TECHNICAL DATA

DC Keying Input
8-16V DC, 1.1 mA

DC Output Voltage
12.8V DC

Maximum Load
25 ohms

DC Power Input
10-16V DC (13.8V nominal)
1.3 mA, not energized
650 mA, energized

Operating Temperature Range
-30° to +65°C

DESCRIPTION

The Control Driver Module is used to provide increased current capacity from a +13.8 volt keying line. In Series 1000 base stations, it is used to drive the antenna relay and transmit indicator.

Refer to the Control Driver Module Schematic Diagram. With no input on pins 1, 2, or 3, all three transistors are biased off. Application of +13.8V to pins 1, 2, or 3 will apply positive bias to the base of Q1, causing it to conduct. Conduction by Q1 applies positive bias to the base of Q2, causing it to conduct. When Q2 conducts, the base of Q3 becomes less positive, causing it to conduct and connect +13.8 volts to output pins 8, 9, 10, and 11. Under full load (25 ohms), the output voltage will drop to approximately 12.8 volts.

REPLACEMENT PARTS

Symbol	Stock No.	Drawing No.	Description
		3720796-501	CONTROL-DRIVER MODULE - P/L 3720796-501 REV 3 CODE B
36CR1	242522	3464611-001	SILICON DIODE
36CR2	242522	3464611-001	SILICON DIODE
36CR3	246572	3731229-001	SILICON DIODE
36CR4	246572	3731229-001	SILICON DIODE
36Q1	242759	3468182-002	TRANSISTOR, NPN
36Q2	230254	3463099-001	TRANSISTOR, NPN
36Q3	419047	3720743-001	TRANSISTOR, PNP
36R1	218499	99206-074	10,000 OHMS, 10%, 1/4W
36R2	223770	99206-088	150,000 OHMS, 10%, 1/4W
36R3	502215	82283-064	1,500 OHMS, 10%, 1/2W
36R4	300649	99206-083	56,000 OHMS, 10%, 1/4W
36R5	218499	99206-074	10,000 OHMS 10% 1/4W
36R6	108863	99206-055	270 OHMS, 10%, 1/4W
36R7	257157	3450123-071	100 OHMS, 10%, 5W
36R8	502218	82283-065	1,800 OHMS, 10%, 1/2W
	228124	3450797-003	CONTACT PIN
	248547	990104-107	SCREW, #4-40 x .31"
	95864	57435-103	NUT, #4-40
	248228	8965442-001	WASHER INSULATOR

PRODUCTION VARIATIONS

The production level of the module is indicated by a legend (example: CODE C) stamped on the module near the identifying drawing number. The following table lists the differences between the various production levels. To determine the difference between a given production level and the level shown on the pathfinder, schematic, and parts list, note the differences tabulated for the desired level and all subsequent levels.

CONTROL DRIVER MODULE
Current Version: 3720796-501 CODE B

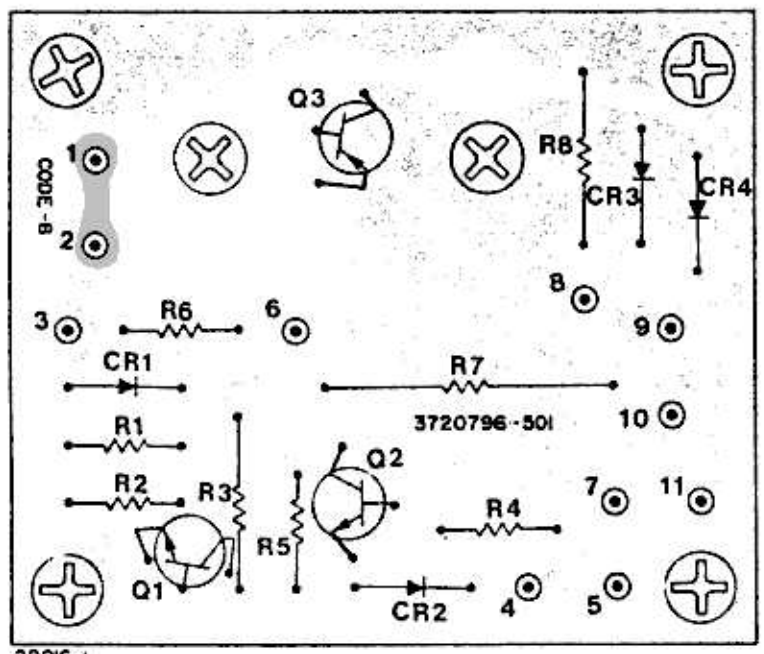
Code Level Difference	Instruction Book Reference	Changes for Code Level Difference			
		Symbol	Stock No.	Dwg. No.	Description
A-B	Component Values	36Q2	419046	3463099-001	TRANSISTOR NPN

EMERGENCY SUBSTITUTES- SOLID STATE DEVICES

In the event of a semiconductor failure, the exact replacement found in the Replacement Parts list should be used. In an emergency, to minimize equipment downtime, the following common semiconductor types may be temporarily used. However, use of these substitutes may result in degraded system performance.

Component Designation	Emergency Substitute
36CR1	1N914
36CR2	1N914
36CR3	1N5059
36CR4	1N5059

Component Designation	Emergency Substitute
36Q1	2N4124
36Q2	40453
36Q3	2N4898



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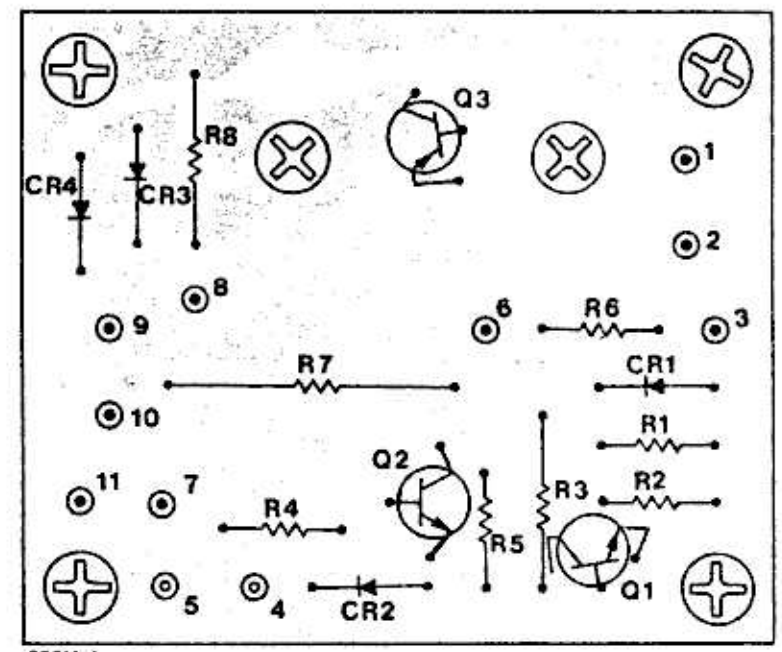
BOARD SHOWN AS VIEWED FROM COMPONENT SIDE



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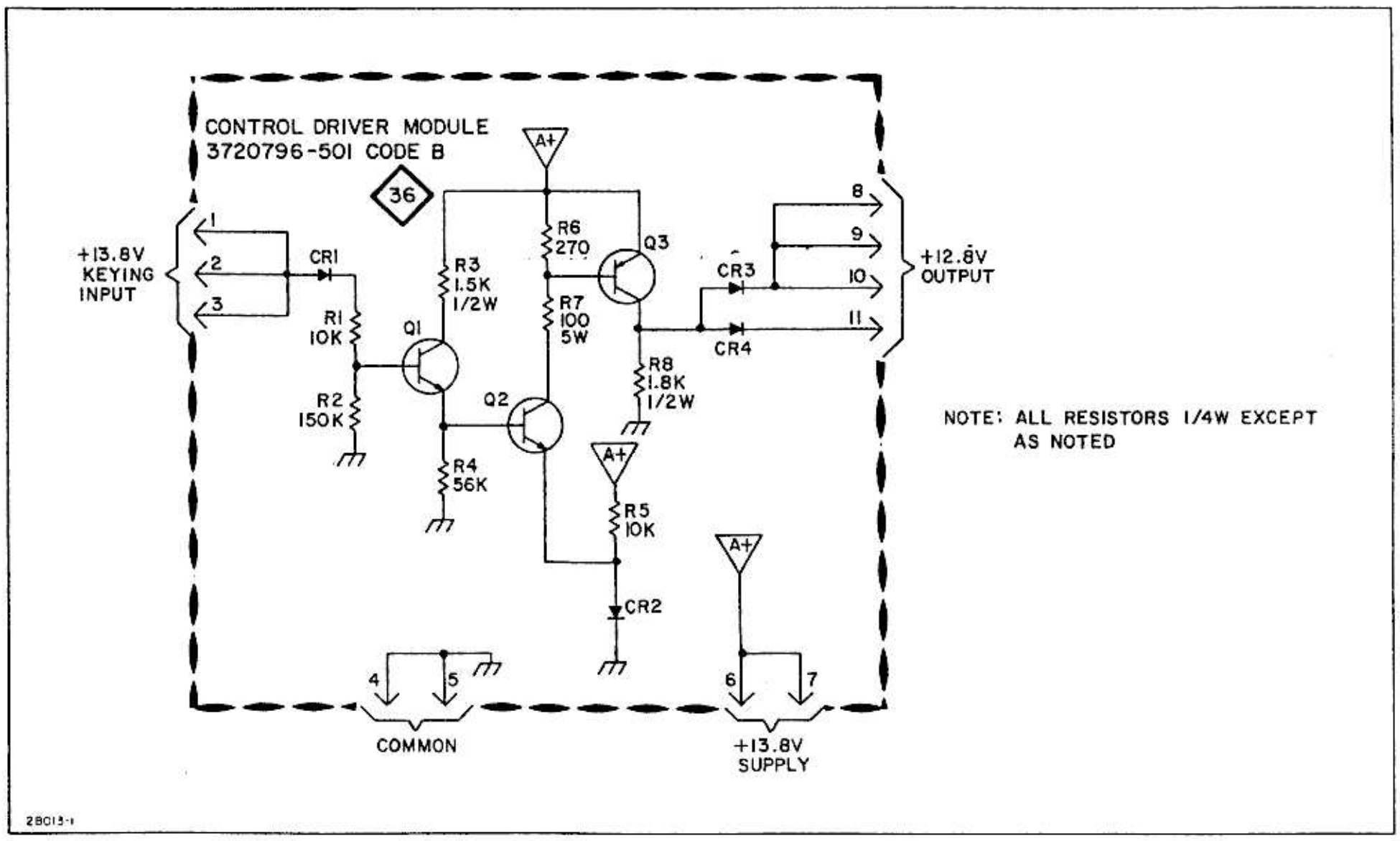
BOARD SHOWN AS VIEWED FROM FOIL SIDE



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Pathfinder and Schematic Diagrams