

FED. SUP. CLASS  
2990REVOLVING GRIP  
(METHOD OF FASTENING  
OPTIONAL)STEEL  
 $3 - 1/2 \pm 1/8$  $5 \pm 1/8$  $1''R$   
 $3/4$  DIA. HOT  
ROLLED STEEL

(A) CANCELLED AFTER 13 Dec 82  
 NO SUPERSEDING STANDARD.

MS PART NUMBER	FIN	
MS-		8±1,
MS-		7±1/6

CHAMFER  
BOTH ENDS $1/16 \times 45^\circ$   
CHAMFER $5/16$  DIA x  
 $1 1/4$  LG  $\pm 1/8$   
STEEL PIN $3/8 \pm 1/64$ 

BOTH ENDS OF PIN MUST BE UPSET SO AS TO  
 LOCK IT SECURELY TO SHAFT.  $0.344$  MAX  
 DIA AFTER UPSET. CYANIDE HARDEN PIN  
 AFTER ASSEMBLY TO CRANK. CASE TO HAVE  
 A MINIMUM DEPTH OF  $.004$ .

NOTE: DRAWING SHOWS ONLY FUNCTIONAL INTERCHANGEABILITY AND NOT NECESSARILY TYPE OF  
 CONSTRUCTION.

ALL DIMENSIONS IN INCHES.

UNLESS OTHERWISE SPECIFIED TOLERANCE SHALL BE  $\pm 1/64$ 

MATERIAL, FINISH AND PAINT SHALL BE IN ACCORDANCE WITH MANUFACTURER'S  
 STANDARD PRACTICE.

THIS DOCUMENT HAS BEEN PROMULGATED BY THE DEPARTMENT OF DEFENSE AS THE MILITARY STANDARD TO LIMIT  
 THE SELECTION OF THE ITEM, PRODUCT, OR DESIGN COVERED HEREIN IN ENGINEERING, DESIGN AND PROCUREMENT.  
 THIS STANDARD SHALL BECOME EFFECTIVE NOT LATER THAN 90 DAYS AFTER THE LATEST DATE OF APPROVAL SHOWN.

P.A.	CE	MILITARY STANDARD	MS51308
Other Cust	Docks USAF		
CRANK, HAND; ENGINE STARTING, PIN TYPE FOR 160 CU. IN. AND BELOW, INDUSTRIAL ENGINES			
PROCUREMENT SPECIFICATION NONE	SUPERSEDES:	SHEET 1 OF 1	

DD FORM 1 OCT 52 672-1

\* U.S. GOVERNMENT PRINTING OFFICE: 1983-605-034-438

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This military standard is approved by the  
 Department of Defense and is mandatory on all  
 activities. Selection for all new engineer-  
 ing and design applications and for repetitive  
 use shall be made from this document.

APPROVED 21 MAY 1959 REVISED (A) 13 December 1982