



HEATH COMPANY • BENTON HARBOR, MICHIGAN 49022
TLX 72-9421

IMPORTANT NOTICE

Please make the following changes in your ET-18 Technical Manual.

Fold-out from Page 39

- Tape the attached Inset drawing over the Inset on Figure 4.
- In the top right corner of Figure 4, change the wire connected between Motor Battery B1 and Motor Battery B2 from RED to GRN.

Page 46

- Tape the new Figure 8B over Figure 8B in your Manual.

Page 86

- Tape the new diode chart supplied with this Notice over the chart at the top of the page.

Page 87

- Under "Integrated Circuits (IC's)."

Delete: U1101 442-4 CA3035V1

Page 90

- Tape the new IC identification drawing supplied with this Notice to the bottom of Page 90.

Page 93

- In the Circuit Component Number column, third box.

Change: U1102

To: U1103

Page 105

- Left column, under "Resistors — Controls."

Change: R618 6-470-12 47 Ω resistor

To: R618 6-100-12 10 Ω resistor

Change: R633 10-1049 2 M Ω control

To: R633 10-946 500 k Ω control

- Right column, under "Capacitors."

Add: C616 25-864 10 μ F electrolytic

- Under "Miscellaneous."

Add: D601 56-56 1N4149 diode

D602 56-56 1N4149 diode

Page 108

- Tape the new Page 108, attached to this Notice, over Page 108 in your Manual.

- Left column, under "Resistors."

Change: R1202 6-103-12 10 k Ω
To: R1202 Not used

- Right column, under "Capacitors."

Change: C1202 25-920 68 μ F electrolytic
To: C1202 Not used

Schematics

Part 1 of 4

- In the center of the Sense Circuit Board Schematic.

Change: R633
2M

To: R633
1M

Change: R618
47

To: R618
10

- Tape the new upper left section of the Schematic supplied with this Notice over the corresponding section.
- Tape the new Sense Circuit Board X-Ray View, the Sonar Receive Circuit Board Schematic, and the Sonar Receive Circuit Board X-Ray View supplied with this Notice over the corresponding sections.

Part 2 of 4

- On the Schematic of the CPU Circuit Board (on the right side near the center), find ROM #1 and change (E000-FFFC) to (E000-FFFF).
- Tape the new section of the CPU Circuit Board Schematic over the corresponding section.
- On the Charger Schematic, change P101 to P2.

Part 4 of 4

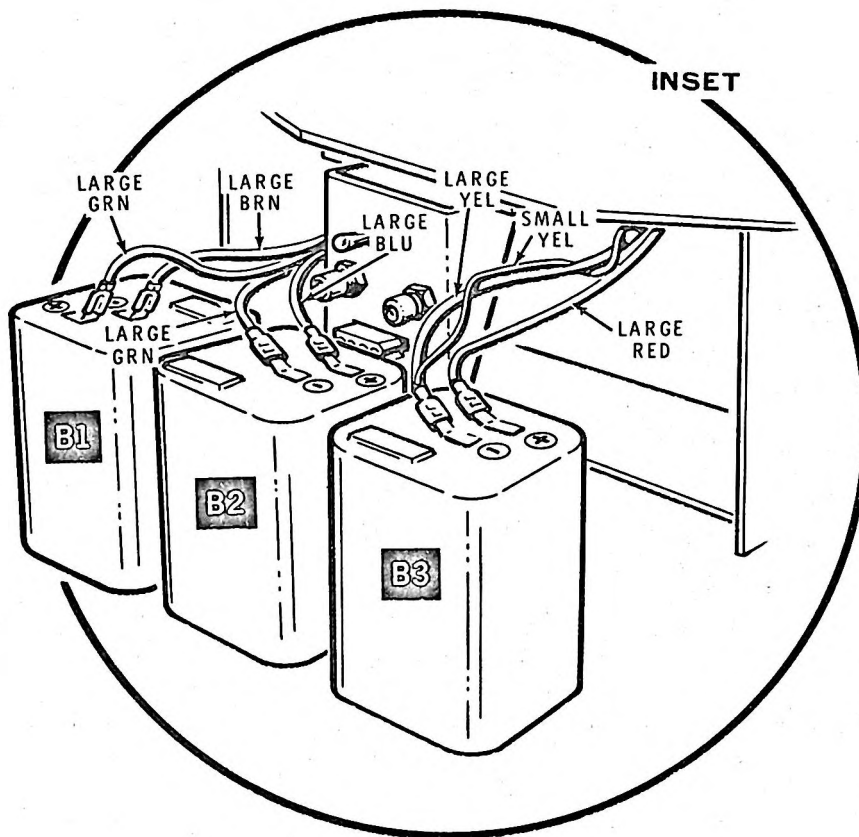
- Tape the new upper left section of the Display Circuit Board Schematic over the corresponding section.
- On the Display Circuit Board X-Ray View (upper left), cross out C1202, D1201, and R1202.

Block/Interconnect Diagram

- Tape the new section of the Block/Interconnect Diagram attached to this Notice over the corresponding section.

Thank you,

HEATH COMPANY



U1101, U1102	442-715	CA3130	
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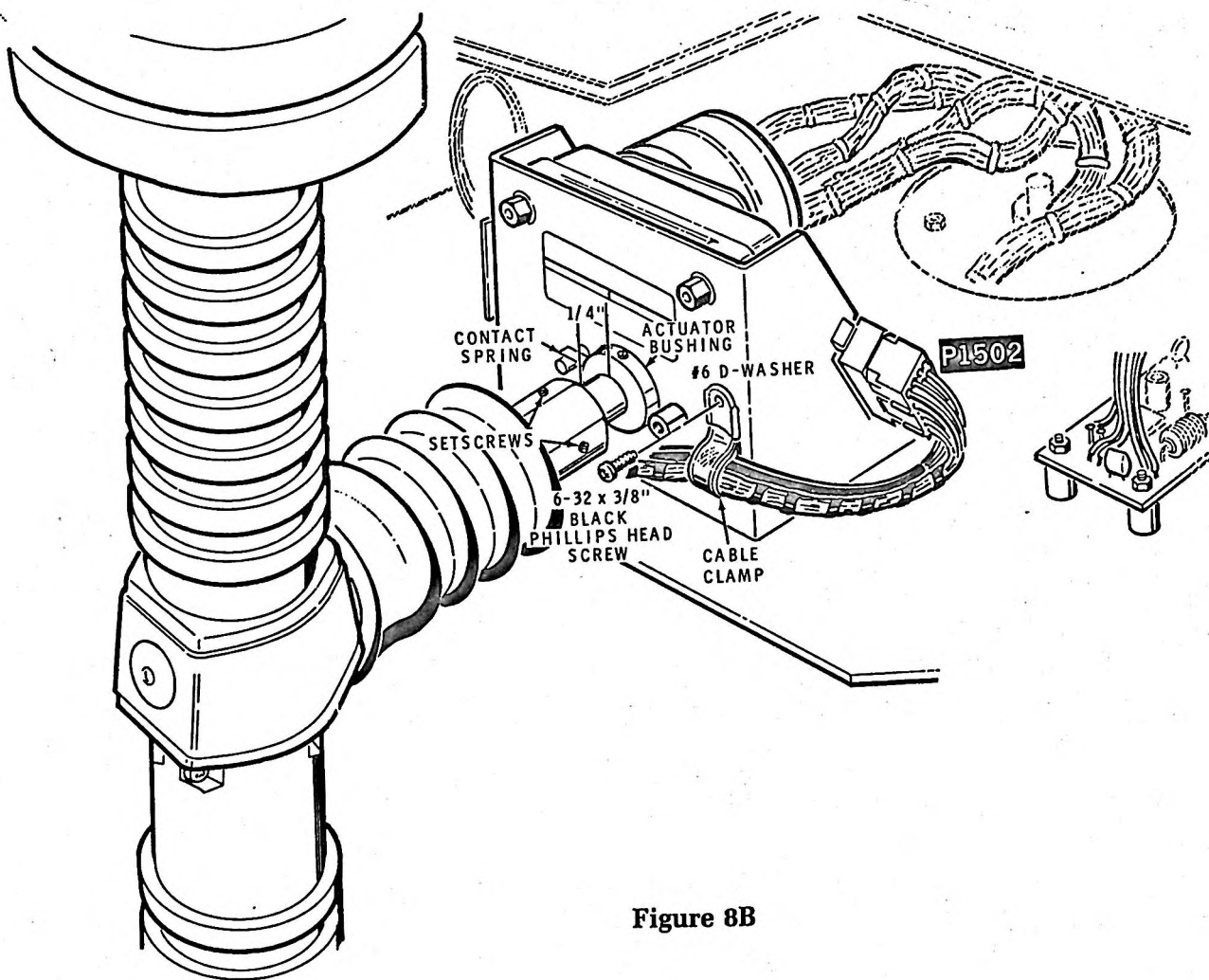
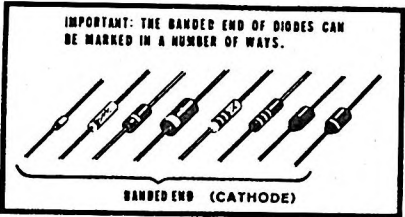


Figure 8B

DIODES

CIRCUIT COMPONENT NUMBER	HEATH PART NUMBER	MAY BE REPLACED WITH	IDENTIFICATION
D1101	56-26	1N191	
D101, D301– D307, D401– D403, D501, D601, D602, D901–D912, D1401	56-56	1N4149	
D707–D711 D716–D719	56-605	1N4746A	
D202, D206	56-616	1N5232B	
D1–D4*, D201, D205	57-42	3A1	
D203, D207, D701–D706, D801	57-65	1N4002	
D204	57-607	1N5817	

*For the factory assembled version of the Robot, these diodes are replaced by a single 8129 bridge rectifier (Heath Part Number 5-88).

REMOTE CONTROL UNIT

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
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CIRCUIT BOARD PARTS

Diodes

D901	56-56	1N4149
D902	56-56	1N4149
D903	56-56	1N4149
D904	56-56	1N4149
D905	56-56	1N4149
D906	56-56	1N4149
D907	56-56	1N4149
D908	56-56	1N4149
D909	56-56	1N4149
D910	Not used	
D911	56-56	1N4149
D912	56-56	1N4149

RESISTORS

NOTE: The following resistors are rated at 1/4-watt and have a tolerance of 5% unless otherwise noted.

R901	6-332-12	3300 Ω
R902	6-332-12	3300 Ω

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
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RESISTORS (Cont'd.)

R903	6-332-12	3300 Ω
R904	6-332-12	3300 Ω
R905	6-332-12	3300 Ω
R906	6-332-12	3300 Ω

Miscellaneous

SW901	64-882	Pushbutton switch
U901	443-603	4011 integrated circuit

CASE PARTS

SW902	60-91	Slide switch
SW903	61-44	Rocker switch
SW904	63-1392	Rotary switch
	95-655	Case, right side
	95-656	Case, left side
	390-2298	Panel label
	462-1134	Trigger
	462-1135	Knob

SONAR RECEIVE CIRCUIT BOARD

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
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RESISTORS

NOTE: The following resistors are rated at 1/4-watt and have a tolerance of 5% unless otherwise noted.

R1101	6-103-12	10 k Ω
R1102	6-102-12	1000 Ω
R1103	6-104-12	100 k Ω
R1104	6-103-12	10 k Ω
R1105	6-102-12	1000 Ω
R1106	6-103-12	10 k Ω
R1107	6-104-12	100 k Ω
R1108	6-103-12	10 k Ω
R1109	6-104-12	100 k Ω
R1110	Not used	
R1111	6-470-12	47 Ω
R1112	6-333-12	33 k Ω
R1113	6-473-12	47 k Ω

CAPACITORS

C1101	21-176	.01 μ F ceramic
C1102	21-75	100 pF ceramic

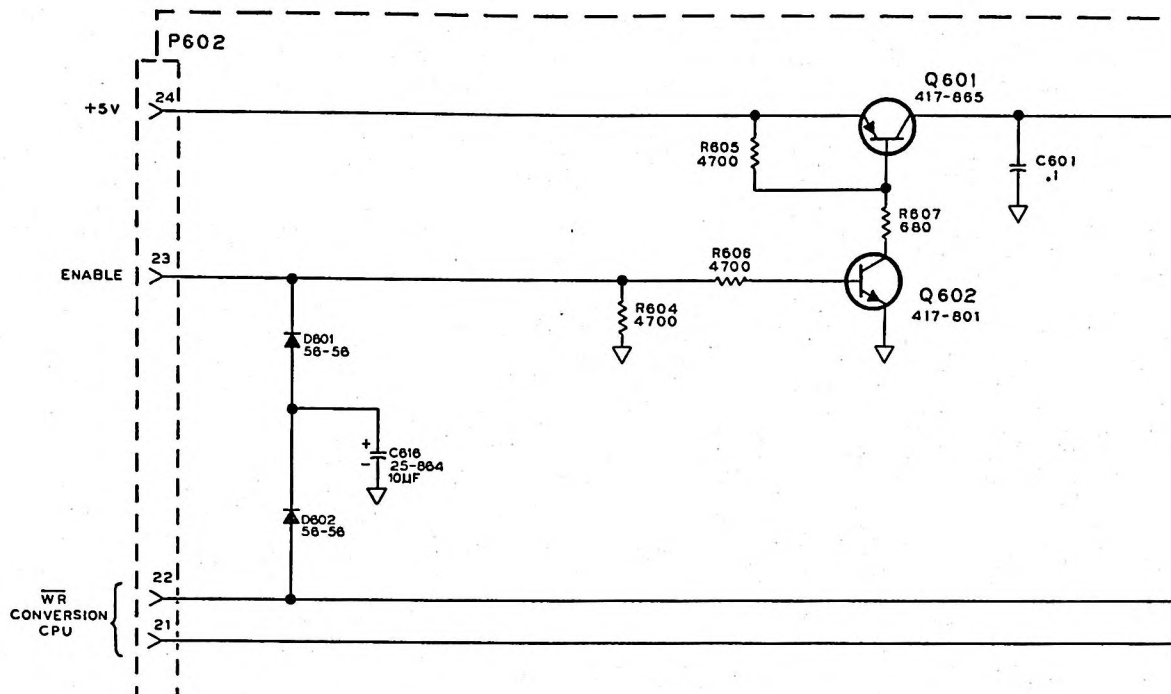
CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
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CAPACITORS (Cont'd.)

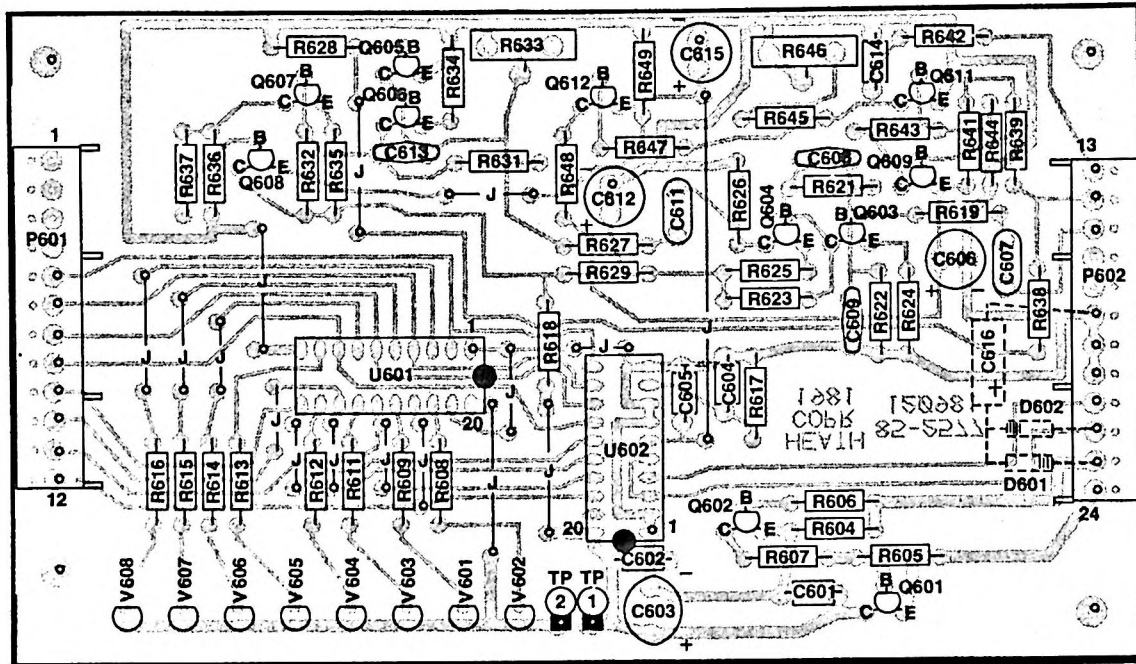
C1103	25-880	10 μ F electrolytic
C1104	21-176	.01 μ F ceramic
C1105	25-880	10 μ F electrolytic
C1106	27-73	.047 μ F Mylar
C1107	21-75	100 pF ceramic
C1108	21-176	.01 μ F ceramic
C1109	25-883	47 μ F electrolytic
C1110	Not used	
C1111	20-106	390 pF mica
C1112	25-912	3.3 μ F electrolytic
C1113	25-883	47 μ F electrolytic

MISCELLANEOUS

L1101	45-47	2 mH RF choke
U1101	442-715	CA3130 integrated circuit
U1102	442-715	CA3130 integrated circuit
U1103	443-785	74C221 integrated circuit
D1101	56-26	1N191 diode



**SCHEMATIC OF THE
SENSE CIRCUIT BOARD**



**X-RAY VIEW OF THE
SENSE CIRCUIT BOARD***

