

MICROWAVE ANTENNAS
KS-5759 DELAY LENS ANTENNA
TOOLS, MATERIALS, AND SAFETY PRECAUTIONS

1. GENERAL

1.01 This section outlines the tools and materials required for field repair of microwave delay lens elements used in the KS-5759 Delay Lens Antennas. The necessity for strict observance of Bell System safety precautions is also emphasized.

2. TOOLS AND MATERIALS

2.01 The following tools and materials, or their equivalent, are required for rehabilitating delay lens antenna lens elements:

QUANTITY	ITEM
4	Angles, sealing, to be made locally (see Fig. 1)
—	Bags, polyethylene, black, for enclosing lens elements; tailored and pre-marked bags may be obtained from Tennessee Aircraft Inc, P.O. Box 1285, Berry Field, Nashville, Tennessee and shall be ordered by element number, ie, A1-A24, B1-B24, etc
1	Balance, spring, 0 to 10 lbs, with tape hook
1	Brush, stencil, with 1-1/2 inch bristle tip, Marsh #GS-5173
3	Dowels, wood, 1/2 by 10 inches long
—	Ink, plastic printing, obtainable from M. W. Kellogg Co, P.O. Box 469, Jersey City, New Jersey as their type A-1007-White-Kel-F plastic printing ink
—	Ink, stencil, black, oil base
2	Irons, soldering, General Electric Company #6A202

QUANTITY

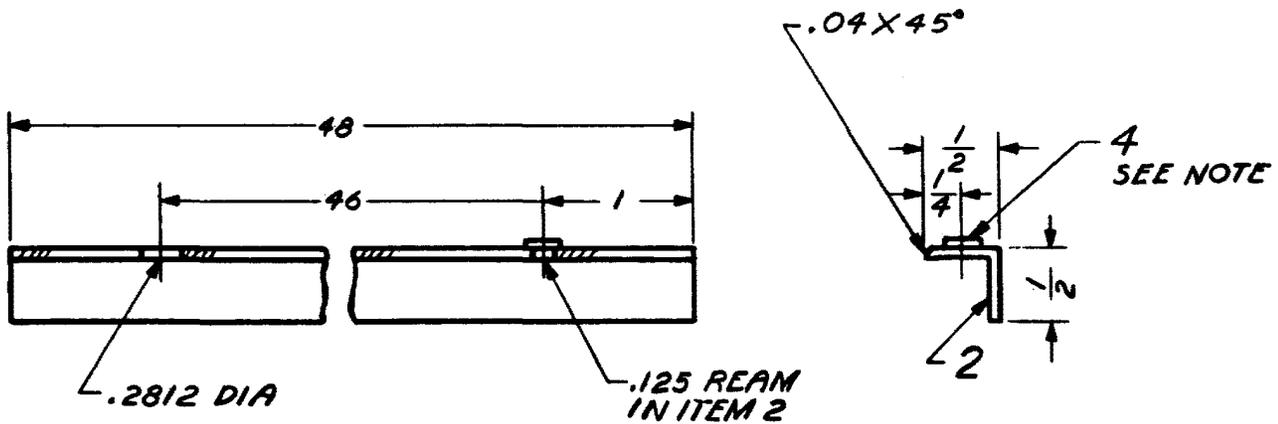
ITEM

1	Letters, marking, 3/4-inch (one set)
1	Pliers, KS-6015
10	Pliers, toggle, obtainable from Lapeer Manufacturing Company, 3056 Davison Road, Lapeer, Michigan as their model P-400
3	Retainers, tension, to be made locally (see Fig. 2)
1	Ruler, 15-inch
1	Scissors, Splicer's AT-7526
1	Screwdriver, automatic, Yankee #135
—	Tape, Polyethylene, B, AT-7209, 100 feet per roll (one roll required for each lens element to be banded)
1	Tape, masking, 1 inch wide (one roll)
—	Trichloroethylene, stabilized per KS-8372, dry-cleaning grade, 16-ounce bottle

2.02 The tools necessary for removing and replacing the weather cover and antenna lens are listed in Section 402-420-200.

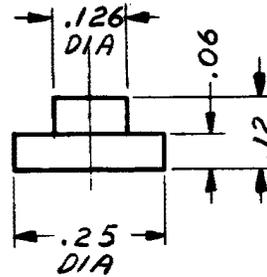
3. SAFETY PRECAUTIONS

3.01 In all operations associated with the rehabilitation of antenna lens elements, caution and good judgment (as indicated by the nature of the particular operation and the circumstances under which it is being performed) should be exercised in the interest of personnel safety. Strict adherence to appropriate Bell System safety practices is to be observed at all times.



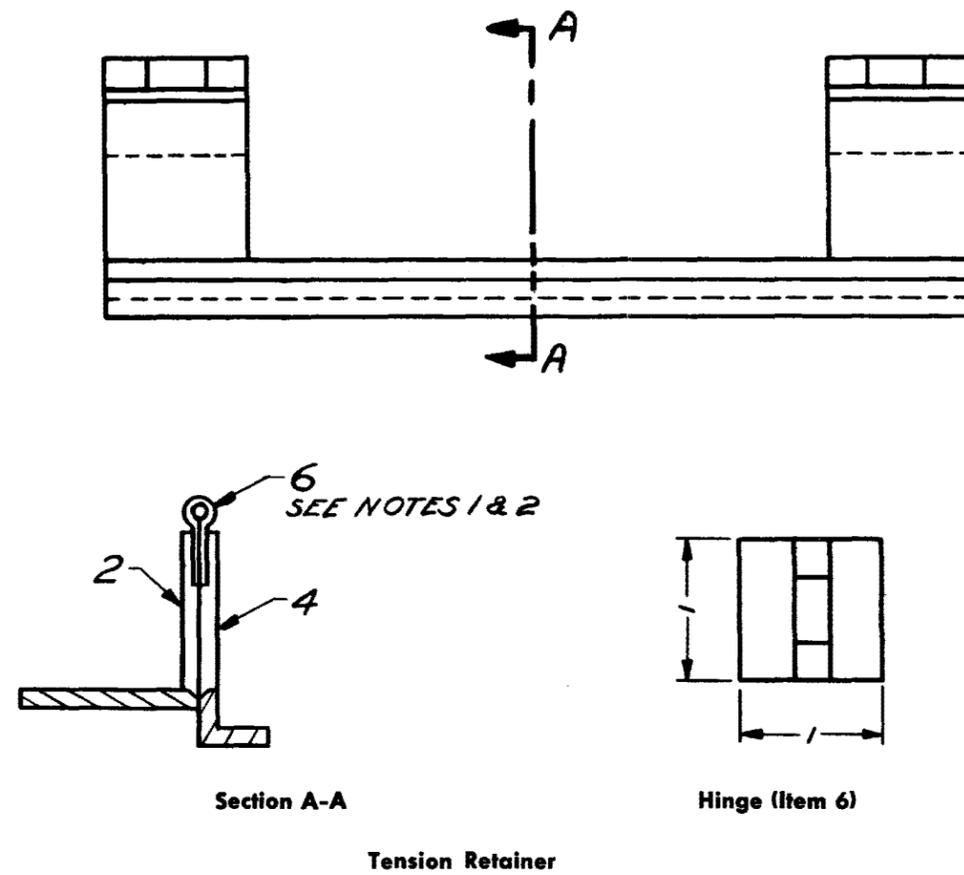
Note: Pin, Item 4, shall be a press fit in Item 2.

ITEM	PART NAME	NUMBER REQD	MATERIAL
4	Pin	1	Brass
2	Angle	1	Brass, 0.062 inch thick



Pin (Item 4)

Fig. 1 - Sealing Angle



Section A-A

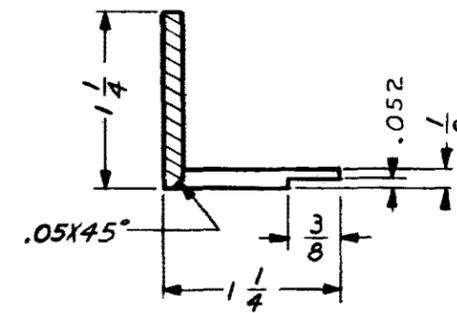
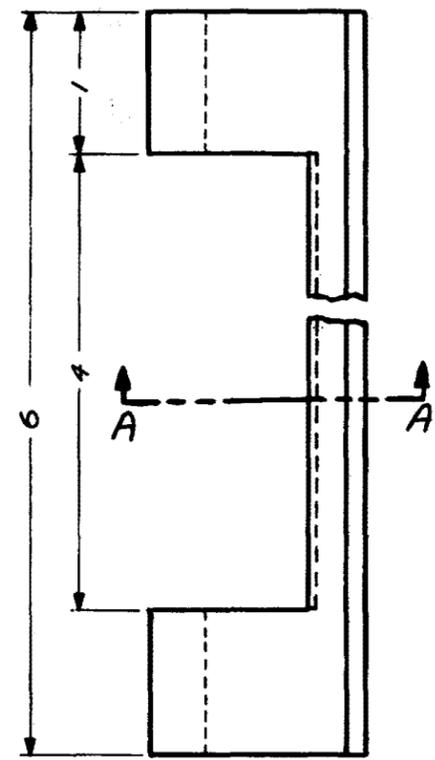
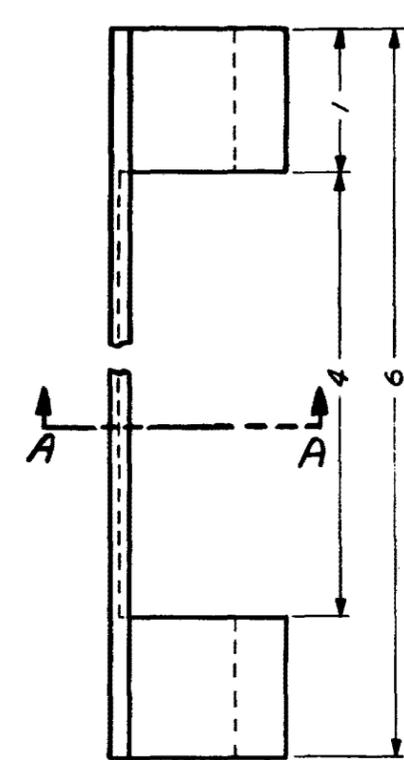
Hinge (Item 6)

Tension Retainer

Note 1: Brass hinge, wing thickness 0.050 inch, may be obtained from National Lock Company, Rockford, Illinois as plain tip hinge No. 58-700C, both wings half-swaged.

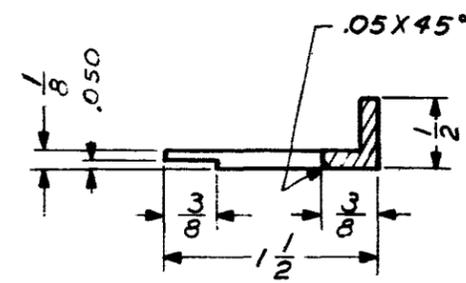
Note 2: Hinge, Item 6, shall be soldered in position.

ITEM	PART NAME	NUMBER REQD	MATERIAL
6	Hinge	2	
4	Angle	1	Brass
2	Angle	1	Brass



Section A-A

Angle (Item 2)



Section A-A

Angle (Item 4)

Fig. 2 - Tension Retainer