NOTES: UNLESS OTHERWISE NOTED
1. MACHINED SURFACE ROUGHNESS 84
2. 2-RING GROOVES AND SURFACES 32
3. REMOVE ALL BURRS/S-HARP CORNERS

BILL OF MATERIAL

<table>
<thead>
<tr>
<th>NO.</th>
<th>REQ'D</th>
<th>REF DRW</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
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<tbody>
<tr>
<td>N/A</td>
<td>1</td>
<td>SP2-001A</td>
<td>CUSTOM WORM</td>
<td>N/A</td>
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<tr>
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<td>1</td>
<td>SP2-011A</td>
<td>WORM EXTENSION</td>
<td>HARD BRASS</td>
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<tr>
<td>2</td>
<td>1</td>
<td>SP2-012A</td>
<td>WORM MOD (W165-45)</td>
<td>STAINLESS</td>
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</tbody>
</table>

INSTITUTION FOR ASTRONOMY
2680 WOODLAWN DR. HONOLULU, HI 96822
INSTRUMENT: SPEX - CROSS DISPERSED SPECTROGRAPH
PART NAME: CUSTOM WORM
TELESCOPE: IRTF

REVDATE: N/A
DATE: 05/07/97
DESIGN: STAHLMAN
DRAWN: STAHLMAN
APPROVED: J. RAYNER

TOLERANCES
X.X +/- .015
X.XX +/- .005
X.XXX +/- .002
ANGLE +/- 30 min
FRACTION +/- 1/32

SIZE: A
LOT NO: 725
SHEET: 1 OF 1

PLOT: 10/19/99