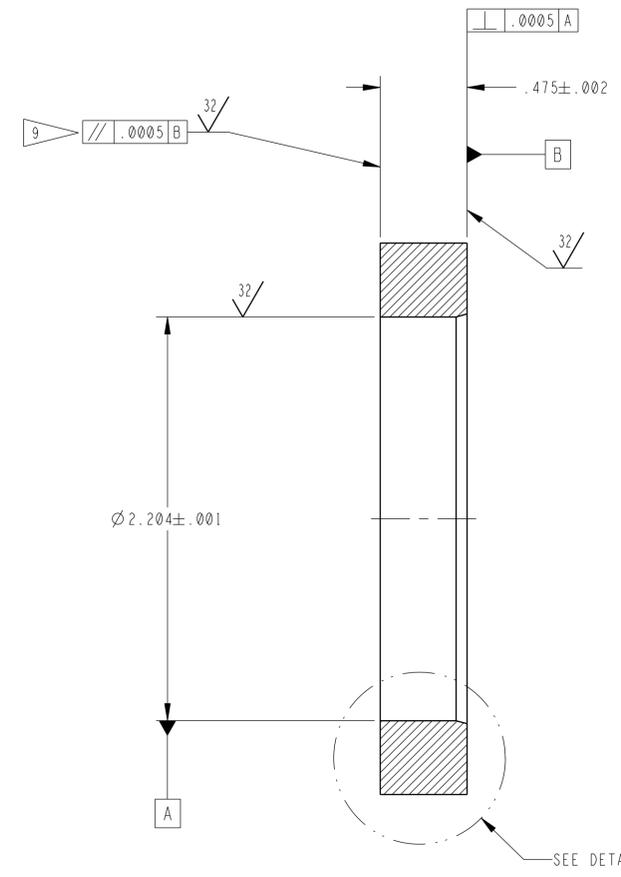


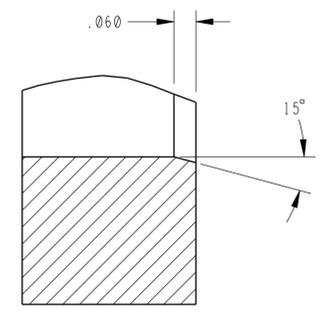
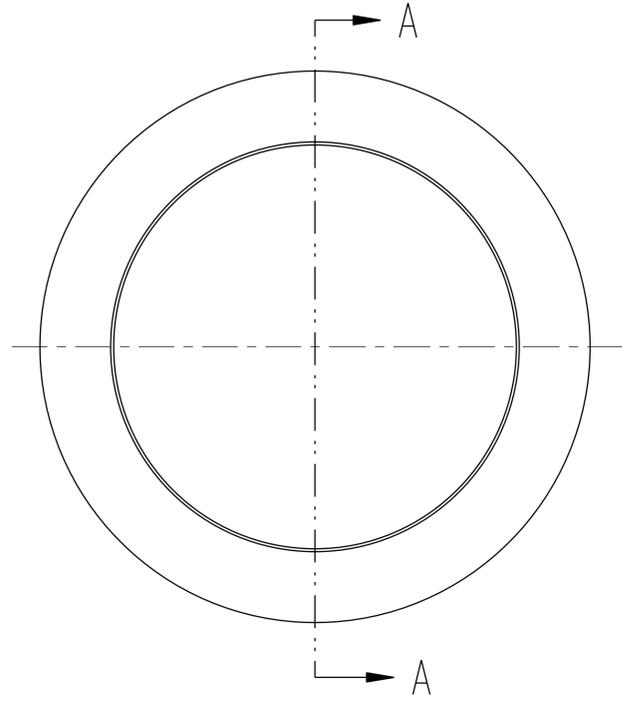
| REVISIONS |      |             |          |          |
|-----------|------|-------------|----------|----------|
| REV       | ZONE | DESCRIPTION | APPROVAL | REL DATE |
| -         |      |             |          |          |

NOTES:

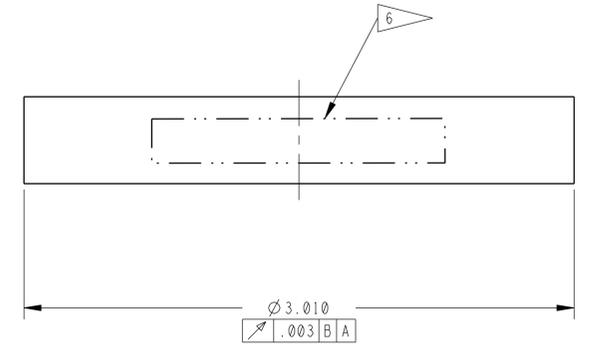
- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.41-2003 EXCEPT AS NOTED BELOW:
  - UNLESS SEPARATE TOLERANCES ARE SHOWN, PERFECT ORIENTATION AT MMC FOR RELATED FEATURES IS REQUIRED.
  - GENERAL ANGULAR TOLERANCE DOES NOT APPLY TO IMPLIED 90 DEGREE ANGLES.
  - FOR PRODUCT DEFINITION DATA SET, REFERENCE MED03657-1 IN MSFC DDMS.
  - ALL DIMENSIONS ARE MODELED AT MEAN VALUE, EXCEPT DRILLED/REAMED HOLES.
  - IGNORE ALL MODEL ANNOTATIONS.
  - AXONOMETRIC VIEWS SHALL NOT BE ANNOTATED.
- REMOVE ALL BURRS AND SHARP EDGES.
- |    |   |
|----|---|
| 3  | MATERIAL: 304L CRES PER ASTM-A479 (UNS S30403). |
| 63 |   |
- ✓ ALL MACHINED SURFACES UNLESS OTHERWISE SPECIFIED.
- |   |   |
|---|---|
| 5 | PASSIVATE PER SAE-AMS-2700, METHOD 1, TYPE 6. |
|---|---|
- |   |   |
|---|---|
| 6 | IDENTIFY PART WITH PART NUMBER PER MIL-STD-130, ENGRAVE PART NUMBER IN ACCORDANCE WITH SAE-AS478-3 USING .13 INCH HIGH CHARACTERS. LOCATE APPROXIMATELY AS SHOWN. |
|---|---|
- CLEAN AND MAINTAIN TO VISIBLY CLEAN - SENSITIVE LEVEL PER CxP 70145 PRIOR TO ASSEMBLY.
- RESERVED.
- |   |  |
|---|--|
| 9 | THIS SURFACE TO BE MACHINED TO FIT AT MED03651-1 ASSEMBLY. |
|---|--|



SECTION A-A



DETAIL B  
SCALE 4/1



| DRAWING INFORMATION                     |  | MODEL INFORMATION  |  | DESIGN APPROVALS |                              | DRAWING APPROVALS |                          |
|---|--|--|--|------------------|------------------------------|-------------------|--------------------------|
| DRAWING STATE: Workgroup Approved       |  | MODEL STATE: Workgroup Approved                                      |  | DESIGN ORG:      | ER34                         |                   |                          |
| DRAWING VERSION: -.1                    |  | MODEL VERSION: -.1   |  | DRAWN BY:        | DWIGHT GOODMAN               |                   |                          |
| DRAWING NUMBER: MED03657                |  | MODEL NUMBER: MED03657-1   |  | ENGINEER:        | DWIGHT GOODMAN               |                   |                          |
| APPLICATION: J-2X OTP                   |  | HEAT TOLERANCES: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES |  | CHECKER:         | Do Not Modify (Release data) |                   |                          |
| NEXT ASSY: USED ON                      |  | FINISH: 5  |  | MATERIALS:       | Do Not Modify (Release data) |                   |                          |
| APPLICATION (VERIFY IN RELEASE RECORDS) |  | TOLERANCES: DECIMALS: .XX±0.03, .XXX±0.010; ANGLES: ±0.5°            |  | STRESS:          | Do Not Modify (Release data) |                   |                          |
| DRAWING STATE: Workgroup Approved       |  | MODEL STATE: Workgroup Approved                                      |  | S & MA:          | Do Not Modify (Release data) |                   |                          |
| DRAWING VERSION: -.1                    |  | MODEL VERSION: -.1   |  | PRODUC-MANUF:    | Do Not Modify (Release data) |                   |                          |
| DRAWING NUMBER: MED03657                |  | MODEL NUMBER: MED03657-1   |  | PRODUC-CONTR:    | Do Not Modify (Release data) |                   |                          |
| DRAWING INFORMATION                     |  | MODEL INFORMATION  |  | NEXT ASSEMBLY:   | Do Not Modify (Release data) |                   |                          |
| RELEASE DATE: 2010/04/28                |  | DESIGN BRANCH CHG: D WHITTEN   |  | SCALE:           | D 339B2                      |                   | DRAWING NUMBER: MED03657 |
|   |  | RELEASE DATE: 2010/04/28   |  | SCALE: 2/1       | MASS (UNIT WEIGHT): 0.452    |                   | SHEET 1 OF 1             |

MED03657-1 SHOWN  
 GEORGE C. MARSHALL  
 SPACE FLIGHT CENTER  
 NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
 HUNTSVILLE, ALABAMA

SHIM, IMPELLER