

MICROWAVE ANTENNAS
KS-15676 HORN-REFLECTOR AND WAVEGUIDE SYSTEM
MAINTENANCE

FEED HORN, MOUNTING BASE AND FRAME, AND FLEXIBLE WAVEGUIDES

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1. GENERAL

1.01 This section outlines the maintenance methods to be employed to repair damage to, or correct malfunction of, the KS-15676, List 3 feed horn; KS-15676, List 4 mounting base assembly; KS-15676, List 5 mounting frame assembly; KS-15690, List 1 waveguide, flexible, circular; and KS-5783 waveguide, flexible, rectangular.

2. MAINTENANCE

KS-15676, List 3 Feed Horn

2.01 If dents, cracks, perforations, or other damages are found in the feed horn, it shall be replaced. The replacement horn shall be installed in accordance with instructions contained in Section 402-421-201 and if necessary, checked electrically per Section 402-421-206 or -207.

Caution: To prevent damage to the flexible circular waveguide, it shall be removed from the waveguide run before the damaged feed horn is removed and shall not be installed again until the pressure test of the new feed horn is completed.

2.02 Tighten loose bolts and nuts securely with a ratchet wrench.

KS-15676, List 4 Mounting Base Assembly and List 5 Mounting Frame Assembly

2.03 Tighten loose bolts and nuts securely.

2.04 When the galvanizing is peeling or the surface is rusted, the following procedure shall be followed.

2.05 Remove loose galvanizing, rust, or other surface deposit by wire brushing or other suitable means.

2.06 Clean the surface with a cloth moistened with turpentine.

2.07 Apply a full coat of primer and allow to dry for 4 hours if brushed, or 2 hours if sprayed.

2.08 Apply two coats of aluminum paint. Allow the first coat to dry, overnight if brushed or 1/2 hour if sprayed, then apply the second coat. The primer and paint are covered by Description AT-7295X. The paint is furnished in a 2-compartment container and should be mixed on the job only in an amount sufficient for the desired coverage. If practicable, the mixture should be allowed to stand for about 1 hour before use.

KS-15690, List 1 Flexible Circular Waveguide

2.09 If the neoprene jacket on the flexible waveguide is cut or torn, or if the waveguide has any visible deformity, it shall be replaced.

Caution: The KS-15690 Flexible Waveguide has a tolerance of plus or minus 1/2 inch and is not extensible or compressible. Therefore, replacing the flexible waveguide may require repositioning of the hanger plate supporting the rigid circular waveguide. New flexible circular waveguide should be installed, and if necessary, checked electrically per Section 402-421-206 or -207.

KS-5783, Flexible Rectangular Waveguide

2.10 If the neoprene jacket on the flexible waveguide is cut or torn, or if the waveguide has any visible deformity, it shall be replaced in accordance with Section AA266.030 (J68335).