia. Lens
E - 8 3/8 Dia. Lens

Type SA Color-Light Dwarf Signals
With Stepped Lenses
Two Unit

Type SA Color-Light Dwarf Signals

With Stepped Lenses

Two Unit

Note: See foreword and ordering information at the beginning of this part.

Other color combinations than those shown below may be supplied if required.

Lamps are not included with signals complete and must be ordered separately.

Unless otherwise specified anchor bolts as shown will be furnished with signals complete.

Signals are designed to operate on the following voltages: 4, 7.5-8, 10 and 12 volts d-c., however they may be equipped with an a-c. mechanism to operate on voltages and frequencies as listed on Plate H2663.

For dwarf signals with compound lenses see Plate H2620.

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
Order by plate, figure number and name		
A	Type SA Color-Light Dwarf Signal Complete, consisting of two signal units for mounting as shown, both units having a $6\frac{3}{8}$ " dia. $3\frac{3}{4}$ " focus, lens and a 25 degree deflecting roundel. (This lens combination deflects a part of the main beam upward through an angle of 25 degrees).....	
	Order must specify the following:	
	1—Voltage upon which signal is to operate if d-c. or frequency and both line and local voltages if a-c.....	
	2—Color indications desired in each signal unit.....	
	3—See Plate H2629 for various methods of bringing wires into signal and specify fittings required.....	
	4—If plug coupler is required same must be specified.....	53050-3
B	Type SA Color-Light Dwarf Signal Complete, consisting of two signal units for mounting as shown, both units having an $8\frac{3}{8}$ " dia., 5" focus, hot-spot lens and a 20 degree deflecting roundel. (This lens combination deflects a part of the main beam upward through an angle of 20 degrees).....	

(Continued on following page)

Type SA Color-Light Dwarf Signals

With Stepped Lenses

Two Unit

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
	Order by plate, figure number and name	
	Order must specify the following:	
	1—Voltage upon which signal is to operate if d-c. or frequency and both line and local voltages if a-c.....	
	2—Color indications desired in each signal unit.....	
	3—See Plate H2629 for various methods of bringing wires into signal and specify fittings required.....	
	4—If plug coupler is required same must be specified.....	53050-3
D	Type SA Color-Light Dwarf Signal Complete, consisting of two signal units arranged for socket mounting on 5" pipe as shown, both units having a 6 $\frac{3}{8}$ " dia., 3 $\frac{3}{4}$ " focus lens and a 25 degree deflecting roundel. (This lens combination deflects a part of the main beam upward through an angle of 25 degrees).....	
	Order must specify the following:	
	1—Voltage upon which signal is to operate if d-c., or frequency and both line and local voltages if a-c.....	
	2—Color indications desired in each signal unit.....	
	3—If plug coupler is required same must be specified.....	
E	Type SA Color-Light Dwarf Signal Complete, consisting of two signal units arranged for socket mounting on 5" pipe as shown, both units having an 8 $\frac{3}{8}$ " dia., 5" focus hot-spot lens and a 20 degree deflecting roundel. (This lens combination deflects a part of the main beam upward through an angle of 20 degrees)	
	Order must specify the following:	
	1—Voltage upon which signal is to operate if d-c., or frequency and both line and local voltages if a-c.....	
	2—Color indications desired in each signal unit.....	
	3—If plug coupler is required same must be specified.....	
F	D-c. Mechanism Complete, for details and order references see Plates H2649 to H2655.....	

(Continued on following page)

Type SA Color-Light Dwarf Signals

With Stepped Lenses

Two Unit

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
Order by plate, figure number and name		
F1	as above, except a-c. mechanism, for details and order references see Plate H2663.....	
G	Slide Complete, for mechanism, includes studs for attaching to case	56421 Gr. 6
H	Socket Complete, for mounting signal to 5" pipe, includes socket, clamp Fig. 50 and screws Fig. 51.....	54732 Gr. 2
1	Case, housing for mechanism having slide arrangement Fig. G, includes studs for cams of mechanism.....	53071-16 441-122
1a	as above, except for mechanism without slide arrangement Fig. G, includes stud for hasp and studs for cams of mechanism.....	53071 441-121 441-122
2	Hood, as shown, for 6 $\frac{3}{8}$ " dia. lens.....	49127-18
3	Screw, No. 10-32 x $\frac{1}{4}$ " rd. hd., for fastening hood to outer ring...	2438-9
4	Outer Ring, as shown, for 6 $\frac{3}{8}$ " dia. lens.....	43983-30
5	Adapter, as shown, for 6 $\frac{3}{8}$ " dia. deflecting roundel.....	43983-31
6	Deflecting Roundel, 6 $\frac{3}{8}$ " dia., deflects part of main beam upward through an angle of 25 degrees. For Fig. A.....	9238-60
6a	as above, except 25 degree spreadlite with close-up deflection.....	9238-65
7	Lens, 6 $\frac{3}{8}$ " dia., 3 $\frac{3}{4}$ " focus.....	53119
8	Gasket, as shown, for 6 $\frac{3}{8}$ " dia. lens and roundel.....	13014-56
9	Screw, $\frac{5}{16}$ "-18 x 1 $\frac{1}{2}$ " rd. hd., with lock washer, for fastening outer ring and adapter to case.....	33287-8 0623-1
10	Taper Pin, No. 2 x 1 $\frac{1}{4}$ ", for fastening stud Fig. 11 to case.....	28349
11	Stud, for obtaining vertical adjustment of upper signal unit.....	980-17
12	Nut, $\frac{3}{4}$ "-10 hex., for adjusting studs Figs. 11 and 21.....	0272-1
13	Base, as shown, for mounting upper unit to lower unit.....	53070-1
14	Pin, $\frac{7}{16}$ " x 1 $\frac{1}{16}$ ", with cotter, for fastening case to base.....	730-21 0663
15	Screw, $\frac{1}{2}$ "-13 x 1 $\frac{3}{4}$ " hex. hd., for adjustment of upper signal unit	5221-1

(Continued on following page)

Type SA Color-Light Dwarf Signals

With Stepped Lenses

Two Unit

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
Order by plate, figure number and name		
16	Nut, 1/2"-13 x 1/4" th. hex., for screw, Fig. 15.....	12754
17	Nut, 3/8"-16 x 3/8" th. hex., with washer, for slide Fig. G.....	1156-2 19867-2
18	Clamp, for fastening coupling to case.....	318-57
19	Screw, No. 14-24 x 1/2" fil. hd., for fastening clamp to case, includes washer and strap.....	49863 0510 38280-139
20	Screw, 3/8"-16 x 5/8" hex. hd., with lock washer, for case.....	0395-4 19867-2
21	Stud, for obtaining vertical adjustment of lower signal unit.....	980-10
22	Anchor Bolt, 3/4"-10 x 18", with sq. nut.....	36182
23	Washer, for anchor bolt.....	35703
24	Base, as shown, for mounting lower signal unit.....	53070
25	Hasp, as shown, includes nut with 1/2"-13 thread, for case having slide arrangement Fig. G.....	9524 9525-6 7568
25a	as above, except has nut with 1/2"-24 thread, for case without slide arrangement Fig. G.....	9524 9525 7568
26	Lock Latch, as shown, threaded 1/2"-13 for hasp nut, for case having slide arrangement Fig. G.....	53106-2
26a	as above, except 1/2"-13 thread, for case without slide arrangement, Fig. G.....	53106-1
26b	same as Fig. 26a, except with 1/2"-24 thread.....	53106
27	Door Complete, for case with slide arrangement Fig. G, includes gasket, latch, hasp and all riveted parts.....	53057 Gr. 3
27a	as above, except for case without slide arrangement Fig. G, includes gasket, latch, hasp and all riveted parts.....	53057 Gr. 1

(Continued on following page)

Type SA Color-Light Dwarf Signals With Stepped Lenses Two Unit

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
Order by plate, figure number and name		
28	Pin, $\frac{3}{8}$ " x $1\frac{13}{16}$ " with cotter, hinge for door.....	730-33 0663
29	Nipple, $1\frac{1}{2}$ ", for upper signal unit.....	39998
30	Screw, $\frac{3}{8}$ "-16 x $\frac{7}{8}$ " hex. hd., with lock washer, for mounting upper unit to lower unit.....	38171-1 0569
31	Washer, for front screw, Fig. 30, only.....	37525
36	Hood, as shown, for $8\frac{3}{8}$ " dia. lens.....	49127-29
37	Outer Ring, as shown, for $8\frac{3}{8}$ " dia. lens.....	43983-35
38	Screw, $\frac{5}{16}$ "-18 x $1\frac{3}{4}$ " rd. hd., with lock washer, for fastening outer ring and adapter to inner ring. For use with $8\frac{3}{8}$ " dia. lens....	33287-13 0623-1
39	Adapter, as shown, for use in applying deflecting roundel to $8\frac{3}{8}$ " dia. lens.....	43983-46
40	Inner Ring, as shown, for $8\frac{3}{8}$ " dia. lens.....	43983-34
41	Screw, $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " rd. hd., with lock washer, for fastening inner ring to case.....	33287-6 0623-1
42	Deflecting Roundel, $8\frac{3}{8}$ " dia., deflects part of main beam upward through an angle of 20 degrees. For use with $8\frac{3}{8}$ " dia. lens..	9238-38
43	Lens, hot-spot, $8\frac{3}{8}$ " dia., 5" focus.....	36733-7
44	Gasket, as shown, for $8\frac{3}{8}$ " dia. lens and roundel.....	13014-57
45	Nut, $\frac{3}{4}$ "-10 hex. for adjusting stud.....	646-3
46	Pipe, for wires to upper signal unit.....	49151-18
46a	as above, except cut off on dotted line.....	49151-30
47	Lock Nut, for nipple Fig. 49.....	0827
48	Shield, for nipple Fig. 49.....	54733
49	Nipple, for case.....	47915-2
50	Clamp, only for socket.....	317-28 Gr. 2
51	Screw, $\frac{1}{2}$ "-13 x $3\frac{1}{2}$ " sq. hd., with hex. nuts for clamp.....	53137 26747 7244-1