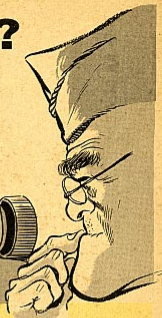
HOW'RE YOU AT NUMBERS?

Dear Half-Mast,
I assume that the numbers on the wiring in our trucks identify the circuits, same as in our tanks. Am I right? Where can I get a complete list of these numbers?
Sgt H.R.M.

Dear Sgt H. R. M.,
Right you are, the numbers on the wires on any military equipment identify the circuit. And these numbers are always the same, f'rinstance No. 1 circuit is the generator field circuit wherever you find it, No. 2 is the armature lead, no matter what Ordnance equipment you find it in, except the M4 tank and vehicles built upon the M4 chassis.
But, if you want to cut out and keep the list, here it is. You might find it handy when working with your equipment.
Half-Mast



The Old Sarge gives you a run-down on the electrical circuit numbers you find in your Army Ordnance equipment

Wire Number	Circuit Description
1	Generator Field Circuit
2	Generator Armature Circuit
3	Generator Ground Circuit
4	Generator regulator to Ammeter or shunt
5	Ammeter or shunt to starter terminal block or battery connected
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 to instrument panel circuit breakers
11	Ignition switch feed or magneto ground (L.H.)
12	Ignition switch to ignition coil or booster switch to booster coil
13	Magneto ground (R.H.)
14	Starter switch circuit (including feed) to relay or solenoid
15	Main light switch feed
16	Light switch (HT) to service headlamp or dimmer switch
17	Dimmer switch to upper beam
18	Dimmer switch to lower beam
19	Light switch (BOO) 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
23	Light switch (BS) to blackout stop lamp
24	Light switch (BHT) to blackout tail lamps
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 gage to sending unit, or left upper tank gage 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 gage or selector switch
33	Water and oil temperature gage 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 gage to sending unit
37	Outlet socket
38	Dome lamp 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

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Wire Number	Circuit Description
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
59	Hull ventilating fan circuit
60	Interphone #6 (extra)
61	Aux. Generator Field
62	Aux. generator armature
63	Aux. generator ground
64	Aux. gen. regulator to battery (incl heater transfer SW.)
65	Aux. generator starter relay circuit, including switch and feed
66	Aux. gen. starter to transfer switch incl. starter or relay
67	Emergency stop switch ground
68	Battery interconnecting cables

Wire Number	Circuit Description
69	Resistor to ground terminal on trailer coupling
70	Regulator ground (L.H.)
71	Windshield wiper circuit
72	Low transmission oil pressure indicator circuit, with feed (L.H.)
73	Radio terminal box to ground
74	Starter solenoid 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
78	Fuel pump switch to fuel pump right
79	Fuel tank ground
80	Ignition coil to distributor
81	Battery 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 stoplight connection on trailer receptacle
85	Low air pressure indicator light
86	Ground on series parallel SW, to ammeter, incl. circ. BR.
87	Spotlight circuit for trucks and wreckers
88	Winch torque limited control
89	Automatic choke
90	Trailer receptacle to ground

Wire Number	Circuit Description
91	Headlamp to ground
92	Parking lamp to ground
93	Starter relay grounding circuit
94	Starter relay aux. 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. SW. feed. incl. circ. BR. & SW. to gyro motor or anti-backlash SW
110	Gun firing and lights, circuit breaker feed
111	Gun firing SW, feed from circ. BR. (incl. safety SW)
112	Gun, firing safety switch indicator light
113	Firing SW. to large gun firing sol. or impulse relay (F term)

Wire Number	Circuit Description
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 SW. to circuit #107
120	Normally closed side of anti-backlash SW. to gyro control resistors feed
121	Junction of Circ. #114 & 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 LP. spot LT. and reel circuit
141	Interphone #1
142	Interphone #2
143	Interphone #3
144	Interphone #4

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Wire Number	Circuit Description
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	Commander's master control circuit feed
154	Rammer motor control circuit, including switch & indicator
155	Elevating motor feed through circuit breaker and main switch and indicator light
156	Brake solenoid feed through brake relay
157	Elevating lead from reversing relay to elevating depressing motor
158	Depressing lead from reversing relay to elevating depressing motor
159	Turret vent. fan
160	Interphone #6 (extra when used)
161	Feed for elevating & depressing control mechanism thru circuit breaker
162	Elevating relay control thru control switch and limit switch
163	Depressing relay control thru control switch and limit switch
164	Brake relay control thru brake switch and ground
165	Elevating and depressing relay mechanism to ground
166	Automatic elevation control through resistor & limit switch
167	Automatic depressing control through resistor & 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	General armature circuit
203	Generator ground circuit
204	Generator regulator to ammeter shunt
211	RH ignition switch feed
212	RH ignition switch RH coil
214	Starter switch or relay feed circuit
233	Temperature gauge to sending unit
234	Oil pressure pilot LT
235	Water temperature pilot LT
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 RH
272	Transmission oil pressure pilot circuit-right
274	Starter solenoid circuit-right
280	Ignition coil to distributor
282	Starter motor lead (feed) RH
293	Starter relay grounding circuit
294	Starter relay aux. grounding circuit

TORQUE CONVERTER & SPECIAL DRIVING EQUIPMENT CIRCUIT NAMES

Wire Number	Circuit Description
300	Air Pressure gauge to sending unit
301	Ignition SW. to throttle sol. through feed term in term box
302	Throttle solenoid to throttle out switch (H)
303	Throttle out switch to brake throttle switch (A)
304	Feed term in term box to feed on clutch SW. (D) & normal range SW. (E)
305	Normal range switch to low range (F) & high switches (G)
306	Hi-range SW. on low range-Hi range shift to SW. on Hi-range-norm. range shift SW. (K)
307	SW on Hi-range-norm. range feeding direct sol. & converter sol.
311	Brake governor switch (C) joining 312 to low side of governor
312	Converter solenoid to brake governor switch (C)
313	Common lead on brake governor switches to high side on governor
314	Brake governor switch (B) to direct solenoid
315	Low range switch (F) on low range-Hi shift to HI range solenoid
316	High range solenoid ground
317	Clutch switch (D) to clutch solenoid
318	Clutch sol. to clutch sol. ground SW. (J) on converter direct shift
319	Common side of throttle cut-off SW. & clutch sol. grounding SW. to grounding term in term box
320	Brake throttle switch to grounding terminal in terminal box
321	Transmission lube pressure gage circuit
324	Transmission temperature gage 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

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SPECIAL EQUIPMENT AND WINTERIZATION CIRCUIT NAMES

Wire Number	Circuit Description
400	Heater feed
401	Heater starting switch to coil & 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 & 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	Aux. generator transfer switch to battery heater & indicator
413	Heater relay control circuit
414	Auxiliary gen. voltage control rheostat 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 gage circuit
421	Auxiliary engine fuel cut-off valve
422	Auxiliary engine magneto ground
423	Signal lamp aux. interphone
424	Field telephone aux. interphone
425	Field telephone aux. interphone
426	Ground aux. 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 incl. relay
437	Comp. relay contr. circuit incl. SW
450	Bilge pump switches feed. & jumper between switches

Wire Number	Circuit Description
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	Aux. gen. disconnect control circuit, including the switch
457	Interphone #10
458	Engine fan clutch circuit
459	Control circuit for master relay, and indicator light
460	Turn indicator circuit, right, service
461	Turn indicator circuit, left, service
462	Generator equalizer circuit, shunt type
463	Interphone #11
464	Interphone #12
465	Range finder, feed
466	Range finder, ground lead
468	Bulldozer, actuator, armature feed
469	Bulldozer, actuator, field & 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
479	Battery heater control circuit
480	Wrecker solenoid valve control circuit
481	Feed to magneto switch
482	Feed to auxiliary engine magneto grounding relay
483	Turn indicator, right blackout
484	Turn indicator, left blackout
485	Cab feed
486	Manifold heater main engine
487	Manifold heater aux. engine
488	Control, rectifier, to master relay circuit
489	Clearance lamp service feed
490	Clearance lamp B. O. feed
491	Parking lights to light switch
492	Ignition ground (GR mag. SW)
493	Aux. Gen. temp. (indicator circuit)
494	Engine decompression control circuit
495	Trans. oil level gage circuit
496	Spotlight or flood lamp ground
497	Red flasher ground

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Wire Number	Circuit Description
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 ind. circuit (left engine)
507	Generator charge ind. circuit (right engine)
508	Generator charge ind. circuit (aux. engine)
509	Warning light circuit, selective warning system
511	Battery heater feed, from eng. gen. to series paralleling switch
512	Battery heater feed, battery heaters in parallel
513	Battery heater feed, battery heaters in series
514	Dimmer switch to B.O. upper beam (IR)
515	Dimmer switch to B.O. lower beam (IR)
516	Power pack feed (IR)
517	Periscope feed (IR)
518	Flood lamp 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	Trav. lead between cont. potentiometer wiper and relay contacts
552	Trav. center tap on cont. handle potentiometer to dead spot res.
553	Elev. center tap on cont. handle potentiometer to dead spot res.
554	Elev. lead between cont. potentiometer wiper and relay contacts
555	Common ground in pulsing relay system
600	Elevation tracking motor feed
601	Tracking motor elevating circuit
602	Tracking motor depressing circuit
603	Elevation gyro gage circuit
604	Elevation gyro motor & pickoff motor feed
605	Elevating electrodyne feed
606	Elevating electrodyne circuit
607	Electrodyne depressing circuit
608	Traverse tracking motor feed
609	Tracking motor left traversing circuit
610	Tracking motor right traversing circuit
611	Traverse gyro cage circuit
612	Traverse gyro motor & pickoff motor feed
613	Electrodyne left traversing circuit
614	Electrodyne right traversing circuit
615	Traversing electrodyne feed
616	Hydraulic valve circuit
617	Loaders traverse safety lamp feed
618	Delay relay coil circuit

Wire Number	Circuit Description
619	Thermo delay switch actuating circuit
620	Delay relay holding circuit
621	Gunner's handle pickoff motor feed
622	Commander's handle pickoff motor feed
623	Commander's override circuit
624	Commander's override switch feed
625	Main positive feed to turret control box
630	Delay circuit feed
631	Safety lamp return
632	Loader's safety switch & safety lamp feed
633	Loader's safety relay coil circuit
640	Aux. 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	B. O. dome lamp feed 115 volt
706	Service dome lamp feed including switch (115 volt)
707	115 blackout SW. from BO lamp feed to BO relay
708	115 V. blackout relay to BO SW. and service dome lamp
709	Blackout relay emergizing coil feed incl. BO door SW.
710	Blackout relay emergizing 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

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Wire Number	Circuit Description
820	D. C. power to bridge box for amplifier heaters
821	Firing circuit D. C. to override relay
822	D. C. power for directional switches to override relay
823	D. C. to inverter, pin lock, solenoid, and ratio solenoid
824	By pass Sol valve ground Ckt. thru pressure switches
825	Solenoid valves ground Ckt. thru line relay
830	A. C. 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	A. C. 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 amplified heater circuit
841	A. C. power to traverse amplifier
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	A. C. power to elevation amplifier
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 amplifier phase
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	A. C. 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	Traversing interference switch feed
896	Oil gear elevation solenoid valve
900	Flame thrower battery feed
901	Flame thrower ignition coil to ignition switch
902	Flame thrower ignition coil to spark plugs
903	Flame thrower atomizing fuel solenoid valves to SW
904	Flame thrower main fuel solenoid valves to SW.
905	Flame thrower timer to switch
906	Flame thrower secondary fuel solenoid valve to SW.
925	Turret lock lamp switch feed
950	External voltage adjustment control rheostat
951	Boom auxiliary power motor control
952	Boom auxiliary motor feed

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