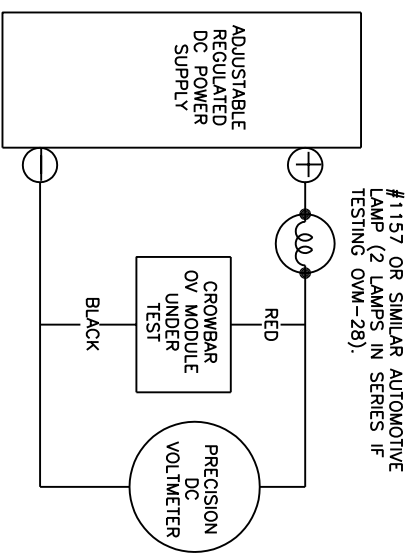
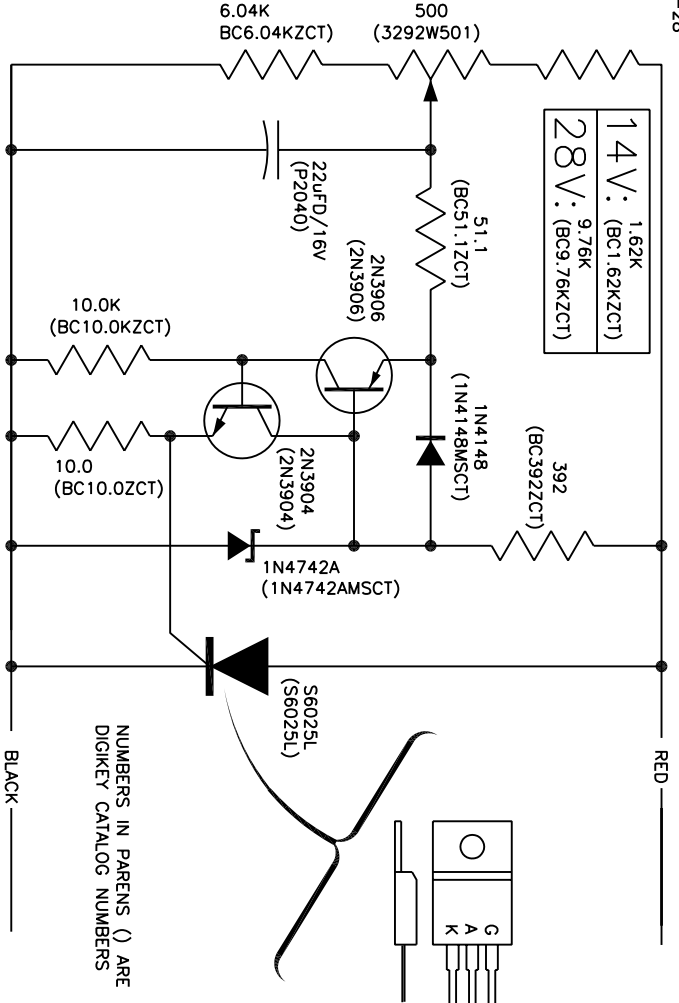
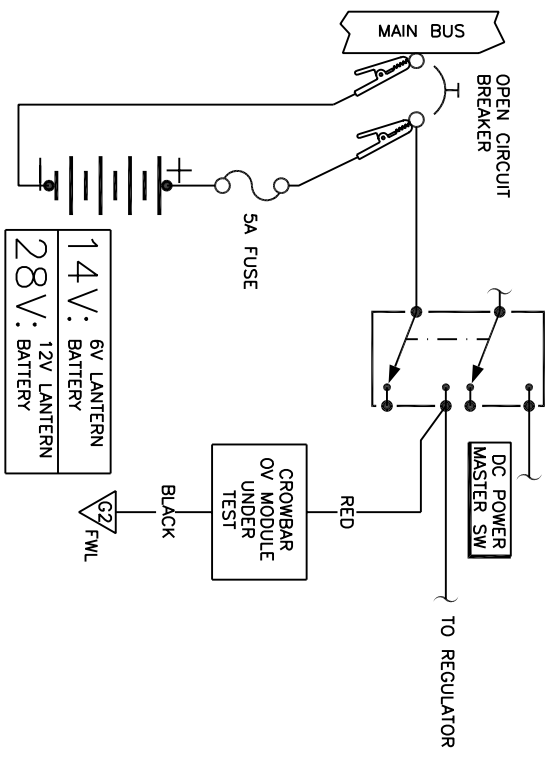


NOTES:

1. INTERCONNECT DEVICE TO BE TESTED AS SHOWN IN BENCH TEST SETUP TO THE LEFT. THE LAMP BULB IN SERIES WITH THE POWER SUPPLY PROTECTS SUPPLY FROM SHORT CIRCUIT DAMAGE WHEN CROWBAR FIRES. IF POWER SUPPLY IS INTERNALLY PROTECTED FROM OVERCURRENT, THE LAMP MAY BE ELIMINATED.
2. SET THE POWER SUPPLY FOR 16.25 VOLTS. ADJUST POTENTIOMETER ON OVMODULE SLOWLY UNTIL IT TRIPS CAUSING THE LAMP TO ILLUMINATE OR PLACES A DEAD-SHORT ON POWER SUPPLY. DISCONNECT OV MODULE TO RESET IT. SET POWER SUPPLY VOLTAGE BELOW 16 VOLTS AND RECONNECT OV MODULE. ADJUST POWER SUPPLY VOLTAGE SLOWLY UPWARD AND OBSERVE TRIP POINT. ADJUST POT AS NEEDED TO ACHIEVE TRIP POINT OF 16.2 TO 16.5 VOLTS (32.4 TO 33.0 VOLTS ON 28V SYSTEM).
3. THE OV PROTECTION MODULE IS SELF RESETTING IN NORMAL SERVICE. AFTER THE MODULE FIRES, THE BREAKER THAT SUPPLIES POWER TO THE CROWBAR MODULE AND ALTERNATOR FIELD WILL POP THUS REMOVING POWER FROM THE FAILED ALTERNATOR SYSTEM. RESETING THE CIRCUIT BREAKER WILL RESTORE NORMAL SYSTEM OPERATION EXCEPT IN CASES WHERE THE VOLTAGE REGULATOR HAS FAILED WHEREUPON THE OV PROTECTION MODULE WILL TRIP AGAIN AND SHUT DOWN THE FAILED SYSTEM.
4. THE OV MODULE SHOULD BE TESTED EVERY YEAR FOR PROPER OPERATION. SUGGEST REMOVAL AT EVERY ANNUAL INSPECTION TIME FOR BENCH TESTING AS DESCRIBED IN NOTES 1 THRU 3 ABOVE.
5. AN ALTERNATIVE TEST FOR FUNCTIONALITY ONLY MAY BE CONDUCTED IN THE AIRPLANE. USE A 6-VOLT LANTERN BATTERY (12-VOLT FOR 24V AIRCRAFT) WITH ALLIGATOR CLIP LEADS AND A 5A, INLINE FUSE AS SHOWN IN THE FIGURE BELOW.
6. BEGIN WITH MASTER SWITCH OFF, OPEN THE ALTERNATOR FIELD BREAKER, CLIP THE TEST FIXTURE ACROSS THE BREAKER TAKING CARE TO OBSERVE POLARITY, THEN TURN DC POWER MASTER SWITCH TO ON.
7. THIS TEST SETUP ADDS THE LANTERN BATTERY VOLTAGE TO THE SHIP'S BATTERY VOLTAGE. THIS HIGHER THAN NORMAL VOLTAGE SHOULD TRIGGER THE CROWBAR OV MODULE AND POP THE FUSE IN THE TEST FIXTURE. THIS TEST SHOWS GROSS FUNCTIONALITY OF THE OVM BUT DOES NOT TEST CALIBRATION.
8. NUMBERS IN PARENS () ARE DIGKEY CATALOG NUMBERS. CALL 1-800-344-4539 AND REQUEST A CATALOG.
9. IF YOU PREFER TO PURCHASE RATHER THAN BUILD, ASSEMBLED AND TESTED OVM-14 AND OVM-28 CROWBAR OV MODULES ARE AVAILABLE FROM B&C SPECIALTY PRODUCTS NEWTON, KS 316-283-8000



BENCH TEST SETUP

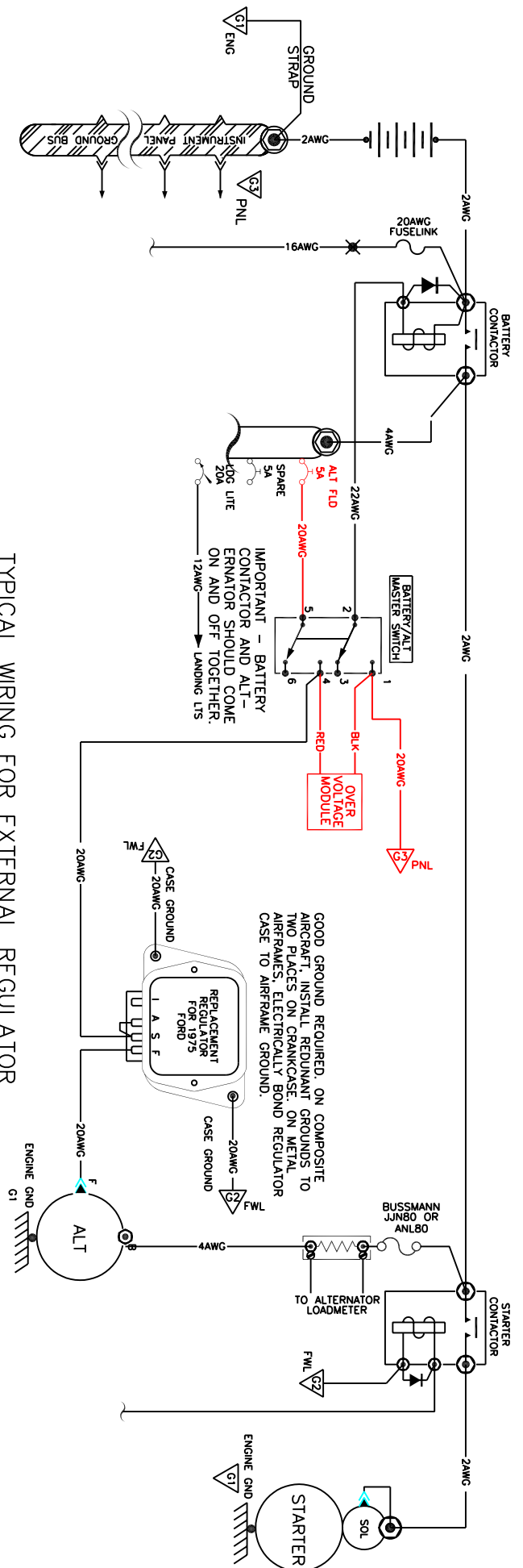


NUMBERS IN PARENS () ARE DIGKEY CATALOG NUMBERS

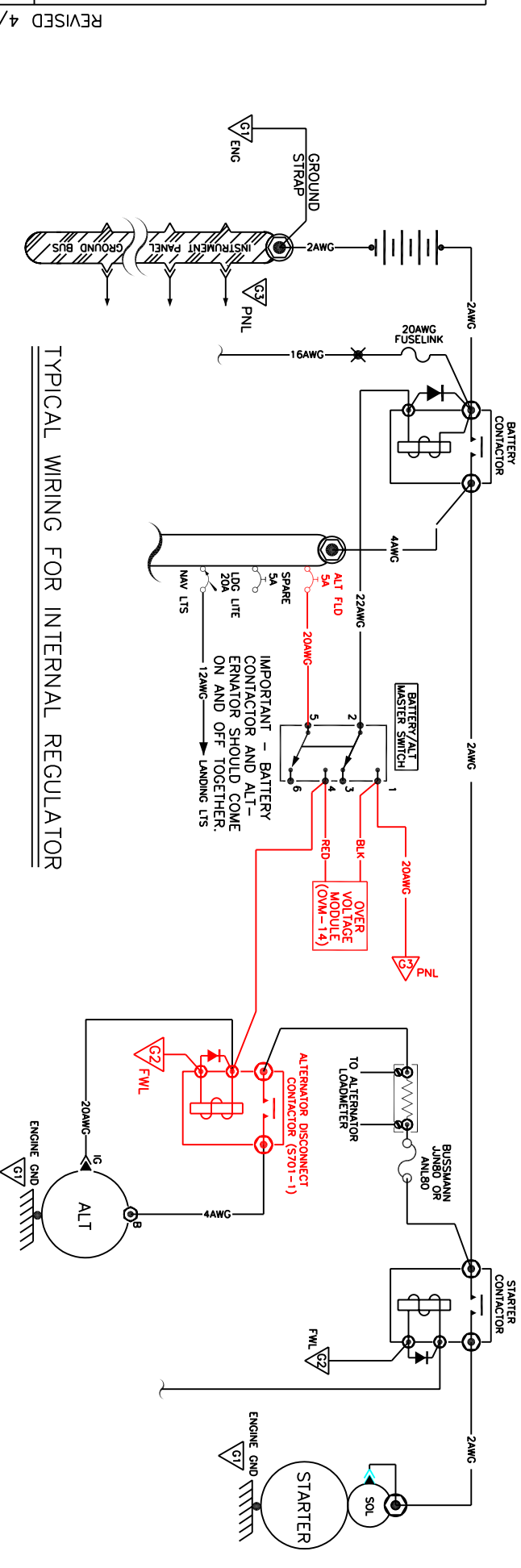
TEST SETUP FOR TESTING ON THE A/C
(See text)

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REVISED 4/16/2



TYPICAL WIRING FOR EXTERNAL REGULATOR



TYPICAL WIRING FOR INTERNAL REGULATOR