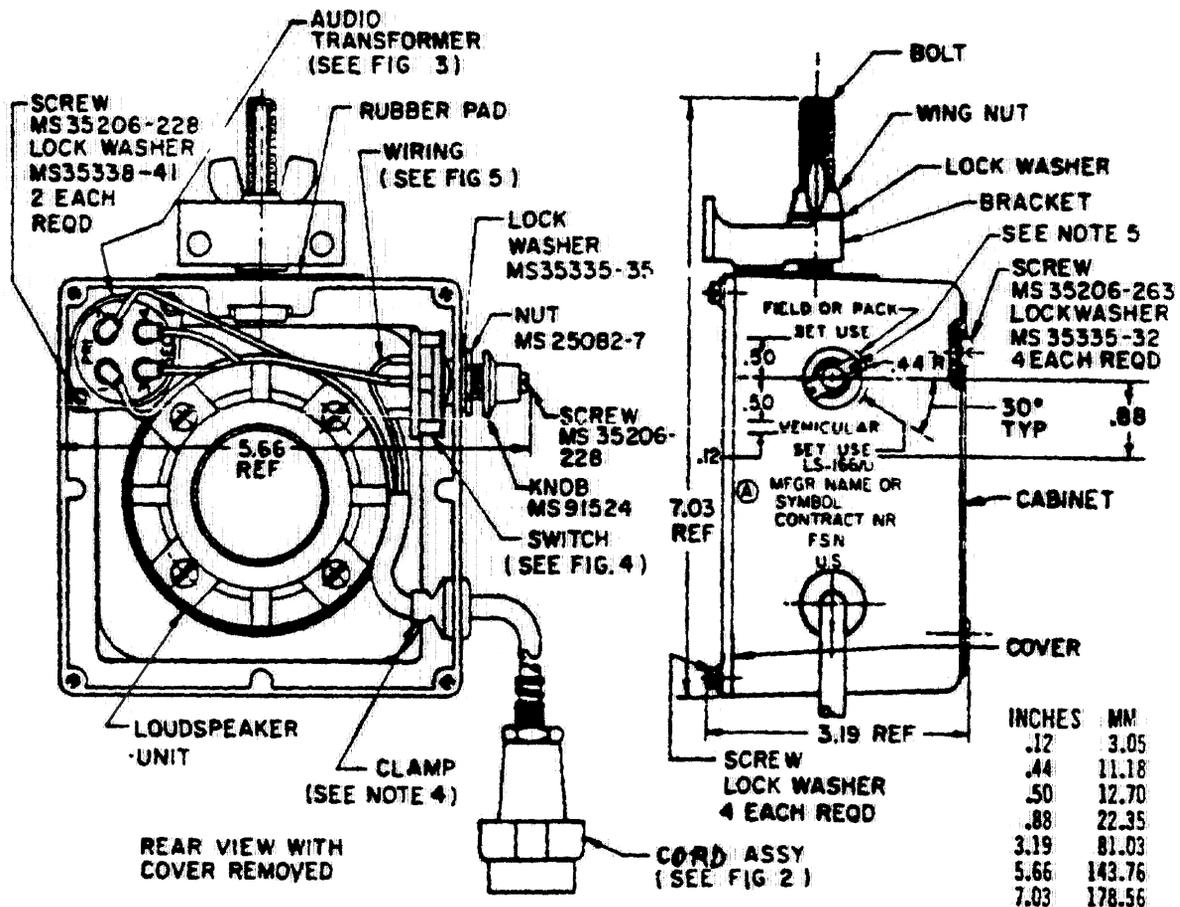


MILITARY SPECIFICATION SHEET

LOUDSPEAKER, PERMANENT MAGNET (ENCASED, 2-WATT,  
 FUNGUS-, GUNBLAST-, AND IMMERSION-RESISTANT),  
 TYPE LS-166/U

This specification is approved for use by all Depart-  
 ments and Agencies of the Department of Defense.

The complete requirements for procuring the loudspeaker described herein shall  
 consist of this document and the latest issue of Specification MIL-L-12632



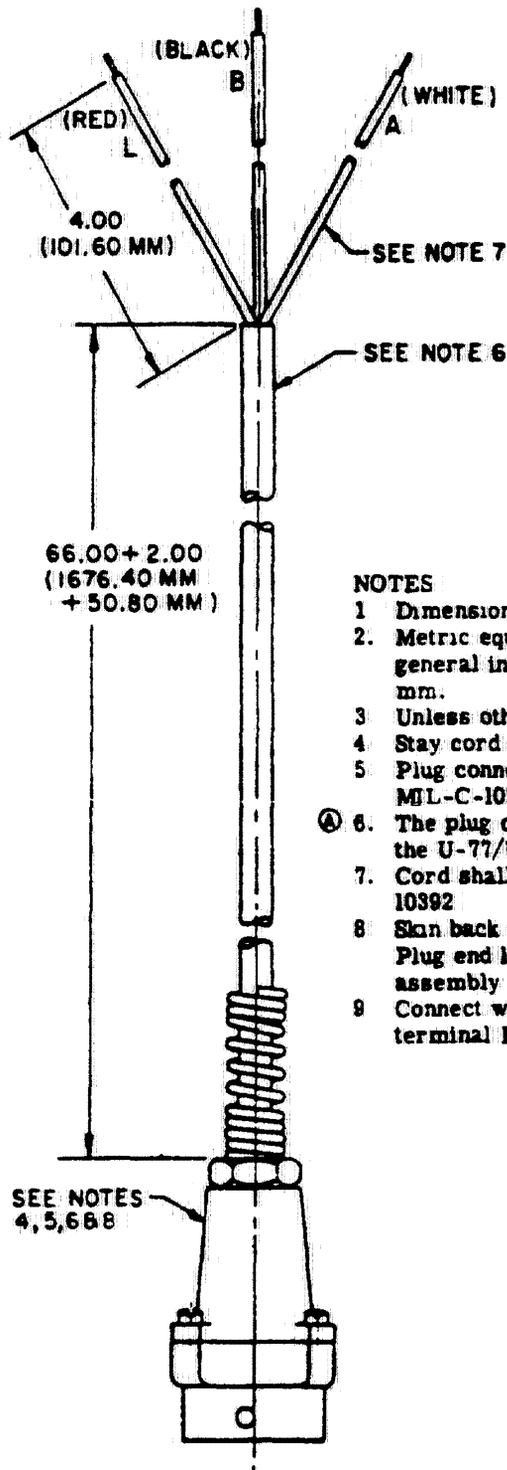
NOTES:

1. Dimensions are in inches
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm
3. Unless otherwise specified, tolerance is  $\pm .02$  (.51 mm) and  $\pm 1/2^\circ$  on angles.
4. Steel clamp firmly clamped on cable jacket. Design optional A strain relief bushing (e.g. Heyco) is a suitable substitute for the grommet/clamp combination
5. Drill #91 (9.93 mm) diameter hole for rotary switch.

FIGURE 1. Loudspeaker LS-166/U.

(A) denotes changes.

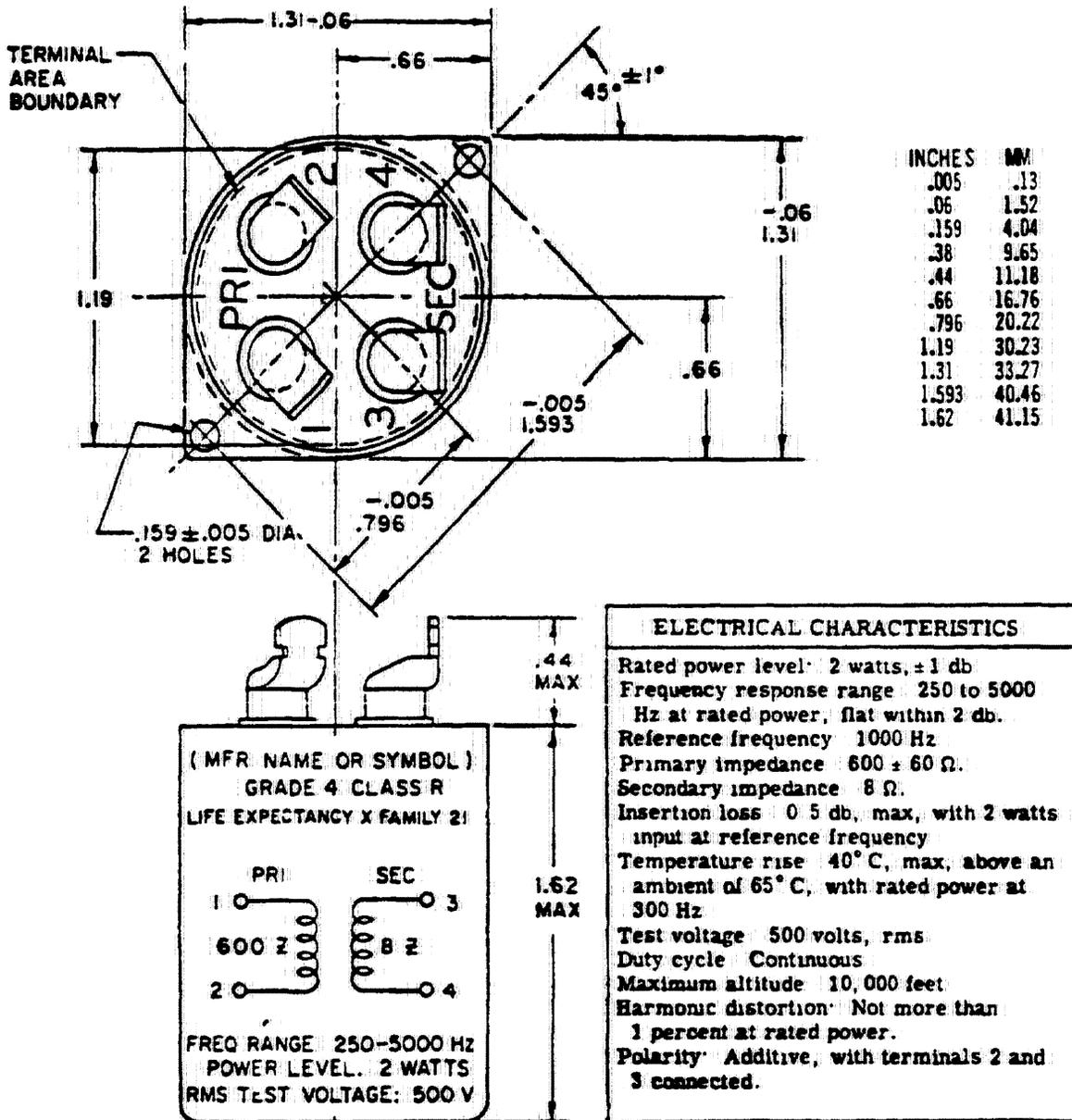
FSC 5965



NOTES

- 1 Dimensions are in inches
- 2 Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
- 3 Unless otherwise specified, tolerance is  $\pm .06$  (1.52 mm).
- 4 Stay cord shall be tied securely to stay ring of plug.
- 5 Plug connector shall be type U-77/U in accordance with MIL-C-10544.
- ⑥ The plug connector type U-161/U is a suitable substitute for the U-77/U.
- 7 Cord shall be type WT-15A/U in accordance with MIL-C-10392
- 8 Skin back ends .12 (3.05 mm), twist and solder coat. Plug end leads shall be 1.12 (28.45 mm) long before assembly
- 9 Connect white conductor to terminal A, black conductor to terminal B, and red conductor to terminal L of plug U-77/U.

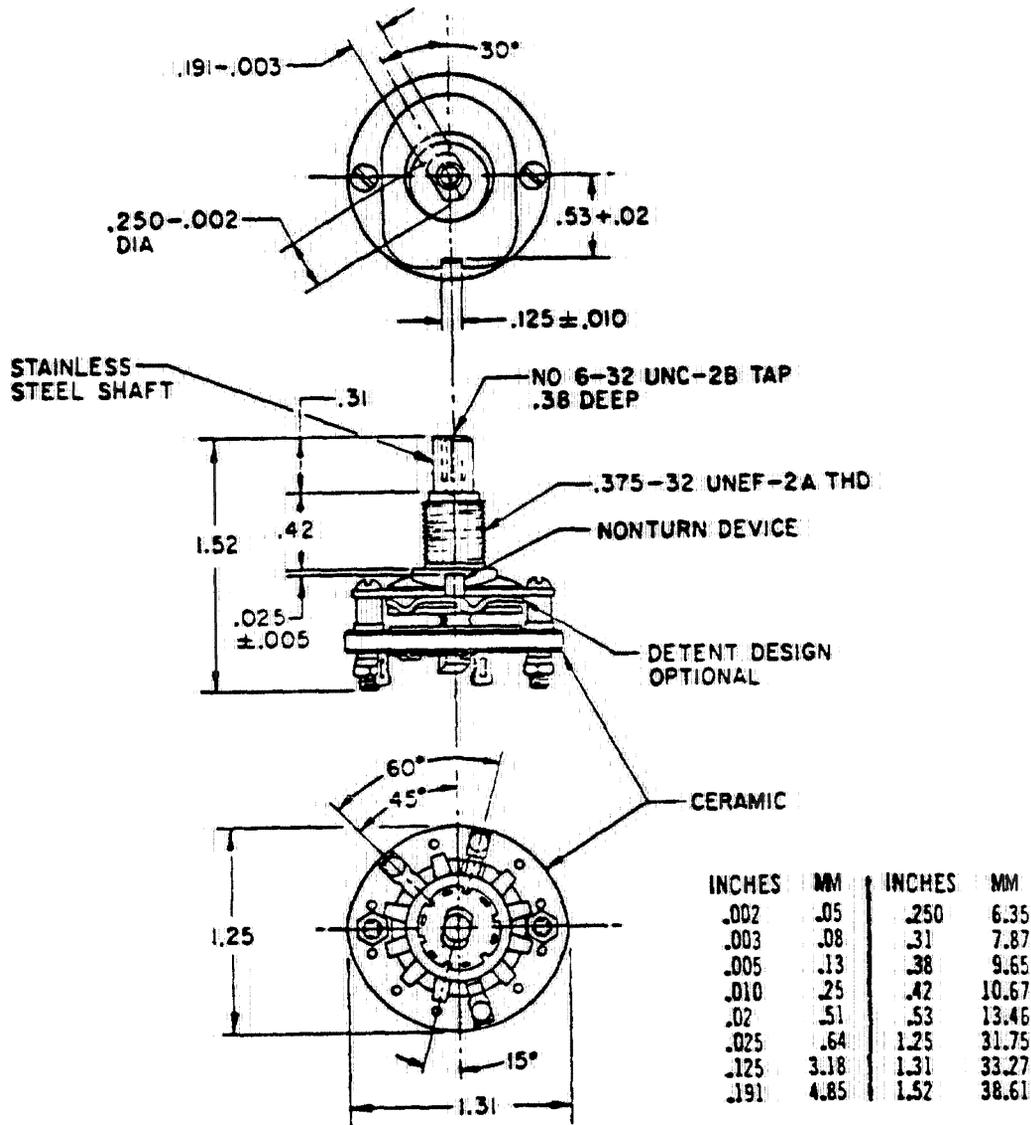
FIGURE 2 Cord assembly.



**NOTES:**

1. Dimensions are in inches
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ± .02 (.51 mm).
4. Solder lug terminals, No. 18 AWG
5. Markings shall be as shown

FIGURE 3. Audio transformer.



**NOTES:**

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are  $\pm .02$  (.51 mm) and  $\pm 1/2^\circ$ .
4. Construction - single section, single pole.
5. Contacts shall be non-shorting.
6. Stops shall be provided to limit rotation to two positions.
7. Terminals - angle of bend  $60^\circ$  to  $90^\circ$ .
8. Torque (rotational) At  $25^\circ + 10^\circ - 5^\circ$  C: 1.5 pound-inches min; 6 pound inches max.  
At  $-55^\circ \pm 2^\circ$  C: 1.5 pound-inches min; 8 pound inches max.
9. Life, rotational 10,000 rotational cycles at  $+125^\circ$  C.

FIGURE 4. Rotary switch.

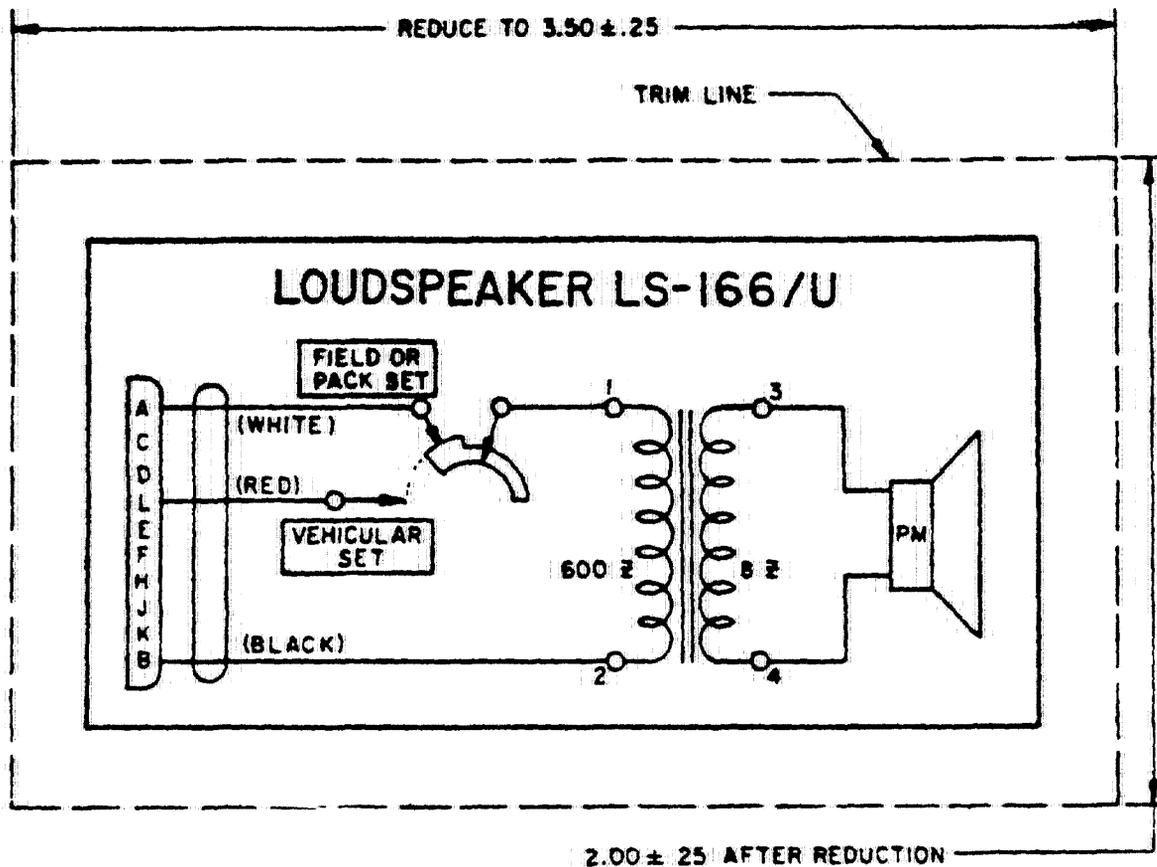


FIGURE 5. Schematic diagram and label size

#### REQUIREMENTS

Design and construction (see figure 1)

Loudspeaker unit - Type LS-445/U of MIL-L-12606.

Cabinet - In accordance with MIL-L-12632.

Cord assembly - See figure 2.

Cable - Type WT-15A/U of MIL-C-10392.

Plug - Type U-77/U of MIL-C-10544.

Audio transformer - See figure 3.

Rotary switch - See figure 4.

Wiring - See figure 5.

Schematic diagram label - In accordance with MIL-L-12632 and figure 5.

Frequency response test voltage (rms).  
36.0 volts.

Marking - See figure 1

#### Custodians

Army - EL

Navy - EC

Air Force - 85

#### Preparing activity

Army - EL

#### Agent

DSA - ES

#### Review activities

Army - EL

Navy -

Air Force - 80, 13

DSA - ES

(Project 5965-0141-2)

#### User activities

Army - ME

Navy - MC, CG, OS

Air Force -