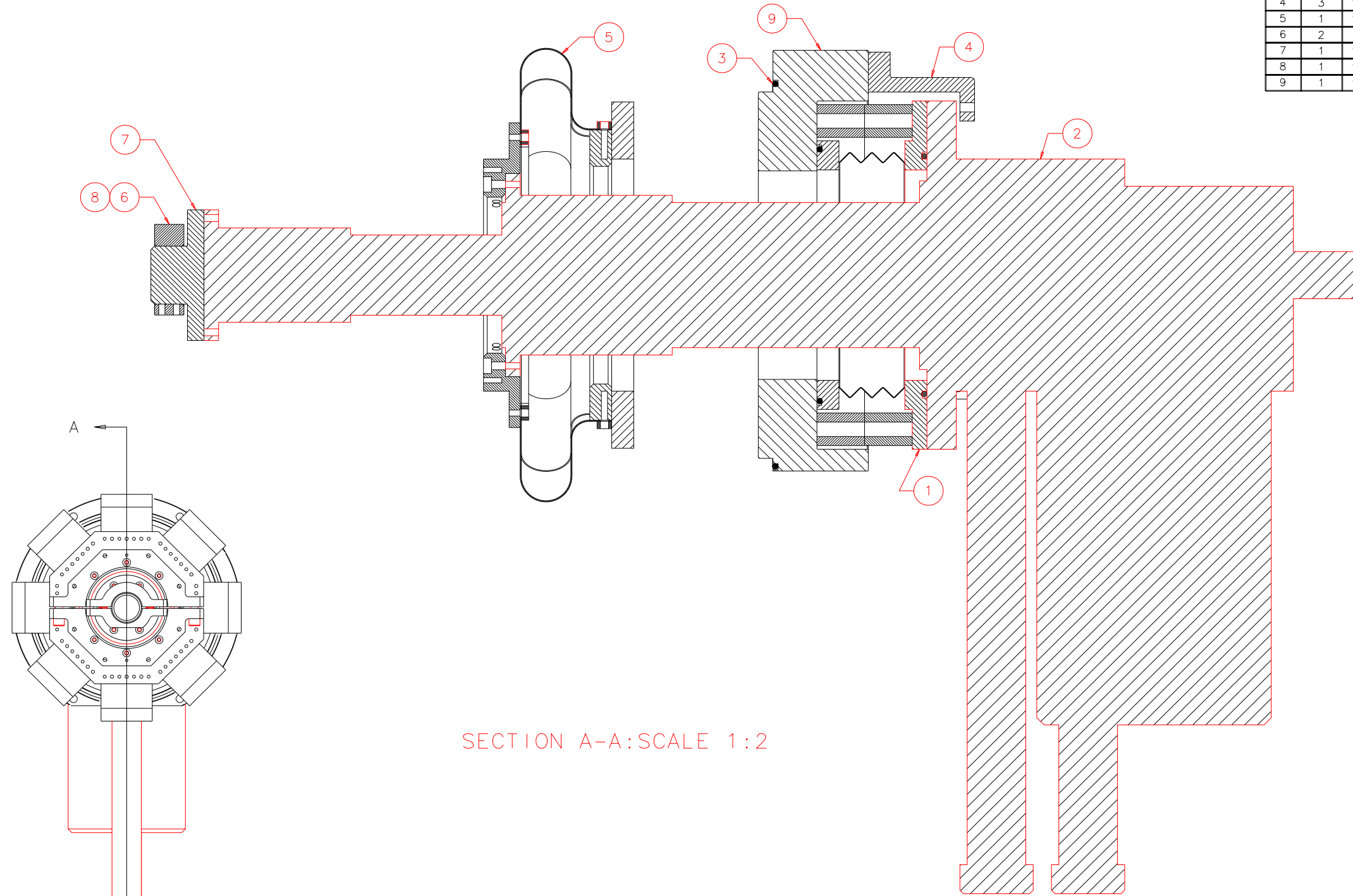


NOTES: UNLESS OTHERWISE NOTED
 1. MACHINED SURFACE ROUGHNESS 64
 O-RING GROOVES AND SURFACES 32
 2. REMOVE ALL BURRS/SHARP CORNERS

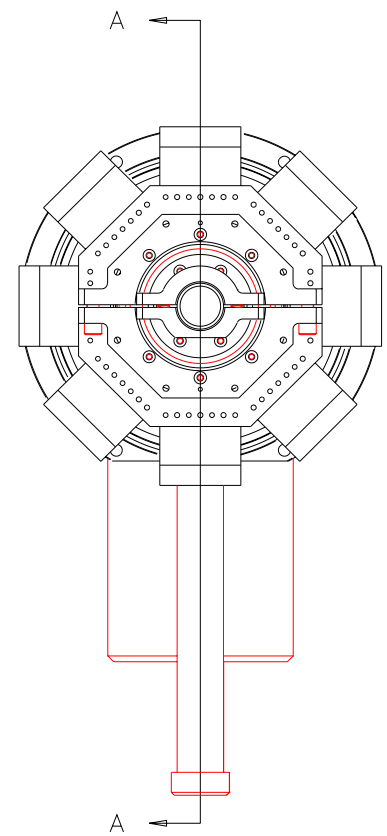
BILL OF MATERIAL				
NO.	REQ'D	REF DRW	DESCRIPTION	MATERIAL
N/A	1	SD0-001B	CLOSED CYCLE COOLER	N/A
1	1	SD1-001A	BELLOWS (ASSEMBLY)	N/A
2	1	N/A	CRYO COOLER CT1 1050	N/A
3	1	N/A	O-RING 2-165	BUNA-N
4	3	SD0-014A	SAFETY FINGER	ALU 6061-T6
5	1	SD2-001A	STAGE 1 STRAP (ASSEMBLY)	N/A
6	2	N/A	COMPR.SPRING MC035G04-B(M&R)	STAINLESS
7	1	SD3-013A	STAGE 2 ADAPTOR FLANGE	COPPER OFHC
8	1	SD3-015A	STAGE 2 CLAMP	COPPER OFHC
9	1	SD0-016B	VACUUM JACKET ADAPTOR	ALU 6061-T6



NOTES:

FOR MORE DETAILS
 LOOK UP THE
 FOLLOWING ASSEMBLIES:

- A) BELLOWS SD1-001A
- B) STAGE 1 STRAP SD2-001A
- C) THERMAL COOLING SD4-001B



SECTION A-A: SCALE 1:2

FRONT: SCALE 1:4

PLOT: 10/19/99

REVD: N/A	REVISION: N/A	INSTITUTE FOR ASTRONOMY	
DATE: 04/19/99	DESIGN: STAHLBERGER	2680 WOODLAWN DR. HONOLULU, HI 96822	
DRAWN: STAHLBERGER	APPR'D: J. RAYNER	INSTRUMENT: SPEX - CROSS DISPERSED SPECTROGRAPH	
TOLERANCES		PART NAME: CLOSED CYCLE COOLER	
X.X	+/- .015	TELESCOPE: IRTF	
X.XX	+/- .005	DRW NO: SD0-001B	SCALE: NOTED
X.XXX	+/- .002	SIZE: B	JOS NO: 725
ANGLE	+/- 30 min	SHEET: 1 OF 2	
FRACTION	+/- 1/32		