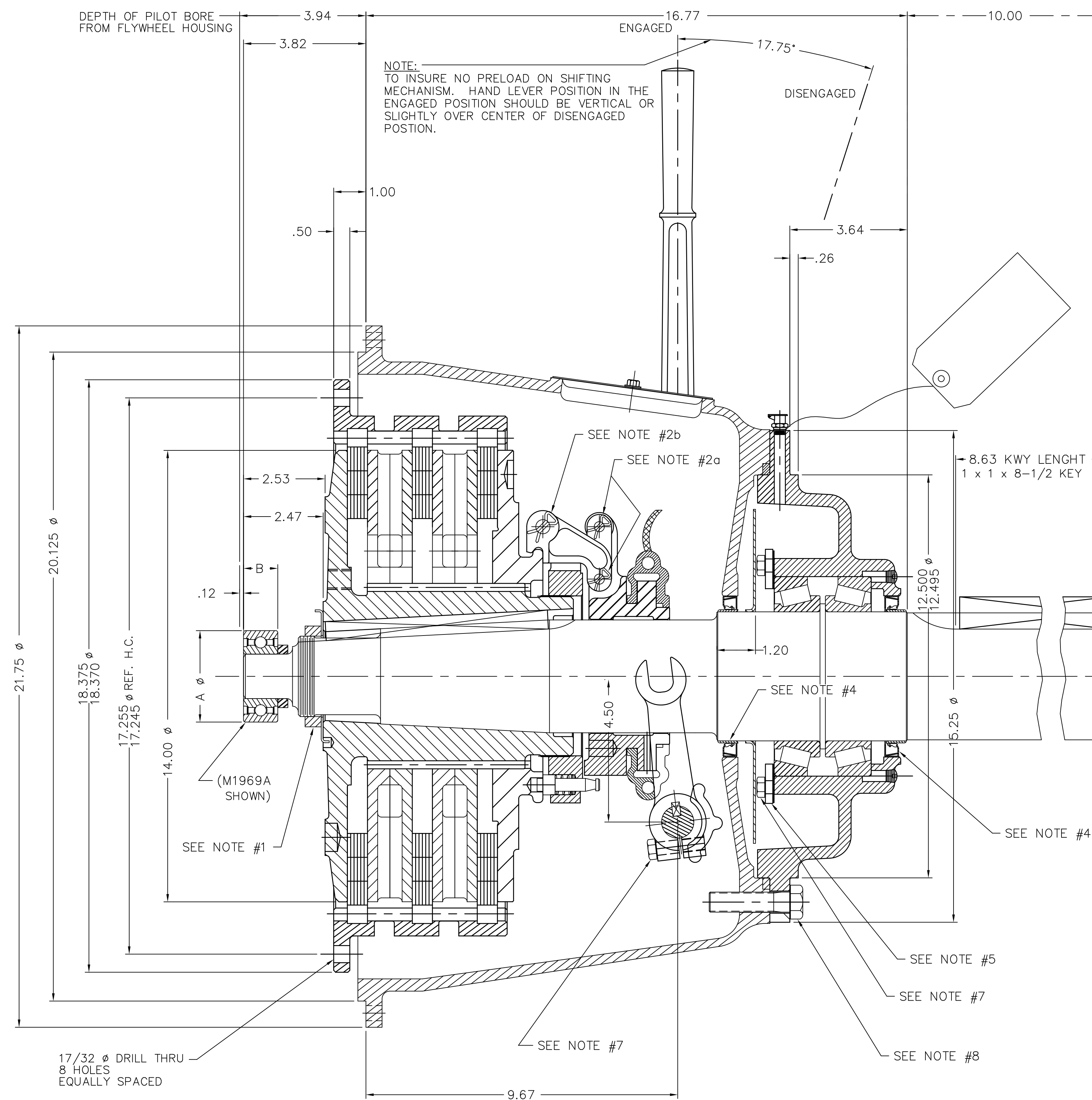
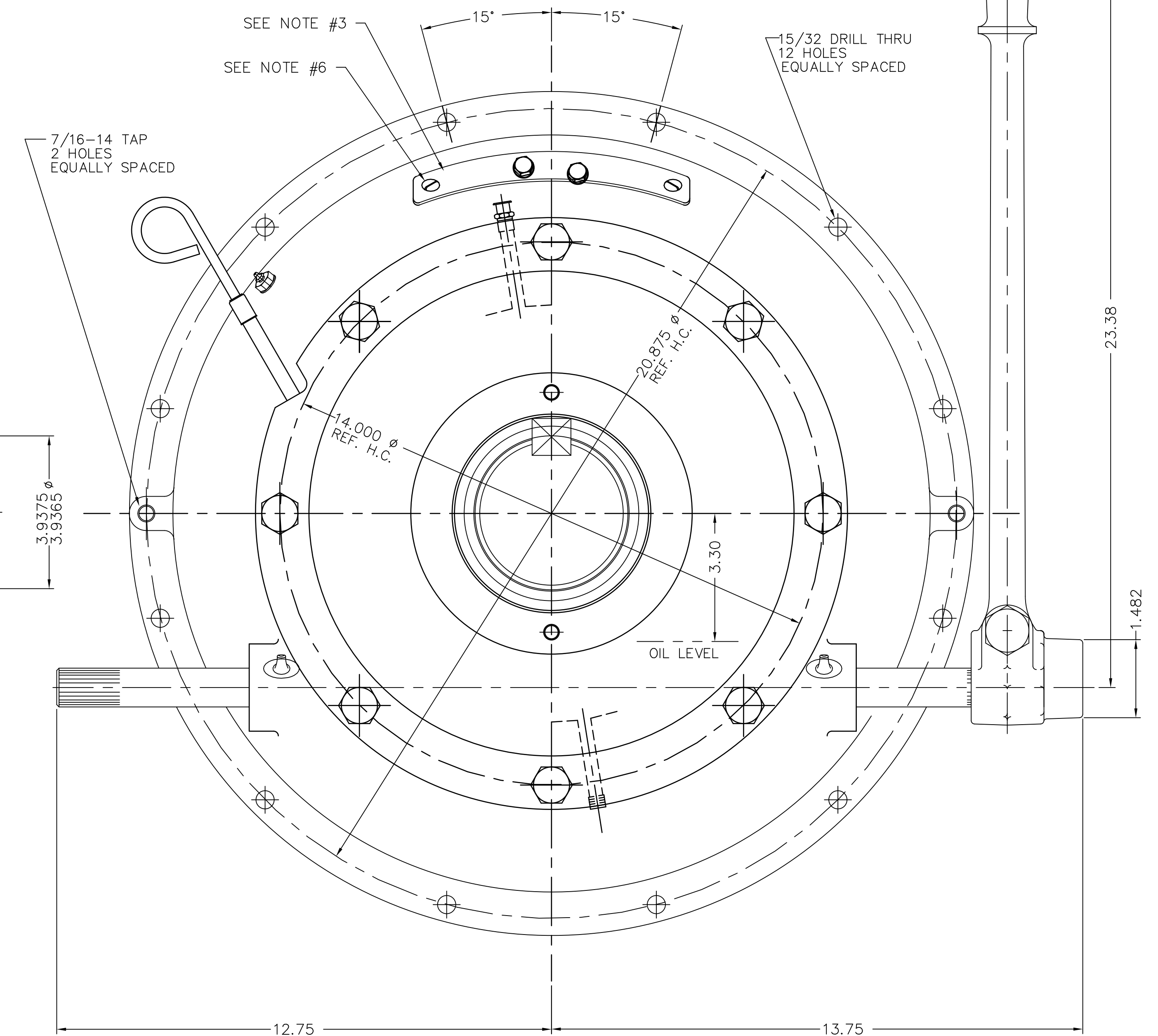




NOTE:  
TO INSURE NO PRELOAD ON SHIFTING MECHANISM. HAND LEVER POSITION IN THE ENGAGED POSITION SHOULD BE VERTICAL OR SLIGHTLY OVER CENTER OF DISENGAGED POSITION.

ASSEMBLY NOTES:

- 1.) SEAT HUB USING 30 LB.-FT. (41.0 Nm) TORQUE ON NUT. THEN TIGHTEN NUT BY TURNING AN ADDITIONAL 180° TO 210°.
- 2.) 
  - a. R=.47 MAX. FOR COTTER PINS
  - b. R=.58 MAX. FOR COTTER PINS
- 3.) STAMP 163-123 IN LBS. BLOCK AND 21.3 IN INCH BLOCK FOR HAND LEVER FORCE.
- 4.) BEFORE ASSEMBLY OF SEALS, APPLY GREASE OR OIL TO LIPS AND WEAR SLEEVE SURFACES.
- 5.) BEARING ADJUSTMENT:  
TAKE UP BEARING RETAINER UNTIL 60 LB.-IN. IS REQUIRED TO ROTATE SHAFT WITHOUT SHIMS. MEASURE SHIM GAP AND ADD .013 TO GET PROPER SHIM THICKNESS. ASSEMBLE SHIMS AND RETAINER, BEARING ENDPLAY TO BE .006-.010 IN.
- 6.) TORQUE BOLTS TO  $9 \pm 1$  LB.-FT. (12 +2/-1 Nm).
- 7.) TORQUE BOLTS TO  $33 \pm 3$  LB.-FT. (45 ± 4 Nm).
- 8.) TORQUE BOLTS TO  $112 \pm 12$  LB.-FT. (214 ± 16 Nm).



| PART NO. | A                | B                | TYPE   |
|----------|------------------|------------------|--------|
| M1969A   | 2.8346<br>2.8341 | 1.0625<br>1.0575 | BALL   |
| M1985A   | 3.1496<br>3.1491 | 1.3750<br>1.3700 | BALL   |
| M2327    | 3.9370<br>3.9364 | 1.5625<br>1.5575 | BALL   |
| M2529    | 3.1506<br>3.1501 | 1.3750<br>1.3700 | ROLLER |
| M2713    | 3.9384<br>3.9378 | 1.5625<br>1.5575 | ROLLER |

GENERAL NOTES:

- a.) REFER TO BOM LIST WHEN ORDERING PARTS.
- b.) REFER TO CARE & OPERATION MANUAL FOR ADDITIONAL INFO.
- c.) A SUPPORT PLATE MUST BE USED WHEN SIDE LOADS ARE APPLIED TO THE SHAFT.
- d.) CLUTCH MUST BE RIGIDLY SUPPORTED DURING HANDLING AND SHIPPING TO PREVENT SEAL DAMAGE.

NOTICE! THIS PRINT CONTAINS  
PROPRIETARY INFORMATION AND IS  
NOT TO BE USED IN ANY MANNER  
DETRIMENTAL TO THE INTERESTS OF  
TWIN DISC, INCORPORATED  
RACINE, WI 53403 - USA  
THIS NOTICE IS NOT INTENDED  
TO NULLIFY OR LIMIT RIGHTS  
GRANTED TO THE U.S. GOVERNMENT  
OR OTHERS BY CONTRACT.

|                   |                |                                         |                                                                                                                                                                               |                 |                                                                            |        |
|-------------------|----------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------|--------|
| MATERIAL          | WEIGHT<br>LBS. | WR <sup>2</sup><br>LBS. IN <sup>3</sup> | UNLESS OTHERWISE SPECIFIED<br>MACHINED DIMENSIONS<br>X.X ±0.030<br>X.XX ±0.010<br>X.XXX ±0.005<br>ALL ANGULAR TOLERANCES ±1°<br>GEOMETRIC TOLERANCING<br>PER ANSI Y14.5M 1982 | DATE<br>5/24/94 | 1B314P106<br>1B314P107<br>1B314P108<br>1B314P109<br>1B314P110<br>1B314P111 |        |
| HEAT TREAT        | FIRST USE      |                                         | SCALE<br>50=1"                                                                                                                                                                | DRN.            |                                                                            |        |
|                   | ASSY.          |                                         | RDW                                                                                                                                                                           |                 |                                                                            |        |
|                   | MODEL          |                                         | CHK.                                                                                                                                                                          |                 |                                                                            |        |
| SURFACE TREATMENT | NAME           |                                         | DJN                                                                                                                                                                           |                 |                                                                            |        |
| IBF3140P1         |                |                                         |                                                                                                                                                                               | APPD. JMS       | SHEET 2 OF 2                                                               | REV. C |

**TWIN DISC**  
INCORPORATED  
RACINE, WI 53403 - USA

|           |
|-----------|
| IB314P104 |
| IB314P105 |
| IB314P106 |
| IB314P107 |
| IB314P108 |
| IB314P109 |
| IB314P110 |
| IB314P111 |

IB314P106  
IB314P107  
IB314P108  
IB314P109  
IB314P110  
IB314P111

|              |     |
|--------------|-----|
| SHEET 2 OF 2 | REV |
|--------------|-----|