

INCH-POUND

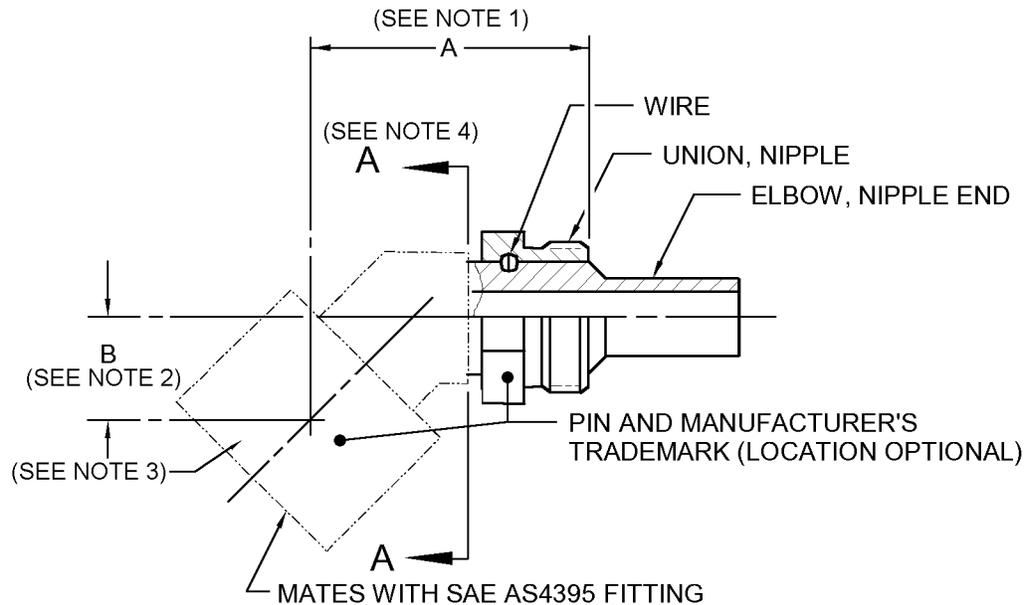
MS27063E  
 24 September 2003  
 SUPERSEDING  
 MS27063D  
 30 June 1972

## DETAIL SPECIFICATION SHEET

## ELBOW SUBASSEMBLY, FLARED, 45°, SWIVEL NUT

This specification is approved for use by all Departments  
 and Agencies of the Department of Defense.

The requirements for acquiring the product described herein  
 shall consist of this specification and MIL-DTL-27272.



## NOTES:

1. Dimension A is measured between the hose end of the threaded section of the union and the free end of the insert at its centerline.
2. Dimension B is measured between the centerline of the elbow and the free end of the insert at its centerline.
3. If required, lockwire holes to be drilled in accordance with SAE AS1043 and suffix L added to the PIN (e.g., MS27063-10CL).
4. Any bent tube design of subassembly components to the left of plane A-A is acceptable provided that the requirements of this specification sheet and the procurement specification are met.

FIGURE 1. Elbow subassembly illustration.

## MS27063E

### REQUIREMENTS

Intended use. This part is a component of MS27055.

Identification of product. The Part or Identifying Number (PIN) and the manufacturer's trademark shall be permanently marked on the assembly. The PIN for this assembly shall be as specified in table I (e.g., MS27063-10C).

Dimensions. Dimensions are in inches.

Material. PIN suffix C, corrosion-resistant steel.

PIN suffix D. Aluminum alloy.

No PIN suffix. Combination of aluminum alloy and corrosion-resistant steel.

See applicable specification sheet for other components identified in table I for their material requirements.

Finish. Corrosion-resistant steel, do not passivate.

Aluminum alloy. Anodize in accordance with MIL-A-8625, type II, dye blue.

Order of precedence. This specification takes precedence over the documents referenced herein. Unless otherwise specified, referenced documents shall be of the issue in effect on the date of solicitation.

The inside diameter (ID) of the elbow shall not be less than the ID of the nipple. Ovality shall not exceed 7.5 percent of the nominal tubing outside diameter. The minimum wall thickness at the elbow bend shall not be less than .034 inch for sizes -10 through -20, and .044 inch for size -24.

Elbow subassembly illustration. See figure 1.

## MS27063E

TABLE I. Elbow subassembly composition.

PIN <u>1/</u>	Wire PIN	Union, nipple PIN	Elbow, nipple end PIN	A <u>2/</u> $\pm.035$	B <u>3/</u> $\pm.035$
MS27063	MS27072	MS27071	MS27087		
-10C	-10C	-10C	-10C	1.486	.536
-10		-10D	-10D		
-12C	-12C	-12C	-12C	1.937	.623
-12		-12D	-12D		
-16C	-16C	-16C	-16C	1.993	.660
-16		-16D	-16D		
-20C	-20C	-20C	-20C	2.252	.768
-20		-20D	-20D		
-24C	-24C	-24C	-24C	2.561	.867
-24		-24D	-24D		

1/ If required, lockwire holes to be drilled in accordance with SAE AS1043 and suffix L added to the PIN (e.g., MS27063-10CL).

2/ Dimension A is measured between the hose end of the threaded section of the union and the free end of the insert at its centerline.

3/ Dimension B is measured between the centerline of the elbow and the free end of the insert at its centerline.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

## CONCLUDING MATERIAL

## Custodians:

Army - AV  
Navy - AS  
Air Force - 99  
DLA - CC

## Preparing activity:

DLA - CC

(Project 4730-0868-031)

## Review activities:

Army - AR, AT, MI  
Navy - MC, SA, SH  
Air Force - 71