

FED. SUP CLASS  
5310

## USER SYMBOLS:

REVIEWER SYMBOLS:  
 ARMY - VJ, MC, AV  
 NAVY - SH  
 AIR FORCE - 99  
 D: - IS

"Review/user information is current as of the date of this document.  
 For future coordination of changes to this document, draft circulation  
 should be based on the information in the current DODDS."

This military standard is approved for use by all Departments  
 & Agencies of the Department of Defense. Selection for all new  
 engineering and design applications and for repetitive use shall  
 be made from this document.

NUT ASSEMBLY, FLOATING, SELF-LOCKING, RIVETLESS, ATTACHED RETENTION ELEMENT,  
 (A.R.E.), MAINTAINABILITY AND RELIABILITY DESIGN AND USAGE LIMITATIONS OF:

THIS IS A DESIGN STANDARD NOT TO BE USED AS A PART NUMBER.

IN THE EVENT OF CONFLICT BETWEEN THE REQUIREMENTS OF THIS STANDARD AND  
 MS 33588 THIS DOCUMENT SHALL GOVERN.

THE FLOATING SELF-LOCKING NUT ASSEMBLY MAY BE USED IN THE FOLLOWING  
 APPLICATIONS.

1. AIRCRAFT ENGINE, MISSILE ASSEMBLY AND AVIONICS EQUIPMENT.
2. HIGH FATIGUE AND STRUCTURAL AREAS WITH APPROVAL OF PROCURING AGENCY.
3. GROUND SUPPORT EQUIPMENT, AIRCRAFT ACCESS DOORS.
4. STACK-UPS WHERE RIVETED PLATE NUTS ARE NOT FEASIBLE OR WHERE A FASTENER  
 WITH A GROMMET IS REQUIRED.
5. SHEAR NUT ASSEMBLIES ARE FOR USE IN INTERFERENCE FIT APPLICATIONS TO  
 PROVIDE INCREASED LAP SHEAR STRENGTH.
6. REDUCED DIAMETER OR CLOSE TOLERANCE NUT ASSEMBLIES ARE INTENDED FOR USE IN  
 LOAD-BEARING AREAS OR WHERE THE ELIMINATION OF MULTIPLE RIVETED HOLE PATTERNS  
 WILL BE BENEFICIAL TO THE FATIGUE LIFE OF THE JOINT.

## USAGE LIMITATION:

1. FLOATING A.R.E. NUTS SHALL NOT BE USED IN SHEAR LOAD CARRYING JOINTS.
2. CADMIUM PLATED A.R.E. NUTS SHALL NOT BE IN CONTACT WITH CARBON COMPOSITE  
 MATERIAL OR TITANIUM.
3. VARIABLE HEIGHT NUTS ARE FOR USE ONLY TO COMPENSATE FOR VARIATIONS IN  
 STRUCTURAL THICKNESS (E.G SKIN ATTACHMENT TO WING SPARS).
4. SHALL NOT BE USED IN JET ENGINE AIR INTAKE AREAS.
5. THE NUT ELEMENT TO BE USED ONLY AS A REPLACEMENT FOR A WORN OR DEFECTIVE  
 NUT ELEMENT IN THE NUT ASSEMBLY.
6. THE OVERSIZE NUT ASSEMBLY IS TO BE USED IN REPAIR AND MODIFICATION ONLY.  
 IT SHALL NOT BE USED IN NEW DESIGN.

APPROVED 25 JAN 85  
 REVISED

P.A. NAVY - AS Other Cust ARMY - AR AIR FORCE - 11	TITLE NUT ASSEMBLY, FLOATING, SELF-LOCKING, RIVETLESS, ATTACHED RETENTION ELEMENT, (A.R.E.), MAINTAINABILITY AND RELIABILITY DESIGN AND USAGE LIMITATIONS FOR:	<b>MILITARY STANDARD</b>
PROCUREMENT SPECIFICATION	SUPERSEDES:	<b>MS14199</b>
		SHEET 1 OF 1