**Wire Number Circuit Description**

1 Generator field circuit (main feed)

2 Generator armature circuit (main positive line)

2A Alternator field, to 5A terminal on alternator

3 Generator ground circuit

3B Alternator ground circuit

4 Generator regulator to ammeter or shunt

5 Ammeter or shunt to starter terminal block or battery connection

5A Battery positive to alternator main feed

6 Battery to starter

7 Battery ground including master switch if in this circuit

8 Shunt to ammeter positive

9 Shunt to ammeter negative

10 Ammeter or shunt feed to instrument panel circuit breakers

11 Ignition switch feed or magneto ground (LH)

12 Ignition switch to ignition coil or booster switch to booster coil

13 Magneto ground (RH)

14 Starter switch circuit (including feed) to relay or solonoid

15 Main light switch feed

16 Light switch (HT) to service headlamp or dimmer switch

17 Dimmer switch to high beam service lamps

18 Dimmer switch to low beam service lamps

19 Light switch (BOD) to blackout driving lamp including resistor

20 Light switch (BHT) to blackout marker lamps

21 Light switch (HT) to service tail lamp

22 Light switch (S) to service stop lamp

22-460 Turn signal switch to right rear stop lamp

22-461 Turn signal switch to left rear stop lamp

23 Light switch (BS) to blackout stop lamp

24 Light switch (BHT) to blackout tail lamp

25 Horn switch (including feed) to horn or horn relay

26 Horn relay feed and horn relay to horn

27 Instruments feed (instruments with polarity)

28 Fuel indicator to sending unit if single tank, or left upper tank indicator to selector switch

29 Fuel selector switch to right upper tank

30 Fuel selector switch to left lower tank

31 Fuel selector switch to right lower tank

32 Oil level sending unit to indicator or selector switch

33 Water and oil temperature indicator to sending unit

34 Low engine oil pressure warning light circuit, including feed

35 High water temperature warning light circuit, including feed

36 Oil pressure indicator to sending unit

37 Outlet socket

38 Dome light circuit, including breaker and switch

39 Map light circuit

40 Instrument light circuit

41 Interphone #1

42 Interphone #2

43 Interphone #3

44 Interphone #4

45 Interphone #5

46 12 Volt radio circuit, including radio master switch

47 Slip ring feed

48 24 volt radio feed

49 Receptacle, aux power outlet, positive lead

50 Receptacle, aux power outlet, negative lead

51 Interphone #7

52 6 volt tap on tail light dropping resistor to tail light

53 Electric brake control circuit

54 Fuel cut-off circuit

55 Flame primer low tension circuit

56 Flame primer high tension circuit

57 Instrument panel ground

58 Compass light circuit

58E Voltmeter ground

59 Hull ventilating fan circuit

60 Interphone #6 (extra)

61 Auxiliary generator field

62 Auxiliary generator armature (positive line)

63 Auxiliary generator ground

64 Auxiliary generator regulator to battery, including heater transfer switch

65 Auxiliary generator starter relay circuit, including switch and feed

66 Auxiliary generator starter to transfer switch, including starter or relay

67 Emergency stop switch ground

68 Battery interconnecting cables

69 Resistor to ground terminal on trailer coupling

70 Regulator ground (LH)

71 Windshield wiper circuit

72 Low transmission oil pressure indicator circuit, with feed (LH)

73 Radio terminal box to ground

74 Starter solonoid circuit (actuating) including switch or relay

75 Stop switch circuit (SW to SS on main light switch)

76 Fuel pump control feed

77 Fuel pump switch to fuel pump left

77B Fuel pump safety cut-out switch (??)

78 Fuel pump switch to fuel pump right

79 Fuel tank ground

80 Ignition coil to distributor

81 Battery positive feed to starting motor terminal block, including master switch

82 Starter motor terminal block to starter motor, left

83 Main light switch (TT) to tail light connection on trailer receptacle

84 Main light switch (SS) to stop light connection on trailer receptacle

85 Low air pressure indicator light

86 Ground on series parallel switch, to ammeter, including circuit breaker

87 Spotlight circuit for trucks and wreckers

88 Winch torque limited control

89 Automatic choke

90 Trailer receptacle to ground

91 Headlamp to ground

92 Parking lamp to ground

93 Starter relay grounding circuit

94 Starter relay auxiliary grounding circuit

95 Tail lamp to ground

96 Speedometer sending unit feed

97 Tachometer sending unit feed

98 Interphone #8

99 Interphone #9

100 Turret feed

101 Impulse relay feed (L terminal on impulse relay)

102 Large cal. gun firing solenoid to impulse relay (S terminal)

103 Small cal. gun firing solenoid to firing switch

104 Traverse motor feed

105 Recoil circuit on gyro control, through recoil switch

106 Gyro control (#3 on an connector) to motor stabilizer control, yellow post

107 Gyro control (#1 on an connector) to motor stabilizer control, green post

108 Stiffness circuit including disengage switch

109 Gyro stab. switch feed including circuit breaker and switch to gyro motor or anti-backlash switch

110 Gun firing and lights, circuit breaker feed

111 Gun firing switch, feed from circuit breaker including safety switch

112 Gun firing safety switch indicator light

113 Firing switch to large gun firing solenoid or impulse relay (F terminal)

114 Gyro control resistors feed

115 Firing relay feed

116 Gyro indicator light feed

117 Positive lead to gun firing switches

119 Normally open side of anti-backlash switch, to circuit #107

120 Normally closed side of anti-backlash switch to gyro control resistors feed

121 Junction of circuits #114 and 120 to gyro motor feed

122 Firing switch to loaders safety relay

123 Loaders safety relay to shell primer

124 Firing switches to selector switch

125 Feed to loaders trip button

126 Loaders trip button to feed on test relay

127 Test relay to loaders safety relay coil

128 Loaders trip button through loaders setting button to controlled side of test relay

129 Loaders ready to fire indicator circuit

130 6.5 inch selector light

132 Ammunition hoist circuit

133 Parallel disconnect circuit

137 Outlet socket

138 Dome lamp, spot light and reel circuit

141 Interphone #1

142 Interphone #2

143 Interphone #3

144 Interphone #4

145 Interphone #5

146 12 Volt radio circuit

147 Light for periscope and sighting devices

148 24 Volt radio feed

149 Commanders master control circuit

151 Interphone #7

152 Commanders master control circuit feed

154 Rammer motor control circuit, including switch and indicator

155 Elevating motor feed through circuit breaker and main switch and indicator ligh

156 Brake solenoid feed through brake relay

157 Elevating lead from reversing relay to elevating depressing motor

158 Depressing lead from reversing relay to delevating depressing motor

159 Turret vent fan

160 Interphone #6 (extra when used)

161 Feed for elevating and depressing control mechanism through circuit breaker

162 Elevating relay control through control switch and limit switch

163 Depressing relay control through control switch and limit switch

164 Brake relay control through brake switch and ground

165 Elevating and depressing relay mechanism to ground

166 Automatic elevation control through resistor and limit switch

167 Automatic depressing control through resistor and limit switch

168 Equilibrator motor feed including switch and indicator light

169 Gun, How. firing area control circuit

173 Radio terminal box to ground

174 Rammer control circuit

198 Interphone #8

199 Interphone #9

201 Generator field circuit

202 Generator armature circuit

203 Generator ground circuit

204 Generator regulator to ammeter or shunt

211 Right hand ignition switch feed

212 Right hand ignition switch RH coil

214 Starter switch or relay feed circuit

233 Temperature gauge to sending unit

234 Oil pressure pilot light

235 Water temperature pilot light

236 Oil pressure gauge to sending unit

255 Flame primer low tension circuit

256 Flame primer high tension circuit

267 Emergency stop switch

270 Regulator ground right hand

272 Transmission oil pressure pilot circuit light

274 Starter solenoid circuit right

280 Ignition coil to distributor

282 Starter motor feed right hand

293 Starter relay grounding circuit

294 Starter relay auxiliary grounding circuit

300 Air pressure gauge to sending unit

301 Ignition switch to throttle solenoid through feed terminal in terminal box

302 Throttle solenoid to throttle out switch (H)

303 Throttle out switch to brake throttle switch (A)

304 Feed terminal in terminal box to feed on clutch switch (D) and normal range switch (E)

305 Normal range switch to low range (F) and high switches (G)

306 High range switch on low/high range shift to switch on high/normal range shift switch (K)

307 Switch on high/normal range feeding direct solenoid and converter solenoid

311 Brake governor switch (C) joining 312 to low side of governor

312 Convertor solenoid to brake governor switch (C)

313 Common lead on brake governor switches to high side of governor

314 Brake governor switch (B) to direct solenoid

315 Low range switch (F) on low/high range shift to high range solenoid

316 High range solenoid ground

317 Clutch switch (D) to clutch solenoid

318 Clutch solenoid to clutch solenoid ground switch (J) on converter direct shift

319 Common side of throttle cutoff switch and clutch grounding switch to grounding terminal on terminal box

320 Brake throttle switch to grounding terminal on terminal box

321 Transmission lube pressure gauge circuit

324 Transmission temperature gauge circuit

325 Red flasher light with switch indicator and flasher

326 Differential low oil pressure warning light

327 Transmission high oil temperature warning light

329 Feed to transmission and steering control

330 Transmission high range control

331 Transmission low range control

332 Transmission reverse range control

333 Transmission clutch lockup control

334 Steer control right

335 Steer control left

336 Converter low oil pressure

337 Pilot control indicator circuit

338 Co-pilot control indicator circuit

339 Converter low lubricating oil pressure

340 Speed selector switches feed, pilot

341 Steer selector switches feed, pilot

342 Speed selector switches feed, co-pilot

343 Steer selector switches feed, co-pilot

344 Inlet fan, right

345 Inlet fan, left

346 Circulating fan, right

347 Circulating fan, left

400 Heater feed

401 Heater starting switch to coil and indicator light

402 Heater starting switch to pump and solenoid valve

403 Running switch to thermal switch

404 Thermal switch to heater starting switch

405 Heater starting switch to motor and indicator light if used

406 Heater ignition circuit and indicator light if used

407 Heater in operating position indicator circuit

408 Oil heater circuit including indicator

409 Compartment heater circuit, including control unit

410 Safety valve reset circuit

411 Ventilation fan lead

412 Auxiliary generator transfer switch to battery heater and indicator

413 Heater relay control circuit

414 Auxiliary generator voltage control reostat to voltage regulator

415 Feed to special ventilating fan or rotoclone

416 Ground lead for special ventilating fan or rotoclone

417 Auxiliary shunt to auxiliary ammeter positive

418 Auxiliary shunt to auxiliary ammeter negative

419 Main feed to auxiliary control box

420 Auxiliary engine oil pressure gauge circuit

421 Auxiliary engine fuel cut off valve

422 Auxiliary engine magneto ground

423 Signal lamp auxiliary interphone

424 Field telephone auxiliary interphone

425 Field telephone auxiliary interphone

426 Ground auxiliary interphone

427 Tachometer, electric, "A" terminal, send to receive

428 Tachometer, electric, "B" terminal, send to receive

429 Tachometer, electric, "C" terminal, send to receive

430 Tachometer, electric, "D" terminal, send to receive

431 Speedometer, electric, "A" terminal, send to receive

432 Speedometer, electric, "B" terminal, send to receive

433 Speedometer, electric, "C" terminal, send to receive

434 Speedometer, electric, "D" terminal, send to receive

435 Rear door emergency warning light

436 Comp. feed including relay

437 Comp. relay control circuit including switch

450 Bilge pump switches feed and jumper between switches

451 Bilge pump switch to rear bilge pump

452 Bilge pump switch to front bilge pump

453 Ignition retard circuit, starter to solenoid through normally closed switch

454 Ignition retard circuit, battery to normally open side of switch

455 Two speed generator control circuit

456 Auxiliary generator disconnect control circuit including the switch

457 Interphone #10

458 Engine fan clutch circuit

459 Control circuit for master relay and indicator light

459B Master relay feed

460 Turn indicator circuit, right, front signal/marker lights

461 Turn indicator circuit, left, front signal/marker lights

462 Generator equalizer circuit, shunt type

463 Interphone #11

464 Interphone #12

465 Range finder feed

466 Range finder ground lead

467 Light switch to turn indicator switch feed

468 Bulldozer actuator armature feed

469 Bulldozer actuator field and clutch feed

470 Bulldozer control solenoid valve circuit

471 Winch control switch feed

472 Winch reverse solenoid circuit

473 Winch forward solenoid circuit

474 Front end fuel tank solenoid

475 Rear end fuel tank solenoid

476 Transmission fan clutch circuit

477 Differential filter pressure circuit

478 Generator equalizer circuit, interpole type

478A Auxiliary generator equalizer circuit

478M Main generator equalizer circuit

479 Battery heater control circuit

480 Wrecker solenoid valve control circuit

481 Magneto switch feed

482 Feed to auxiliary engine magneto grounding relay

483 Turn indicator, right blackout light

484 Turn indicator, left blackout light

485 Cab feed

486 Manifold heater, main engine

487 Manifold heater, auxiliary engine

488 Rectifier control to master relay circuit

489 Clearance lamp service feed

490 Clearance lamp blackout feed

491 Parking lights to light switch

492 Ignition ground, ground mag. switch

493 Auxiliary generator temperature indicator circuit

494 Engine decompression control circuit

495 Transmission oil level gauge circuit

496 Flood or spot lamp ground

497 Red flasher ground

500 Three phase circuit lead "A"

501 Three phase circuit lead "B"

502 Three phase circuit lead "C"

503 Motor generator/alternator feed

504 Motor generator/alternator ground

505 Motor generator/alternator control box feed

506 Generator charge indicator circuit, left or main engine

507 Generator charge indicator circuit, right engine

508 Generator charge indicator circuit, auxiliary engine

509 Warning light circuit, selective warning system

511 Battery heater feed, from engine generator to series paralleling switch

512 Battery heater feed, battery heaters in parallel

513 Battery heater feed, battery heaters in series

514 Dimmer switch to blackout upper beam (IR)

515 Dimmer switch to blackout lower beam (IR)

516 Power pack feed (IR)

517 Periscope feed (IR)

518 Flood or work lamp feed

519 High beam indicator circuit

520 Main light switch to IR BOD selector

550 Power feed to pulsing relay box

551 Traverse lead between cont. potentiometer wiper and relay contacts

552 Traverse center tap on cont. handle potentiometer to deat spot res.

553 Elevation center tap on cont. handle potentiometer to deat spot res.

554 Elevation lead between cont. potentiometer wiper and relay contacts

555 Common ground in pulsing relay system

567A Voltmeter from ignition switch

568 Alternator field from ignition switch

600 Elevation tracking motor feed

601 Tracking motor elevating circuit

602 Tracking motor depressing circuit

603 Elevation gyro gauge circuit

604 Elevation gyro motor and pickoff motor feed

605 Elevating electrodyne feed

606 Elevating electrodyne circuit

607 Depressing electrodyne circuit

608 Traverse tracking motor feed

609 Tracking motor left traversing circuit

610 Tracking motor right traversing circuit

611 Traverse gyro gauge circuit

612 Traverse gyro motor and pickoff motor feed

613 Left traversing electrodyne circuit

614 Right traversing electrodyne circuit

615 Traversing electrodyne feed

616 Hydraulic valve circuit

617 Loaders traverse safety lamp feed

618 Delay relay coil circuit

619 Thermo delay switch actuating circuit

620 Delay relay holding circuit

621 Gunners handle pickoff motor feed

622 Commanders handle pickoff motor feed

623 Commanders override circuit

624 Commanders override switch feed

625 Main positive feed to turret control box

630 Delay circuit feed

631 Safety lamp return

632 Loaders safety switch and safety lamp feed

633 Loaders safety relay coil circuit

640 Auxiliary generator decompression circuit

641 Booster motor control

642 Booster motor power

643 Inverter feed

644 Inverter ground

645 Turret relay control circuit

700 Single phase 115 volt grounded

701 Single phase 115 volt

702 Receptacle outlet 115 volt

703 Blackout light switch feed 115 volt

704 Converter feed 115 volt

705 Blackout dome lamp feed 115 volt

706 Service dome lamp feed including switch 115 volt

707 Blackout switch from blackout lamp feed to blackout relay 115 volt

708 Blackout relay to blackout switch and service dome lamp 115 volt

709 Blackout relay energizing coil feed including blackout door switch

710 Blackout relay energizing coil return

801 Ratio selector switch, high

802 Ratio selector switch, low

803 Left traverse switch

804 Right traverse switch

805 Up elevation switch

806 Down elevation switch

807 Ratio selector, low external feed

808 Ratio selector, high external feed

809 Traverse hydraulic motor brake

810 Traverse potentiometer, left

811 Traverse potentiometer, right

812 Traverse and elevation potentiometer wipers, ground

813 Elevation potentiometer, up

814 Elevation potentiometer, down

815 Input to ratio selector switch

816 Input to traverse switches

817 Input to elevation switches

818 Cannon firing circuit

820 DC power to bridge box for amplifier heaters

821 Firing circuit DC to override relay

822 DC power for directional switches to override relay

823 DC power to inverter, pin lock, solenoid, and ratio solenoid

824 Bypass solenoid valve ground circuit through pressure switches

825 Solenoid valves ground circuit through line relay

830 AC to traverse velocity generator, primary

831 Ground side traverse velocity generator, secondary

832 Ground side traverse velocity generator, primary

833 Output traverse velocity generator, secondary

834 AC to elevation velocity generator, primary

835 Ground side elevation velocity generator, primary

836 Ground side elevation velocity generator, secondary

837 Output elevation velocity generator, secondary

838 Output of traverse amplifier

839 Ground for traverse amplifier

840 Traverse amplifier heater circuit

841 Traverse amplifier AC power feed

842 Velocity generator input to traverse amplifier

843 Bridge input to traverse amplifier

844 Bridge input to elevation amplifier

845 Velocity generator input to elevation amplifier

846 Elevation amplifier AC power feed

847 Elevation amplifier heater circuit

848 Ground for elevation amplifier

849 Output of elevation amplifier

850 Elevation servo balance potentiometer, up

851 Elevation servo balance potentiometer, wiper

852 Elevation servo balance potentiometer, down

853 Elevation servo

854 Elevation servo amplifier phase ground

855 Elevation servo line phase ground

856 Elevation servo line phase

857 Traverse servo balance potentiometer, right

858 Traverse servo balance potentiometer, wiper

859 Traverse servo balance potentiometer, left

860 Traverse servo amplifier phase

861 Traverse servo amplifier phase ground

862 Traverse servo line phase ground

863 Traverse servo line phase

870 Right traverse pilot valve solenoid

871 Left traverse pilot valve solenoid

872 Up elevation pilot valve solenoid

873 Down elevation pilot valve solenoid

875 Elevation limit potentiometer, down

876 Elevation limit potentiometer, up

877 Elevation limit potentiometer, up wiper

878 Elevation limit potentiometer, down wiper

879 AC power from inverter

880 Ratio selector governor and relay

881 Lock switch power feed

882 Turret lock switch on

883 Turret lock switch off

884 Gun lock power

885 Gun lock switch on

886 Gun lock switch off

887 Inverter ground

888 Turret lock power

889 Contactor to limit switch

891 Brake solenoid including contactor to battery

892 Turret lock motor armature and fields

893 Inverter power feed

894 Breech switch feed

895 Traverse interference switch feed

896 Oil gear elevation solenoid valve

900 Flame thrower battery lead

901 Flame thrower ignition coil to ignition switch

902 Flame thrower ignition coil to spark plugs

903 Flame thrower atomizing fuel solenoid valves to switch

904 Flame thrower main fuel solenoid valves to switch

905 Flame thrower timer to switch

906 Flame thrower secondary fuel solenoid valve to switch

925 Turret lock lamp switch feed

950 External voltage adjustment control rheostat

951 Boom auxiliary power motor cotrol

952 Boom auxiliary motor feed