3 2 DATE DCN# **DRAWING TREE #** NOTES CONTINUED: REV. V1 26 JUN 2012 E1200700 (5) SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP V2 13 JUL 2012 E1200700 (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXXX-VY, TYPE-XX, S/N XXX 6. APPROXIMATE WEIGHT = X.XXX LB. 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364 - 8.00 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364. $\langle 9 \rangle$. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4 **--** 1.669 -- 1.669 -- 8X TAP .005 OVERSIZE (10). ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL, -1/4-20 UNC ▼.62 AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS. 11. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900364. 6.00 4.50 .75 ϕ .781 THRU--2X ∅ .266 THRU TAP FOR 3/4-10 HELICOIL INSERT = 1.0 * DIA. TAP FOR 1/4-20 HELICOIL INSERT = 2.0 * DIA. 2.56 -0 - 2X 5.36° - 4X R.13 0 2X .66 (2X 5.4°) (5) NEAR SIDE _ 2X 2.000 - INSERT, HELI-COIL, 1/4-20 X .50 LG 3 1185-12EN750 HELI-COIL 2 HELI-COIL 2 1185-4EN500 NITRONIC 60 D1200731 PCAL PLATE RING CONNECTOR ITEM NO. QTY. PART NUMBER **DESCRIPTION** SUPPLIER **BOM Table** NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) **PART NAME** CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY 1. INTERPRET DRAWING PER ASME Y14.5-1994. PCAL PLATE RING CONNECTOR DIMENSIONS ARE IN INCHES 2. REMOVE ALL SHARP EDGES, .005-.015. FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATLEY R.02 FOR SHEET METAL PARTS. SYSTEM SUB-SYSTEM 26 JUN 2012 | **SIZE** | **DWG. NO. DESIGNER** TOLERANCES: REV. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE. **ADVANCED LIGO** .XX ± .02 AOS **DRAFTER** S. SHANKLE 26 JUN 2012 .XXX ± .005 **NEXT ASSY** MATERIAL **CHECKER** S. SHANKLE 26 JUN 2012 D1200174 ANGULAR ± 0.5° 6061 Alloy 63 μinch APPROVAL SHEET 1 OF 1 S. SHANKLE 26 JUN 2012 | **SCALE**: 1:2 PROJECTION: 6 D1200731 - PCal Plate Ring Connector, PART PDM REV: X-006, DRAWING PDM REV: X-000