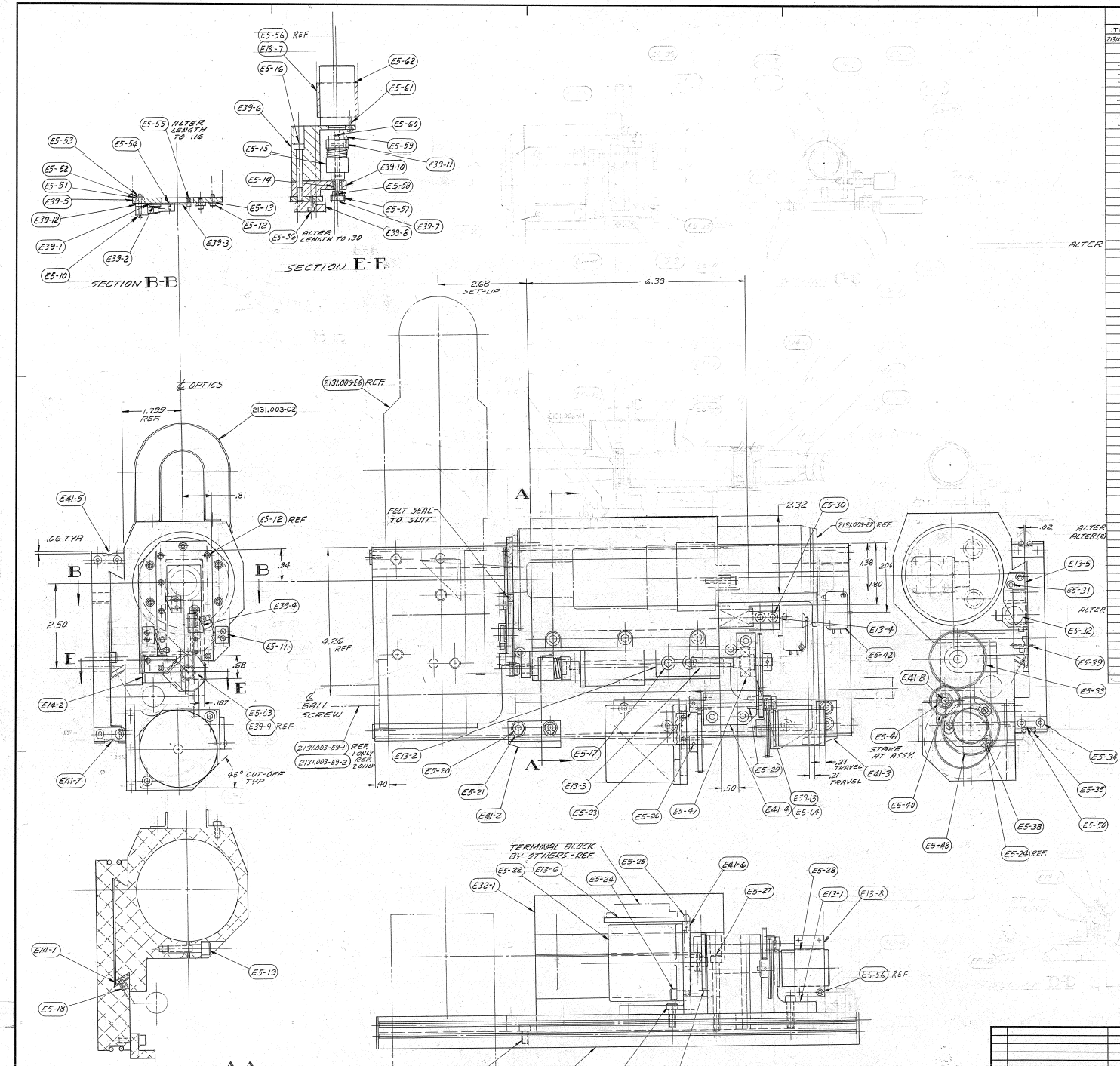

BILL OF MATERIAL

ITEM	QTY	ITEM	QTY.	MATERIAL	DESCRIPTION	WEIGHT
2131.003-E5-2		2131.003-E5-1	1	—	CASSEGRAIN GUIDER CART SUB-ASSEMBLY	
-		E5-3	2	CRES	#4-40 × 1/2 SOC. HD. SCR.	
-		E5-4	6	CRES	#8-32 × 1/2 SOC. HD. SCR.	
-		E5-5	2	STD.	LIGHT EMITTING DIODE OPCOA #OSL-2 (ASSY PER E15-3)	
-		E5-6	1	STEEL	SPRING TO SUIT	
-		E5-7	2	NYLON	3/32 DIA. × 1/16	
-		E5-8	2	CRES	#3-40 × 3/16 FLAT PT NYLOK SOC SET SCR.	
-		E5-9	1	STEEL	SPRING TO SUIT	
E5-10	4	E5-10	2	BRASS	#2-56 × 3/16 RND. HD. SCR.	
E5-11	2	E5-11	2	STD.	MICROSWITCH 2SXI-T WITH 1T-25 ROLLER	
E5-12	15	E5-12	15	STEEL	#4-40 × 1/8 SOC HD. CAP SCR.	
E5-13	5	E5-13	5	STEEL	#4 FLAT WASHER	
E5-14	1	E5-14	1	STD.	PIC #B10-2 BUSHING	
E5-15	1	E5-15	1	STD.	PIC #T17-1-2-2 SLIP CLUTCH (.202 IN)	
E5-16	2	E5-16	2	CRES	#10-24 × 1/2 SOC. HD. CAP SCR.	
E5-17	2	E5-17	2	CRES	1/4-20 × 3/4 SOC. HD. SCR.	
E5-18	5	E5-18	5	CRES	#8-32 × 5/16 HALF DOG PT. NYLOK SOC. SET SCR.	
E5-19	3	E5-19	3	CRES	1/4-20 × 1" SOC. HD. SCR.	
E5-20	4	E5-20	4	CRES	#10-24 × 5/8 SOC. HD. SCR.	
E5-21	4	E5-21	4	CRES	1/4" FLAT WASHER	
ALTER E5-22	1	E5-22	1	STD.	SIGMA #20-2223D201/6 STEPPER MOTOR	
E5-23	1	E5-23	1	CRES	PIC #G3-32-014 SPUR GEAR	
E5-24	6	E5-24	6	CRES	#10-24 × 3/8 SOC HD CAP SCR	
E5-25	2	E5-25	2	STEEL	#2-56 × 1/4 BUTTON HD. CAP SCR.	
E5-26	4	E5-26	4	CRES	#6-0 TAPER PIN - 1/8" LONG	
E5-27	3	E5-27	3	CRES	#10-24 × .5" SOC HD SCR.	
E5-28	1	E5-28	1	STD.	NPL #SPE-110209-GRC ENCODER	
E5-29	2	E5-29	2	BOST-BRONZ	BOSTON #FB-46-3 BUSHING	
E5-30	2	E5-30	2	CRES	#10-24 × 1" SOC. HD. SCR.	
E5-31	2	E5-31	2	CRES	#6-32 × 3/4 SOC. HD. SCR.	
E5-32	1	E5-32	1	STEEL	SPRING TO SUIT	
E5-33	1	E5-33	1	CRES	PIC #P17-1-80 ANTI-BACKLASH GEAR	
E5-34	8	E5-34	8	STEEL	#6-32 × 3/8 FLAT HD. SOC. SCR.-CAD. PL.	
E5-35	4	E5-35	4	DRILL ROD	1/8 DIA. × 13.94 LONG	
E5-38	3	E5-38	3	CRES	PIC #L2-1 CLEAT	
E5-39	4	E5-39	4	CRES	#4-40 × 5/8 ROUND HD SCR	
E5-40	1	E5-40	1	ALUM.	PIC #J2-40-014 HUBLESS GEAR	
E5-41	1	E5-41	1	ALUM.	PIC # C0-8 CLUSTER GEAR & HUB	
E5-42	2	E5-42	2	STD.	MICROSWITCH #13-15	
E5-43	1	E5-43	1	ALUM.	PIC #E4-80-014 SPUR GEAR	
E5-44	2	E5-44	2	CRES	#10-24 × 7/8 SOC. HD. SCR.	
E5-45	4	E5-45	4	CRES	#0-80 × 3/16 RND. HD. MACH. SCR.	
E5-46	2	E5-46	2	CRES	#10-24 × 1/2 SOC. HD. SCR.	
E5-47	1	E5-47	1	STD.	FAFNIR #33KDD BALL BEARING	
E5-48	1	E5-48	1	CRES	PIC #P15-1-80 ANTI-BACKLASH GEAR	
		E5-49	2	CRES	#6-32 × 1/2 SOC. HD. SCR.	
E5-50	1	E5-50	1	BRONZE	SHIM TO SUIT	
E5-51	2	E5-51	2	BRASS	#2 FLAT WASHER	
E5-52	1	E5-52	4	BRASS	#2 LOCK WASHER	
E5-53	4	E5-53	4	BRASS	#2-56 HEX NUT	
E5-54	4	E5-54	4	CRES	#0-80 × 3/16 SOC. FH SCR	
E5-55	3	E5-55	3	CRES	#0-80 × 1/4 SOC.HD. CAP SCR	
E5-56	6	E5-56	6	CRES	#4-40 × 3/8 SOC.HD. CAP SCR	
E5-57	1	E5-57	1	STD.	PIC # G6-18-010 GEAR	
E5-58	1	E5-58	1	CRES	#2-56 × 1/8 SOC. SET SCR	
E5-59	3	E5-59	3	CRES	#0-80 × 3/8 SOC.HD. CAP SCR	
E5-60	1	E5-60	1	CRES	#4-40 × 3/16 SOC. SET SCR	
E5-61	3	E5-61	3	STD.	M 1.7 × 5 MM PHILLIPS HD. METRIC SCR. (ORDER FROM MINARIK)	
E5-61	1	E5-62	1	STD.	MINARIK ESCAP #E6 SR 601 A "1 18 TO 1 RATIO MOTOR	
ALTER E5-63	1	E5-63	1	BRASS	RACK - BOSTON #Y48-2 (ALTER PER E39-9)	
E5-64	3	E5-64	3	CRES	#2-56 × 3/16 SOC. FLAT HD CAP SCR	
		E5-65	8	CRES	#6-32 × 3/8 SOC HD CAP SCR	

PROJECT DWGS: 2131.003-E41, E13, E14, E15, E32, E33, E39

FOR ASSEMBLY SEE 2131.003-E1

LET.	REVISION	ECR	DATE	BY
C	DELETED E5-1 ASSY	3542	4/26/01	LBH
B	CHG'D IT E14-4 To 2131.003-C2	1753	11-16-78	[illegible]
	ADDED No. 2130.006-A1			
A	E5-2 ADDED	1593	3-17-78	[illegible]
	E5-1 WAS 2 REQD	1593	3-17-78	[illegible]

TOLERANCES UNLESS OTHERWISE NOTED: DECIMAL DIMENSIONS .XX ±0.01, .XXX ±0.005; FRACTIONAL DIMENSIONS UP TO 36" ± 1/64, UP TO 60" ± 1/32, 60" & OVER ± 1/16; BREAK SHARP EDGES; ALL SURFACES 125 TO HAVE FINISH UNLESS OTHERWISE NOTED.

~~E5-1 CASSEGRAIN GUIDER (ELECT + MAN) CART SUB-ASSEMBLY 1 REQD~~

E5-2 CASSEGRAIN GUIDER (ELECT. ONLY) CART SUB-ASSEMBLY-1 REQD

KITT PEAK NATIONAL OBSERVATORY
OPERATED BY THE ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC. UNDER CONTRACT WITH NATIONAL SCIENCE FOUNDATION

150" TELESCOPE — REF FILE 1301

NAME: CASSEGRAIN GUIDER CART SUB-ASSEMBLY — SCALE FULL — PRINT ISSUED

DRAWN BY: [illegible] DATE: 3-17-78; CHECKED BY: [illegible] DATE: 3-17-78; APPROVED BY: [illegible] DATE: 3-17-78; ENGINEER BY: DATE: APPROVED BY: DATE:

DRAWING NUMBER 2131.003-E5 REV. C

RAC 11-16-78

AAA DESIGN