

NO.	NOTES
1.	<p>INDICATES FEMALE TERMINAL</p> <p>INDICATES MALE TERMINAL</p>
2.	<p>INDICATES SINGLE SHIELDING</p> <p>INDICATES DOUBLE SHIELDING</p>
3.	SL-BL INDICATES SLOW BLOWING
4.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES ARE FOR REFERENCE ONLY AND ARE NOT MARKED ON COMPONENT.
5.	<p>ASSOCIATED WIRING DIAGRAMS</p> <p>2900WD ACTUAL OF LMJ37</p> <p>8764WD ACTUAL OF LPC403</p> <p>8763WD ACTUAL OF LP166</p> <p>8299WD ACTUAL AND SCHEMATIC OF S19204 SELECTOR</p>
6.	RESISTANCE VALUES IN OHMS UNLESS OTHERWISE SPECIFIED.
7. (A)	151819 STRAP REQUIRED FOR HALF DUPLEX OPERATION ONLY STRAP SS1 TO SS4 SIGNAL LINE SS2(+), SS3(-)
(B)	REMOVE STRAP FROM SS1 TO SS4 FOR FULL DUPLEX OPERATION. CONNECT SEND LINE TO SS3(-) AND SS4(+). CONNECT RECEIVE LINE TO SS1(-) AND SS2(+).
8.	FOR SYNCHRONOUS PULSE OPERATION EXTERNAL POWER (45 MA ±10% MUST BE PROVIDED.

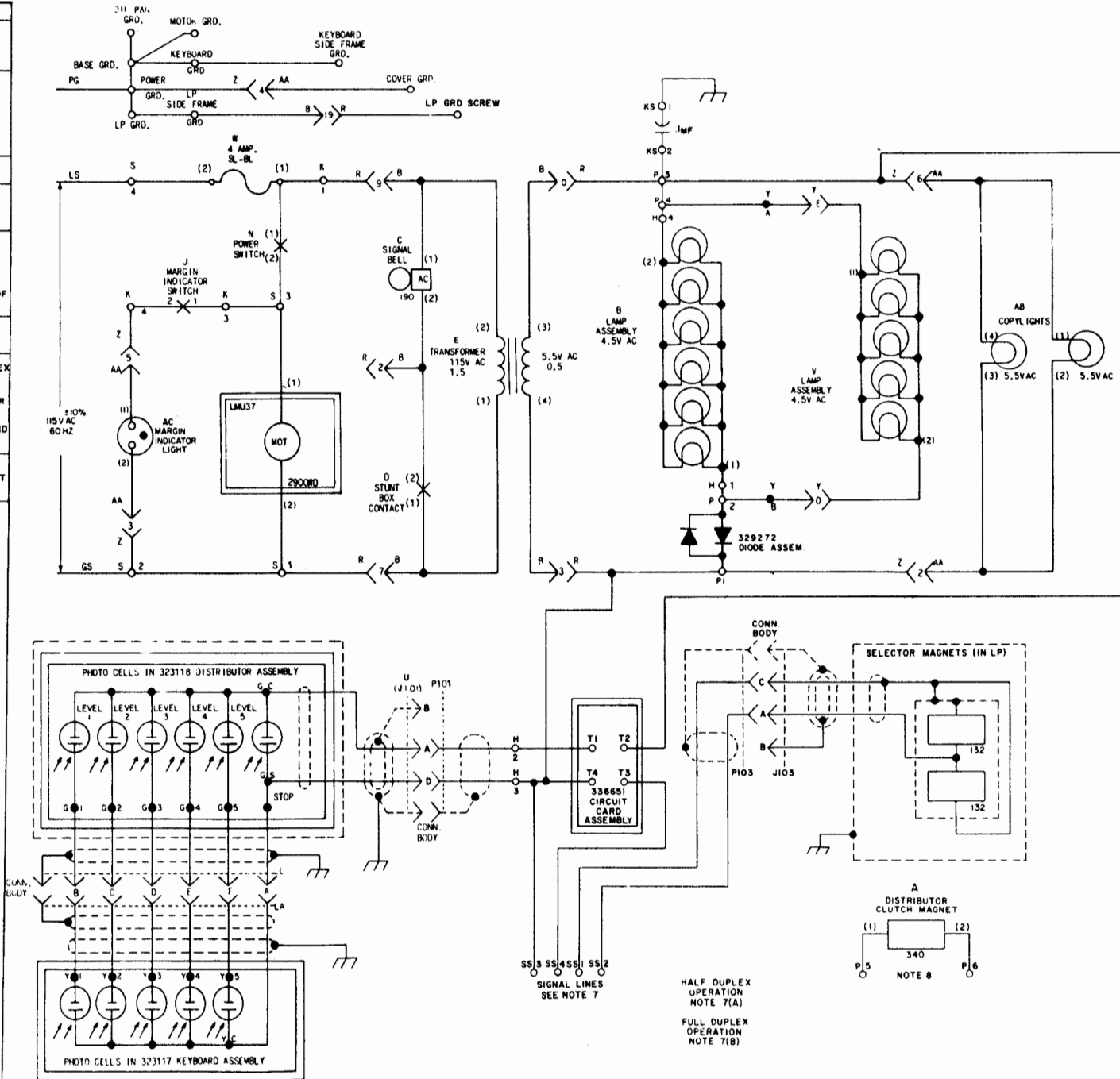


Figure 5-1. AN/UGC-20B Schematic Diagram

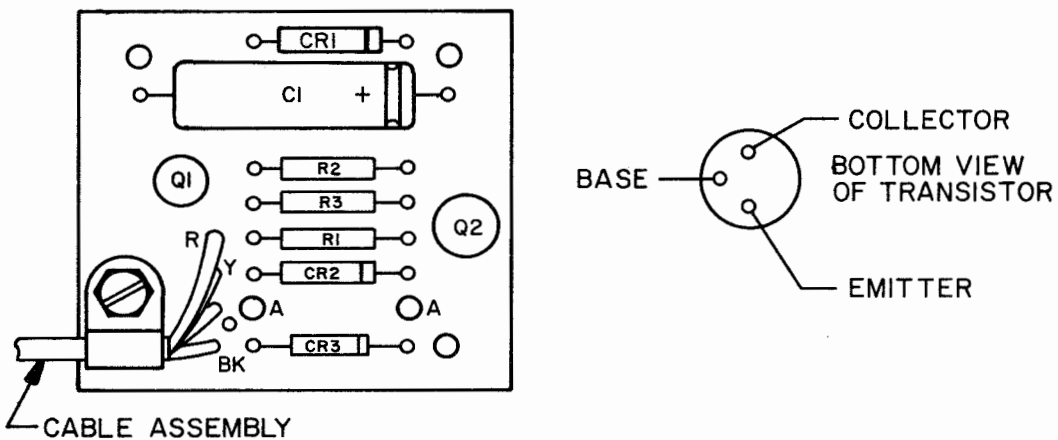
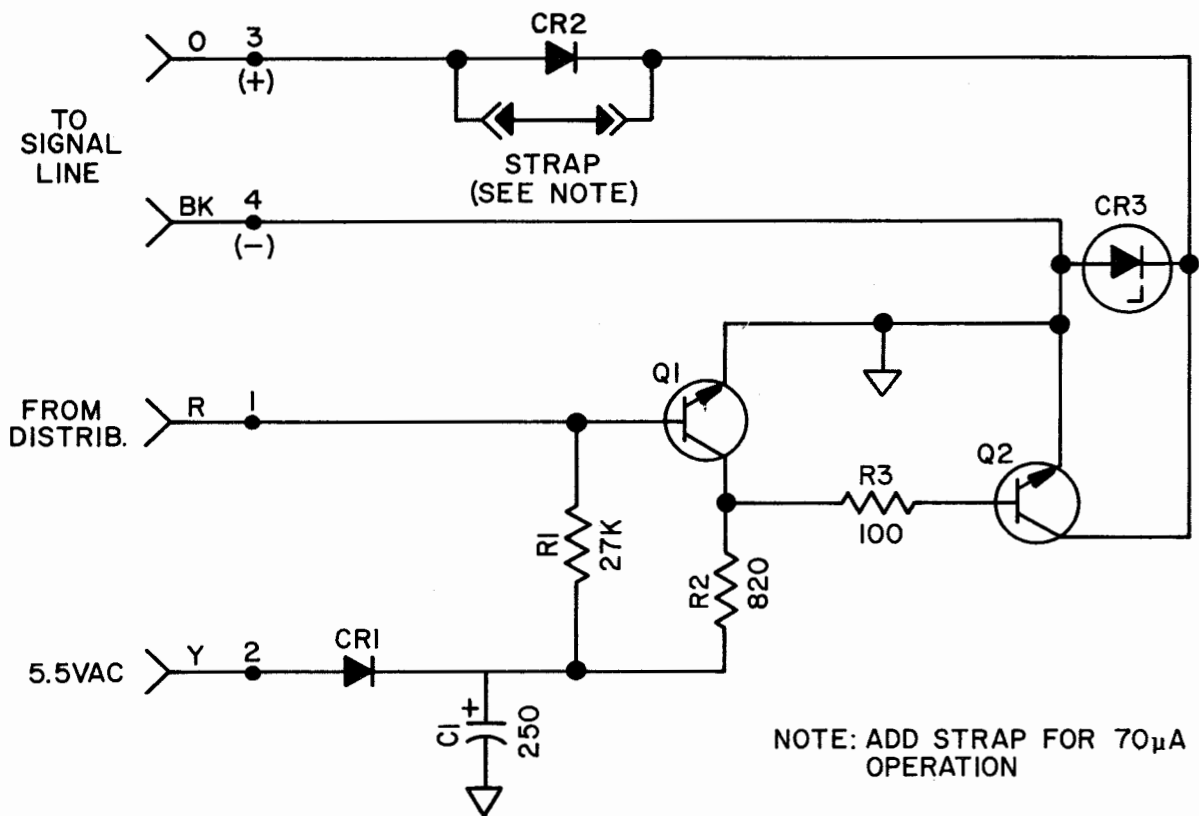
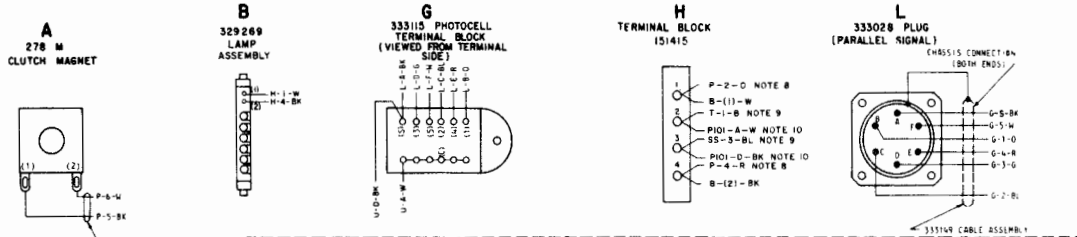


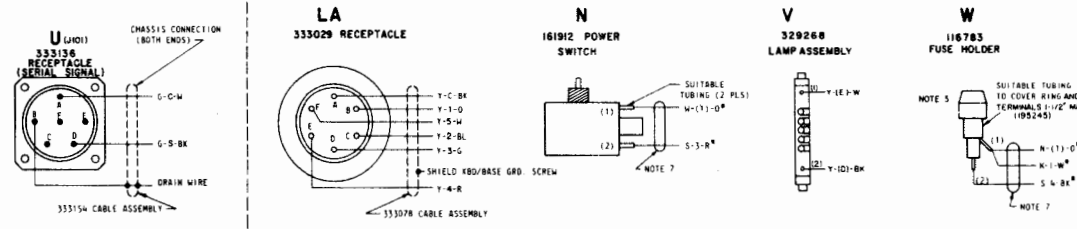
Figure 5-2. Signal Control Circuit Card 336650 Schematic Diagram and Pictorial

NO.	NOTES
1.	WIRING LEGEND:
2.	COLOR CODE: BK - BLACK G - GREEN BR - BROWN BL - BLUE R - RED P - PURPLE O - ORANGE S - SLATE Y - YELLOW W - WHITE
3.	CONNECTORS VIEWED FROM SOLDER TERMINAL SIDE.
4.	* INDICATES 18 GA. WIRE.
5.	USE 4 AMP. SL-BL FUSE.
6.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES ARE FOR REFERENCE AND ARE NOT MARKED ON COMPONENT.
7.	333079 CABLE ASSEMBLY
8.	333151 CABLE ASSEMBLY
9.	336652 CABLE ASSEMBLY
10.	336655 CABLE ASSEMBLY
11.	336654 CABLE ASSEMBLY
12.	ASSOCIATED WD'S 2900WD FOR LMU37 8764WD FOR LPC403 8763WD FOR LP156 8230WD FOR 518204 SELECTOR
13.	ADD 151819 STRAP FOR HALF DUPLEX OPERATION ONLY.
14.	FOR SYNCHRONOUS PULSE OPERATION EXTERNAL POWER (46 MA ±10%) MUST BE PROVIDED BY CUSTOMER.
15.	INDICATES SHIELDED WIRE.
16.	SIGNAL LINE CONNECTIONS FOR 50 MA (±20 VDC) OR 70µA (1.5 VDC) FOLLOWS: FOR HALF DUPLEX OPERATION 151819 STRAP SIGNAL LINE FOR FULL DUPLEX OPERATION REC SEND LINE LINE

DISTRIBUTOR WIRING



KEYBOARD WIRING



BASE WIRING

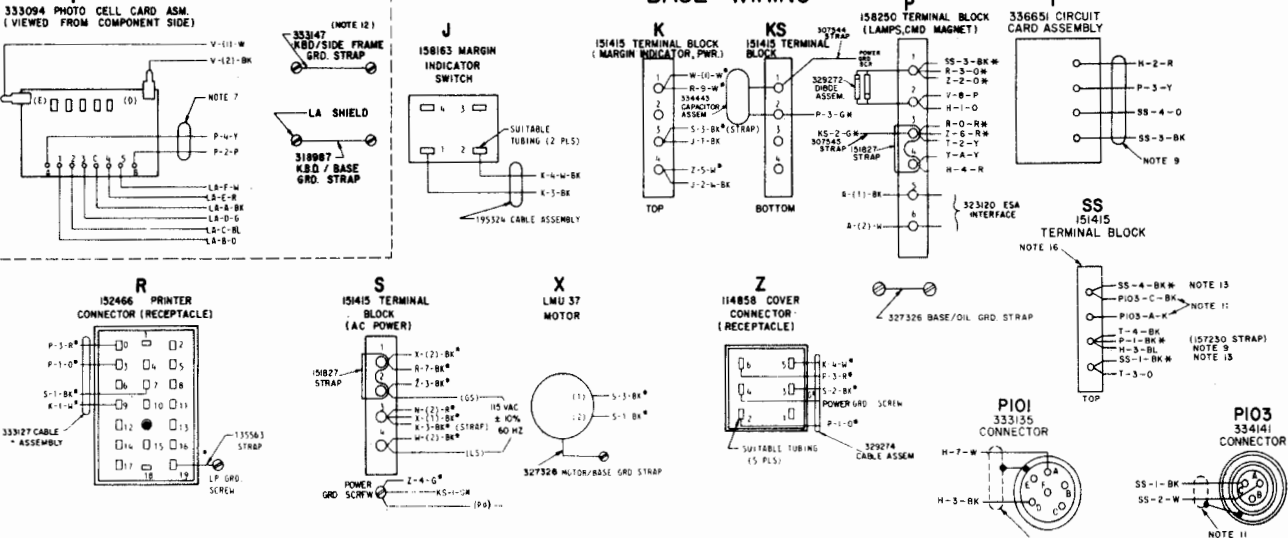
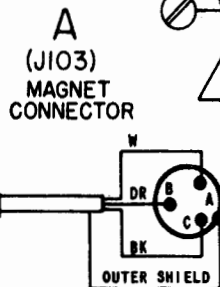
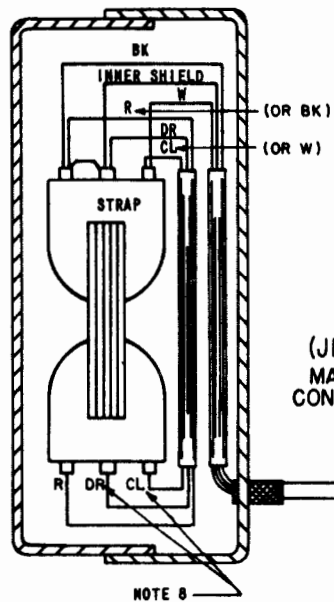


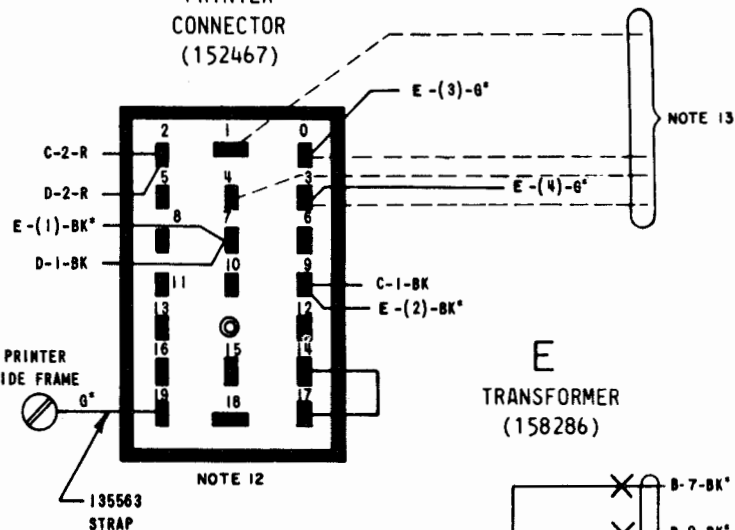
Figure 5-3. AN/UGC-20B Wiring Diagram (Sheet 1 of 4)

NO.	NOTES																												
1.	<p>AREA DESIGNATION TERMINATING DESIGNATION G-3-BK COLOR CORE</p>																												
2.	<p>COLOR CODE:</p> <table border="0"> <tr> <td>BK-BLACK</td> <td>BL-BLUE</td> </tr> <tr> <td>W-WHITE</td> <td>R-RED</td> </tr> <tr> <td>Y-YELLOW</td> <td>BR-BROWN</td> </tr> <tr> <td>P-PURPLE</td> <td>O-ORANGE</td> </tr> <tr> <td>S-SLATE</td> <td>G-GREEN</td> </tr> </table>	BK-BLACK	BL-BLUE	W-WHITE	R-RED	Y-YELLOW	BR-BROWN	P-PURPLE	O-ORANGE	S-SLATE	G-GREEN																		
BK-BLACK	BL-BLUE																												
W-WHITE	R-RED																												
Y-YELLOW	BR-BROWN																												
P-PURPLE	O-ORANGE																												
S-SLATE	G-GREEN																												
3.	CONNECTOR VIEWED FROM SOLDERED TERMINAL ENDS.																												
4.	* DENOTES 18 GA., ALL OTHER WIRES 24 GA.																												
5.	<p>NORMALLY OPEN CONTACT</p> <p>NORMALLY CLOSED CONTACT</p>																												
6.	<p>ASSOCIATED WIRING DIAGRAMS:</p> <table border="0"> <tr><td>8724WD</td><td>323120</td><td>ESA</td><td>ACTUAL</td></tr> <tr><td>8725WD</td><td>323120</td><td>ESA</td><td>SCHEMATIC</td></tr> <tr><td>8726WD</td><td>323121</td><td>ESA</td><td>ACTUAL</td></tr> <tr><td>8727WD</td><td>323121</td><td>ESA</td><td>SCHEMATIC</td></tr> <tr><td>8728WD</td><td>323116</td><td>MOD. KIT</td><td>ACTUAL</td></tr> <tr><td>8729WD</td><td>323116</td><td>MOD. KIT</td><td>SCHEMATIC</td></tr> <tr><td>8764WD</td><td>1PCN03</td><td>ACTUAL</td><td></td></tr> </table>	8724WD	323120	ESA	ACTUAL	8725WD	323120	ESA	SCHEMATIC	8726WD	323121	ESA	ACTUAL	8727WD	323121	ESA	SCHEMATIC	8728WD	323116	MOD. KIT	ACTUAL	8729WD	323116	MOD. KIT	SCHEMATIC	8764WD	1PCN03	ACTUAL	
8724WD	323120	ESA	ACTUAL																										
8725WD	323120	ESA	SCHEMATIC																										
8726WD	323121	ESA	ACTUAL																										
8727WD	323121	ESA	SCHEMATIC																										
8728WD	323116	MOD. KIT	ACTUAL																										
8729WD	323116	MOD. KIT	SCHEMATIC																										
8764WD	1PCN03	ACTUAL																											
7.	<p>ASSOCIATED CABLES:</p> <table border="0"> <tr><td>155066</td><td>-</td><td>CABLE ASSEMBLY</td></tr> <tr><td>195353</td><td>-</td><td>CABLE ASSEMBLY</td></tr> <tr><td>333118</td><td>-</td><td>CABLE ASSEMBLY</td></tr> </table>	155066	-	CABLE ASSEMBLY	195353	-	CABLE ASSEMBLY	333118	-	CABLE ASSEMBLY																			
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195353	-	CABLE ASSEMBLY																											
333118	-	CABLE ASSEMBLY																											
8.	<p>LEGEND:</p> <p>CL - CLEAR INSULATION</p> <p>DR - DRAIN LEAD</p>																												
9.	<p>S NUMBERS 61,351S 61,600S</p>																												
10.	X INDICATES SPLICE																												
11.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESIS ARE FOR REFERENCE ONLY AND ARE NOT MARKED ON COMPONENTS																												
12.	USE SUITABLE TUBING OVER TERMINALS.																												
13.	CABLE 152468 (PART OF STUNT BOX) MAY BE CLIPPED AND DISCARDED.																												

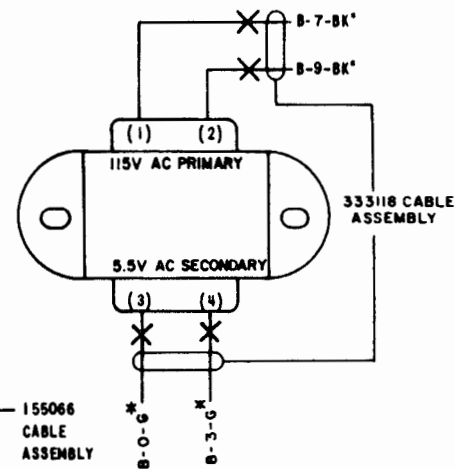
MAGNET AND BASE ASSEMBLY (319230)



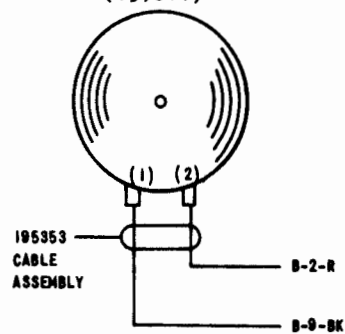
B (F) PRINTER CONNECTOR (152467)



E TRANSFORMER (158286)



C (B) SIGNAL BELL (159611)



D (C) STUNT BOX CONTACT ARRANGEMENT AY, AJG (172502)

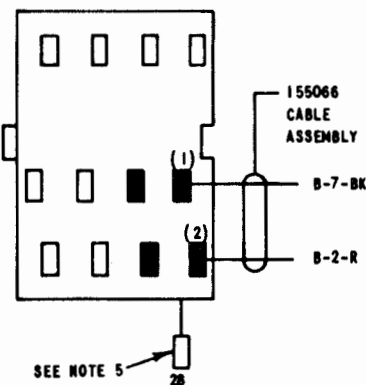
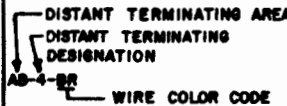



Figure 5-3. AN/UGC-20B Wiring Diagram (Sheet 2 of 4)

NO.	NOTES
1.	WIRING LEGEND : 
2.	COLOR CODE: BK - BLACK R - RED BL - BLUE Y - YELLOW BR - BROWN G - GREEN O - ORANGE W - WHITE S - SLATE P - PURPLE
3.	ASSOCIATED WIRING DIAGRAMS 8724 WD 323120 ESA ACTUAL 8725 WD 323120 ESA SCHEMATIC 8726 WD 323121 ESA ACTUAL 8727 WD 323121 ESA SCHEMATIC 8728 WD 323116 MOD KIT ACTUAL 8729 WD 323116 MOD KIT SCHEMATIC 8763 WD LP156 ACTUAL
4.	 INDICATES SPLICE SOLDER AND TAPE
5.	CONNECTOR VIEWED FROM SOLDER END.
6.	USE 155755 INSULATING SLEEVE ON THE CONNECTOR TERMINALS AFTER SOLDERING.
7.	S NUMBER 61600S
8.	* DENOTES 18GA. ALL OTHER WIRES 24GA.
9.	151982 INCANDESCENT LAMP
10.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESIS ARE FOR REFERENCE ONLY AND ARE NOT MARKED ON COMPONENTS.

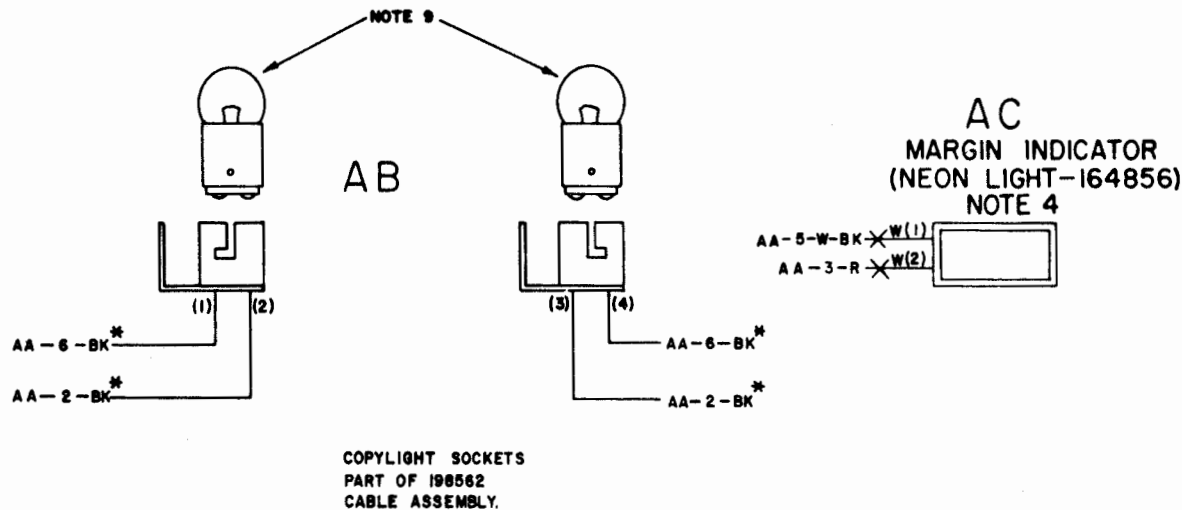
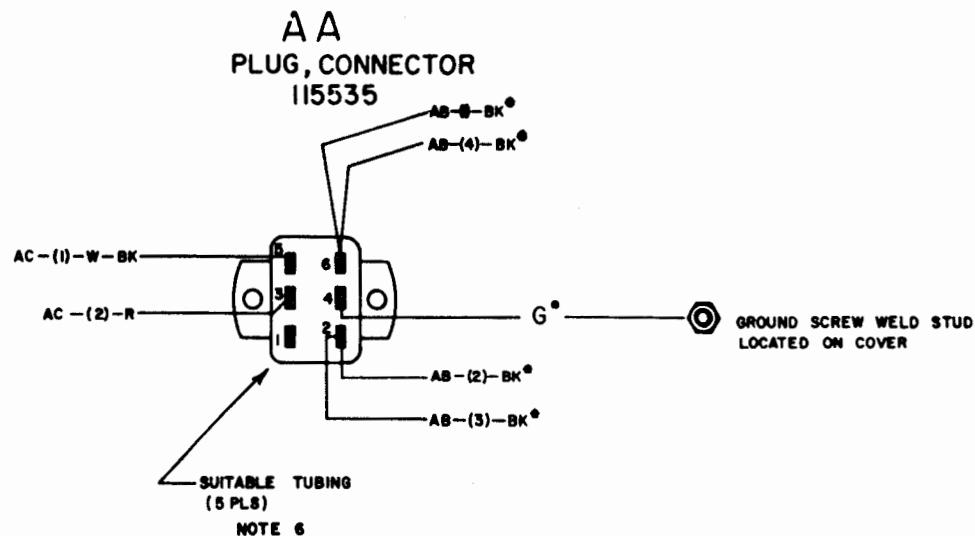
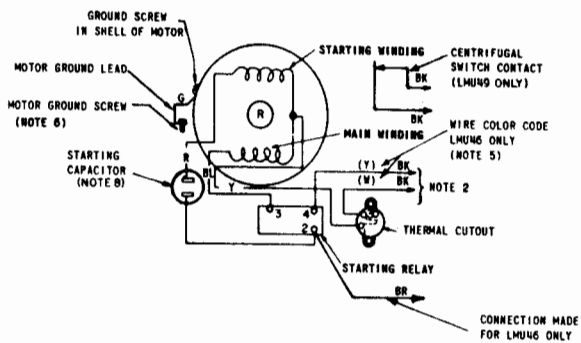


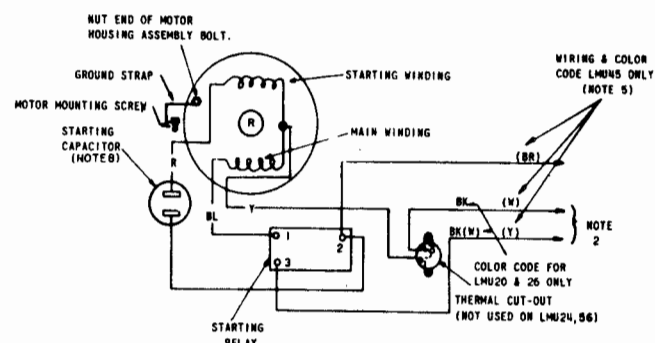
Figure 5-3. AN/UGC-20B Wiring Diagram
(Sheet 3 of 4)

SYNCHRONOUS MOTOR UNITS

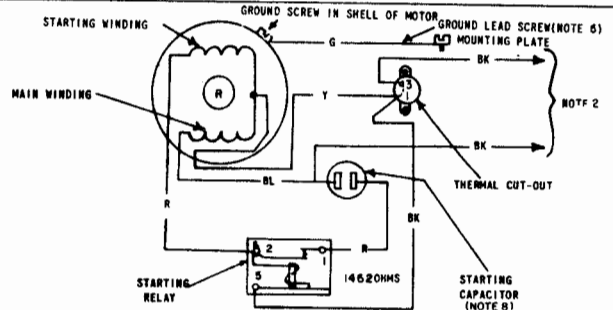
NO.	NOTES														
1.	SYNCHRONOUS MOTOR OPERATES ON REGULATED FREQUENCY ($\pm 0.75\%$) MAXIMUM AC ONLY.														
2.	CONNECT EITHER WIRE TO DESIGNATED TERMINALS OF UNIT TERMINAL BLOCK, PER WIRING DIAGRAM OF ASSOCIATED UNIT														
3.	MOTOR LEADS OF SAME COLOR ARE INTERCHANGEABLE.														
5.	EXTERNAL NOISE SUPPRESSION NETWORK CONSISTING OF 100 OHM, 1/2 WATT RESISTOR IN SERIES WITH 0.25 MFD 1K V CAPACITOR CONNECTED ACROSS YELLOW AND BROWN WIRES. (FOR LMUN5, N6)														
6.	MOTOR GROUND LEAD (GREEN) TERMINAL MUST BE FASTENED TO MOUNTING CRADLE OF MOTOR UNDER A SEPARATE GROUND SCREW ONLY. A SCREW USED FOR ANOTHER PURPOSE CANNOT BE USED FOR GROUNDING (UNDERWRITERS LABORATORIES REQUIREMENT).														
7.	WIRE COLOR CODE: BK - BLACK R - RED BL - BLUE O - ORANGE BR - BROWN Y - YELLOW P - PURPLE S - SLATE W - WHITE G - GREEN														
8.	<table border="1"> <thead> <tr> <th>LMU</th> <th>STARTING CAPACITOR VALUE</th> </tr> </thead> <tbody> <tr> <td>3, 15, 21, 30, 33, 36, 37, 38, 42, 46, 49, 54, 52</td> <td>43-48 MFD</td> </tr> <tr> <td>11, 12</td> <td>170-226 MFD</td> </tr> <tr> <td>35</td> <td>64-77 MFD</td> </tr> <tr> <td>55</td> <td>15-18 MFD</td> </tr> <tr> <td>19, 20, 24, 26, 31, 45, 56</td> <td>88-108 MFD</td> </tr> <tr> <td>50</td> <td>161-193 MFD</td> </tr> </tbody> </table>	LMU	STARTING CAPACITOR VALUE	3, 15, 21, 30, 33, 36, 37, 38, 42, 46, 49, 54, 52	43-48 MFD	11, 12	170-226 MFD	35	64-77 MFD	55	15-18 MFD	19, 20, 24, 26, 31, 45, 56	88-108 MFD	50	161-193 MFD
LMU	STARTING CAPACITOR VALUE														
3, 15, 21, 30, 33, 36, 37, 38, 42, 46, 49, 54, 52	43-48 MFD														
11, 12	170-226 MFD														
35	64-77 MFD														
55	15-18 MFD														
19, 20, 24, 26, 31, 45, 56	88-108 MFD														
50	161-193 MFD														



LMU 3, 11, 12, 15, 21, 30, 37, 42, 46, 49
 FOR USE WITH 115V AC 60~POWER SUPPLY
LMU 33, 36, 38, 51, 52
 FOR 115V AC 50~POWER SUPPLY
LMU 55
 FOR 230 V AC 50~POWER SUPPLY



LMU 19, 20, 24, 26, 31, 45, 56
 FOR USE WITH 115V AC 60~POWER SUPPLY ONLY



LMU 50,
 FOR USE WITH 115V AC 50~POWER SUPPLY ONLY

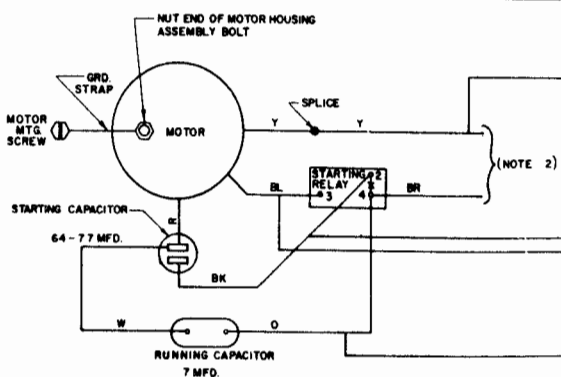
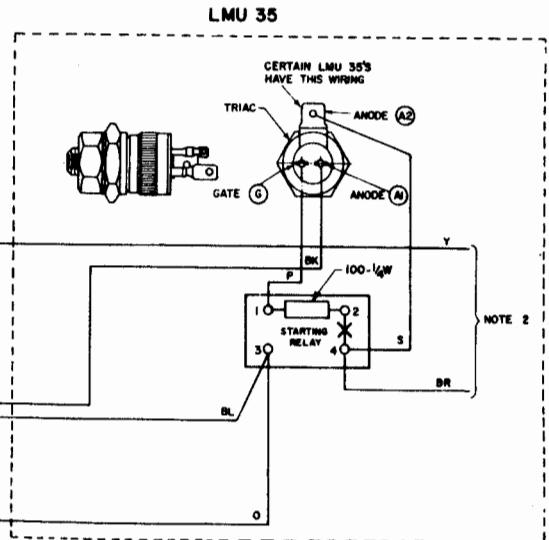


Figure 5-3. AN/UGC-20B Wiring Diagram (Sheet 4 of 4)