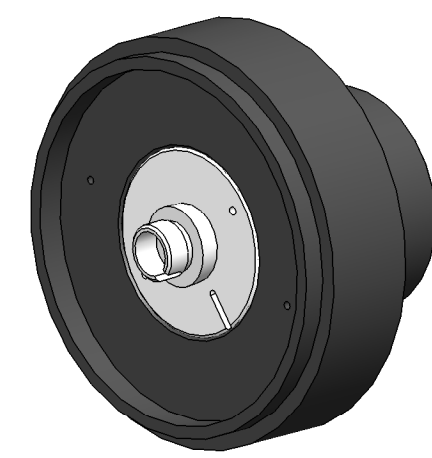
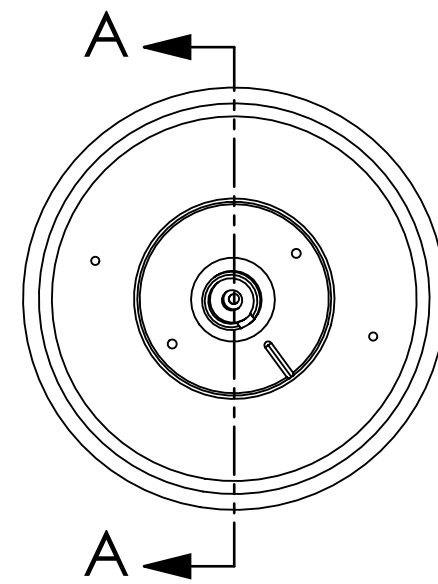


SEE LIGO E1300254, FOR OCULAR DEPTH & OBJECTIVE GAP DETAILS.

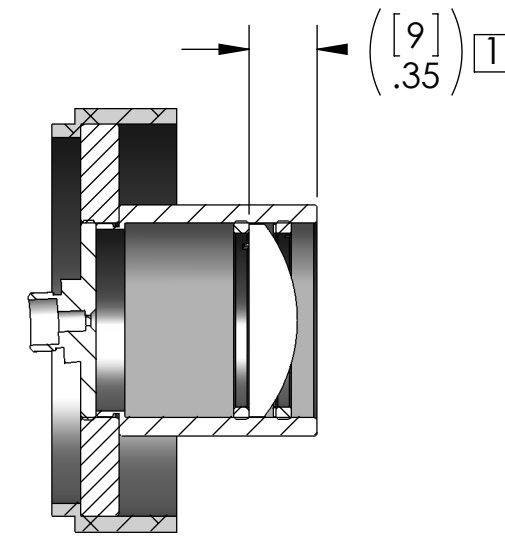
REV.	DATE	DCN #	DRAWING TREE #
v1	12 SEP 2013	E1300714-x0	-
-	-	-	-
-	-	-	-



ASSY. STEP 2  
(ASSEMBLED)

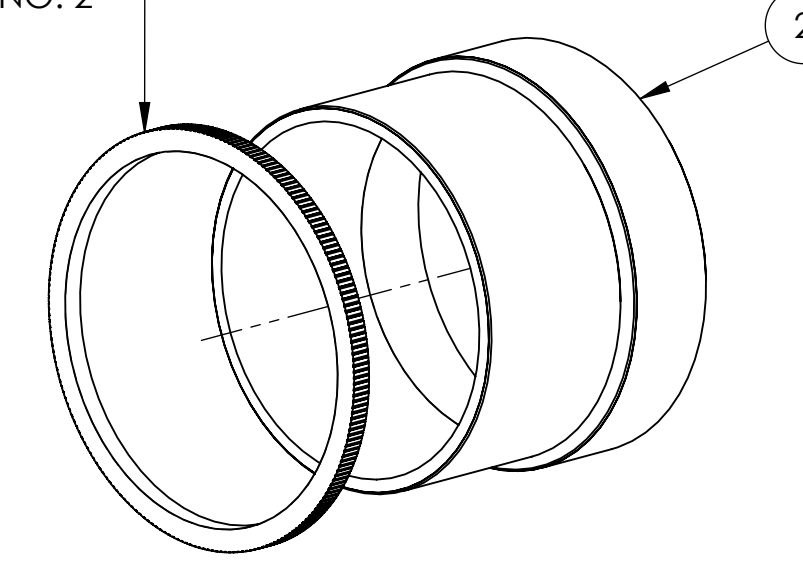


ASSY. STEP 2  
(OCULAR ELEMENT)



SECTION A-A  
(OCULAR DEPTH DETAIL)

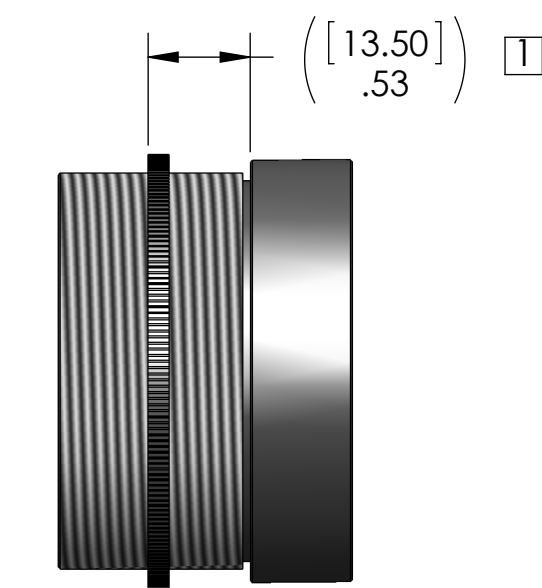
P/N SM2RR  
SUPPLIED AS PART OF  
ITEM NO. 2



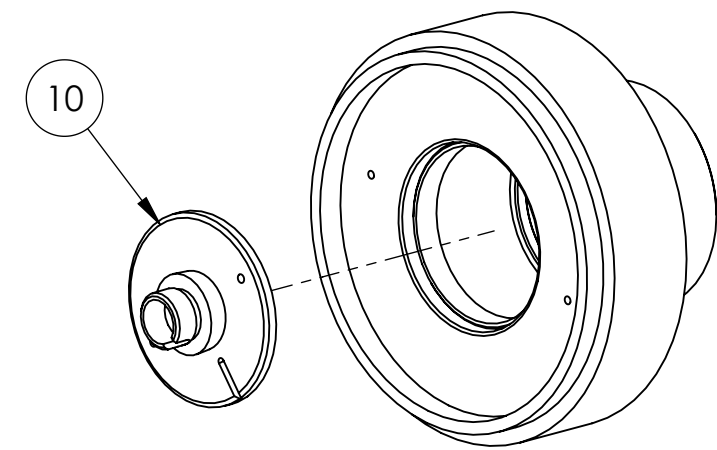
ASSY. STEP 4



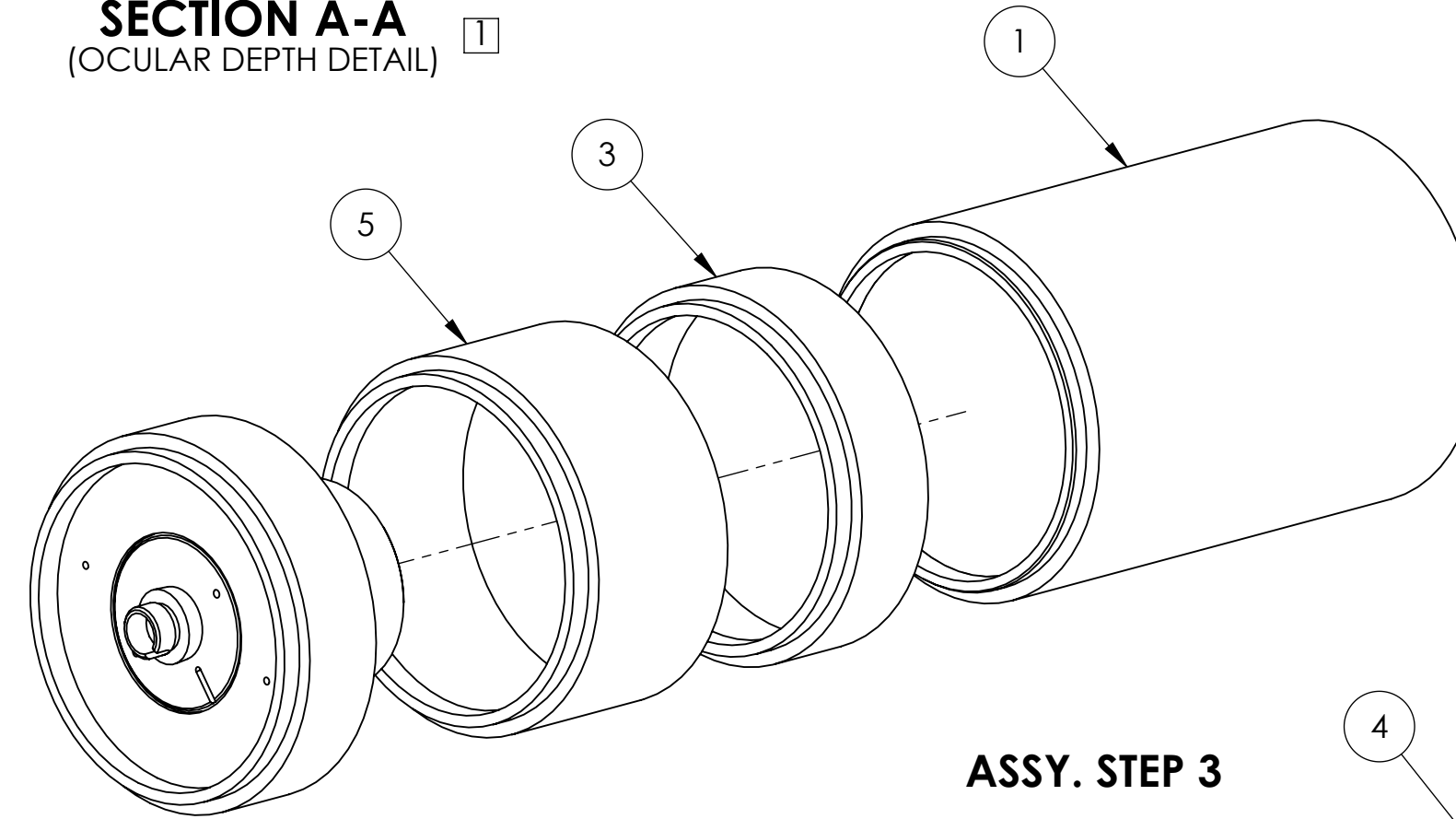
ASSY. STEP 4  
(ASSEMBLED)



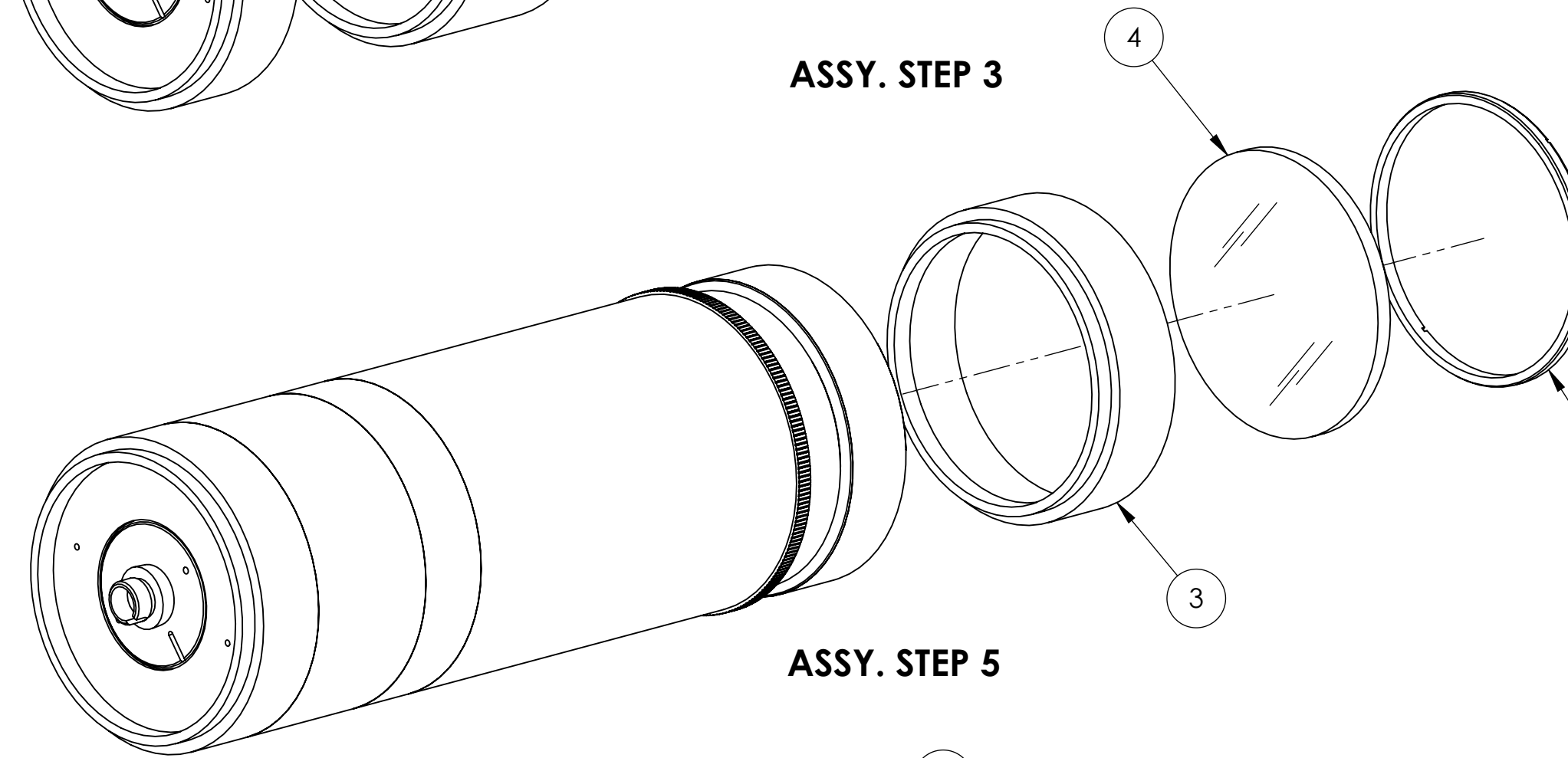
ASSY. STEP 4  
(OBJECTIVE GAP)



ASSY. STEP 2  
(OCULAR ELEMENT)



ASSY. STEP 3

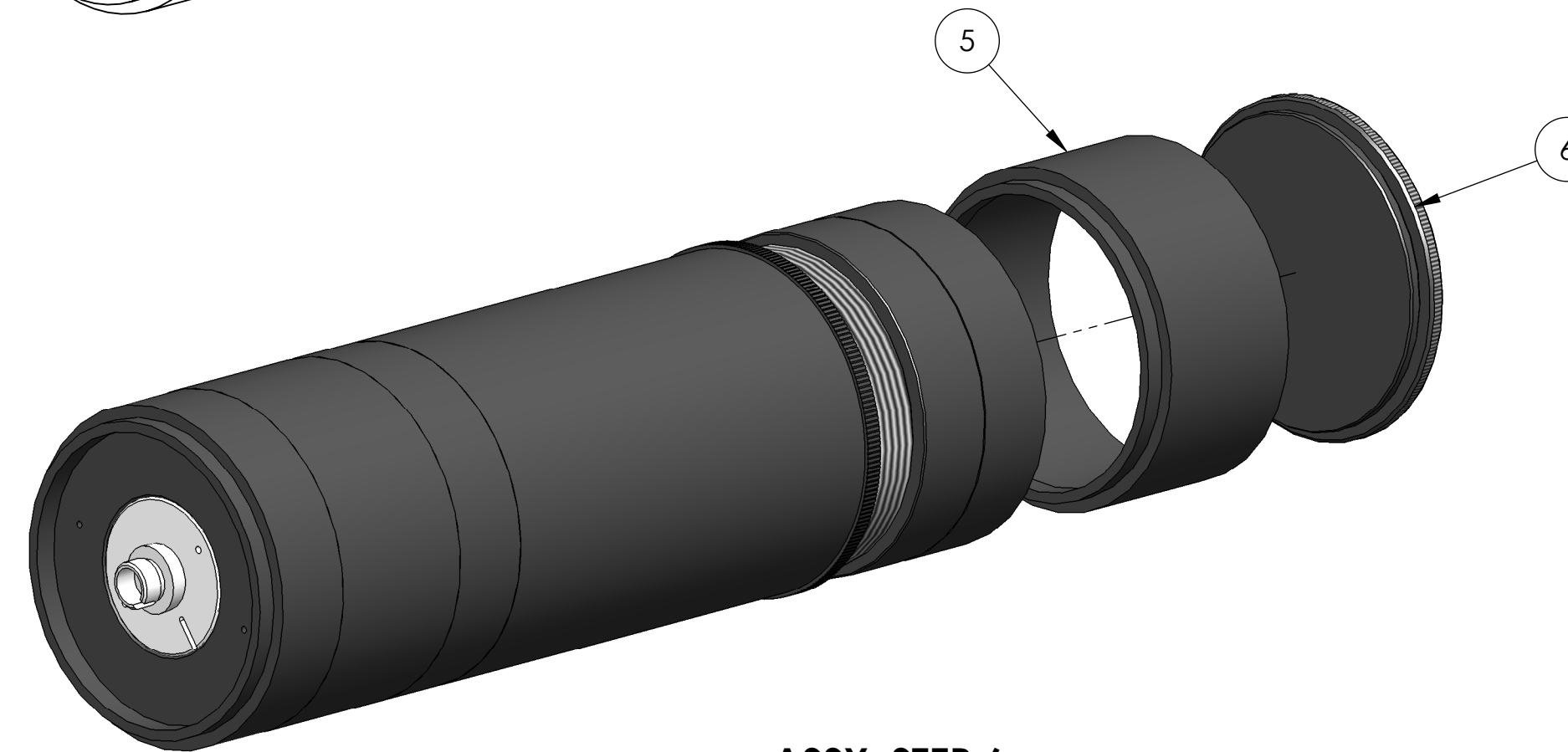


ASSY. STEP 5

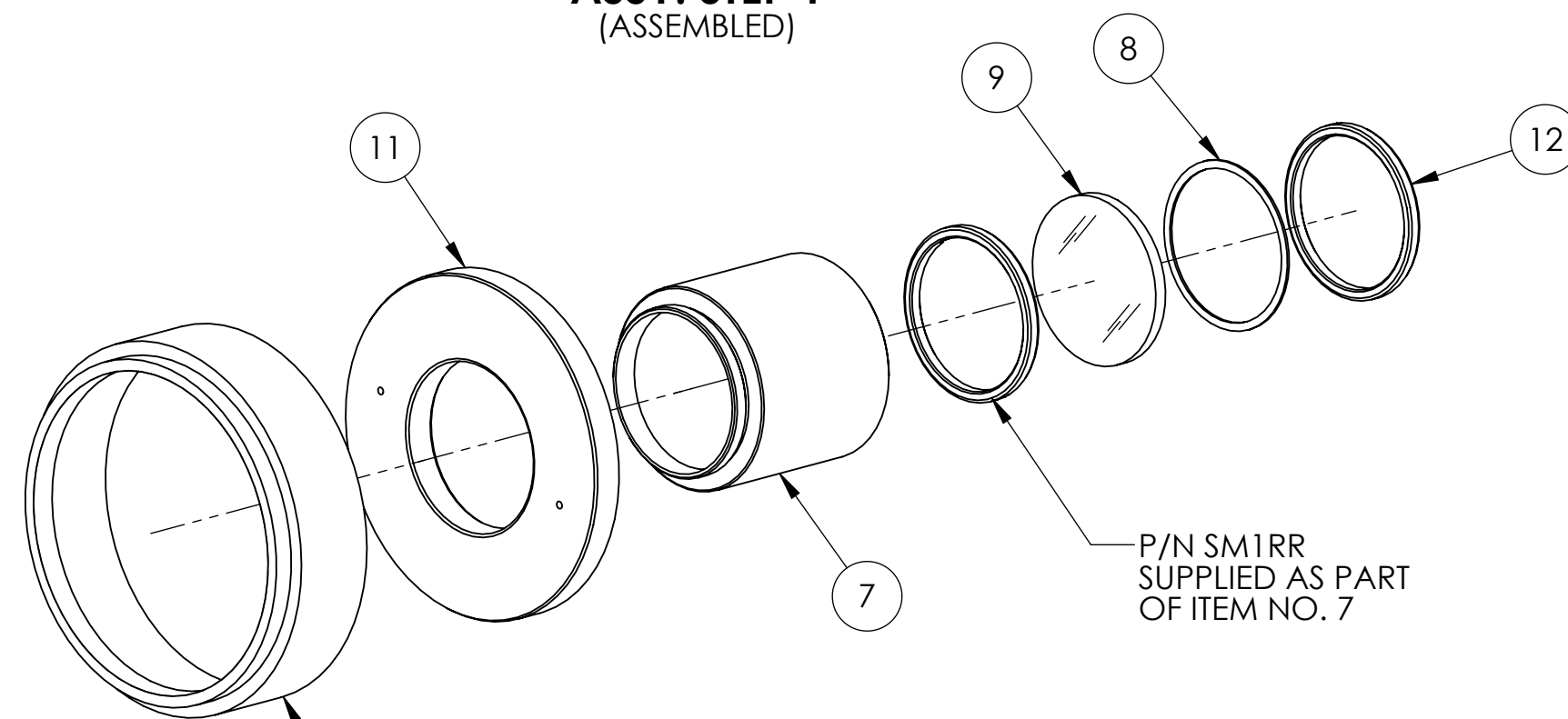
P/N SM2RR  
SUPPLIED AS PART OF  
ITEM NO. 5



ASSY. STEP 1  
(ASSEMBLED)



ASSY. STEP 6



P/N SM1RR  
SUPPLIED AS PART OF  
ITEM NO. 7

DISCARD  
RETAINING RING  
SUPPLIED AS PART OF  
ITEM NO. 3

ASSY. STEP 1

ITEM NO.	PART NUMBER	DESCRIPTION	REQ
12	THORLABS SM1RR	SM1 RETAINING RING	1
11	THORLABS SM2A6	ADAPTER, SM2 TO SM1, THREADED	1
10	THORLABS SM1FCA	SM1 CONNECTOR ADAPTER PLATE, THREADED	1
9	THORLABS LA1422-A	N-BK7 PLANO-CONVEX LENS, 1.0 DIA	1
8	THORLABS SM1S01	RING, LENS SPACER, .015 THK.	1
7	THORLABS SM1L10	SM1 LENS TUBE, 1.0 LG.	1
6	THORLABS SM2CP2	SM2 SERIES END CAP, EXTERNAL THREAD	1
5	THORLABS SM2L10	SM2 LENS TUBE, 1.0 THREAD DEPTH	2
4	THORLABS LA1979-A	N-BK7 PLANO-CONVEX LENS, 50.8 mm DIA.	1
3	THORLABS SM2L05	SM2 LENS TUBE, .5 THREAD DEPTH	3
2	THORLABS SM2V10	SM2 LENS TUBE, ADJUSTABLE, 2.0 DIA.	1
1	THORLABS SM2L30	SM2 LENS TUBE, 3.0 LG.	1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME  
ALIGO, AOS, OPLEV, ITEM/ETM TELESCOPE ASSY. (SHORT RANGE)

MATERIAL N/A FINISH N/A μinch

SYSTEM ADVANCED LIGO SUB-SYSTEM OPLEV  
NEXT ASSY MULTIPLE

DESIGNER E.JAMES 25 MAY 2011 SIZE DWG. NO. D1300781 REV. v1  
DRAFTER E.SANCHEZ 12 SEP 2013  
CHECKER SEE DCC SEE DCC  
APPROVAL SEE DCC SEE DCC SCALE: 1:1 PROJECTION: SHEET 1 OF 1

D1300781 ALIGO, AOS, OPLEV, ITEM/ETM TELESCOPE ASSY. (SHORT RANGE), PART FDM REV. X-002, DRAWING FDM REV. X-003