

6.5 KS 270C PITCH SERVO BOARD

300-09653-0501 Rev 0					
SYMBOL	PART NUMBER	FIND NO	DESCRIPTION	UM	0501
C1	106-04182-0016		CAPCH1800PFNPO/50V	EA	1.00
C3	106-04182-0016		CAPCH1800PFNPO/50V	EA	1.00
C5	106-00129-0000		CAP CH 1UF X7R/50V	EA	1.00
C7	106-04104-0047		CH 100KX7R/50V	EA	1.00
C8	106-04104-0047		CH 100KX7R/50V	EA	1.00
C9	096-01186-0014		CAP 10.0UF 16V 10%	EA	1.00
C12	106-00134-0001		CAP CH CR .01 200	EA	1.00
C13	106-04103-0047		CH 10K X7R/50V	EA	1.00
C15	106-05392-0047		CAP CH3900PFX7R/50	EA	1.00
C16	106-05153-0047		CAP CH 15K X7R/50V	EA	1.00
C17	106-05153-0047		CAP CH 15K X7R/50V	EA	1.00
C18	106-04104-0047		CH 100KX7R/50V	EA	1.00
C19	097-00214-0017		CAP AL 82UF 50V	EA	1.00
C20	106-00129-0000		CAP CH 1UF X7R/50V	EA	1.00
C21	106-00129-0000		CAP CH 1UF X7R/50V	EA	1.00
C22	106-00129-0000		CAP CH 1UF X7R/50V	EA	1.00
C23	106-04562-0057		CAPCH5600PFX7R/100	EA	1.00
C24	106-04101-0026		CH 100PF NPO/100V	EA	1.00
C25	106-04101-0026		CH 100PF NPO/100V	EA	1.00
C26	106-04104-0047		CH 100KX7R/50V	EA	1.00
C27	106-04104-0047		CH 100KX7R/50V	EA	1.00
CR1	007-05245-0024		DIO Z 33V SMD	EA	1.00
CR2	007-05117-0015		DIO Z 13V SOT	EA	1.00
CR3	007-05117-0015		DIO Z 13V SOT	EA	1.00
CR4	007-05117-0015		DIO Z 13V SOT	EA	1.00
CR5	007-05117-0015		DIO Z 13V SOT	EA	1.00
CR6	007-05247-0001		TRANSIENT VOLTAGE	EA	1.00

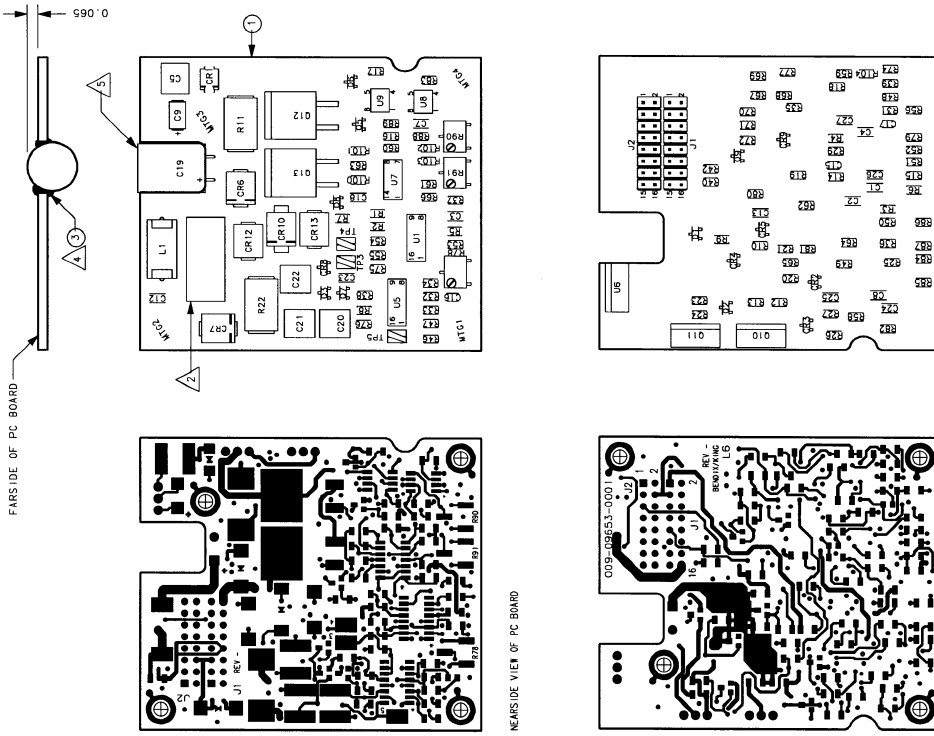
300-09653-0501 Rev 0					
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CR7	007-06437-0007		DIO 3A 600V SMD	EA	1.00
CR8	007-06177-0000		SMD DIO SI MMBD914	EA	1.00
CR9	007-06177-0000		SMD DIO SI MMBD914	EA	1.00
CR10	007-05240-0000		36V TRANSORB SO	EA	1.00
CR12	007-05241-0203		TRNSRB 1500W 15V	EA	1.00
CR13	007-05241-0203		TRNSRB 1500W 15V	EA	1.00
ITM1	009-09653-0001		KS 270C SERVO BOAR	EA	1.00
ITM2	016-01040-0000		COATING TYPE AR	AR	1.00
ITM3	016-01082-0000		DC RTV 3145	AR	1.00
J1	030-02453-0008		CONNECTOR 16P	EA	1.00
J2	030-02453-0008		CONNECTOR 16P	EA	1.00
L1	019-02752-0100		IND SM 10UH 15%	EA	1.00
Q1	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q2	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q3	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q5	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q6	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q7	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q8	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q9	007-00383-0004		SOT-23 2N2222A XST	EA	1.00
Q10	007-01074-0001		POWER MOSFET 100V	RF	.00
Q11	007-01074-0001		POWER MOSFET 100V	RF	.00
Q12	007-01072-0001		POWER MOSFET	EA	1.00
Q13	007-01072-0001		POWER MOSFET	EA	1.00
R1	139-03483-0000		RES CH 348K EW 1%	EA	1.00
R2	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R3	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R4	139-03483-0000		RES CH 348K EW 1%	EA	1.00
R5	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R6	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00

300-09653-0501 Rev 0					
SYMBOL	PART NUMBER	FIND NO	DESCRIPTION	UM	0501
R7	139-01212-0000		RES CHIP 12.1K1%EW	EA	1.00
R8	139-01212-0000		RES CHIP 12.1K1%EW	EA	1.00
R9	139-01003-0000		RES CHIP 100KEW1%	EA	1.00
R10	139-01003-0000		RES CHIP 100KEW1%	EA	1.00
R11	132-05145-0330		RES SM WW .33 5%	EA	1.00
R12	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R13	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R14	139-03573-0000		RES CHIP 357KEW1%	EA	1.00
R15	139-03573-0000		RES CHIP 357KEW1%	EA	1.00
R16	139-03831-0000		RES CHIP3.83KEW1%	EA	1.00
R17	139-03831-0000		RES CHIP3.83KEW1%	EA	1.00
R18	139-03831-0000		RES CHIP3.83KEW1%	EA	1.00
R19	139-03831-0000		RES CHIP3.83KEW1%	EA	1.00
R20	139-02802-0000		RES CH 28K EW 1%	EA	1.00
R21	139-02802-0000		RES CH 28K EW 1%	EA	1.00
R22	132-05145-0103		RES SM 100 2W 5%	EA	1.00
R23	139-00200-0000		RES CH 20.0 EW 1%	EA	1.00
R24	139-00200-0000		RES CH 20.0 EW 1%	EA	1.00
R25	139-01002-0000		RES CHIP 10K EW 1%	EA	1.00
R26	139-01002-0000		RES CHIP 10K EW 1%	EA	1.00
R27	139-02001-0000		RES CHIP 2K EW 1%	EA	1.00
R29	139-02053-0000		RES CH 205K EW 1%	EA	1.00
R31	139-01004-0003		RES CH 1M .1% EW	EA	1.00
R32	139-01004-0003		RES CH 1M .1% EW	EA	1.00
R33	139-01004-0003		RES CH 1M .1% EW	EA	1.00
R34	139-01004-0003		RES CH 1M .1% EW	EA	1.00
R35	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R36	139-02001-0000		RES CHIP 2K EW 1%	EA	1.00
R37	139-02001-0000		RES CHIP 2K EW 1%	EA	1.00
R38	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00

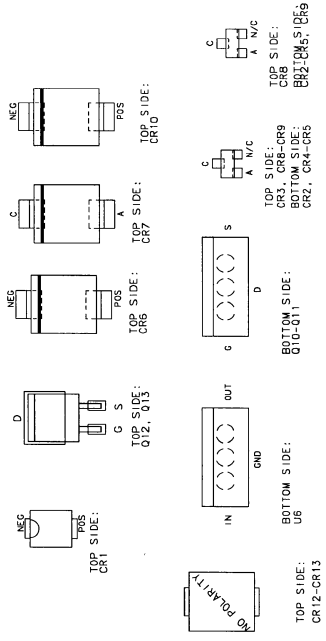
300-09653-0501 Rev 0					
SYMBOL	PART NUMBER	FIND NO	DESCRIPTION	UM	0501
R39	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R40	139-04021-0000		RES CH 4.02K EW 1%	EA	1.00
R42	139-04021-0000		RES CH 4.02K EW 1%	EA	1.00
R48	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R49	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R50	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R51	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R52	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R53	139-01002-0000		RES CHIP 10K EW 1%	EA	1.00
R54	139-01822-0000		RES CHIP 18.2KEW1%	EA	1.00
R55	139-04991-0000		RES CHIP 4.99KEW1%	EA	1.00
R56	139-02002-0000		RES CHIP 20.0KEW1%	EA	1.00
R58	139-02001-0000		RES CHIP 2K EW 1%	EA	1.00
R59	139-01182-0000		RES CH 11.8K EW1	EA	1.00
R60	139-07323-0000		RES CH 732K EW 1%	EA	1.00
R61	139-07323-0000		RES CH 732K EW 1%	EA	1.00
R62	139-01002-0000		RES CHIP 10K EW 1%	EA	1.00
R63	139-04221-0000		RES CH 4.22K EW 1%	EA	1.00
R64	139-01002-0000		RES CHIP 10K EW 1%	EA	1.00
R65	139-09091-0000		RES CH 9.09K EW 1%	EA	1.00
R66	139-09091-0000		RES CH 9.09K EW 1%	EA	1.00
R67	139-09091-0000		RES CH 9.09K EW 1%	EA	1.00
R68	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R69	139-01181-0000		RES CHIP 1.18KEW1%	EA	1.00
R70	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R71	139-01181-0000		RES CHIP 1.18KEW1%	EA	1.00
R72	139-20100-0000		RES CH 1 EW 1%	EA	1.00
R74	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R75	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R76	139-04993-0000		RES CHIP 499K EW1%	EA	1.00

300-09653-0501 Rev 0					
SYMBOL	PART NUMBER	FIND NO	DESCRIPTION	UM	0501
R77	139-02553-0000		RES CH 255K EW 1%	EA	1.00
R78	133-00562-3104		RES VAR 12/15T100K	EA	1.00
R79	139-01004-0000		RES CHIP 1M EW 1%	EA	1.00
R80	139-00000-0004		RES CH 0 EW	EA	1.00
R81	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R82	139-01001-0003		RES CH 1K EW 1%	EA	1.00
R83	139-01001-0003		RES CH 1K EW 1%	EA	1.00
R84	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R85	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R86	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R87	139-01001-0000		RES CHIP 1K EW 1%	EA	1.00
R88	139-03010-0000		RES CHIP 301 EW 1%	EA	.25
R88	139-03320-0000		RES CHIP 332 EW 1%	EA	.90
R88	139-03650-0000		RES CH 365 EW 1%	EA	.25
R89	139-03010-0000		RES CHIP 301 EW 1%	EA	.25
R89	139-03320-0000		RES CHIP 332 EW 1%	EA	.90
R89	139-03650-0000		RES CH 365 EW 1%	EA	.25
R90	133-00562-3102		RES VAR 12-15T 1K	EA	1.00
R91	133-00562-3102		RES VAR 12-15T 1K	EA	1.00
R100	139-04991-0000		RES CHIP 4.99KEW1%	EA	1.00
R101	139-04991-0000		RES CHIP 4.99KEW1%	EA	1.00
R102	139-04223-0000		RES CH 422K EW 1%	EA	1.00
R103	139-04223-0000		RES CH 422K EW 1%	EA	1.00
R104	139-04993-0000		RES CHIP 499K EW1%	EA	1.00
REF1	300-09653-01		PITCH SERVO BOARD	RF	.00
REF2	002-09653-01		PITCH SERVO	RF	.00
REF3	300-09653-0401		KS 270C SERVO BOAR	RF	.00
TP3	008-00309-0000		TEST POINT SURF MN	EA	1.00
TP4	008-00309-0000		TEST POINT SURF MN	EA	1.00
TP5	008-00309-0000		TEST POINT SURF MN	EA	1.00

300-09653-0501 Rev 0					
SYMBOL	PART NUMBER	FIND NO	DESCRIPTION	UM	0501
U1	120-03552-0000		QUAD OP AMP	EA	1.00
U5	120-03552-0000		QUAD OP AMP	EA	1.00
U6	120-03026-0002		IC MC7806CT	RF	.00
U7	120-03163-0001		LM2901 SO-14 COMP	EA	1.00
U8	120-03696-0001		AMP, INST, LOW PW	EA	1.00
U9	120-03696-0001		AMP, INST, LOW PW	EA	1.00



- NOTES:
1. PRIOR TO POST COATING BOTH SIDERS OF P.C. BOARD WITH ITEM 2, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: J1-J2, MTG1-MTG4, TP3-TP5
 2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
 3. WHERE APPLICABLE, LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
 4. APPLY ITEM 3 AS SHOWN TO FILL GAP BETWEEN COMPONENT OUTER DIAMETER AND BOARD EDGE.
 5. C19 TOP MUST BE FLUSH OR BELOW EDGE OF BOARD.



THIS DRAWING IS NOT COMPLETE WITHOUT PARTS LIST 300-09653-0501

Figure 6-5 KS 270C Pitch Servo Board
Dwg. No. 300-09653-01 Rev 0

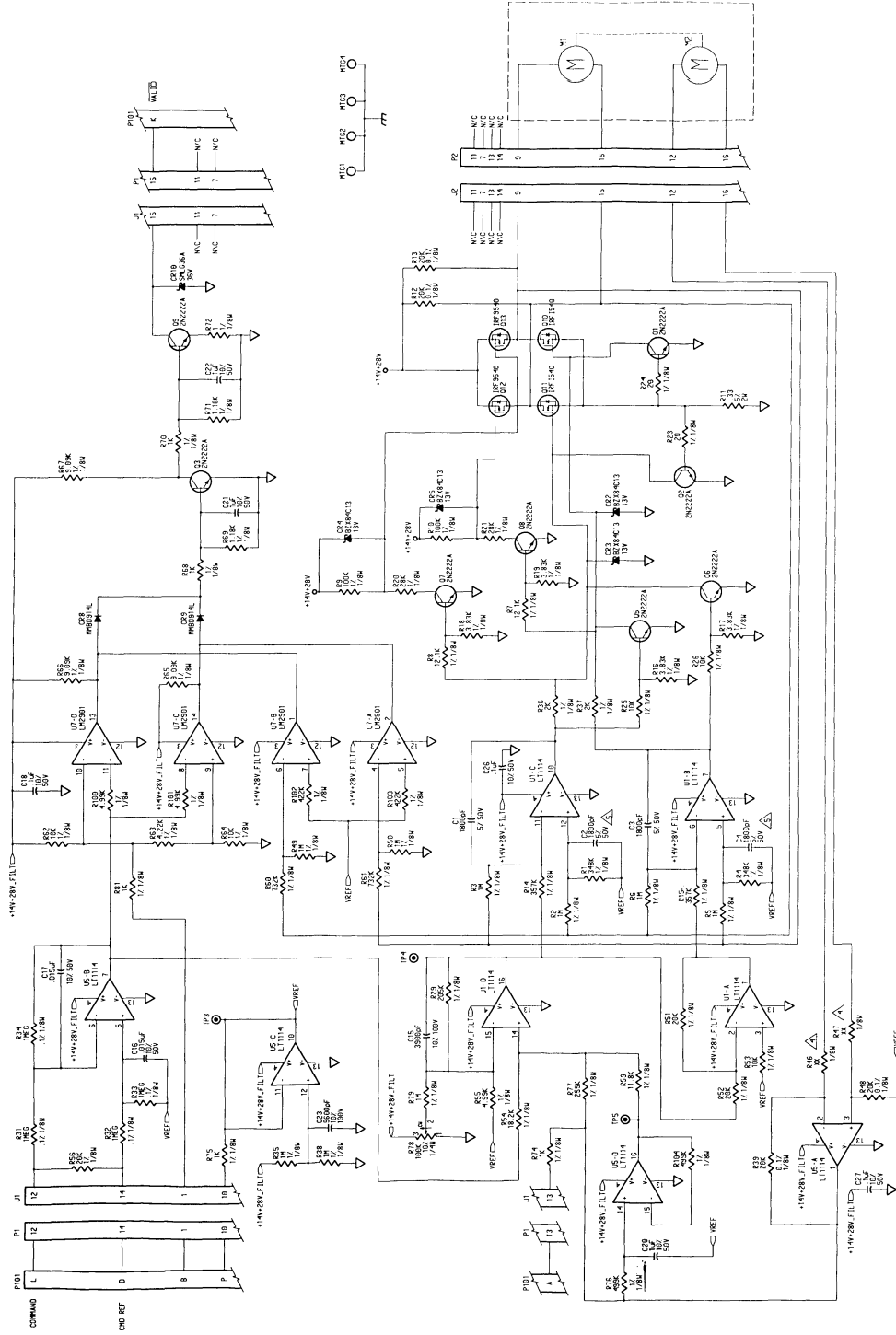
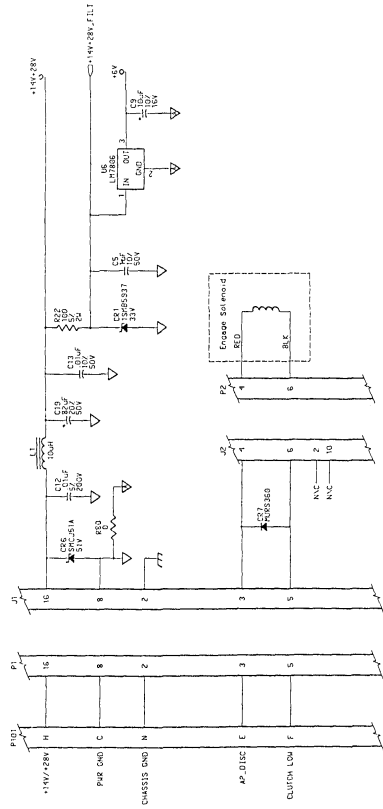


Figure 6-6 KS 270C Pitch Servo Schematic
Dwg. No. 002-09653-01 Rev A
(Sheet 1 of 2)

- NOTES:
- △ PFD1 +4, 6 terminals connector external to the P.C. board.
 - △ Symbols located on the P.C. board denote components external to the P.C. board.
 - △ P1 and P2 refer to J1 and J2 respectively.
 - △ R45 and R47 are described on 080-00788 0210 501.
 - △ C2 and C4 are not installed.
 - △ R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158, R159, R160, R161, R162, R163, R164, R165, R166, R167, R168, R169, R170, R171, R172, R173, R174, R175, R176, R177, R178, R179, R180, R181, R182, R183, R184, R185, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220, R221, R222, R223, R224, R225, 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TORQUE SENSE

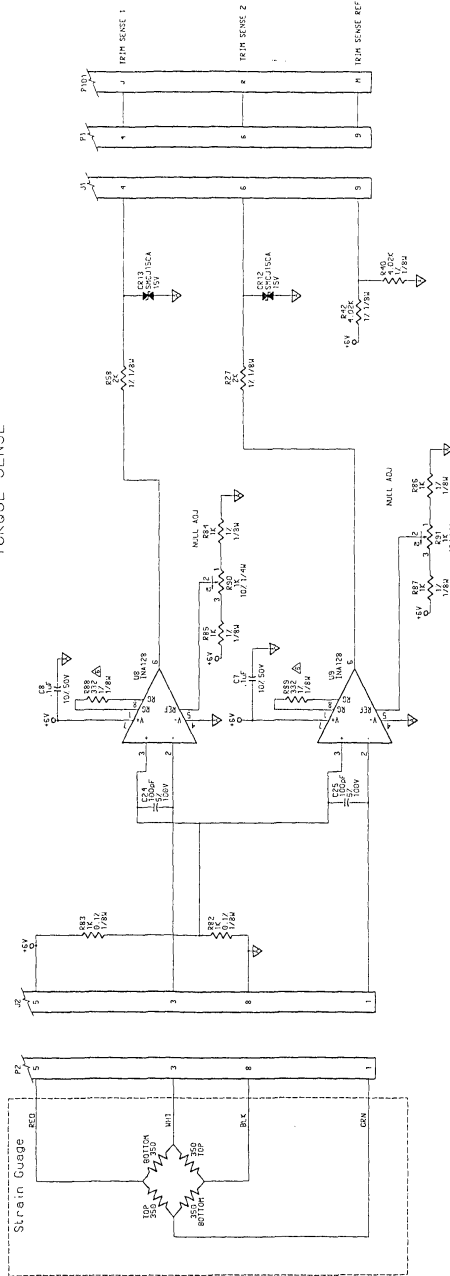


Figure 6-6 KS270C Pitch Servo Schematic
 Dwg. No. 002-09653-01 Rev A
 (Sheet 2 of 2)