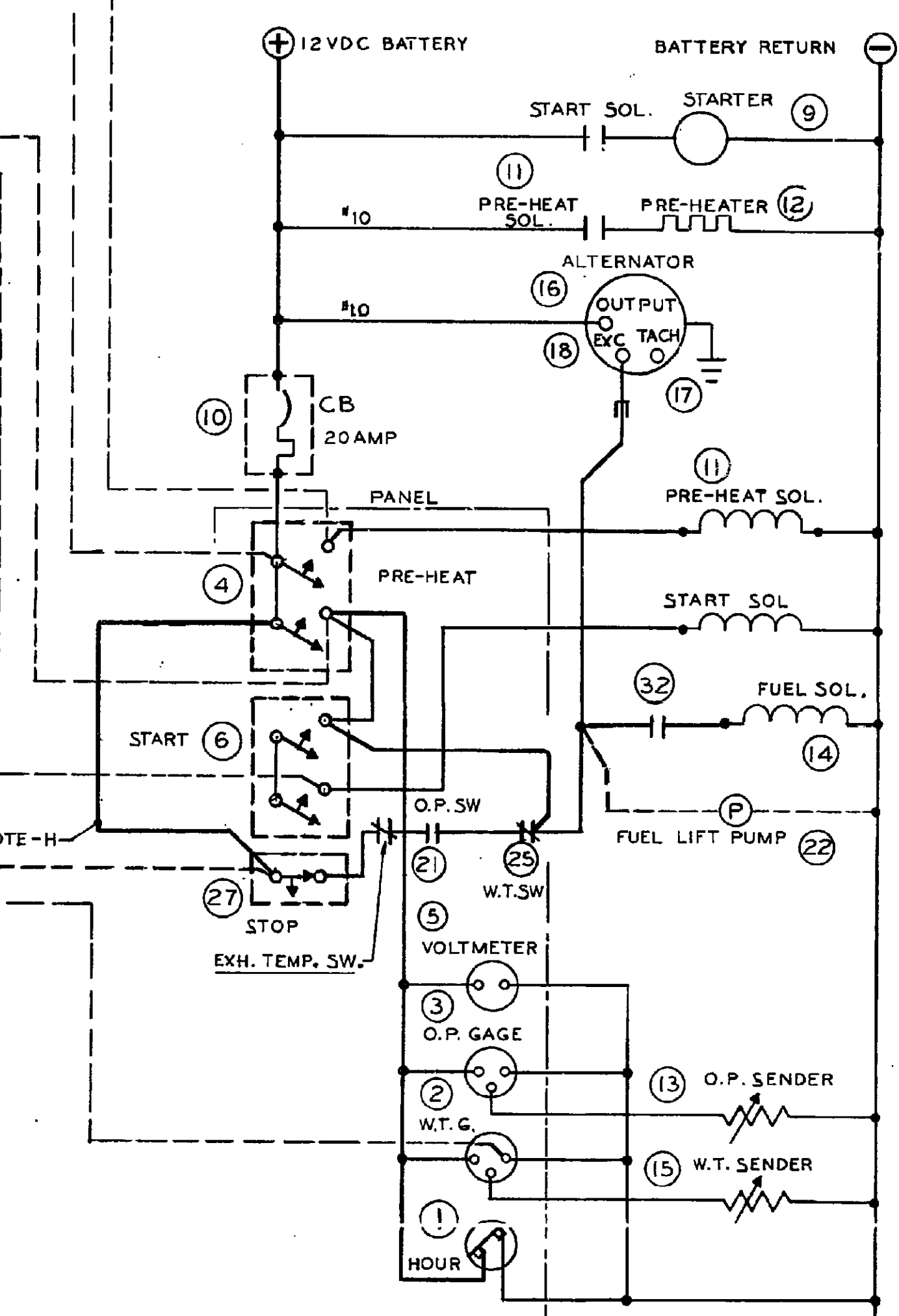
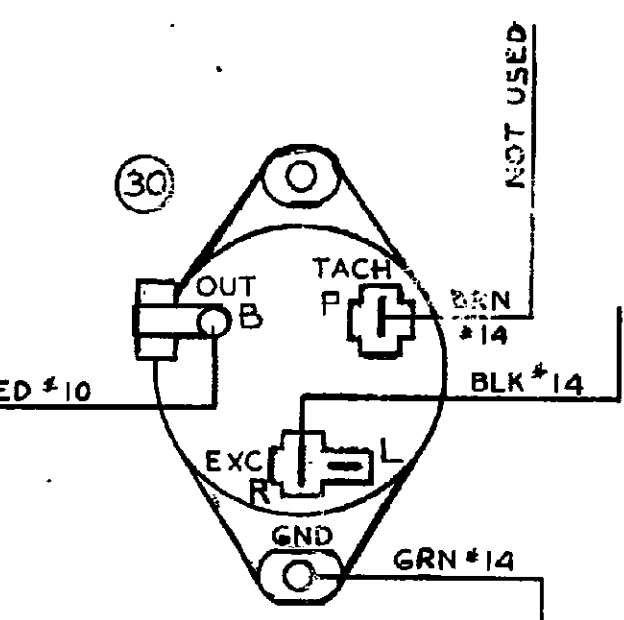
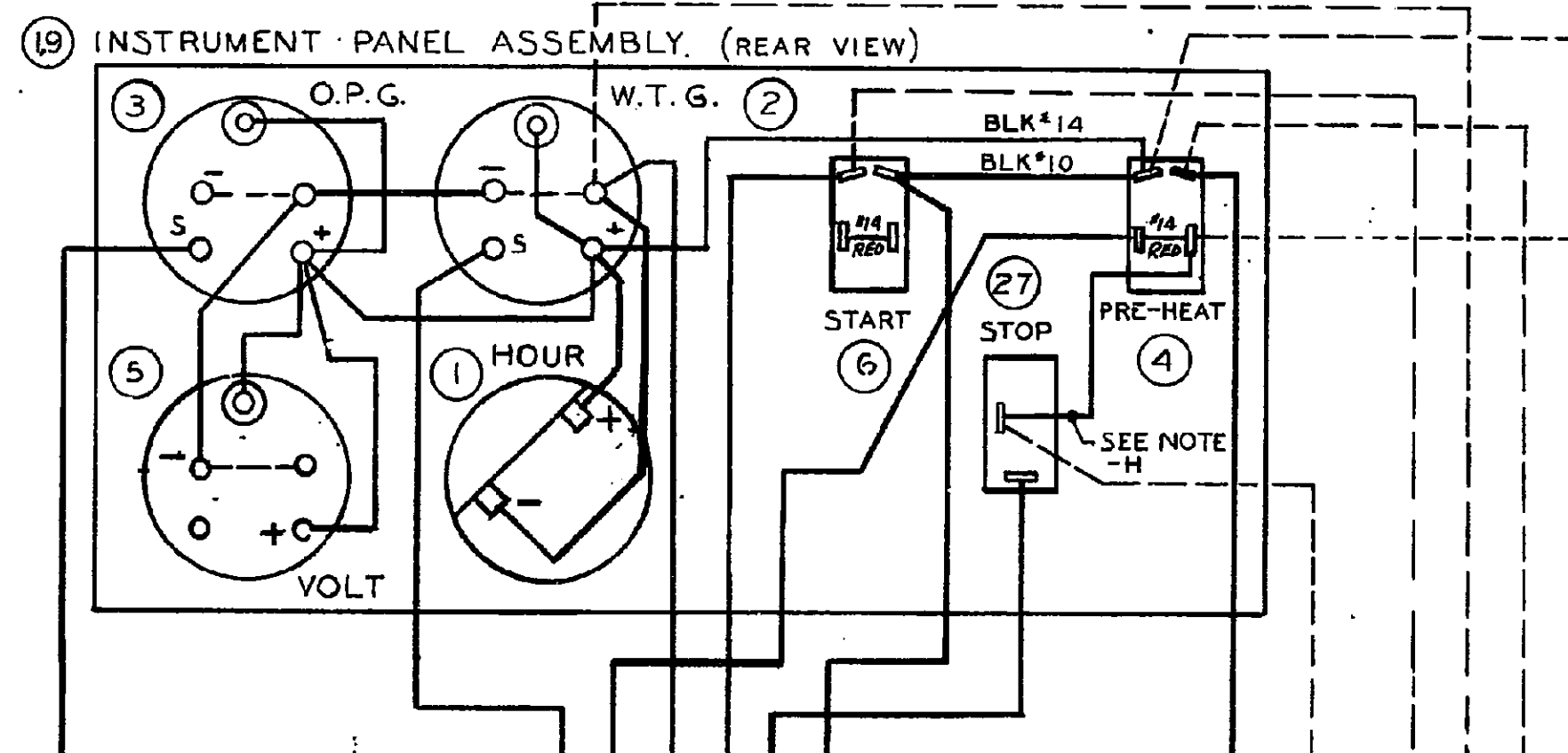
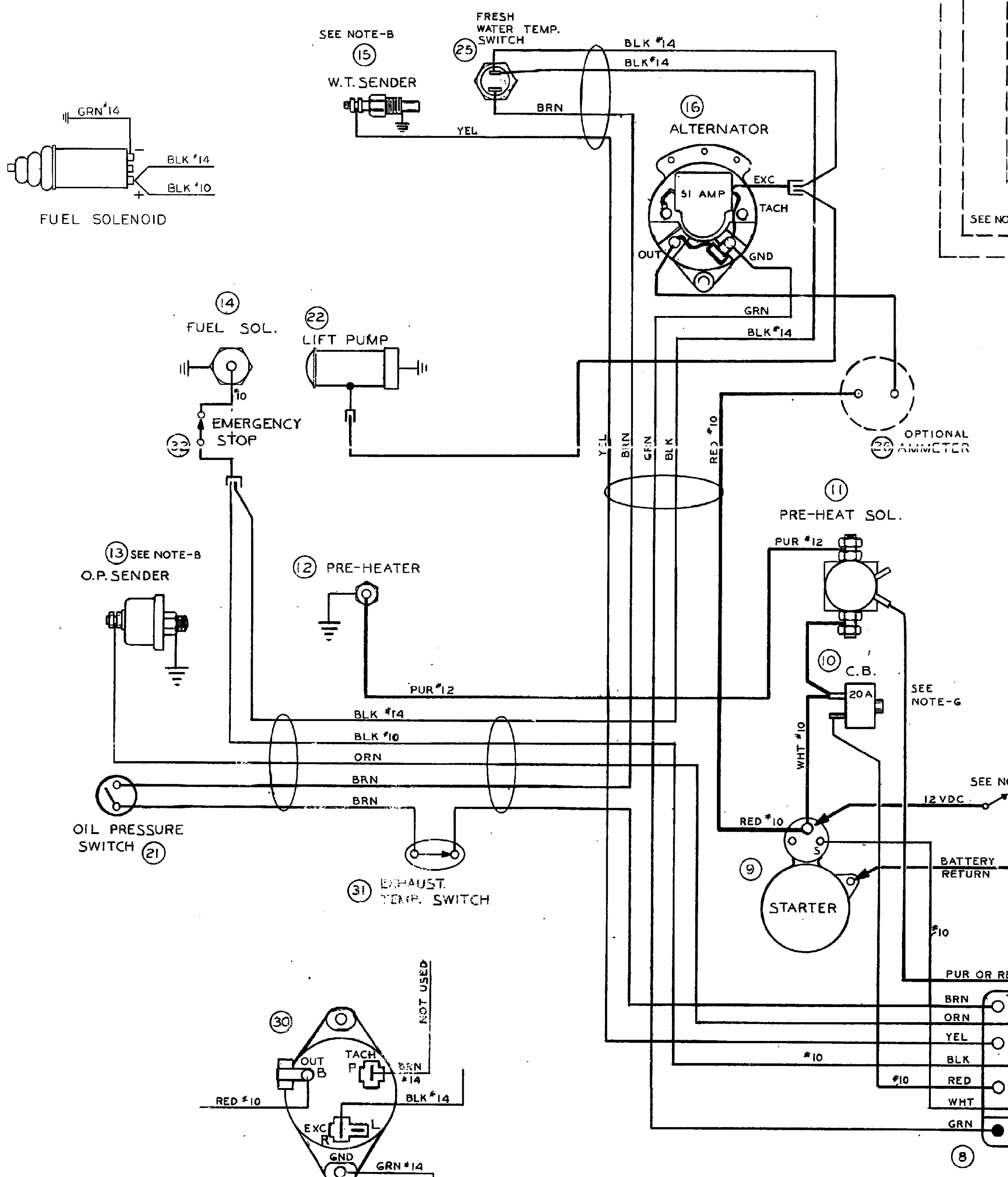


ECO No.	SYM	DATE	REVISION	AUTH
A		3-24-80	ADDED REMOTE CONTROL PANEL	B.J.S.
B		11-16-80	ADDED NOTE - J	B.J.S.
C		12-1-80	ADDED C.BREAKER 20 AMP.	B.J.S.
D		4-13-81	1A BLK WAS 4B BLK.	B.J.S.
E		11-19-82	ADDED SERIES 15 ALT. REAR VIEW.	B.J.S.
F		12-16-83	PRE-HEAT - START INTERLOCK	B.J.S.
G		4-6-83	ADDED EXHAUST TEMP. SWITCH	B.J.S.
H		4-6-83	17EN 29 WAS 8 AMP (C.I.B)	B.J.S.
I		6-21-83	ADDED EMERGENCY STOP SWITCH 17EN 32	B.J.S.
J		12-21-87	ADDED FUEL SOLENOID	T.V.
1885	K	3-16-92	WIRE MUST BE FROM TOP TERM. OF PRE-HEAT SW. TO STOP SW. FROM LOWEST TERM. OF PRE-HEAT SW. TO STOP SW.	WEM

**SCHEMATIC DIAGRAM.**



**WIRING DIAGRAM.**



**GENERATOR OPERATION.**  
**PREHEAT:** DEPRESS PREHEAT SWITCH FROM 15 TO 60 SECONDS AS REQUIRED.  
**START:** DEPRESS BOTH PREHEAT AND START SWITCHES (PREHEAT ALSO OVERRIDES LOW OIL PRESSURE SHUTDOWN CIRCUIT).  
**WHEN GENERATOR STARTS,** RELEASE START SWITCH ONLY, CONTINUE HOLDING PREHEAT SWITCH FOR A FEW SECONDS UNTIL OIL PRESSURE REACHES 20PSI.  
**STOP:** DEPRESS STOP SWITCH UNTIL THE GENERATOR STOPS COMPLETELY.

- NOTES:**  
**NOTES ON BUILDER/OWNERS RESPONSIBILITY.**
- (A) AN ON-OFF SWITCH SHOULD BE INSTALLED SOMEWHERE IN THIS CIRCUIT TO DISCONNECT THE STARTER FROM THE BATTERY IN AN EMERGENCY & WHEN LEAVING THE BOAT. 12 VOLT DIESEL ENGINE STARTERS TYPICALLY DRAW 200 TO 300 AMPS WHEN CRANKING. THE DURATION OF INDIVIDUAL CRANKING CYCLES SHOULD NOT EXCEED 30 SECONDS. A SWITCH WITH CONTINUOUS RATING OF 175 AMPS AT 12 VDC WILL NORMALLY SERVE THESE FUNCTIONS, BUT SUCH A SWITCH MUST NEVER BE USED TO MAKE THE STARTER CIRCUIT.
  - (B) **WARNING; SENDER CONNECTION:** CONTACT WITH B+ MAY DAMAGE SENDER.
  - (C) ALL RETURNS ARE THROUGH ENGINE BLOCK.
  - (D) FOR WIRING OF AUXILIARY ALTERNATORS SEE THE FOLLOWING DIAGRAMS:  
 MOTOROLA 85 AMP, 11232  
 MOTOROLA 120 AMP, 11231  
 LEECE-NEVILLE 53 AMP, 16535  
 LEECE-NEVILLE 105 AMP, 16614
  - (E) IF ADDITIONAL PRESSURE SWITCHES ARE REQ'D TO START BOAT ACCESSORIES, A FLEXIBLE HOSE MUST BE RUN FROM THE OIL PRESSURE MANIFOLD TO A NEARBY BULKHEAD AND ALL PRESSURE SWITCHES MOUNTED AT THE BULKHEAD.
  - (F) APPLY SILASTIC OR TIGHT WOUND PLASTIC/SPLICE ELECTRICAL TAPE AROUND CONNECTORS CONNECTED.
  - (G) **CAUTION:** THIS PRODUCT IS PROTECTED BY A MANUAL RESET CIRCUIT BREAKER LOCATED NEAR THE STARTER AND AS CLOSE TO THE SOURCE OF CURRENT AS POSSIBLE. EXCESSIVE CURRENT DRAIN ANYWHERE IN THE INSTRUMENT PANEL, WIRING, OR ENGINE WILL CAUSE THE BREAKER TO TRIP. IN THIS EVENT, MOST ENGINE MODELS WILL SHUT DOWN BECAUSE THE OPENED BREAKER DISCONNECTS THEIR FUEL SUPPLY. THEREFORE THE BUILDER/OWNER MUST BE SURE THAT THE INSTRUMENT PANEL, WIRING AND ENGINE ARE INSTALLED TO PREVENT CONTACT BETWEEN ELECTRICAL DEVICES AND SALT WATER.
  - (H) REMOVE JUMPER WHEN REMOTE CONTROL PANEL IS USED.
  - (I) MOST STARTER SOLENOIDS DRAW 15 AMPS. THEREFORE THE VOLTAGE DROP IN THIS CONDUCTOR MUST BE NO GREATER THAN 10% (IN THE PATH FROM THE STANDARD START SWITCH TO ANY REMOTE SWITCHES AND BACK TO THE STANDARD STARTER SWITCH). IF THIS REQUIRES IMPRACTICALLY LARGE CONDUCTORS, THEN A RELAY MAY BE ADDED TO CONTROL THE STARTER SOLENOID ITSELF.

ITEM	PART NO.	DESCRIPTION	QTY	ASSY	OPTION
32		EMERGENCY STOP, SWITCH	1		
31		EXHAUST TEMPERATURE SWITCH	1		
30		ALTERNATOR, 50A.	1		
29		PANEL COMPLETE	1		
28		REMOTE CONTROL PANEL	1		
27		SWITCH, STOP	1		
26		AMMETER (OPTIONAL)	1		
25		SWITCH, WATER TEMP. N.C.	1		
24		COMPOSITION ASSY	1		
23		LED, RUN LIGHT	1		
22		LIFT PUMP	1		
21		SWITCH, OIL PRESSURE, N.O.	1		
20		PANEL, LESS INSTRUMENTS	1		
19		PANEL COMPLETE	1		
18	NOT USED	SUPPRESSION KIT, ALT.	1		
17	NOT USED	TACH. KIT, ALTERNATOR	1		
16		ALTERNATOR, 51 A.	1		
15		SENDER, WATER TEMP.	1		
14		SOLENOID, FUEL	1		
13		SENDER, OIL PRESSURE	1		
12		PRE-HEATER	4		
11		SOLENOID, PRE-HEAT	1		
10		CIRCUIT BREAKER 20AMP	1		
9		STARTER, GENERATOR	1		
8		HARNES, ENGINE	1		
7		HARNES, PANEL	1		
6		SWITCH, START	1		
5		VOLTMETER	1		
4		SWITCH, PRE-HEAT	1		
3		OIL PRESSURE GAUGE	1		
2		WATER TEMP. GAUGE	1		
1		HOURLY METER	1		

(28) REMOTE CONTROL PANEL (REAR VIEW)

J.H. WESTERBEKE CORP.  
 AVON, MA 02322  
 SCALE: NONE  
 THIS WIRING DIAGRAM, GENERATOR SETS WITH TOGGLE SW. CONTROL KIT  
 3-5-80 24700