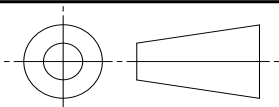


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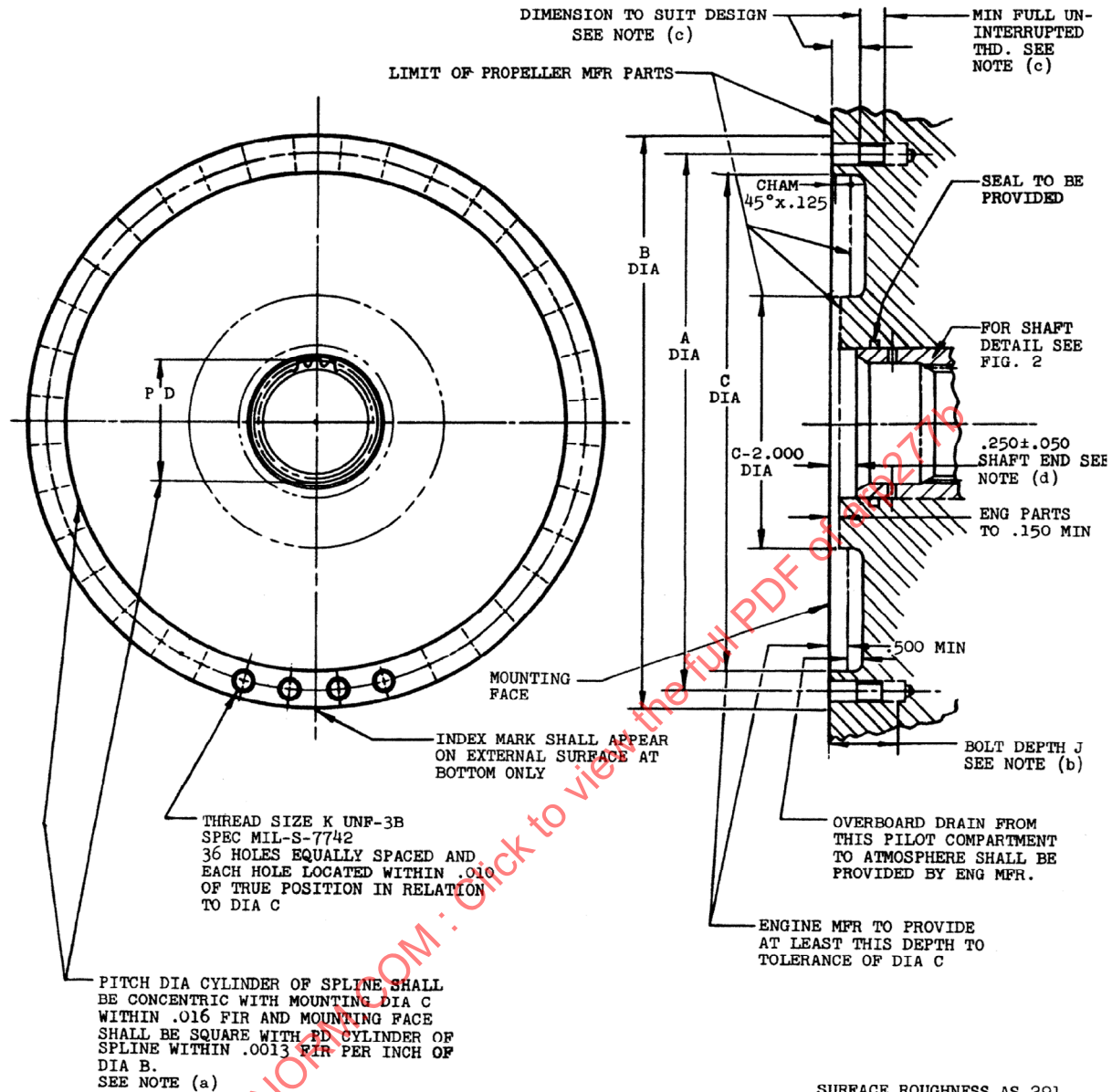
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--|
| <b>REV.<br/>B</b>                                                                                                                                                                                                                                                                                                                                                                                              | <b>SAE ARP277</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                 | FEDERAL SUPPLY CLASS |  |
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ISSUED 1953-04 REVISED 1960-04 NONCURRENT 1973-08 REAFFIRMED NONCURRENT 2006-07 STABILIZED 2013-02

# **MOUNTING DATA** FOR APPLICABLE DIMENSIONS SEE TABLE 1

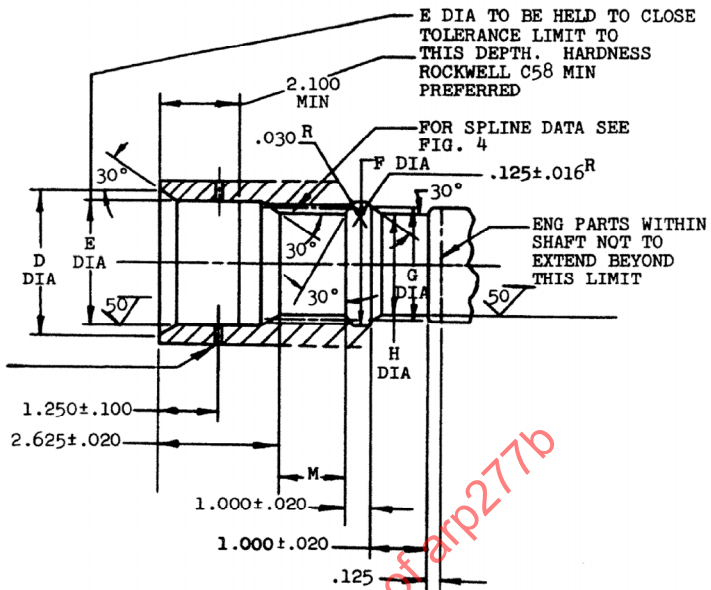


**FIGURE 1**

SURFACE ROUGHNESS AS 291  
ALL DIMENSIONS IN INCHES

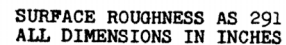
|                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------|
| <p>UNLESS OTHERWISE SPECIFIED<br/>BREAK SHARP EDGES .003-.015<br/>TOLERANCES:<br/>LINEAR DIMENSIONS ±.010<br/>ANGULAR DIMENSIONS ± 2°</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------|

FOR APPLICABLE DIMENSIONS SEE TABLE 1



## FIGURE 2

## PROPELLER END DATA AND TYPICAL INSTALLATION



UNLESS OTHERWISE SPECIFIED  
BREAK SHARP EDGES .003-.015  
TOLERANCES:  
LINEAR DIMENSIONS  $\pm .010$   
ANGULAR DIMENSIONS  $\pm 2^\circ$

### FIGURE 3

| SIZE  | A<br>BASIC | B<br>ENG MIN | C<br>+.004<br>-.000 | D     | E<br>+.002<br>-.000 | F<br>MIN | G     | H<br>+.002<br>-.000 | J<br>MAX | K<br>THD SIZE | L<br>LB-IN | M<br>LENGTH |
|-------|------------|--------------|---------------------|-------|---------------------|----------|-------|---------------------|----------|---------------|------------|-------------|
| 20-20 | 20.000     | 21.250       | 18.750              | 4.850 | 4.502               | 4.550    | 4.100 | 3.875               | 1.500    | .375-24       | 5,000      | 2.250       |
| 22-22 | 22.000     | 23.250       | 20.750              | 5.350 | 5.062               | 5.050    | 4.600 | 4.375               | 1.750    | .4375-20      | 6,000      | 2.500       |
| 24-24 | 24.000     | 25.375       | 22.625              | 5.865 | 5.562               | 5.550    | 5.100 | 4.875               | 2.000    | .500-20       | 7,000      | 2.750       |
| 26-26 | 26.000     | 27.375       | 24.625              | 6.615 | 6.312               | 6.300    | 5.850 | 5.625               | 2.000    | .500-20       | 8,000      | 3.250       |
| 28-28 | 28.000     | 29.500       | 26.500              | 7.365 | 7.062               | 7.050    | 6.600 | 6.375               | 2.250    | .5625-18      | 9,000      | 3.750       |
| 30-30 | 30.000     | 31.500       | 28.500              | 7.865 | 7.562               | 7.550    | 7.100 | 6.875               | 2.250    | .5625-18      | 10,000     | 4.250       |
| 32-32 | 32.000     | 33.500       | 30.500              | 8.365 | 8.062               | 8.050    | 7.600 | 7.375               | 2.250    | .5625-18      | 11,000     | 4.750       |

**TABLE 1 FOR FIGURES 1, 2 & 3**

**NOTES:**

- INCLUDING THE MAX ENGINE SHAFT ECCENTRICITY AND MISALIGNMENT SPECIFIED HEREIN, AND UNDER THE CONDITIONS OF MAXIMUM PROPELLER DESIGN LOADING, THE FORCES EXERTED BY THE PROPELLER SPLINES ON THE ENGINE DRIVE SPLINES SHALL NOT EXCEED A SIDE LOAD OF 6000 POUNDS, A FORE AND AFT THRUST OF 1500 POUNDS, AND A MOMENT OF L. FOR NORMAL CONTINUOUS OPERATION THE FORCES SHALL NOT EXCEED 45% OF THESE SPECIFIED DESIGN VALUES.
- MAX BOLT DEPTH J INDICATES AMOUNT OF MIN REMOVAL SPACE TO BE ALLOWED IN PROP MFR PARTS FOR THE ATTACHMENT BOLT. PROP MFR SHALL REFER TO ENG MFR INSTALLATION DWG WHICH SHALL SHOW MAX AND MIN REQUIRED DEPTH OF INSTALLED BOLT.
- PROP MFR SHALL REFER TO ENG MFR ENGINE INSTALLATION DWG WHICH SHALL SHOW MAX DEPTH TO FIRST FULL UNINTERRUPTED THD AND MIN DEPTH TO LAST FULL UNINTERRUPTED THD AVAILABLE FOR BOLT ENGAGEMENT.
- MAX END PLAY .050 (THIS LIMIT IS INCLUDED IN THE TOLERANCE)

SURFACE ROUGHNESS AS 291  
ALL DIMENSIONS IN INCHES

|                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UNLESS OTHERWISE SPECIFIED</b><br>BREAK SHARP EDGES .003-.015<br>TOLERANCES:<br>LINEAR DIMENSIONS $\pm .010$<br>ANGULAR DIMENSIONS $\pm 2^\circ$ |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|