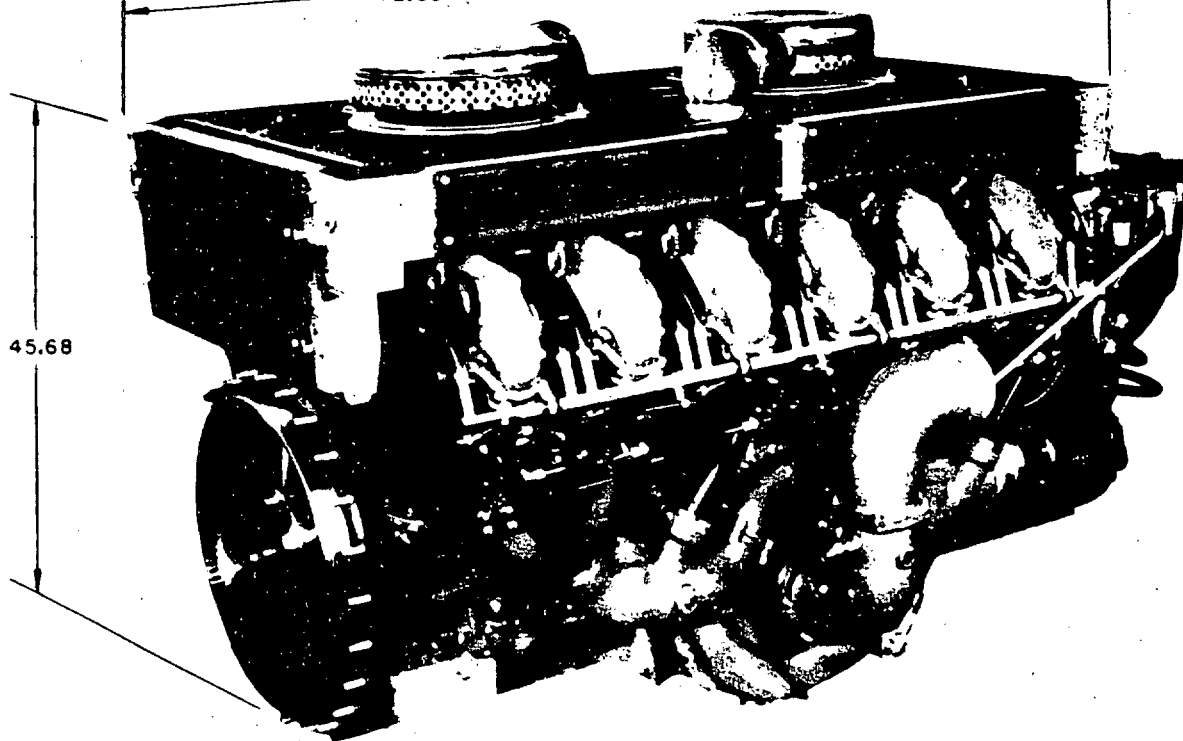


REVIEW ACTIVITIES: AF-82, 85; DSA-CS  
USER ACTIVITIES: ARMY-AV; NAVY-MC

45.68

72.83

56.74

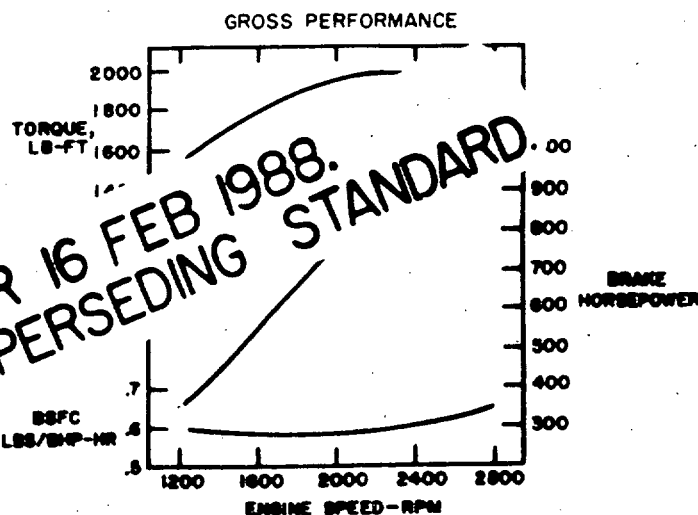
**ENGINE CHARACTERISTICS:**

NUMBER OF CYLINDERS 12  
BORE AND STROKE, INCHES 5.75 x 5.75  
DISPLACEMENT, CUBIC INCHES 1790  
COMPRESSION RATIO 5.5:1  
TORQUE, MAX. LB. FT. AT 2000 RPM AT  
FLYWHEEL STANDARD CONDITIONS 1900  
BHP, AT 2800 RPM, STANDARD CONDITIONS 1020  
INDUCTION SYSTEM SUPERCHARGED  
IGNITION SYSTEM  
GENERATOR  
FUEL SYSTEM  
WEIGHT, DRY

\* IN  
AA  
CA

(B)

**CANCELLED AFTER 16 FEB 1988.  
NO SUPERSEDING STANDARD**

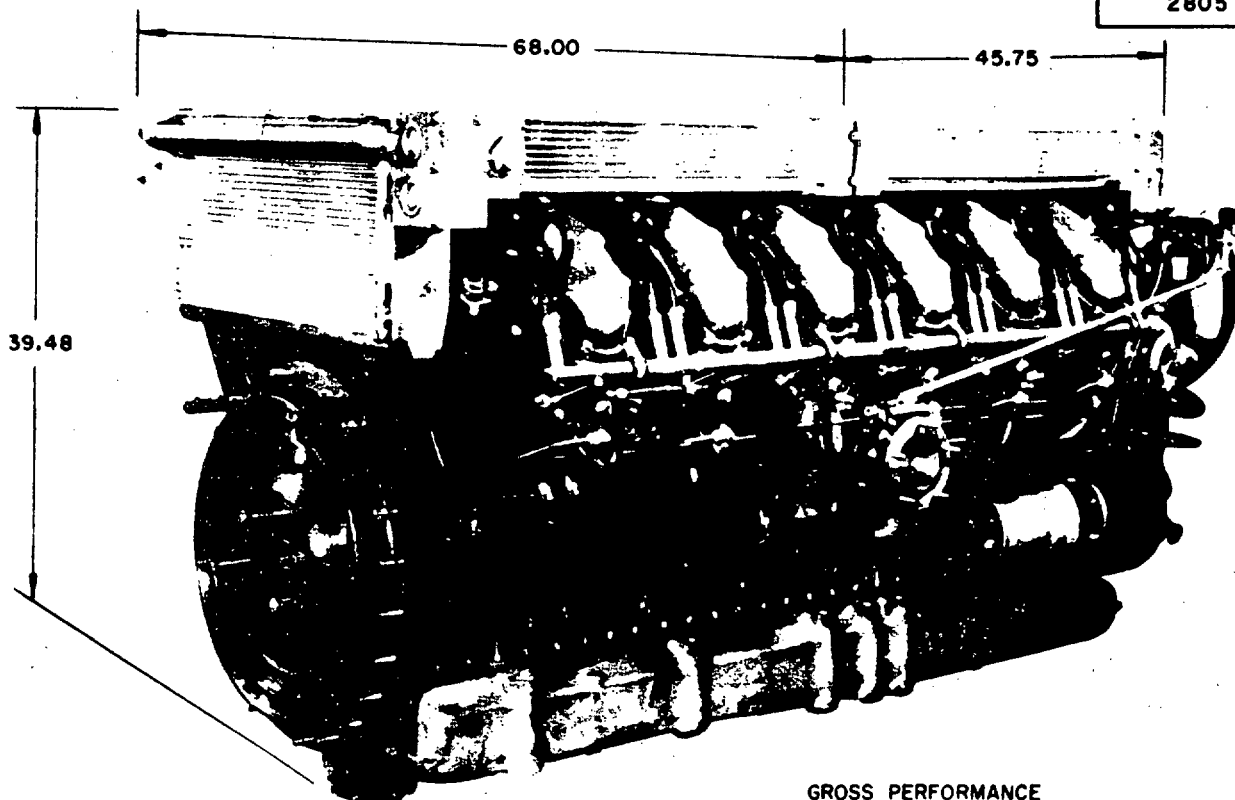
**NOTES:**

1. THIS ENGINE SHALL CONFORM TO 90 DEGREE V TYPE, 1,020 BHP WITH FUEL INJECTION, SUPERCHARGED CLASSIFICATION OF MIL-E-45162.
2. ALL THREADS SHALL BE IN ACCORDANCE WITH SCREW-THREAD STANDARDS FOR FEDERAL SERVICES, HANDBOOK H28.
3. DIMENSIONS SHOWN ARE IN INCHES AND ARE FOR ENGINEERING REFERENCE ONLY.
4. MARKING SHALL CONSIST OF THE MS PART NUMBER AND THE MANUFACTURER'S IDENTIFICATION AND SHALL BE IN ACCORDANCE WITH MIL-STD-130.
5. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
6. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
7. DRAWINGS AND OTHER INFORMATION PERTAINING TO THIS ENGINE ARE AVAILABLE FROM THE U.S. ARMY TANK-AUTOMOTIVE COMMAND, WARREN, MICHIGAN 48090.

SEE SHEETS 3 AND 4 FOR MOUNTING DIMENSIONS

(A) ENTIRE STANDARD REVISED

P.A. ARMY-AT Other-Cust NAVY-MC AF-82	TITLE <b>ENGINE, GASOLINE: AIR COOLED, 1790 CU IN DISPL, 4 STROKE CYCLE, RECIPROCATING, AUTOMOTIVE</b>	MS PART NO. MS 51313 -1	ENGINEERING PARTS LIST 8365416
PROCUREMENT SPECIFICATION MIL-E-45162	SUPERSEDES	<b>MILITARY STANDARD MS 51313</b>	
		SHEET 1 OF 4	

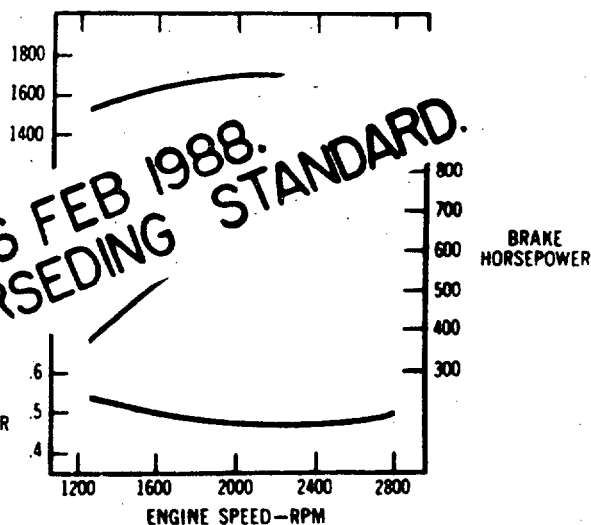
**ENGINE CHARACTERISTICS:**

NUMBER OF CYLINDERS 12  
 BORE AND STROKE, INCHES 5.75 x 5.75  
 DISPLACEMENT, CUBIC INCHES 1790  
 COMPRESSION RATIO 6.5:1  
 TORQUE, MAX. LB FT AT 2000 RPM AT FLYWHEEL STANDARD CONDITIONS 1600  
 BHP, AT 2000 RPM, STANDARD CONDITIONS 810  
 INDUCTION SYSTEM NATURAL ASPIRATION  
 IGNITION SYSTEM  
 GENERATOR  
 FUEL SYSTEM  
 WEIGHT, DRY

\* INCL  
 COOL.  
 ACCESS

TORQUE,  
 LB FT

BSFC  
 LBS/BHP-HR

**GROSS PERFORMANCE****NOTES:**

1. THIS ENGINE SHALL CONFORM TO 90 DEGREE V TYPE, 810 BHP, FUEL INJECTION CLASSIFICATION OF MIL-E-45162.
2. ALL THREADS SHALL BE IN ACCORDANCE WITH SCREW-THREAD STANDARDS FOR FEDERAL SERVICES, HANDBOOK H28.
3. DIMENSIONS SHOWN ARE IN INCHES AND ARE FOR ENGINEERING REFERENCE ONLY.
4. MARKING SHALL CONSIST OF THE MS PART NUMBER AND THE MANUFACTURER'S IDENTIFICATION AND SHALL BE IN ACCORDANCE WITH MIL-STD-130.
5. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
6. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
7. DRAWINGS AND OTHER INFORMATION PERTAINING TO THIS ENGINE ARE AVAILABLE FROM THE U.S. ARMY TANK-AUTOMOTIVE COMMAND, WARREN, MICHIGAN 48090.

SEE SHEETS 3 AND 4 FOR MOUNTING DIMENSIONS

(A) ENTIRE STANDARD REVISED

MS PART NO.	ENGINEERING PARTS LIST
MS 51313 -2	8380568

P A. ARMY-AT  
 Other Cust  
 NAVY- MC  
 AF- 82

TITLE  
 ENGINE, GASOLINE: AIR COOLED,  
 1790 CUIN DISPL, 4 STROKE CYCLE,  
 RECIPROCATING, AUTOMOTIVE

**MILITARY STANDARD****MS 51313**

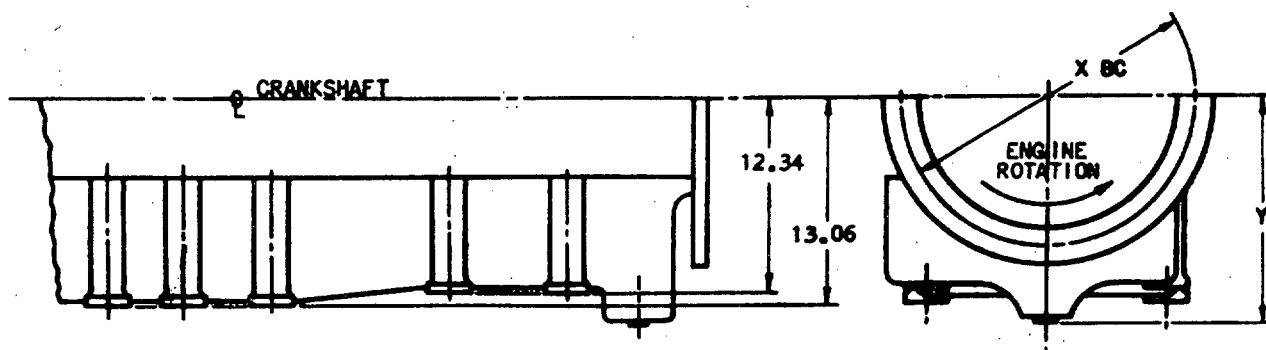
PROCUREMENT SPECIFICATION  
 MIL-E-45162

SUPERSEDES

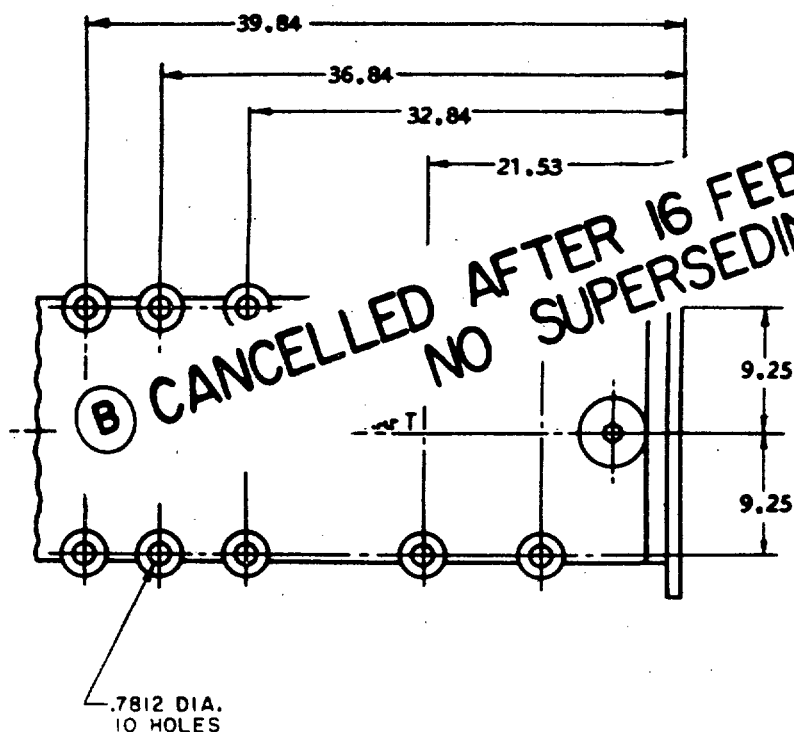
SHEET 2 OF 4

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

## STANDARD MOUNTING DIMENSIONS FOR ENGINE MS 51313-1 AND MS 51313-2



TRANSMISSION END  
FOR MOUNTING HOLE  
DIMENSIONS SEE SHEET 4



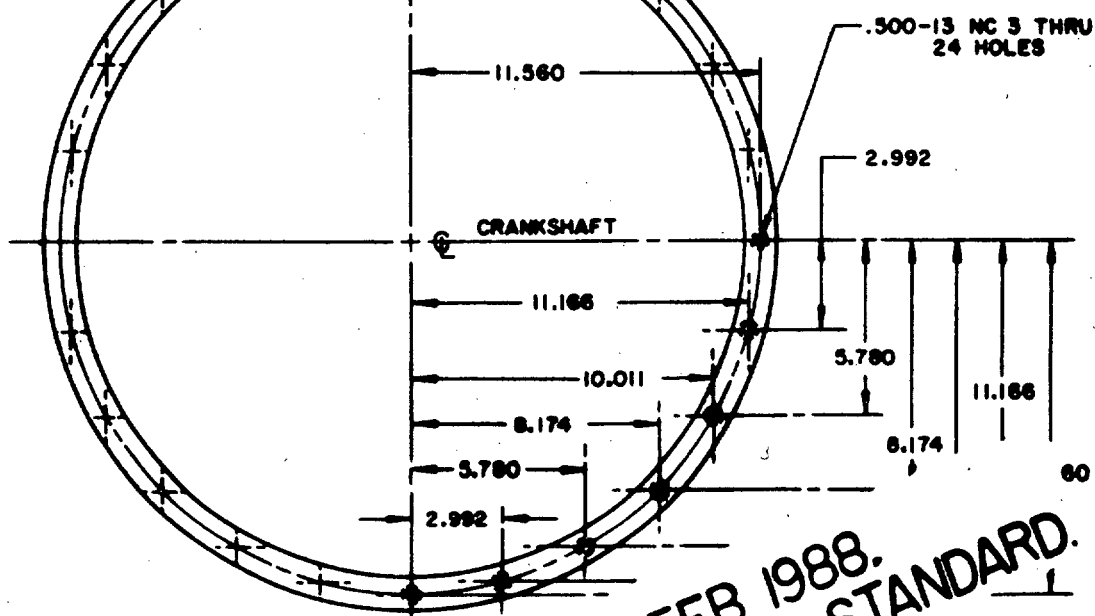
**(B) CANCELLED AFTER 16 FEB 1988.  
NO SUPERSEDING STANDARD.**

MS PART NO.	X	Y
MS 51313 -1	23.120	18.27
MS 51313 -2	22.798	18.27

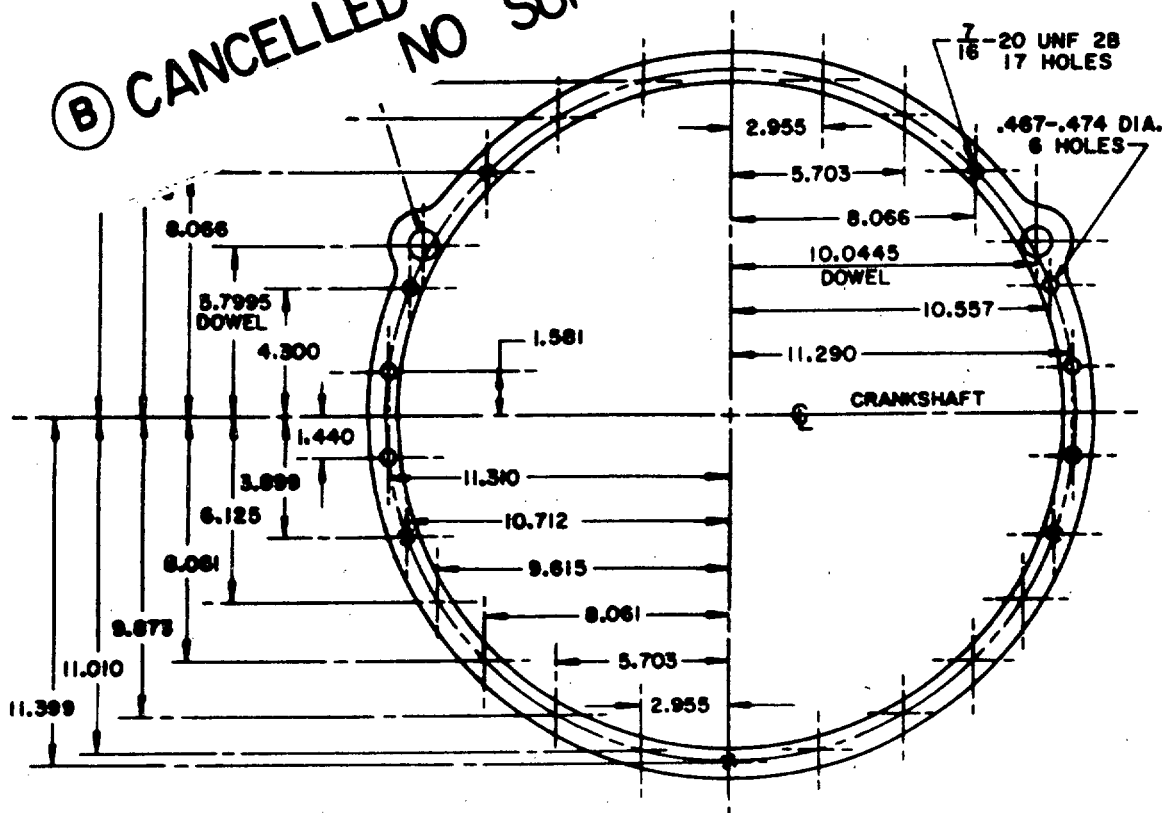
**(A) ENTIRE STANDARD REVISED**

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

P.A. ARMY-AT Other Cust NAVY-MC AF-82	TITLE ENGINE, GASOLINE: AIR COOLED, 1790 CU IN DISPL, 4 STROKE CYCLE, RECIPROCATING, AUTOMOTIVE	MILITARY STANDARD <b>MS 51313</b>
PROCUREMENT SPECIFICATION MIL-E-45162	SUPERSEDES	SHEET 3 OF 4



WORK, DIMENSIONS FOR MS 51313-1



TRANSMISSION, CASE, ADAPTER, DIMENSIONS FOR MS 51313-2

(A) ENTIRE STANDARD REVISED

APPROVED 26 MAY 1959 REVISED (A) 6 SEP 1966 (B) 16 FEB 1988

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

P.A. ARMY-AT Other Cust NAVY- MC AF- 82	TITLE ENGINE, GASOLINE: AIR COOLED, 1790 CU IN DISPL, 4 STROKE CYCLE, RECIPROCATING, AUTOMOTIVE	MILITARY STANDARD
		MS 51313
PROCUREMENT SPECIFICATION MIL-E-45162	SUPERSEDES	SHEET 4 OF 4