1971

Colorized Mustang Wiring & Vacuum Diagrams

(with Electrical Illustrations)

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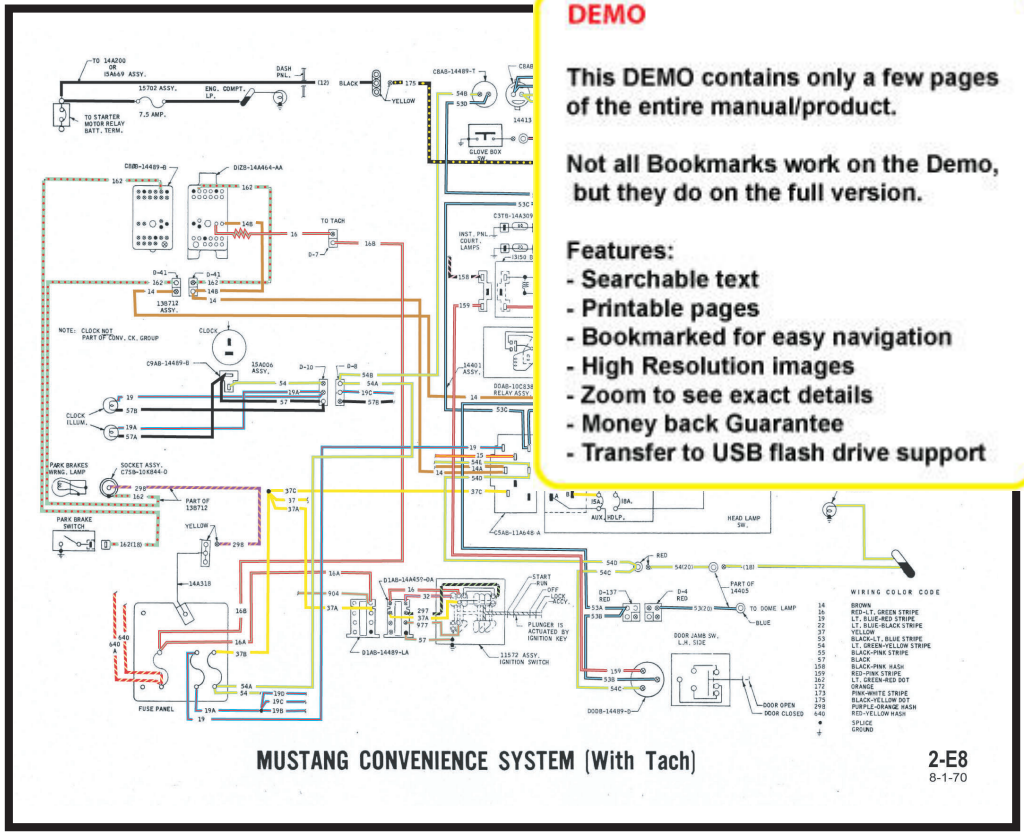

Example of colorized diagrams

1971 Colorized Mustang Wiring and Vacuum Diagrams
(Extracted from Form FD-7795P-71, Form 7098-71-3, FP-7635B, and FD-7943-G)
EAN: 978-1-60371-030-5
ISBN: 1-60371-030-2

Forel Publishing Company, LLC
3999 Peregrine Ridge Ct.
Woodbridge, VA 22192

Note from the Editor

This product was compiled using several original Ford Motor Company publications. In some cases, there are slight differences between publications, so it is important to compare between diagrams, schematics, or illustrations. The contents of this product were extracted from: *1971 Wiring and Vacuum Diagrams* (Form FD-7795P-71), *1965/1972 Ford Car Master Parts and Accessory Catalog* (Form FP-7635B), 1971 Car Shop Manual (Volume III, FORM 7098-71-3), and *How to Read Wiring Diagrams* (FD-7943-G, January 1968).

Disclaimer

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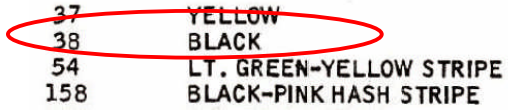
ATTENTION

Please Read This

It is important to note that there may be errors in the diagrams, even though they are original Ford publications. Below are two examples of possible errors because the color code on the page diagram does not match the master Car Standard Wire Code Chart. If your vehicle has a color coded wire that does not match a diagram you should consult the other diagrams contained in the manual for a possible match.

Example of possible errors

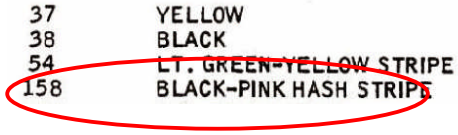


In the wiring diagrams from the Ford publication Form 7795P-71, the Key Warning Buzzer Wiring Color Code shows:

38 Black

However, the Car Standard Wire Color Code Chart lists:

38 – Black-Orange Stripe



In the wiring diagrams from the Ford publication Form 7795P-71, the Key Warning Buzzer Wiring Color Code shows:

158 Black-Pink HASH STRIPE

However, the Car Standard Wire Color Code Chart lists:

158 – Black- Pink HASH

The color coded wiring diagrams are provided for illustration purposes only. Only the wire number should be used for the identification of the wire itself. The color coding of the wires in the product may not match the actual colors of the wires in the vehicle. In some cases, the colors have been altered to provide a visual contrast (i.e. the color white has been shaded to make it more visible). As stated in the paragraph above, there are some variation and/or differences between the original Ford wiring diagrams. If your vehicle has a color coded wire that does not match a diagram you should consult the other diagrams contained in the manual for a possible match.

Source Document
Ford Publication Form 7795P-71

1971 WIRING and VACUUM DIAGRAMS

COURSE 13003 and 1703

Ford

SERVICE TRAINING

FORM 7795P-71

FOREWORD

This book contains wiring and vacuum diagrams for all Ford and Lincoln-Mercury car lines and all Ford trucks.

Both wiring and vacuum diagram replacement sheets will be released as required to keep the book current.

All vacuum systems are contained in a separate section.

This book is divided by vehicles. Refer to the applicable section as follows:

- Pinto
- Maverick and Comet
- Mustang and Cougar
- Torino
- Montego
- Ford and Meteor
- Mercury
- Thunderbird
- Mark III
- Lincoln
- Bronco, Econoline and P-Series
- B and F-100-750 Series
- C and CT-Series
- W-Series
- L-Series

HOW TO USE THE WIRING DIAGRAMS

Two styles of wiring diagrams are contained in this book.

I – Cars (Except Mustang, Cougar and Lincoln) and L-Series Truck.

II – Mustang, Cougar, Lincoln and Truck (Except L-Series

I – CARS (Except Mustang, Cougar and Lincoln) AND L-SERIES TRUCKS

Each electrical circuit is illustrated in a clear and easy to follow style.

There are 7 steps that should be followed to use this diagram to diagnose electrical problems.

- Verify the complaint
- Refer to the Index
- Locate inoperative system
- Identify other systems on the circuit
- Isolate the problem area
- Correct the problem
- Operate the corrected system

VERIFY THE COMPLAINT

To diagnose a customer complaint "Back Up Lights Don't Work" the first thing we should do is verify the complaint.

If both lights do not work, refer to the INDEX on page 1 of the vehicle schematic.

REFER TO THE INDEX

An INDEX is provided on page 1 to locate the inoperative components.

See LAMPS – BACK-UP on the INDEX. The INDEX lists the location of the part on the drawing.

The drawing is set up like a road map. For example: the Pinto Back-up lights are located at B-27. To locate B-27 on the schematic, find the number 27 at the top of the illustration.

Now, find the letter B on the side of the illustration. Follow the number and the letter until they intersect. The part will be within an inch or two of the intersection.

LOCATE INOPERATIVE SYSTEM

Generally, the power supply for all components on this drawing comes from the top of the page and over to the battery at the left.

The ground for each component is always toward the bottom of the drawing.

There are symbols used on this drawing that are explained as follows:

- Ground symbols are shown in Figure 1. A ground wire connected away from the component is identified by a code G1 or G2, etc. The location of the remote ground is listed in the GROUND CODES chart and the bottom of the page.

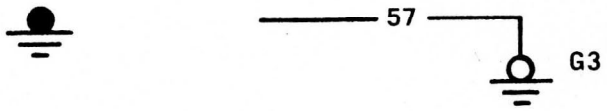


Fig. 1 — Ground Symbols

- Wire color code is shown in Fig. 2. Wiring Color Codes are listed at the bottom of the drawing. New Standard Wiring Color Codes are listed be hind these instructions.

Fig. 2 — Wire Color Code

CORRECT THE PROBLEM

Use standard continuity tests for open circuits and short circuit tests to find the specific problem.

Repair or replace the electrical component that is malfunctioning.

OPERATE CORRECTED SYSTEM

It is a good practice to operate the system after a repair has been made to see if it now works.

BULB AND FUSE CHART

A bulb and fuse chart is included on the first page of this schematic for your convenience.

II – MUSTANG, COUGAR, LINCOLN AND TRUCKS (Except L-Series)

The index page is the first page in each section. Each electrical schematic will have a notation as to the source of power for that system. All wires will be shown as single lines to provide a clear understanding of the diagrams. To trace a circuit, it is recommended to start at the ground circuit of the inoperative component, trace it through all connectors to the source, and note the possible trouble areas and points of most convenient access. Wire connectors will be identified on the schematic and the pictorial drawings, this will show the technician the location of the connectors. Most wire connectors are shown in open book fashion. A wire on the top right of a connector (open side by side) will be on the top left side of the other half of the connector. See Figure 9 (Wire No. 140 to No. 140A, etc.)

Wire disconnects and connectors will all be black unless a color code is noted on the diagram. The colored disconnects and connectors are to aid the technician in finding the proper circuit to be tested or traced. Pictorial drawings of a component will include the specific location of some components in cases where it is difficult to determine if the component is under the instrument panel or in the engine compartment.

Relays and switches are shown in the "System Off" position. If a vehicle specific wire color in a connector does not match the diagram shown, it can usually be identified by comparing the other colors shown at the wire connectors. Specific wire color deviations in the manufacturing of a wire harness are usually for a short duration.

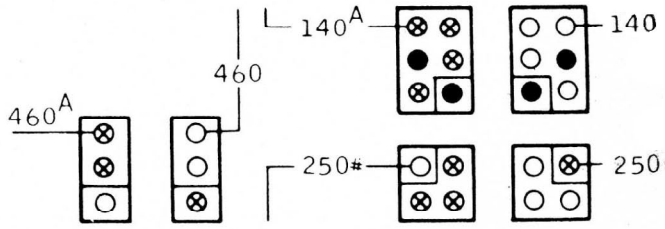


Fig. 9 – Connectors

CAR STANDARD WIRE COLOR CODE CHART
(1 OF 3)

CIRCUITS IN CURRENT USE
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CIRCUIT	DESCRIPTION	COLOR NO.	BASE	STRIPE	WASH	DOT	CIRCUIT
* 1	HORN SWITCH CONTROL	69	DK BLUE				1*
2	RH FRONT TURN SIGNAL LAMP	56	WHITE	LT BLUE			2
3	LH FRONT TURN SIGNAL LAMP	39	LT GREEN	WHITE			3
4	ALTERNATOR REG. "S" TERM. TO ALTERNATOR "S" TERM	51	WHITE	BLACK			4
5	RH REAR TURN SIGNAL LAMP	25	ORANGE	LT BLUE			5
6	HORN RELAY TO HORN	138	YELLOW		LT GREEN		6
7	SEAT SWITCH ARM TERM TO RELAY FIELD TERM	232	LT GREEN			YELLOW	7
8	TURN SIGNAL FLASHER FEED	23	ORANGE	YELLOW			8
9	LH REAR TURN SIGNAL LAMP	36	LT GREEN	ORANGE			9
10	STOPLAMP SWITCH FEED	147	LT GREEN		RED		10
12	HEADLAMP DIMMER SWITCH TO HIGH BEAMS	34	LT GREEN	BLACK			12
13	HEADLAMP DIMMER SWITCH TO LOW BEAMS	14	RED	BLACK			13
* 14	HEADLAMP SWITCH TO TAIL LAMPS AND SIDE MARKER LAMPS	7	BROWN				14*
15	HEADLAMP SWITCH TO HEADLAMP DIMMER SWITCH	16	RED	YELLOW			15
16	IGNITION SWITCH TO IGNITION COIL "BATT." TERMINAL	17	RED	LT GREEN			16
17	LOW OIL PRESSURE WARNING LAMP TO LOW OIL PRESS. SENDING UNIT	50	WHITE				17
18	SEAT SWITCH TO RELAY FIELD TERM	215	ORANGE			YELLOW	18
19	INSTRUMENT PANEL LAMPS FEED	42	LT BLUE	RED			19
22	BRAKE FEED	41	LT BLUE	BLACK			22
28	WINDSHIELD WIPER SW. TO WINDSHIELD WIPER MOTOR	181	BLACK			PINK	28
29	FUEL GAGE TO FUEL GAGE SENDER	32	YELLOW	WHITE			29
30	CONSTANT VOLTAGE UNIT AND INDICATOR LAMPS FEED	4	BLACK	LT GREEN			30
31	OIL PRESSURE INDICATOR TO OIL PRESSURE SENDING UNIT	52	WHITE	RED			31
32	STARTER CONTROL	18	RED	LT BLUE			32
35	ALTERNATOR REGULATOR "F" TERM. TO ALTERNATOR	25	ORANGE	LT BLUE			35
36	ALTERNATOR OUTPUT	223	YELLOW			WHITE	36
* 37	BATTERY TO LOAD	27	YELLOW				37*
38	POWER SUPPLY TO BATTERY	2	BLACK	ORANGE			38
39	TEMP. GAGE TO TEMP. SENDING UNIT	19	RED	WHITE			39
40	CIGAR LIGHTER FEED	45	LT BLUE	WHITE			40
41	WARNING LAMP FEED	102	BLACK		LT BLUE		41
42	SWITCH TO WARNING LAMP	206	RED			WHITE	42
43	LOW AIR BUZZER FEED	134	ORANGE		LT BLUE		43
44	TURN SIGNAL FLASHER TO TURN SIGNAL SWITCH	40	LT BLUE				44
45	HOT WATER TEMP. RELAY TO HOT WATER TEMP. SENDING UNIT	29	YELLOW	RED			45
* 48	BLIND CIRCUIT TERM IN HARNESS CANNOT BE CHECKED FOR CONT (COLOR OPT)	264					48*
51	SEAT REG. CONTROL SWITCH FEED	186	BLACK			WHITE	51
53	COURTESY LAMP SWITCH TO COURTESY LAMP	5	BLACK	LT BLUE			53
54	INTERIOR LAMP SWITCH FEED	37	LT GREEN	YELLOW			54
55	CARGO LAMP SW. TO CARGO LAMP	61	BLACK	PINK			55
56	WINDSHIELD WIPER SW. TO WINDSHIELD WIPER MOTOR	70	DK BLUE	ORANGE			56
* 57	GROUND CIRCUIT	1	BLACK				57*
58	WINDSHIELD WIPER SW. TO WINDSHIELD WIPER MOTOR	50	WHITE				58
60	CONSTANT VOLTAGE UNIT TO GAGE	184	BLACK			LT GREEN	60
61	WINDSHIELD WIPER SW. TO WINDSHIELD WIPER MOTOR	29	YELLOW	RED			61
63	WINDSHIELD WIPER SW. TO WINDSHIELD WIPER MOTOR	13	RED				63
65	WINDSHIELD WIPER SW. TO WINDSHIELD WIPER MOTOR	64	DK GREEN				65
66	AIR SHIFT SWITCH TO INDICATOR LAMP	40	LT BLUE				66
69	COIL TERM. IGN. SW. TO FUEL SOLENOID	118	RED		PINK		69
73	LOW AIR BUZZER TO LOW AIR BUZZER SWITCH	133	ORANGE		LT GREEN		73
74	RELAY "B" TERMINAL TO LAMP (WATER)	33	LT GREEN				74
75	STARTING MOTOR RELAY TO SERIES PARALLEL SW. (#1 TERM)	150	LT GREEN		PURPLE		75
80	ENGINE COMPARTMENT LAMP FEED	182	BLACK			ORANGE	80
84	DECK LID SOLENOID FEED	163	PURPLE		YELLOW		84
88	INSTRUMENT PANEL LAMP SWITCH FEED	6	BLACK	WHITE			88
89	GLOW PLUG TO GLOW PLUG SWITCH	24	ORANGE	LT GREEN			89
102	OVERDRIVE - KICKDOWN SWITCH TO OVERDRIVE GOVERNOR	50	WHITE				102
103	OVERDRIVE KICKDOWN SW. TO IGN. COIL	257	WHITE			RED	103
104	OVERDRIVE KICKDOWN SW. TO OVERDRIVE SOLENOID	43	LT BLUE	ORANGE			104
105	OVERDRIVE KICKDOWN SWITCH TO OVERDRIVE RELAY	203	RED			YELLOW	105
106	OVERDRIVE SOLENOID TO OVERDRIVE RELAY	40	LT BLUE				106
111	WARNING LAMP TO LIGHTS ON RELAY	3	BLACK	YELLOW			111
112	WARNING LAMP RELAY FEED	183	BLACK			YELLOW	112
113	STARTING MOTOR TO STARTING MOTOR RELAY	222	YELLOW			LT BLUE	113
114	FEED TO VACUUM DOOR LOCK SWITCH	113	TAN		YELLOW		114
115	VACUUM DOOR LOCK SWITCH TO SOLENOID (LOCK)	33	LT GREEN				115
116	VACUUM DOOR LOCK SWITCH TO SOLENOID (UNLOCK)	188	BROWN			ORANGE	116
117	DOOR LOCK MOTOR (LOCK)	207	PINK			BLACK	117
118	DOOR LOCK MOTOR (UNLOCK)	208	PINK			ORANGE	118
119	DOOR LOCK SWITCH (LOCK)	209	PINK			YELLOW	119
120	DOOR LOCK SWITCH (UNLOCK)	210	PINK			LT GREEN	120
122	TOP CONTROL SWITCH TO TOP CONT. MOTOR OR RELAY	27	YELLOW				122
123	TOP CONTROL SWITCH TO TOP CONT. MOTOR OR RELAY	13	RED				123
125	MAP LAMP SWITCH TO RH MAP LAMP	9	BROWN	YELLOW			125
126	COURTESY LAMP SW. TO INSTR. PANEL COURTESY LAMP	182	BLACK			ORANGE	126
127	COURTESY LAMP SW. TO "C" PILLAR LAMPS	185	BLACK			LT BLUE	127
129	GLOW PLUG SWITCH FEED	33	LT GREEN				129
131	CIGAR LIGHTER LAMP FEED	60	PURPLE	ORANGE			131
133	RELAY TO MAP LAMP SWITCH	111	TAN		RED		133
137	RADIO # ANTENNA SWITCH FEED	136	YELLOW		BLACK		137
138	DOOR JAMB SWITCH TO LIGHTS ON RELAY	11	BROWN	LT BLUE			138
140	BACK UP LAMP	61	BLACK	PINK			140
141	TWO OR THREE SPEED AXLE SWITCH TO TWO OR THREE SPEED AXLE MOTOR	181	BLACK			PINK	141
142	TWO OR THREE SPEED AXLE SWITCH FEED	142	DK GREEN		YELLOW		142
143	TWO OR THREE SPEED AXLE SWITCH TO TWO OR THREE SPEED AXLE MOTOR	13	RED				143
151	SPEED CONTROL ON-OFF SWITCH TO AMPLIFIER	156	LT BLUE		BLACK		151
153	STARTING MOTOR RELAY TO FLASHER	19	RED	WHITE			153
158	KEY WARNING SWITCH TO BUZZER	98	BLACK		PINK		158
159	DOOR JAMB SWITCH TO BUZZER	63	RED	PINK			159
160	BUZZER TO WARNING INDICATOR RELAY	88	WHITE	PINK			160
162	EMERG. BRAKE WARNING LAMP TO EMERG. BRAKE SWITCH	230	LT GREEN			RED	162
170	WINDOW REGULATOR SWITCH FEED	205	RED			LT BLUE	170
171	CIRCUIT BREAKER TO SEAT LATCH RELAY	4	BLACK	WHITE			171
172	RELAY TO SEAT LATCH SOLENOID	20	ORANGE				172
173	DOOR SWITCH TO SEAT LATCH RELAY (COIL TERM.)	85	PINK	WHITE			173
175	TOP CONTROL SWITCH OR RELAY FEED	183	BLACK			YELLOW	175
176	REAR WINDOW REGULATOR SWITCH FEED	50	WHITE				176
179	HORIZONTAL SEAT REG. MOTOR TO RELAY	27	YELLOW				179
180	HORIZONTAL SEAT REG. MOTOR TO RELAY	13	RED				180
181	BLOWER MOTOR FEED	8	BROWN	ORANGE			181
182	THERMOSTAT SWITCH FEED	12	BROWN	WHITE			182
184	AIR COND SW (LO) TO AIR COND BLOWER MOTOR	112	TAN		ORANGE		184
186	DEFOGGER SW. TO DEFOGGER MOTOR	108	BROWN		LT BLUE		186
188	CIRCUIT BRKR. TO HEADLAMP SW. "BATT." TERM.	1	BLACK				188
191	DEFOGGER SW. TO DEFOGGER MOTOR	71	DK BLUE	YELLOW			191
193	WINDOW REGULATOR RELAY FEED	138	YELLOW		LT GREEN		193
194	WINDOW REG RELAY ACCY FEED	79	PINK				194
196	COOLANT FAN CONTROL RELAY FEED	194	TAN			RED	196
197	COOLANT TEMPERATURE SWITCH TO CONTROL RELAY	195	TAN			ORANGE	197
198	A/C PRESSURE SWITCH TO CONTROL RELAY	196	TAN			YELLOW	198
199	CONTROL RELAY TO IGNITION RELAY	197	TAN			LT GREEN	199
200	IGNITION RELAY TO COOLANT FAN	198	TAN			LT BLUE	200
*206	GROUND RETURN TO TOWING VEHICLE	50	WHITE				206*
*207	MARKER LAMP SWITCH TO MARKER LAMPS	1	BLACK				207*
*212	AUXILIARY CIRCUIT FEED TO TRACTOR TRAILER PLUG	69	DK BLUE				212*

CAR STANDARD WIRE COLOR CODE CHART
(2 OF 3)

CIRCUITS IN CURRENT USE
****

CIRCUIT		COLOR NO.	BASE	STRIPE	WASH	DOT	CIRCUIT
215	SIGNAL UNIT LAMP TO FUEL SIGNAL RELAY	219	YELLOW			BLACK	215
226	LF WINDOW REG SW TO LF WINDOW REG MOTOR	13	RED				226
227	LF WINDOW REG SW TO LF WINDOW REG MOTOR	27	YELLOW				227
241	DE-ICE SOLENOID CONTROL	44	LT BLUE	YELLOW			241
243	POWER SERVO TO CLIMATE CONTROL UNIT (MODE)	148	LT GREEN		ORANGE		243
244	THERMAL SW. TO CLIMATE CONTROL UNIT	140	YELLOW		WHITE		244
245	POWER SERVO TO CLIMATE CONTROL UNIT (AMP)	10	BROWN	LT GREEN			245
246	POWER SERVO TO CLIMATE CONTROL UNIT (AMP)	46	PURPLE				246
247	POWER SERVO TO CLIMATE CONTROL UNIT (AMP)	89	WHITE	YELLOW			247
248	HEATER & A/C CONTROL SW, (DE-ICE) TO CLIMATE CONTROL UNIT	139	YELLOW		LT BLUE		248
249	HEATER & A/C CONTROL SW.(LO-NORM) TO CLIMATE CONTROL UNIT	57	DK BLUE	LT GREEN			249
250	HEATER & A/C CONTROL SW. (LO-NORM) TO POWER SERVO	20	ORANGE				250
253	INTERMEDIATE TERM 3 SPEED AXLE SWITCH TO SOLENOID VALVE FORWARD TANDEM	13	RED				253
254	HIGH TERMINAL 3 SPEED AXLE SWITCH TO SOLENOID VALVE REAR TANDEM	1	BLACK				254
255	AXLE LOCKOUT DIFFERENTIAL SWITCH FEED	157	LT BLUE		RED		255
260	BLOWER MOTOR TO SWITCH - LO	119	RED		ORANGE		260
261	BLOWER MOTOR TO SWITCH - HI	21	ORANGE	BLACK			261
262	STARTING MOTOR RELAY TO IGN, COIL "I" TERM.	62	BROWN	PINK			262
269	HEATER BLOWER MOTOR TO SWITCH (MEDIUM)	159	LT BLUE		ORANGE		269
*282	TURN SIGNAL SW. TO RH REAR TURN SIGNAL LAMP	64	DK GREEN				282*
*283	TURN SIGNAL SW. TO LH REAR TURN SIGNAL LAMP	28	YELLOW	BLACK			283*
*284	BATTERY FEED TO STOPLAMP SWITCH	13	RED				284*
287	SPEAKER VOICE COIL RETURN	103	BLACK		WHITE		287
296	FUSED ACCY FEED #1	56	WHITE	PURPLE			296
297	ACCY. FEED FROM IGNITION SWITCH	101	BLACK		LT GREEN		297
298	FUSED ACCY FEED #2	162	PURPLE		ORANGE		298
306	SEAT REG. SW. TO HORIZ. SOLENOID BATT. TERM.	40	LT BLUE				306
307	SEAT REG. SW.TO VERT. SOLENOID BATT. TERM.	50	WHITE				307
313	LEFT FRONT WINDOW REGULATOR SWITCH TO RIGHT FRONT WINDOW REGULATOR MOTOR	28	YELLOW	BLACK			313
314	LEFT FRONT WINDOW REGULATOR SWITCH TO RIGHT FRONT WINDOW REGULATOR MOTOR	14	RED	BLACK			314
316	LEFT FRONT WINDOW REGULATOR SWITCH TO LEFT REAR WINDOW REGULATOR MOTOR	31	YELLOW	LT BLUE			316
317	LEFT FRONT WINDOW REGULATOR SWITCH TO LEFT REAR WINDOW REGULATOR MOTOR	122	RED		LT BLUE		317
319	LEFT FRONT WINDOW REGULATOR SWITCH TO RIGHT REAR WINDOW REGULATOR MOTOR	136	YELLOW		BLACK		319
320	LEFT FRONT WINDOW REGULATOR SWITCH TO RIGHT REAR WINDOW REGULATOR MOTOR	117	RED		BLACK		320
328	WINDOW REG.MASTER CONT. SW. TO WIND. REG. SW. FEED	203	RED			YELLOW	328
333	WINDOW REG SW TO WINDOW REG MOTOR	29	YELLOW	RED			333
334	WINDOW REG SW TO WINDOW REG MOTOR	16	RED	YELLOW			334
347	COMPRESSOR CLUTCH FEED	100	BLACK		YELLOW		347
348	THERMOSTATIC SW. TO AIR COND. SW. SELECTOR TERM.	150	LT GREEN		PURPLE		348
364	BLOWER MOTOR RELAY FEED	4	BLACK	LT GREEN			364
365	FUEL LEVEL WARNING RELAY FEED	157	LT BLUE		RED		365
366	FUEL WARNING RELAY CONTROL	117	RED		BLACK		366
367	FUEL LEVEL RECEIVER TO FUEL LEVEL WARNING RELAY (REC. TERM)	228	DK GREEN			WHITE	367
369	VACUUM SOLENOID TO TEMP. SW.	105	BROWN		ORANGE		369
371	BLOWER MOTOR RELAY TO MOTOR	129	PINK		WHITE		371
375	MOVABLE STEERING COLUMN SOLENOID FEED	221	YELLOW			LT GREEN	375
379	TURN SIGNAL SWITCH TO RH CORNERING LAMP	109	BROWN		WHITE		379
380	TURN SIGNAL SWITCH TO LH CORNERING LAMP	47	PURPLE	YELLOW			380
381	MOVABLE STEERING COLUMN SOLENOID TO COURTESY LAMP SWITCH	26	ORANGE	WHITE			381
383	EMERGENCY WARNING FLASHER FEED	123	RED		WHITE		383
385	FLASHER TO EMERGENCY WARNING SWITCH	174	WHITE		RED		385
387	READING LAMP SWITCH TO READING LAMP (LH)	33	LT GREEN				387
399	HEATER BLOWER SWITCH FEED	9	BROWN	YELLOW			399
400	SAFETY RELAY LOAD TERM. TO WIND. REG. SW. FEED	289	LT BLUE			BLACK	400
401	LIMIT SW. TO BACK WINDOW REG. MOTOR	73	GRAY	BLACK			401
402	WINDOW REG SW TO BACK WINDOW REG MOTOR	74	GRAY	RED			402
403	WINDOW REG. SW. TO WIND. REG. MOTOR	78	GRAY	WHITE			403
404	WINDOW REG. SW. TO BACK WIND.SW.	86	PURPLE	LT GREEN			404
405	WINDOW REG. SW. TO BACK WIND. SW.	87	PURPLE	LT BLUE			405
406	WINDOW REG. SW. TO BACK WIND. AUX. SW.	90	TAN				406

407	WINDOW REG. SW. REAR TO LIMIT SW.	91	TAN	BLACK			407
408	WINDOW REG. SW. FRONT TO LIMIT SW.	92	TAN	RED			408
409	PRESSURE SWITCH TO KEY SWITCH	193	TAN			BLACK	409
442	SEQUENTIAL LH REAR INBOARD TURN SIGNAL LAMP	36	LT GREEN	ORANGE			442
443	SEQUENTIAL LH REAR CENTER TURN SIGNAL LAMP	35	LT GREEN	RED			443
444	SEQUENTIAL LH REAR OUTBOARD TURN SIGNAL LAMP	34	LT GREEN	BLACK			444
445	SEQUENTIAL RH REAR INBOARD TURN SIGNAL LAMP	25	ORANGE	LT BLUE			445
446	SEQUENTIAL RH REAR CENTER TURN SIGNAL LAMP	26	ORANGE	WHITE			446
447	SEQUENTIAL RH REAR OUTBOARD TURN SIGNAL LAMP	22	ORANGE	RED			447
450	SEAT BELT WARNING INDICATOR LAMP FEED	67	DK GREEN	LT GREEN			450
454	IGN. SW. COIL TERM. TO CIRCUIT BREAKER	17	RED	LT GREEN			454
455	CIRCUIT BREAKER TO FUEL VALVE	149	LT GREEN		YELLOW		455
458	TURN SIGNAL SWITCH TO INDICATOR RELAY	130	ORANGE		BLACK		458
459	INDICATOR RELAY TO FLASHER	24	ORANGE	LT GREEN			459
460	HORN SWITCH FEED	222	YELLOW			LT BLUE	460
469	SEAT BELT WARNING SWITCH FEED	33	LT GREEN				469
474	STOPLAMP RELAY FEED	80	PINK	BLACK			474
475	STOPLAMP SW. TO STOPLAMP RELAY (COIL TERM)	145	DK GREEN		WHITE		475
478	FOG LAMP SW. TO FOG LAMP	93	TAN	ORANGE			478
485	IGNITION SWITCH ACCY. TERM. TO DECK LID OPEN WARNING LAMP	104	BROWN		PINK		485
486	DECK LID OPEN WARNING LAMP TO DECK LID OPEN SWITCH	192	BROWN			WHITE	486
487	READING LAMP SWITCH TO READING LAMP	81	PINK	ORANGE			487
494	TURN SIGNAL RELAY TO TURN SIGNAL FLASHER	114	TAN		LT GREEN		494
500	HEADLAMP DIMMER SWITCH TO HEADLAMP DIMMER RELAY	44	PURPLE				500
502	HEADLAMP DIMMER RELAY TO HEADLAMP DIMMER SWITCH	49	GRAY				502
503	HEADLAMP DIMMER RELAY TO FUSE HOLDER	40	LT BLUE				503
504	FUSE HOLDER TO HEADLAMP DIMMER AMPLIFIER	155	DK BLUE		WHITE		504
505	HEADLAMP DIMMER SWITCH TO HEADLAMP DIMMER AMPLIFIER	1	BLACK				505
507	AMPLIFIER TO RHEOSTAT	27	YELLOW				507
508	RHEOSTAT TO SENSOR	50	WHITE				508
509	AIR COND. CONDENSOR THERMAL SWITCH FEED	94	TAN	YELLOW			509
511	STOPLAMP SW. TO TURN SIGNAL SW.	33	LT GREEN				511
515	RESISTOR TO BLOWER MOTOR (HI)	22	ORANGE	RED			515
517	CIRCUIT BREAKER (LOAD TERM) TO CONTROL SW. (BATT. TERM)	6	BLACK	WHITE			517
519	GLOW PLUG SW. TO LAMP (FEED)	50	WHITE				519
520	SEAT BELT WARNING LAMP TO WARNING LAMP SWITCH	166	PURPLE		WHITE		520
526	CIRCUIT BREAKER TO MARKER LAMP SW. FEED	6	BLACK	WHITE			526
527	HEADLAMP DIMMER SWITCH OVERRIDE TO RHEOSTAT	13	RED				527
536	BLOWER MOTOR RELAY (LOAD TERM) TO BLOWER MOTOR	184	BLACK			LT GREEN	536
568	ALTERNATOR RELAY TO ALTERNATOR REGULATOR	33	LT GREEN				568
587	WINDSHIELD WIPER INTERMITTENT GOVERNOR FEED	103	BLACK		WHITE		587
589	WINDSHIELD WIPER SWITCH TO INTERMITTEN GOVERNOR GROUND	20	ORANGE				589
590	INTERMITTENT GOVERNOR TO W/S WIPER SWITCH	72	DK BLUE	WHITE			590
591	SPEED CONTROL RELAY TO SPEED REGULATOR	2	BLACK	ORANGE			591
592	STOPLAMP SW. TO SPEED CONTROL RELAY	161	LT BLUE		WHITE		592
593	SPEED CONTROL ACTUATOR TO CUTOUT RELAY	27	YELLOW				593
596	PRIMER SW. TO OIL PRESSURE SAFETY SWITCH	182	BLACK			ORANGE	596
597	COIL TERM. OF IGN. SW. TO OIL PRESSURE SAFETY SWITCH	13	RED				597
598	COIL TERM. OF IGN. SW. TO FUEL PUMP PRIMER SWITCH	88	PINK	YELLOW			598
601	BRAKE SKID CONTROL MODULE FEED	58	LT BLUE	PINK			601
602	COIL TERM. OF IGN. SWITCH TO BRAKE SKID CONTROL MODULE	121	RED		LT GREEN		602
604	SKID CONTROL MODULE TO RH WHEEL SENSOR HI	131	ORANGE		RED		604
626	OPEN DOOR WARNING LAMP FEED	126	PINK		YELLOW		626
627	OPEN DOOR WARNING LAMP TO OPEN DOOR WARNING SWITCH	99	BLACK		ORANGE		627
632	IGN. SW. COIL TERM. TO OIL TEMP. WARNING LAMP	1	BLACK				632
633	IGN. SW. TO OIL TEMP. WARNING RELAY	13	RED				633
634	OIL TEMP. WARNING RELAY TO OIL TEMP. WARNING LAMP	40	LT BLUE				634
635	OIL TEMP. WARNING LAMP TO OIL TEMP. WARNING SWITCH	38	LT GREEN				635
640	WARNING LAMPS FEED	120	RED		YELLOW		640
642	WATER TEMP. WARNING LAMP TO WATER TEMP. SW. (COLD)	54	WHITE	LT GREEN			642

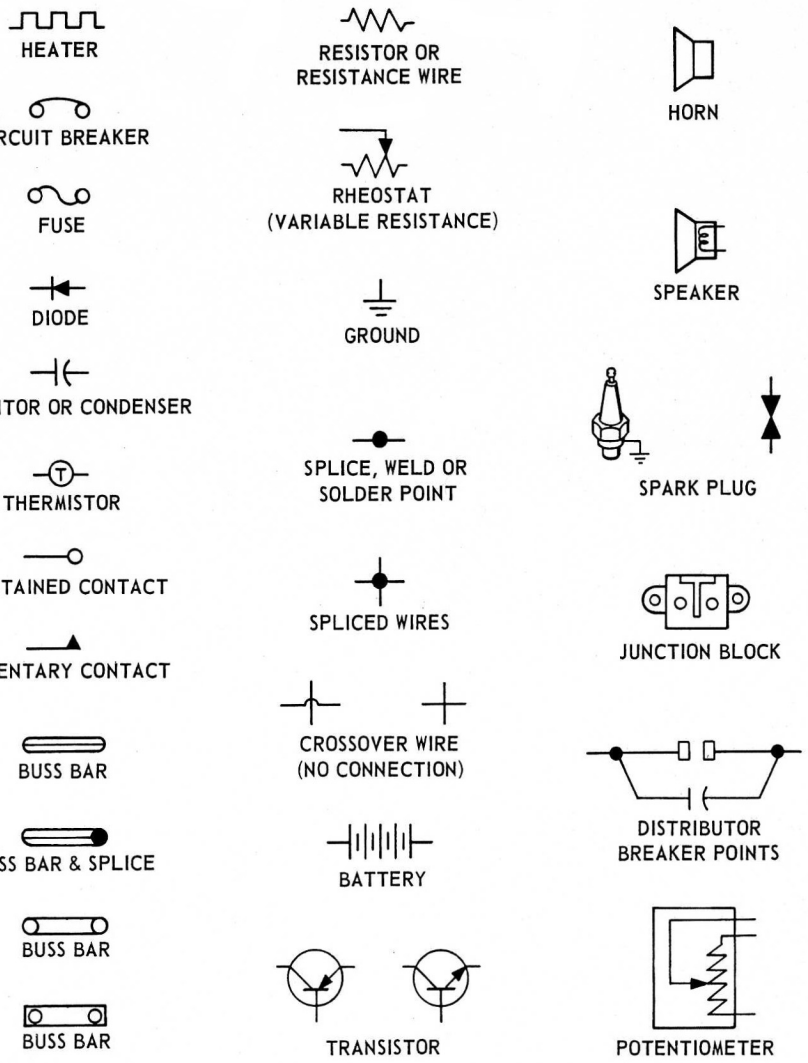
CAR STANDARD WIRE COLOR CODE CHART
(3 OF 3)

CIRCUITS IN CURRENT USE
****

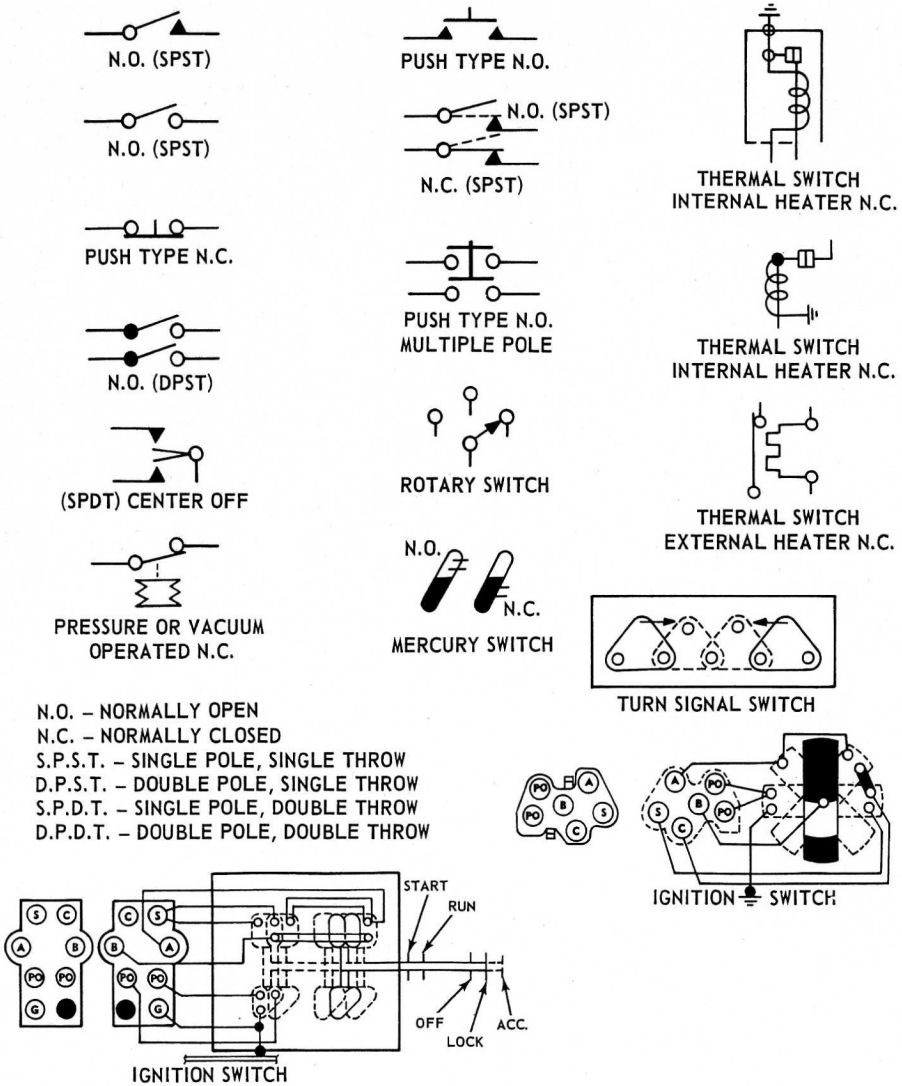
CIRCUIT	COLOR NO.	BASE	STRIPE	WASH	DOT	CIRCUIT
647 WATER TEMP. WARNING LAMP TO WATER TEMP. SWITCH (HOT)	200	RED			BLACK	647
648 TACHOMETER FEED	205	RED			LT BLUE	648
654 ALT. SHUNT TO AMMETER	30	YELLOW	LT GREEN			654
655 STARTING MOTOR RELAY SHUNT TO AMMETER	15	RED	ORANGE			655
660 AIR COND. CONTROL SW. TO FRESH-AIR RECIRC. DOOR SOLENOID	221	YELLOW			LT GREEN	660
671 SPEED REG. SW. "ON" POSITION TO ON & OFF RELAY	50	WHITE				671
672 SELECTOR SW. TO LEFT HAND PUMP MOTOR	109	BROWN		WHITE		672
673 SELECTOR SW. TO LEFT FUEL GAGE	33	LT GREEN				673
674 SELECTOR SW. TO RIGHT HAND PUMP MOTOR	12	BROWN	WHITE			674
675 SELECTOR SW. TO RIGHT FUEL GAGE	35	LT GREEN	RED			675
683 H/L SW. "R" TERM. TO TRACTOR-TRAILER RELAY "F" TERM.	187	BROWN			PINK	683
684 TRACTOR-TRAILER RELAY "A" TERM. TO MARKER LAMP SW.	6	BLACK	WHITE			684
686 HEAD LP TIME DELAY CONTROL RELAY TO CIR. BREAKER	75	GRAY	ORANGE			686
687 ACC FEED	76	GRAY	YELLOW			687
688 HTD BACKLITE SW TO TIME DELAY RELAY	77	GRAY	LT BLUE			688
697 SPEED REG. SW. "OFF" POSITION TO ON & OFF RELAY	21	ORANGE	BLACK			697
745 ANTENNA SWITCH TO POWER ANTENNA (UP)	118	RED		PINK		745
746 ANTENNA SWITCH TO POWER ANTENNA (DOWN)	66	DK GREEN	YELLOW			746
751 BLOWER MOTOR SPEED CONTROLLER TO RESISTOR #3 (MED.)	155	DK BLUE		WHITE		751
752 BLOWER MOTOR SPEED CONTROLLER TO RESISTOR #2 (MED.)	220	YELLOW			RED	752
753 HEATER & A/C CONTROL SW. TO BLOWER RELAY SW.	29	YELLOW	RED			753
754 BLOWER MOTOR SPEED CONTROLLER TO RESISTOR #1 (MED.)	151	LT GREEN		WHITE		754
755 BLOWER MOTOR SWITCH RELAY TO RESISTOR (LOW SPEED)	12	BROWN	WHITE			755
756 HEATER AND A/C CONTROL SW. (HI-NORM) TO RESISTOR (LOW RANGE)	201	RED			PINK	756
757 HEATER & A/C CONTROL SW. (HI-NORM) TO BLOWER MOTOR SW. RELAY	19	RED	WHITE			757
758 HEATER AND A/C CONTROL SW. (LO-NORM) TO RESISTOR (LOW RANGE)	249	PURPLE			WHITE	758
761 BLOWER MOTOR RELAY TO ENG. WATER TEMP. SWITCH (COLD)	54	WHITE	LT GREEN			761
765 HEATER AND A/C CONTROL SW. TO REHEAT & A/C FEED	149	LT GREEN		YELLOW		765
766 HEATER AND A/C CONTROL SW.(DE-FOG)TO INLET AIR CONTROL SOLENOID	204	RED			LT GREEN	766
767 AMBIENT SENSOR TO INST. PANEL THERMISTOR	43	LT BLUE	ORANGE			767
768 REFERENCE SENSOR TO HEAT DUCT THERMISTOR	149	LT GREEN		YELLOW		768
769 HEATER & A/C CONTROL SW.(HI & LO NORM)TO BLOWER MTR.SW.RELAY	160	LT BLUE		YELLOW		769
773 HEATER & A/C CONTROL SW.(TEMP. SELECTOR) TO REHEAT AMPL.	141	DK GREEN		ORANGE		773
775 HEATER & A/C CONTROL SW.(DEFOG) TO DEFROST CONT.SOLENOID	88	WHITE	PINK			775
776 CLIMATE CONTROL BOX TO HIGH BLOWER RELAY	213	ORANGE			BLACK	776
780 ENGINE ALARM RELAY(OIL PRESS.)"F" TERM.TO "A" TERM.IGN.SW.	13	RED				780
787 FUEL PUMP SAFETY SWITCH TO FUEL PUMP MOTOR	124	PINK		BLACK		787
788 REHEAT AMPLIFIER TO HEAT DUCT THERMISTOR	202	RED			ORANGE	788
790 HEATER AND A/C CONTROL SW. TO INST. PANEL THERMISTOR	53	WHITE	ORANGE			790
797 BATTERY FEED TO STEREO	38	LT GREEN	PURPLE			797
804 SPEAKER VOICE COIL FEED-FRONT (LEFT CHANNEL)	133	ORANGE		LT GREEN		804
805 SPEAKER VOICE COIL FEED-FRONT (RIGHT CHANNEL)	178	WHITE		LT GREEN		805
806 SPEAKER VOICE COIL FEED-REAR (RIGHT CHANNEL)	84	PINK	LT BLUE			806
807 SPEAKER VOICE COIL FEED-REAR (LEFT CHANNEL)	83	PINK	LT GREEN			807
808 SELECTOR SWITCH TO FUEL TANK SOLENOID VALVE	8	BROWN	ORANGE			808
810 STOPLAMP SW. TO STOPLAMP	121	RED		LT GREEN		810
817 INDICATOR RELAY TO RH TURN LAMP	115	TAN		LT BLUE		817
818 INDICATOR RELAY TO LH TURN LAMP	116	TAN		WHITE		818
822 SPEAKER VOICE COIL FEED	184	BLACK			LT GREEN	822
823 RADIO TO FADER CONTROL	33	LT GREEN				823
848 BALLAST RESISTOR "F" TERM. TO TRANSISTOR UNIT "E" TERM.	202	RED			ORANGE	848
850 BALLAST RESISTOR COIL TERM. TO IGN. COIL BATT. TERM.	244	LT BLUE			WHITE	850
851 TRANSISTOR UNIT "B" TERM. TO DISTRIBUTOR	33	LT GREEN				851
852 TRANSISTOR UNIT "C" TERM. TO BALLAST RESISTOR "C" TERM.	158	LT BLUE		PINK		852
853 COIL TERM. IGN. SW. TO BALLAST RESISTOR "E" TERM.	119	RED		ORANGE		853
854 C.S. RELAY TO STARTER SOLENOID "1" TERM.	106	BROWN		YELLOW		854
858 MAKE READY SWITCH TO BRAKE PEDAL PAD SWITCH	125	PINK		ORANGE		858
859 BRAKE PEDAL PAD SWITCH TO CONTROL RELAY TERM. #4	27	YELLOW				859
860 MAKE READY SWITCH TO SET SPEED SWITCH	48	PURPLE	WHITE			860
861 RETARD SWITCH TO CONTROL RELAY TERM. #7	45	LT BLUE	WHITE			861

863 BRAKE SWITCH TO HOLDING RELAY	3	BLACK	YELLOW			863
869 RETARD VALVE TO CONTROL RELAY TERM. #1	37	LT GREEN	YELLOW			869
*870 EMERGENCY STOP LAMP SWITCH TO TRACTOR-TRAILER PLUG	13	RED				870*
883 AIR COND CONTROL RELAY FEED	128	PINK		LT BLUE		883
904 (COIL) OR (ACCY.) TERM. OF IGN. SW. TO ALT. REG. (IGN. TERM.)	35	LT GREEN	RED			904
914 SPEED REGULATOR SWITCH FEED	65	DK GREEN	ORANGE			914
917 VENT SWITCH TO BLOWER MOTOR LO	127	PINK		LT GREEN		917
920 BRAKE SW. TO SPEED CONTROL REG.	177	WHITE		YELLOW		920
923 SPEED CONTROL SW. TO SPEED REG. SOLENOID	46	PURPLE				923
924 HOLDING RELAY TO SPEED CONTROL SW. FEED	13	RED				924
925 SPEED CONTROL SW. TO SPEED REG. COUPLING COIL	53	WHITE	ORANGE			925
934 EMISSION SPEED SENSOR TO MODULATOR CONTROL	97	TAN	WHITE			934
939 MODULATOR TO THERMO. SW.	110	TAN		BLACK		939
941 WASHER PUMP MOTOR FEED	6	BLACK	WHITE			941
943 TRACTOR TRAILER RELAY "B" FEED	144	DK GREEN		PURPLE		943
946 REAR WASHER PUMP FEED	164	PURPLE		LT GREEN		946
950 WASHER CONTROL SWITCH FEED	51	WHITE	BLACK			950
955 W/SHIELD WIPER MOTOR ARM RH TO W/S WIPER SWITCH	15	RED	ORANGE			955
956 W/SHIELD WIPER SW. TO W/SHIELD WIPER MOTOR FIELD RH	36	LT GREEN	ORANGE			956
960 AUX. HEATER FEED TO SWITCH	203	RED			YELLOW	960
962 DIFF. TEMP. SW. TO FRONT DIFFERENTIAL	204	RED			LT GREEN	962
963 DIFF. TEMP. TO REAR DIFFERENTIAL	143	DK GREEN		LT GREEN		963
975 TRANSMISSION TEMPERATURE LAMP INDICATOR FEED	117	RED		BLACK		975
976 FUSE PANEL TO FUEL GAGE INDICATOR	184	BLACK			LT GREEN	976
977 BRAKE WARNING SWITCH TO INDICATOR LAMP	43	PURPLE	WHITE			977
978 SEAT REGULATOR SWITCH TO FRONT MOTOR (LH)	31	YELLOW	LT BLUE			978
979 SEAT REGULATOR SWITCH TO FRONT MOTOR (LH)	18	RED	LT BLUE			979
980 SEAT REGULATOR SWITCH TO HORZ. MOTOR (LH)	32	YELLOW	WHITE			980
981 SEAT REGULATOR SWITCH TO HORZ. MOTOR (LH)	19	RED	WHITE			981
982 SEAT REGULATOR SWITCH TO REAR MOTOR (LH)	30	YELLOW	LT GREEN			982
983 SEAT REGULATOR SWITCH TO REAR MOTOR (LH)	17	RED	LT GREEN			983
984 SEAT REGULATOR SWITCH TO FRONT MOTOR (RH)	222	YELLOW			LT BLUE	984
985 SEAT REGULATOR SWITCH TO FRONT MOTOR (RH)	205	RED			LT BLUE	985
986 SEAT REGULATOR SWITCH TO HORZ. MOTOR (RH)	223	YELLOW			WHITE	986
987 SEAT REGULATOR SWITCH TO HORZ. MOTOR (RH)	206	RED			WHITE	987
988 SEAT REGULATOR SWITCH TO REAR MOTOR (RH)	221	YELLOW			LT GREEN	988
989 SEAT REGULATOR SWITCH TO REAR MOTOR (RH)	204	RED			LT GREEN	989
993 INTERMITTENT GOVERNOR TO WINDSHIELD WIPER SWITCH	12	BROWN	WHITE			993

CIRCUIT SYMBOLS

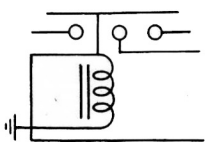


SWITCHES



N.O. – NORMALLY OPEN
N.C. – NORMALLY CLOSED
S.P.S.T. – SINGLE POLE, SINGLE THROW
D.P.S.T. – DOUBLE POLE, SINGLE THROW
S.P.D.T. – SINGLE POLE, DOUBLE THROW
D.P.D.T. – DOUBLE POLE, DOUBLE THROW

RELAYS



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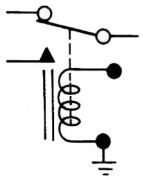

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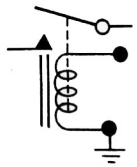

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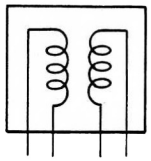

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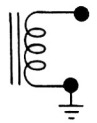

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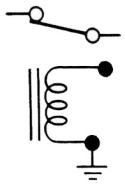

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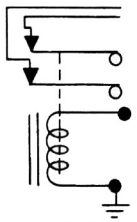

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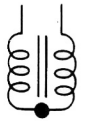
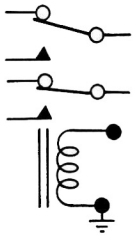
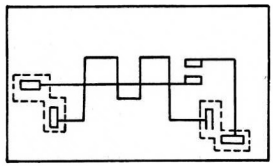


IGNITION COIL



DPDT



MAP LAMP RELAY

N.O. – NORMALLY OPEN
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S.P.S.T. – SINGLE POLE, SINGLE THROW
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S.P.D.T. – SINGLE POLE, DOUBLE THROW
D.P.D.T. – DOUBLE POLE, DOUBLE THROW

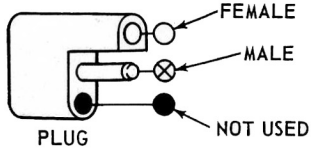
COIL AIR CORE

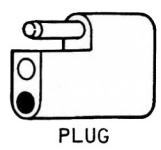
LAMPS

SINGLE FILAMENT

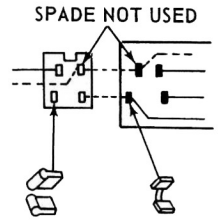
DOUBLE FILAMENT

CONNECTORS



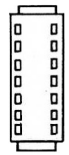


PLUG



FEMALE MALE

BULLET CONNECTOR



MALE

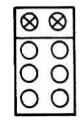
FEMALE

FEMALE

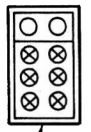
FEMALE

MALE

MALE

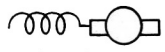


MULTIPLE PLUG

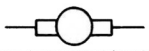


COVER FOR CONNECTOR PINS

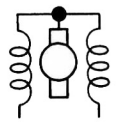
MOTORS



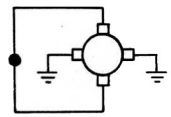
BASIC SERIES



PERMANENT MAGNET

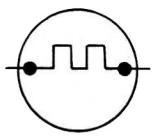


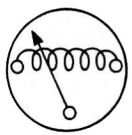
SPLIT SERIES

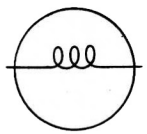


STARTER MOTOR

GAUGES

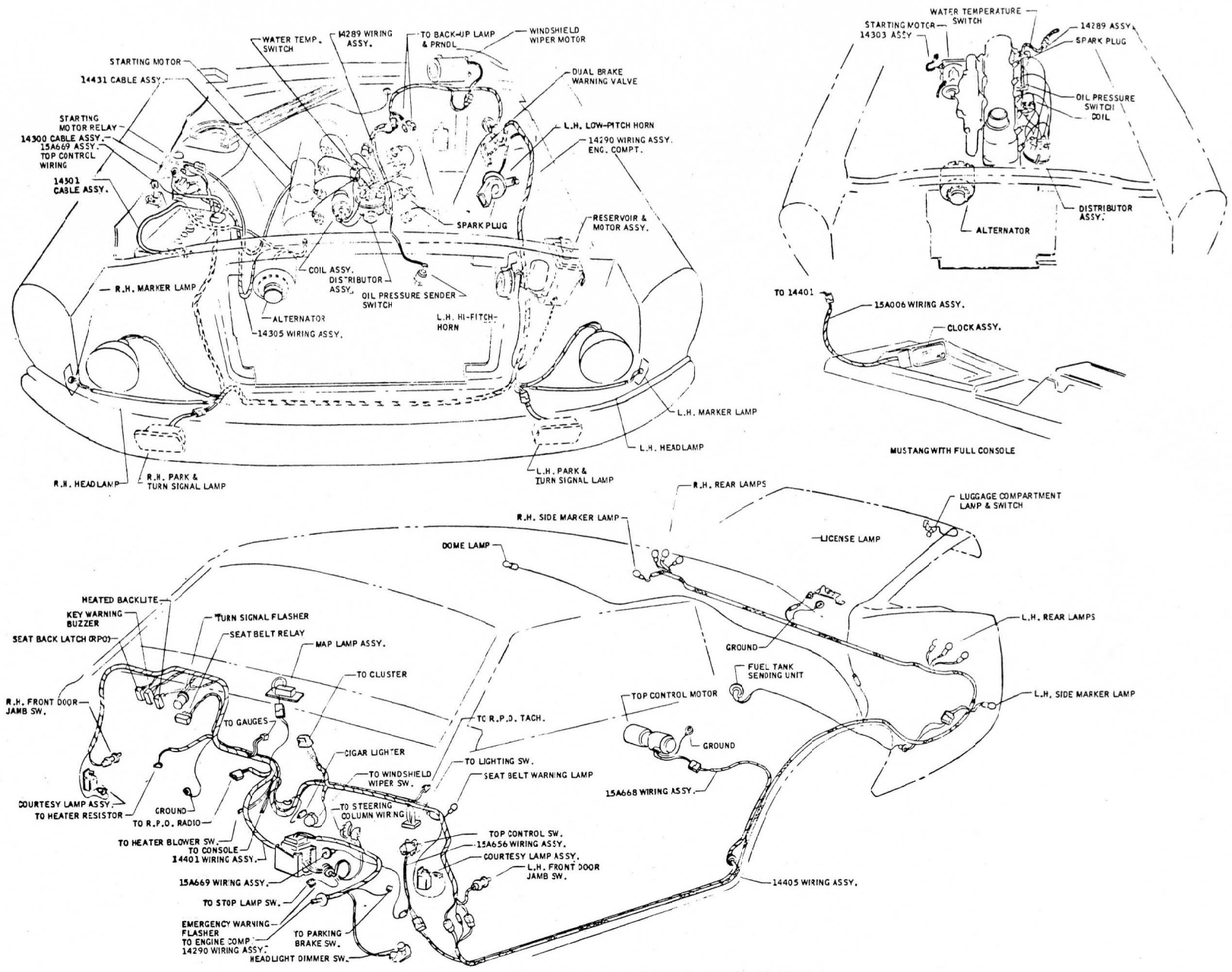




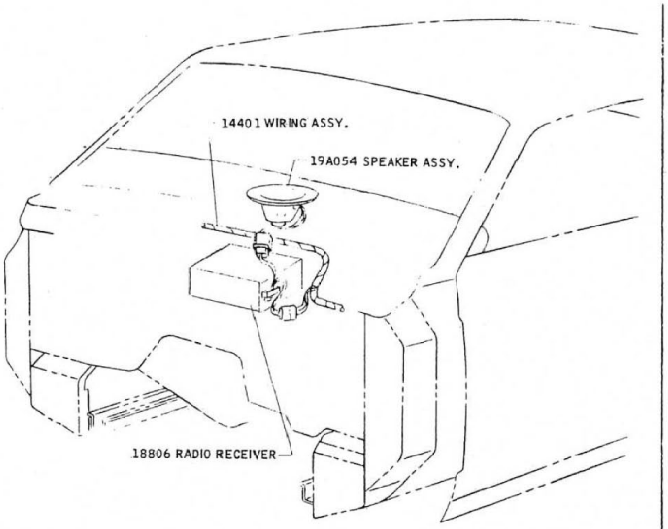


1971 MUSTANG AND COUGAR ELECTRICAL DRAWINGS

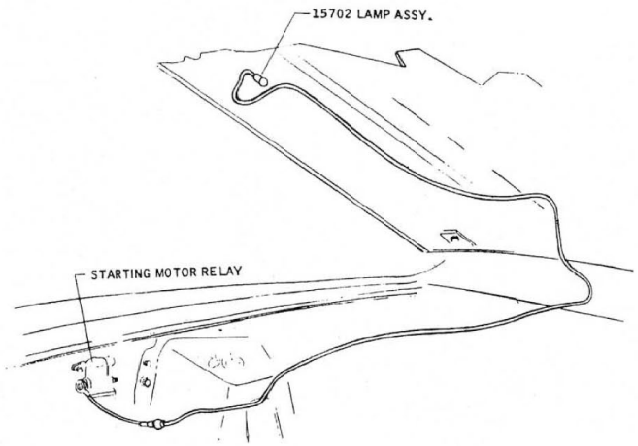
SECTION 2 INDEX



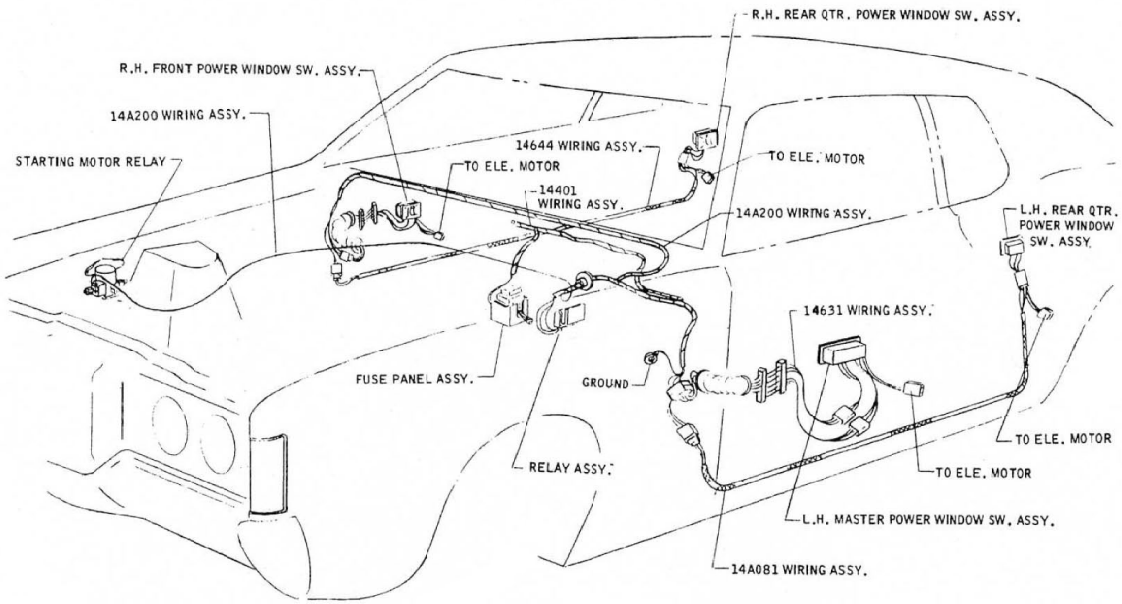
MUSTANG OVERALL VIEW PICTORIAL



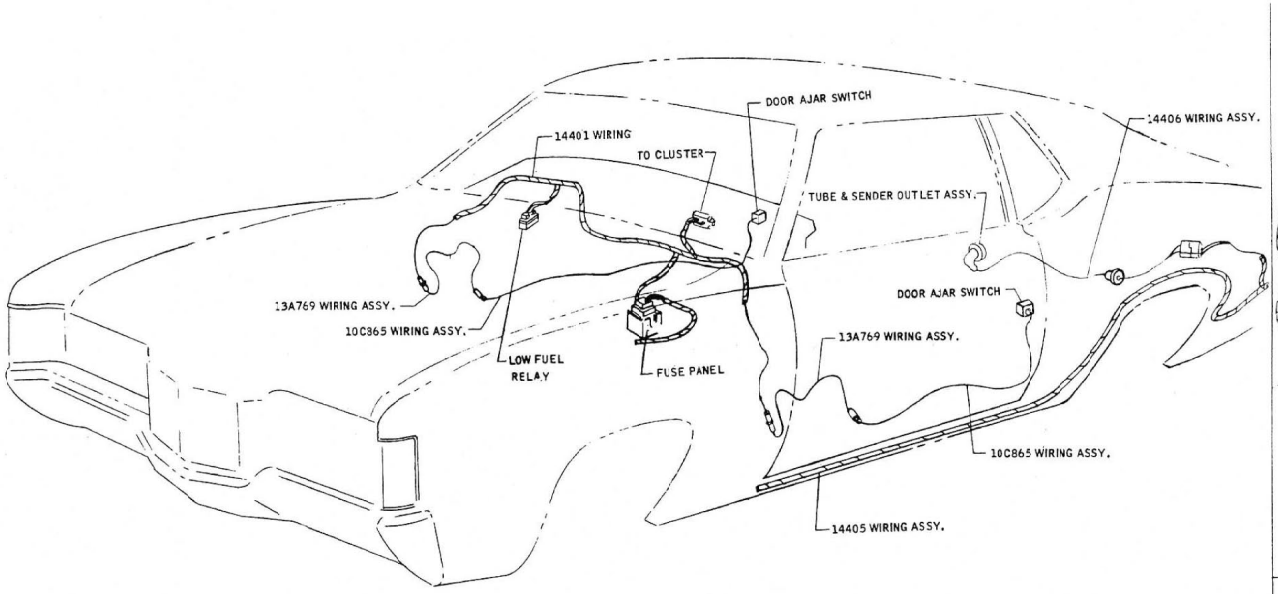
MUSTANG-COUGAR AM RADIO & FRONT SPEAKER



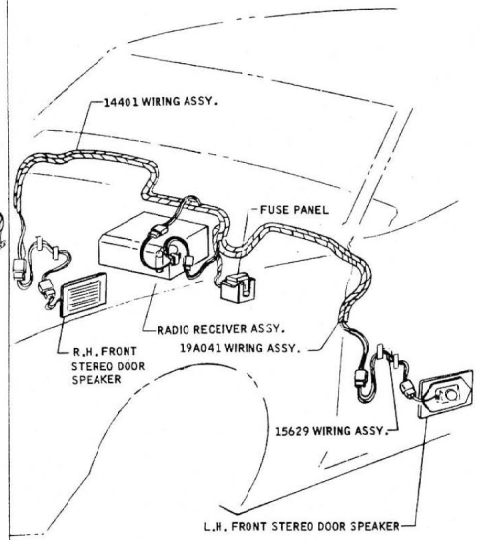
COUGAR-ENGINE COMPARTMENT LAMP



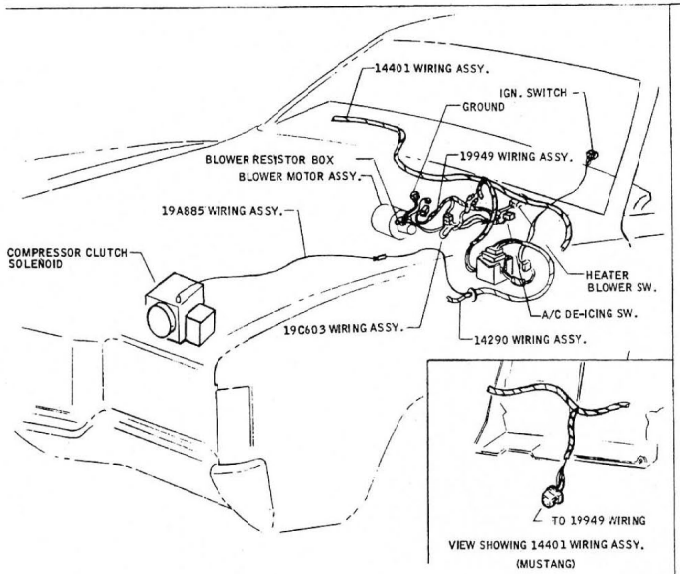
MUSTANG AND COUGAR PICTORIALS



COUGAR LOW FUEL WARNING & DOOR AJAR WARNING

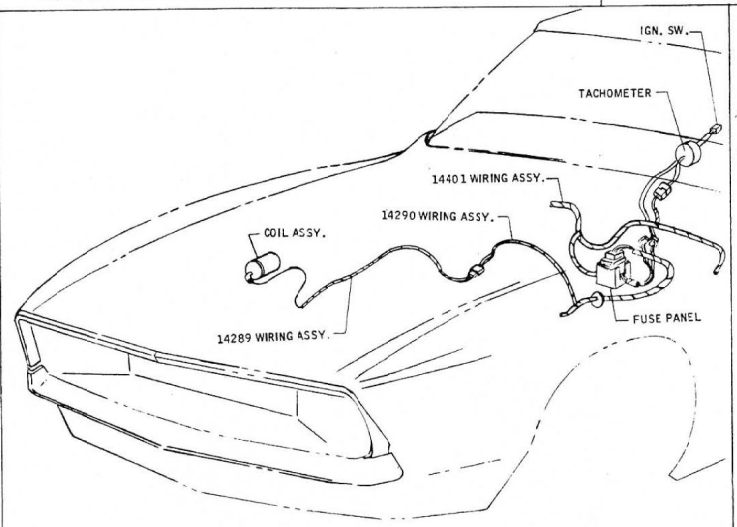


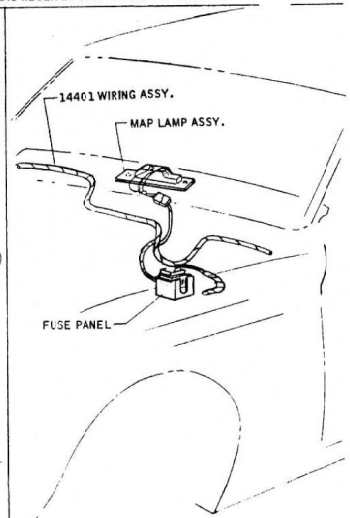
MUSTANG-COUGAR
RADIO RECEIVER (AM) STEREO TAPE PLAYER



VIEW SHOWING 14401 WIRING ASSY.
(MUSTANG)

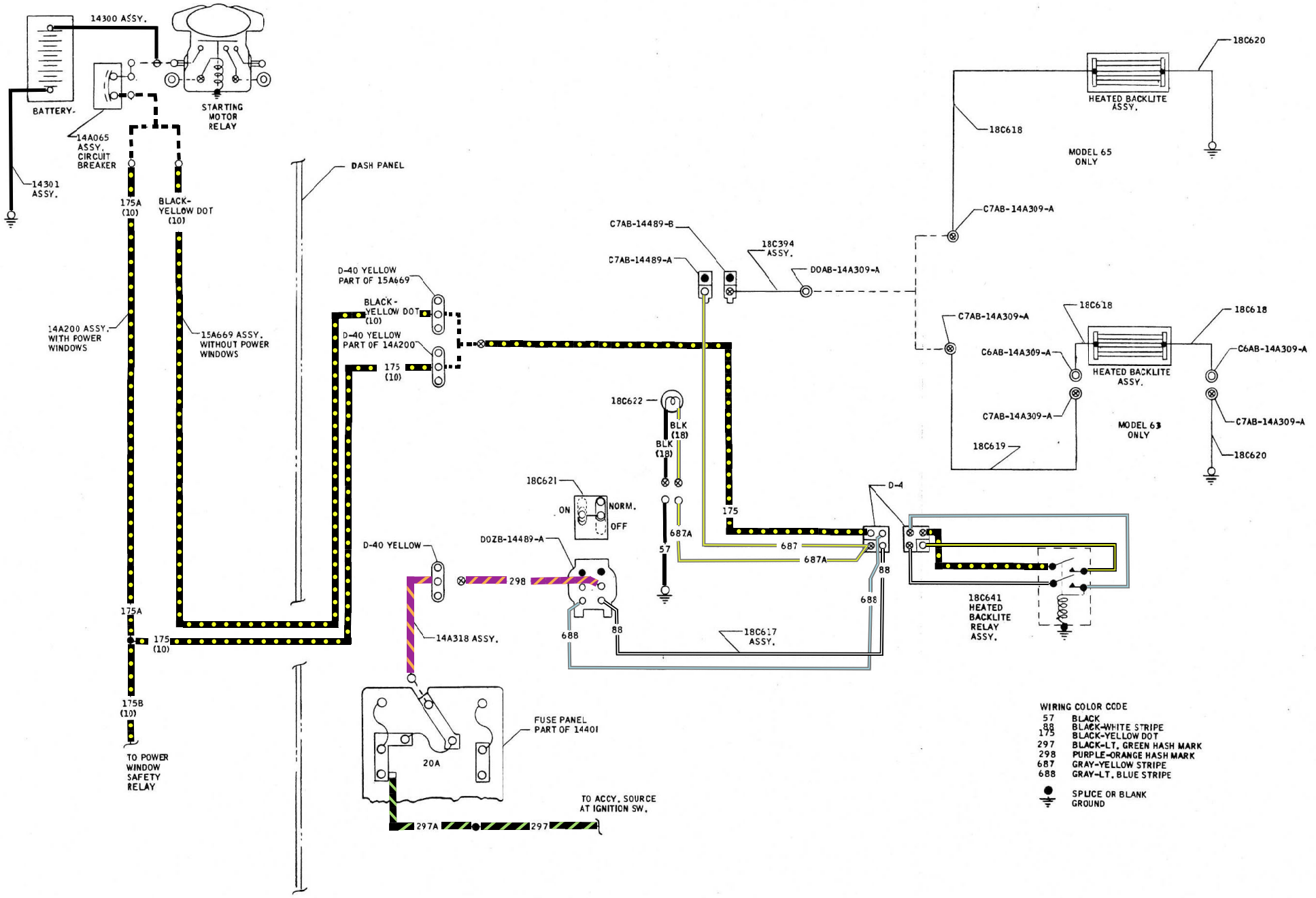
MUSTANG-COUGAR AIR CONDITIONER CIRCUIT



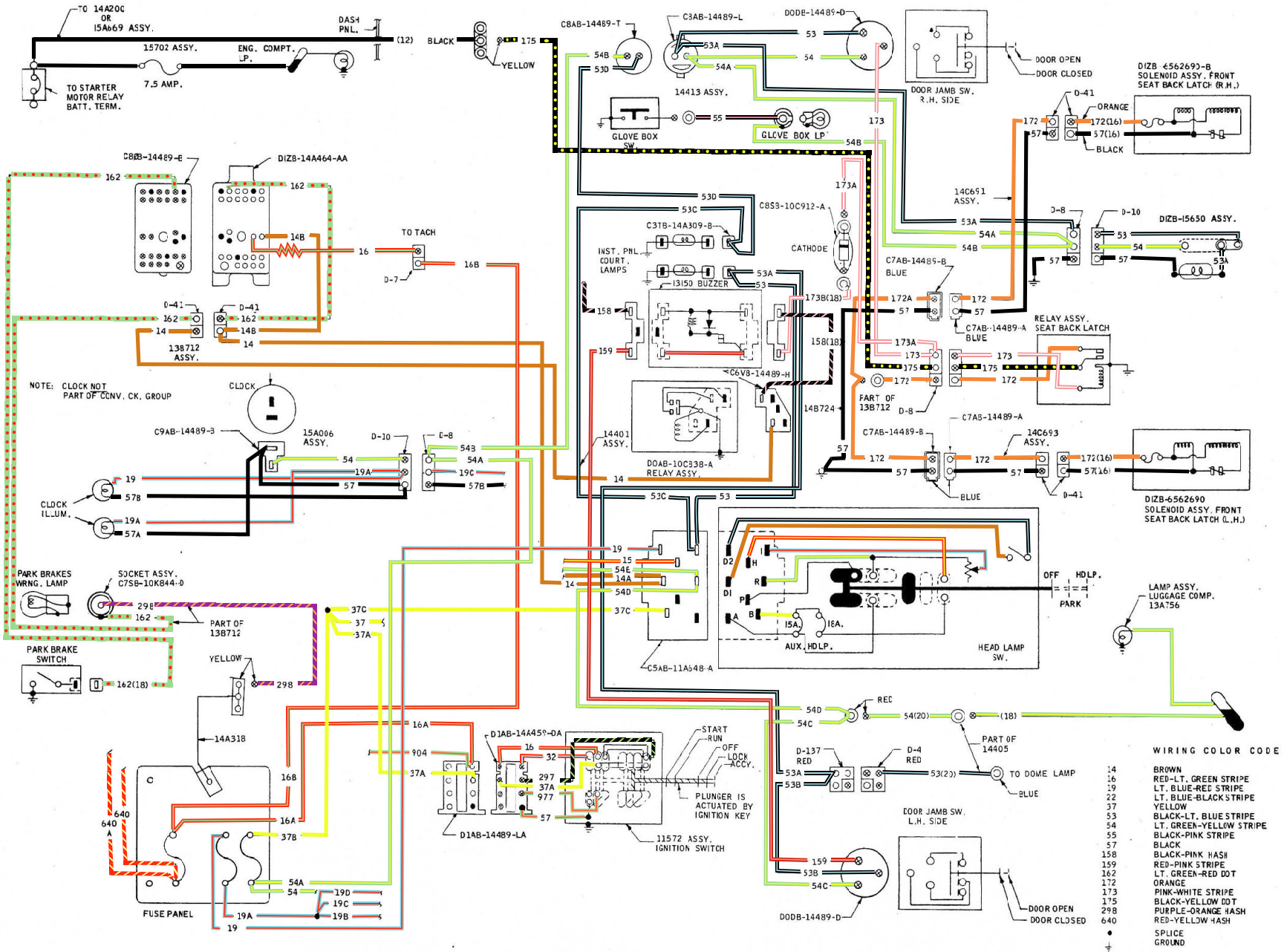


MUSTANG-COUGAR MAPLAMP CIRCUIT

MUSTANG AND COUGAR PICTORIALS



MUSTANG HEATED BACKLITE



MUSTANG CONVENIENCE SYSTEM (With Tach)

Source Document
Ford Publication Form 7795P-71

1971 WIRING and VACUUM DIAGRAMS

COURSE 13003 and 1703

Ford

SERVICE TRAINING

FORM 7795P-71

1971 VACUUM SYSTEMS
INDEX

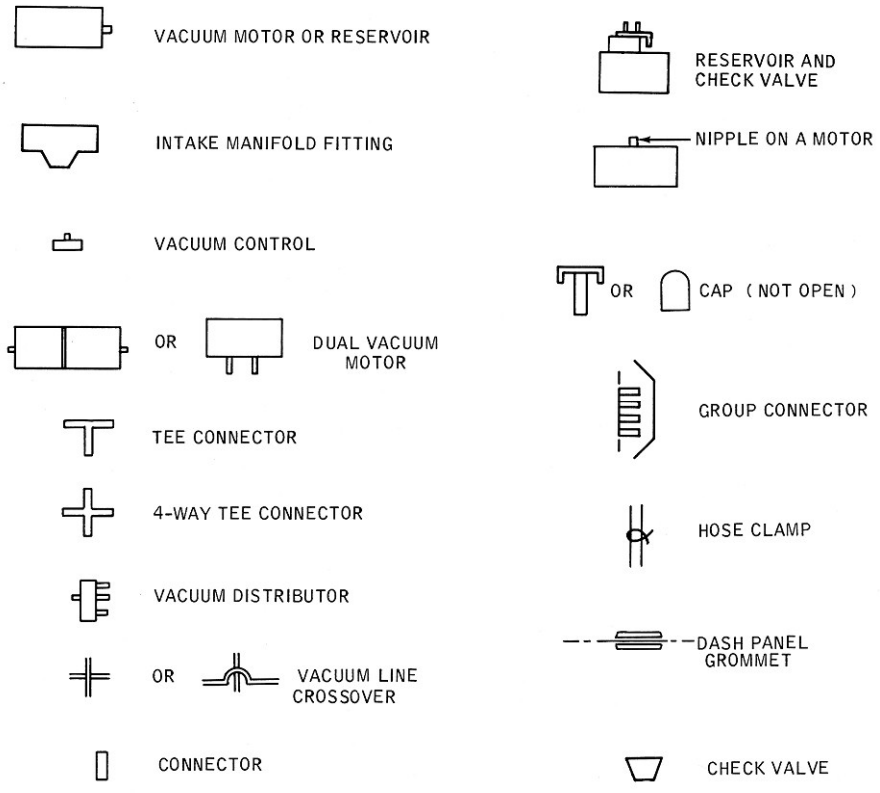
HOW TO USE THE VACUUM DIAGRAMS

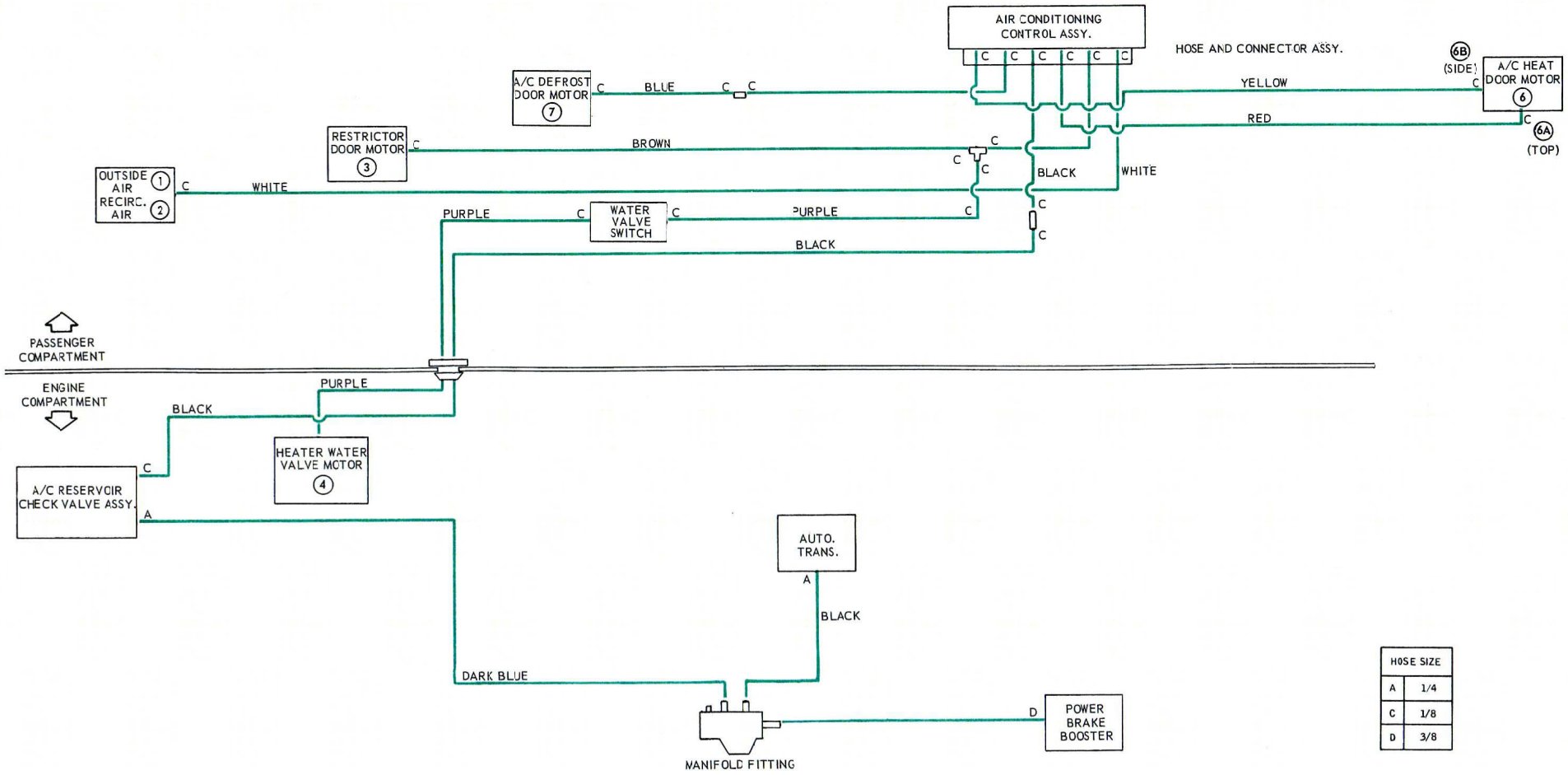
IF IT IS A FORD CAR LINE VACUUM SYSTEM, THE TECHNICIAN WILL FIND A PAGE FOR THE TOTAL SCHEMATIC SYSTEM AS WELL AS A LISTING FOR A SCHEMATIC AND PICTORIAL OF EACH SUBSYSTEM ON EACH SECTION INDEX PAGE. IT IS RECOMMENDED THAT THE TECHNICIAN FIRST TURN TO THE TOTAL SYSTEMS SCHEMATIC TO DETERMINE IF THERE ARE ANY BRANCH SYSTEMS OPERATING FROM THE SAME SOURCE. THIS WILL ASSIST IN LOCATING SYSTEM TROUBLES. HE WILL THEN BE ABLE TO TURN TO A PAGE TO FIND DETAILED INFORMATION ON A PARTICULAR SYSTEM. IN TRACING VACUUM SYSTEMS, IT IS RECOMMENDED THAT A CIRCUIT BE TRACED FROM ITS CONTROL UNIT TO ITS SOURCE OF VACUUM, AND THEN FROM THE CONTROL UNIT TO THE OPERATING UNIT, NOTING POINTS OF POSSIBLE MALFUNCTION AND ACCESSIBILITY.

THE VACUUM SYMBOLS AND THEIR MEANINGS ARE NOTED ON EACH DIVIDER PAGE TO PROVIDE A CLEAR UNDERSTANDING OF THE DIAGRAMS.

VACUUM

CIRCUIT SYMBOLS





MUSTANG-COUGAR VACUUM SYSTEMS

1971

CAR

SHOP

MANUAL

Includes all Five Volumes:

Volume I - Chassis
Volume II - Engine
Volume III - Electrical
Volume IV - Body
Volume V - Pre-Delivery

Ford

MAVERICK
TORINO
MUSTANG
FORD
THUNDERBIRD
MONTEGO
COUGAR
COMET
METEOR
MERCURY
LINCOLN CONTINENTAL
CONTINENTAL MARK III

GROUP INDEX

Ford SERVICE PUBLICATIONS

FIRST PRINTING—SEPTEMBER, 1970

FOREWORD

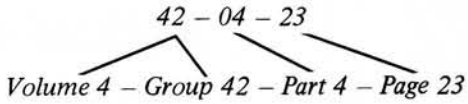
This manual is divided into five volumes: 1 – Chassis, 2 – Engine, 3 – Electrical, 4 – Body, 5 – Maintenance and Lubrication. These volumes should provide Service Technicians with complete information covering normal service repairs on all 1971 model passenger cars (except Pinto) built by the Ford Companies in the U. S. and Canada. Service procedures for the Pinto are covered in the Pinto Car Shop Manual. As changes in the product occur, this information will be updated by Technical Service Bulletins. When issued, TSB information always supersedes that published herein.

Within each volume, information is grouped by system or component plus "General Service" parts which contain information which is common to several similar components.

The table of contents on the first page of each volume indicates the general content of the book and provides a handy tab locater to make it easy to find the first page of each "Group". That page will contain an index to "Parts" and the first page of each "Part" contains a detailed index which gives page location for each service operation covered. Page numbers are consecutive in each "Part".

To make reference easier, information has been broken down into smaller units so that essentially there is now one "Part" for each component or system. Group numbers indicate the volume in which the group may be found.

Indicates:



The descriptions and specifications in this manual were in effect at the time this manual was approved for printing. Ford Marketing Corporation reserves the right to discontinue models at any time, or change specifications or design, without notice and without incurring oblication.

Ford SERVICE PUBLICATIONS

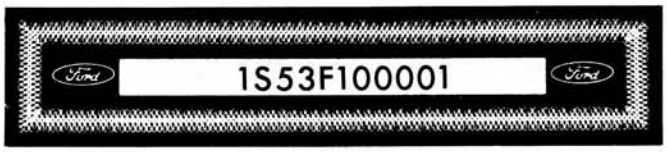
Identification Codes

GROUP 30

PART 30-01 *Car Identification Codes*

OFFICIAL VEHICLE IDENTIFICATION NUMBER

The official Vehicle Identification Number (VIN) for title and registration purposes is stamped on a metal tab that is riveted to the instrument panel close to the windshield on the driver's side of the car and is visible from outside (Fig. 1).



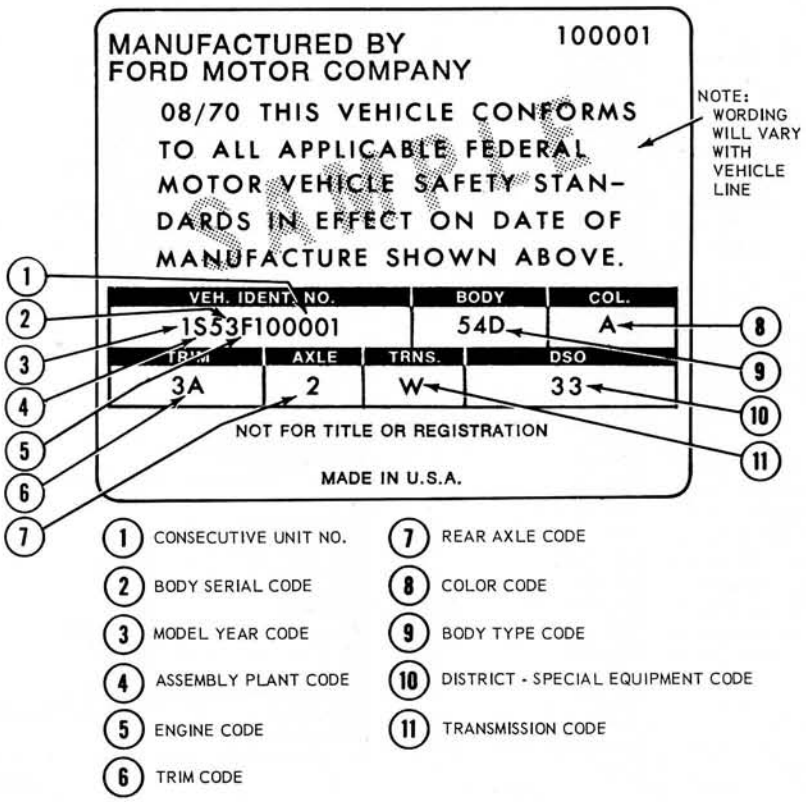


FIG. 1 . Vehicle Certification Label and Identification Number

VEHICLE CERTIFICATION LABEL

The Vehicle Certification Label (V.C. Label) is attached to the rear face of the driver's door. The upper half of the label contains the name of the manufacturer, the month and year of manufacture and the certification statement. The V.C. label also contains the Vehicle Identification Number. This number is also used for Warranty identification of the vehicle. The first number indicates the model year. The letter following the model year number indicates the manufacturing assembly plant. The next two numbers designate the Body Serial Code followed by a letter expressing the Engine Code. The last six digits of the Vehicle Identification Number indicate the Consecutive Unit Number.

The remaining information on the V.C. Label consists of pertinent vehicle identification codes. The **BODY** code is two numerals and a letter identifying the body style. The **COL** (color) code is a number or letter (or both) indicating the exterior paint color code. The **TRIM** code consists of a number-letter combination designating the interior trim. The axle code is a number or letter indicating the rear axle ratio and standard or locking type axles. The **TRNS.** code is a number or letter indicating the type of transmission, numerals for manual and letters for automatic. The **DSO** code consisting of two numbers designates the district in which the car was ordered and may appear in conjunction with a Domestic Special Order or Foreign Special Order number when applicable. Ford of Canada **DSO** codes consist of a letter and a number.

MODEL YEAR CODE

The number 1 designates 1971.

CONSECUTIVE UNIT NUMBER

Starting Serial Numbers—1971 Passenger Cars

100,001—Ford, Torino, Mustang, Thunderbird, Maverick

500,001—Mercury, Meteor, Montego, Cougar, Comet

800,001—Lincoln Continental & Continental Mark III

ASSEMBLY PLANT CODES

Code Letter	
A	Atlanta
B	Oakville (Canada)
E	Mahwah
F	Dearborn
G	Chicago
H	Lorain
J	Los Angeles
K	Kansas City
N	Norfolk
P	Twin Cities
R	San Jose
S	Allen Park
T	Metuchen
U	Louisville
W	Wayne
X	St. Thomas
Y	Wixom

CY-1299-A

DATE CODES

A number signifying the date preceeds the month code letter. A second-year code letter will be used if the model exceeds 12 months.

Month	Code First Year	Code Second Year
January	A	N
February	B	P
March	C	Q
April	D	R
May	E	S
June	F	T
July	G	U
August	H	V
September	J	W
October	K	X
November	L	Y
December	M	Z

DISTRICT CODES (DSO)

Units built on a Domestic Special Order, Foreign Special Order, or other Special orders will have the complete order number in this space. Also to appear in this space is the two-digit code number of the District which ordered the unit. If the unit is a regular production unit, only the District code number will appear.

FORD

Code	District
11	Boston
13	New York
15	Newark
16	Philadelphia
17	Washington
21	Atlanta
22	Charlotte
24	Jacksonville
25	Richmond
28	Louisville
32	Cleveland
33	Detroit
35	Lansing
37	Buffalo
38	Pittsburgh
41	Chicago
43	Milwaukee
44	Twin Cities
46	Indianapolis
47	Cincinnati
51	Denver
53	Kansas City
54	Omaha
55	St. Louis
56	Davenport
61	Dallas
62	Houston
63	Memphis
64	New Orleans
65	Oklahoma City
71	Los Angeles
72	San Jose
73	Salt Lake City
74	Seattle
75	Phoenix
83	Government
84	Home Office Reserve
85	American Red Cross
89	Transporation Services
90-99	Export

LINCOLN-MERCURY

Code	District
11	Boston
15	New York
16	Philadelphia
17	Washington
21	Atlanta
22	Dallas
23	Jacksonville
26	Memphis
31	Buffalo
32	Cincinnati
33	Cleveland
34	Detroit
41	Chicago
42	St. Louis
46	Twin Cities
51	Denver
52	Los Angeles
53	Oakland
54	Seattle
84	Home Office Reserve
90	Export

FORD OF CANADA

Code	District
B1	Central
B2	Eastern
B3	Atlantic
11 thru 17	Export
B4	Midwestern
B6	Western
B7	Pacific

Note: Canadian Lincoln-Mercury units use prefix "A" in place of "B".

CK2456-B

Charging System

GROUP 31

PART 31-01 *Charging System General Service*

1 DESCRIPTION AND OPERATION

CHARGING SYSTEM FUSE LINK

The fuse link is a short length of insulated wire integral with the engine compartment wiring harness. It is several wire gages smaller than the circuit that it protects. Production fuse links are black. Service fuse links are green or black depending on usage. All fuse links have the words FUSE LINK printed on the insulation. Fig. 1 shows fuse link installations.

The fuse link burns out, thus protecting the alternator or wiring, when heavy current flows, such as when a booster battery is connected incorrectly or a short to ground occurs in the wiring harness.

A burned out link may have bare wire ends protruding from the insulation, or it may only have expanded or bubbled insulation with illegible identification. If it is hard to determine if the link is burned out, perform a continuity test.

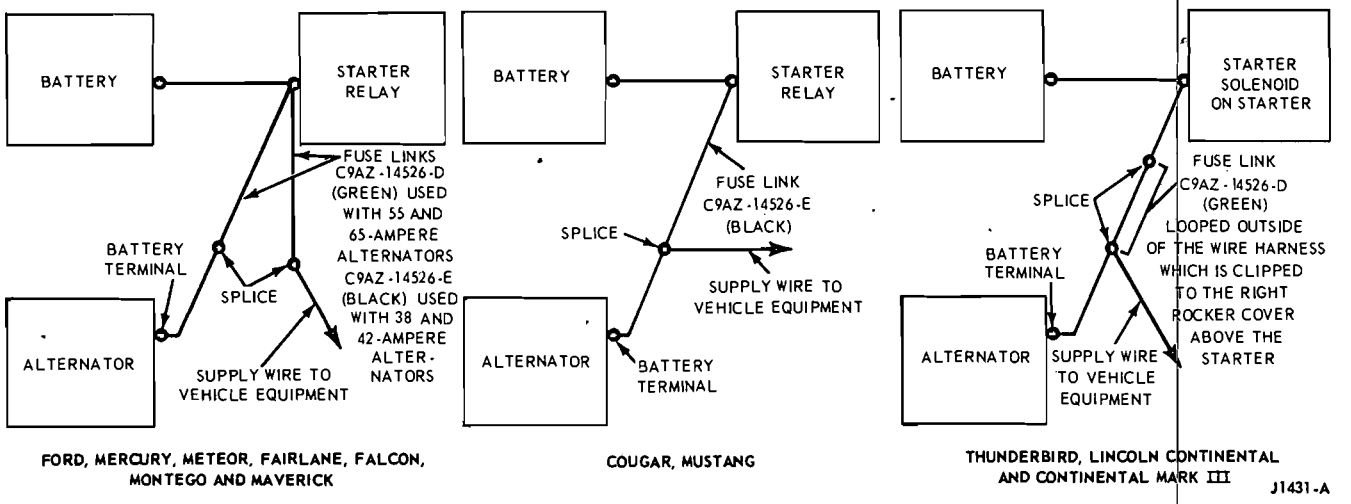


FIG. 1 Fuse Link Installation

2 TESTING

CHARGING SYSTEM

The alternator and alternator regulator are precision built units, and the equipment to make tests in the charging system must be accurate. Voltmeters must be accurate within 0.1 (one tenth) volt within the range of 12 to 16 volts and ammeters within one ampere at 30 to 65 amperes to permit correct measurement of the alternator and regulator. The meters on Rotunda equipment should be calibrated once a year and the date of calibration stamped on the meter face. It is recommended that this practice be followed by technicians with other than approved equipment in order to maintain their meters at acceptable accuracy.

Certain tests outlined in this section are illustrated in schematic and in pictorial form. The schematic illustrates the internal connections of the Rotunda equipment so that these connections can be duplicated when this equipment is not available. The Rotunda test units are a combination of accepted instruments incorporated into a single unit. The various circuits involved in the tests can be selected by means of switches without the necessity of changing connections. This reduces the time required to test units and circuits on the vehicle.

Where applicable, the tests are divided into On The Vehicle and On The Test Bench procedures. Either procedure can be followed depending on the equipment available for the tests.

Trouble shooting or diagnosis is required before actual repairs can be made in the electrical system. Even where an obvious fault makes the replacement of a unit necessary, you must still find out why the unit failed. The trouble shooting procedures given in the Electrical Systems Diagnosis Manual will aid in making a correct diagnosis. When a trouble is diagnosed correctly, unnecessary repairs are prevented, the time the vehicle is out of service will be decreased, and the repairs that are made will be permanent.

FUSE LINK CONTINUITY TEST

1. On the Cougar, Mustang, Thunderbird, Lincoln Continental and Continental Mark III, make certain first that the battery is OK, then turn on the headlights or any accessory. If the headlights or accessory do not operate, the fuse link is probably burned out.

2. On the Ford, Mercury, Meteor, Torino, Montego, Maverick and Comet, there are two fuse links (Fig. 1). Use the same procedure as in step 1 to test the fuse link that protects the vehicle equipment.

To test the fuse link that protects the alternator, make certain that the battery is OK then check with a voltmeter for voltage at the BAT terminal of the alternator. No voltage indicates that the fuse link is probably turned out.

4 REMOVAL AND INSTALLATION

FUSE LINK REPLACEMENT

1. Procure the proper service fuse link for the vehicle being repaired (Fig. 1). The two fuse links shown have an eyelet terminal for a 5/16-inch stud on one end. When the terminal is not required, cut off the fuse link as close to the terminal as possible and strip approximately 3/8-inch of insulation from the cut end.

2. Disconnect the battery ground cable.

3. Disconnect the fuse link and/or fuse link eyelet terminal from the battery terminal of the starter

relay. On the Thunderbird, Lincoln Continental and the Continental Mark III, the fuse link is looped outside of the wire harness behind the point at which the harness is clipped to the right rocker cover above the starter.

4. Cut the fuse link and the splice(s) from the wire(s) to which it is attached.

5. Splice and solder the new fuse link to the wire(s) from which the old link was cut. Use rosin core solder. Wrap the splice(s) completely with vinyl electricians tape.

6. Securely connect the eyelet terminals (if any) to the battery stud on the starter relay.

7. Install the repaired wiring as before using existing clips if provided.

8. Connect the ground cable to the battery.

PART 31-02 *Batteries*

1

2 TESTING

Tests are made on a battery to determine the state of charge and also the condition. The ultimate result of these tests is to show that the battery is good, needs recharging, or should be replaced.

If a battery has failed, is low in charge, or requires water frequently, good service demands that the reason for this condition be found. It may be necessary to follow trouble shooting procedures to locate the cause of the trouble. Refer to the Ford Car and Truck Diagnosis Manual for battery diagnosis procedures.

Hydrogen and oxygen gases are produced during normal battery operation. This gas mixture can explode if flames or sparks are brought near the vent openings of the battery. The sulphuric acid in the battery electrolyte can cause a serious burn if spilled on the skin or spattered in the eyes. It should be flushed away with large quantities of clear water.

Particular care should be used when connecting a booster battery in order to prevent sparks. Be certain to connect positive terminal to positive terminal and negative terminal to negative terminal.

Before attempting to test a battery, it is important that it be given a thorough visual examination to determine if it has been damaged. The presence of moisture on the outside of the case and/or low electrolyte level in one or more of the cells are indications of possible battery damage.

Autolite batteries have a single one-piece cover which completely seals the top of the battery and the individual cell connectors. This cover must not be pierced with test probes to perform individual cell tests.

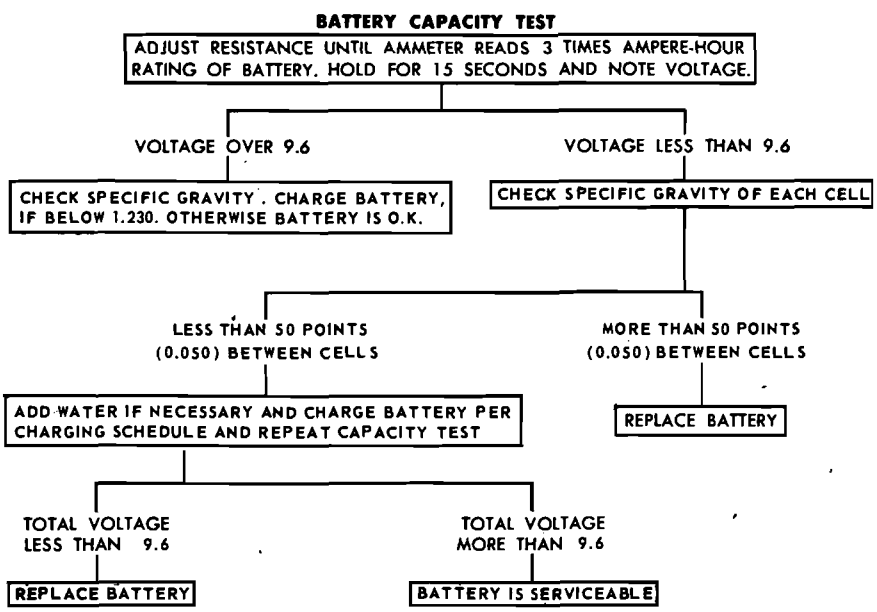


FIG. 1 Battery Capacity Test Outline

TESTS USING THE ROTUNDA CELL ANALYZER (SRECA-200)

The Rotunda Cell Analyzer (SRECA-200) measures the individual cell voltages by inserting probes into the cell openings. Follow the instructions provided with the unit.

A battery can also be tested by determining its ability to deliver current. This may be determined by conducting a Battery Capacity Test. Fig. 1 shows the battery capacity test in outline form.

TESTS USING THE ROTUNDA BATTERY—STARTER TESTER ARE 16-31

Battery Capacity Test

A high rate discharge tester (Rotunda Battery-Starter Tester ARE 16-31) in conjunction with a voltmeter is used for this test.

1. Turn the control knob on the BatteryStarter Tester to the OFF position.

2. Turn the voltmeter selector switch to the 20-volt position.

3. Connect both positive test leads to the positive battery post and both negative test leads to the negative battery post. **The voltmeter clips must contact the battery posts and not the high rate discharge tester clips. Unless this is done, the actual battery terminal voltage will not be indicated.**

4. Turn the load control knob in a clockwise direction until the ammeter reads three times the ampere hour rating of the battery. (A 45 ampere-hour battery should be tested at 135 amperes load).

5. With the ammeter reading the required load for 15 seconds, note the voltmeter reading. **Avoid leaving the high discharge load on the battery for periods longer than 15 seconds.**

6. If the voltmeter reading is 9.6 volts or more, the battery has good output capacity and will readily accept a charge, if required. Check the specific gravity. If the specific gravity reading is 1.230 or below, add water if necessary and charge the battery until it is fully charged (Fig. 1). **Always disconnect the battery ground cable when charging the battery.**

Specific Gravity Reading	Charge Rate Amperes	Battery Capacity – Ampere Hours				
		45	55	70	80	85
1.125–1.150 ①	35	65 min.	80 min.	100 min.	115 min.	125 min.
1.150–1.175	35	50 min.	65 min.	80 min.	95 min.	105 min.
1.175–1.200	35	40 min.	50 min.	60 min.	70 min.	75 min.
1.200–1.225	35	30 min.	35 min.	45 min.	50 min.	55 min.
Above 1.225	5	②	②	②	②	②

① If the specific gravity is below 1.125, use the indicated high rate of charge for the 1.125 specific gravity, then charge at 5 amperes until the specific gravity reaches 1.250 at 80° F.

② Charge at 5 ampere rate only until the specific gravity reaches 1.250 at 80° F.

At no time during the charging operation should the electrolyte temperature exceed 130° F.

J 1355-C

FIG. 2 Allowable Battery High Rate Charge Time Schedule

The battery is fully charged when the cells are all gassing freely and the specific gravity ceases to rise for three successive readings taken at hourly intervals. Additional battery testing will not be necessary after the battery has been properly charged.

7. If the voltage reading obtained during the capacity test is below 9.6 volts, check the specific gravity of each cell.

8. If the difference between any two cells is more than 50 points (0.050), the battery is not satisfactory for service and should be replaced.

9. If the difference between cells is less than 50 points (0.050), the battery should be charged according to the charging schedule in Fig. 2. In some cases the electrolyte level may be too low to obtain a specific gravity reading. In such cases water should be added until the electrolyte level just covers the ring in the filler well, then charge the battery at 35 amperes for the maximum charging time indicated in Fig. 2 for the capacity of the battery being tested.

10. After the battery has been charged, repeat the capacity test. If the capacity test battery voltage is still less than 9.6 volts, replace the battery. If the voltage is 9.6 volts or more, the battery is satisfactory for service.

11. If the battery is found to be discharged only, check for a loose fan belt, loose electrical connections and charging system performance.

9 SPECIFICATIONS

BATTERIES

Allowable Battery High Rate Charge Time Schedule						
Specific Gravity Reading	Charge Rate Amperes	Battery Capacity–Ampere Hours				
		45	55	70	80	85
1.125–1.150①	35	65 min.	80 min.	100 min.	115 min.	125 min.
1.150–1.175	35	50 min.	65 min.	80 min.	95 min.	105 min.
1.175–1.200	35	40 min.	50 min.	60 min.	70 min.	75 min.
1.200–1.225	35	30 min.	35 min.	45 min.	50 min.	55 min.
Above 1.225	5	②	②	②	②	②

①If the specific gravity is below 1.125, use the indicated high rate of charge for the 1.125 specific gravity, then charge at 5 amperes until the specific gravity reaches 1.250 at 80° F.
②Charge at 5 ampere rate only until the specific gravity reaches 1.250 at 80° F.
At no time during the charging operation should the electrolyte temperature exceed 130° F.

Battery Freezing Temperatures			
Specific Gravity	Freezing Temp	Specific Gravity	Freezing Temp
1.280	–90°F	1.150	+5°F
1.250	–62°F	1.100	+19°F
1.200	–16°F	1.050	+27°F

Battery Ampere Hours		Number Of Plates
45		54
55		66
70		66
80		78

CJ1447-A

1965/72
FORD CAR

FINAL ISSUE

Master Parts a and Accessories CATALOG

Form FP 7635-A & B

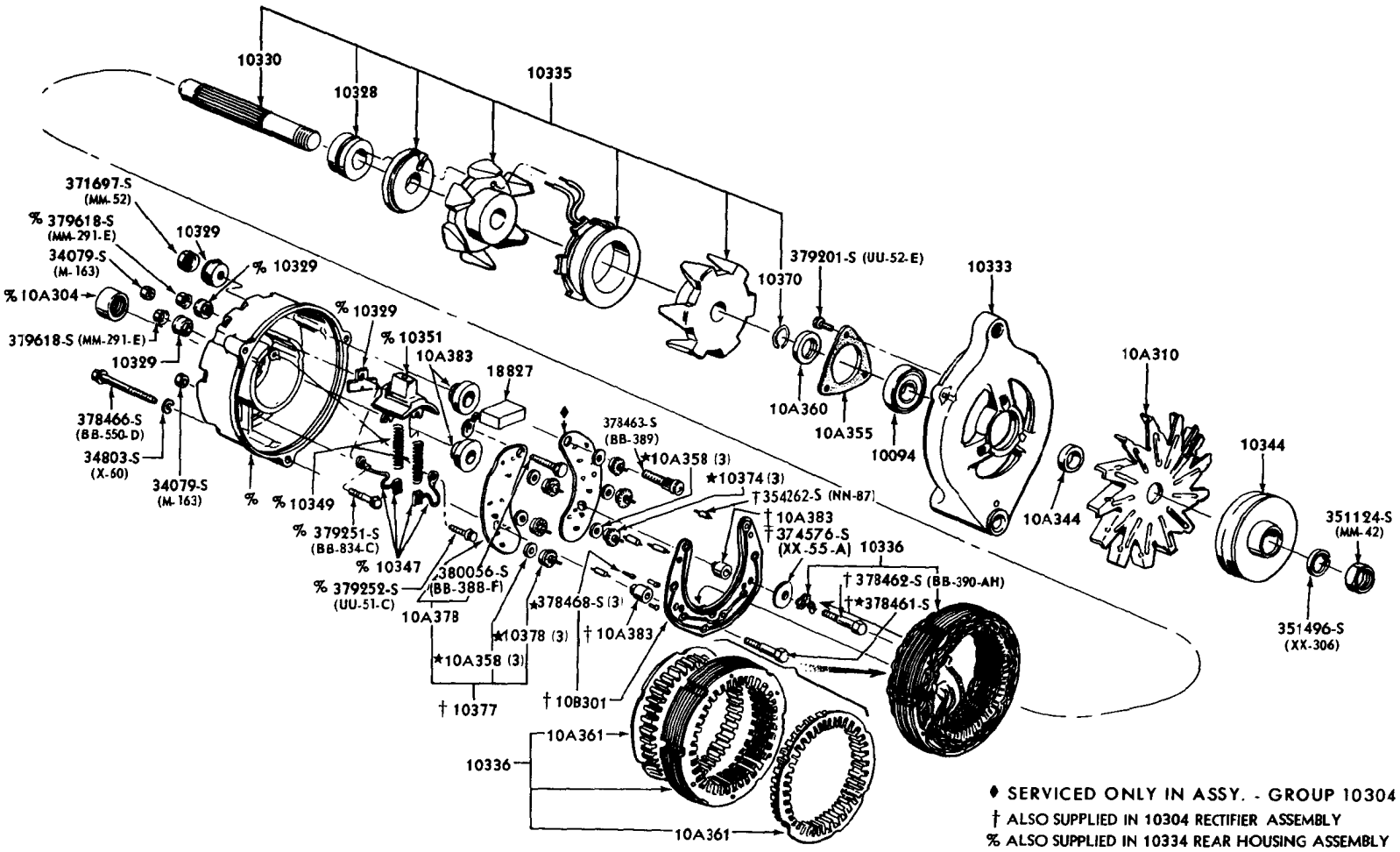
Supersends All Previous Issues, Changes and Revisions

5236

May, 1975

FINAL ISSUE

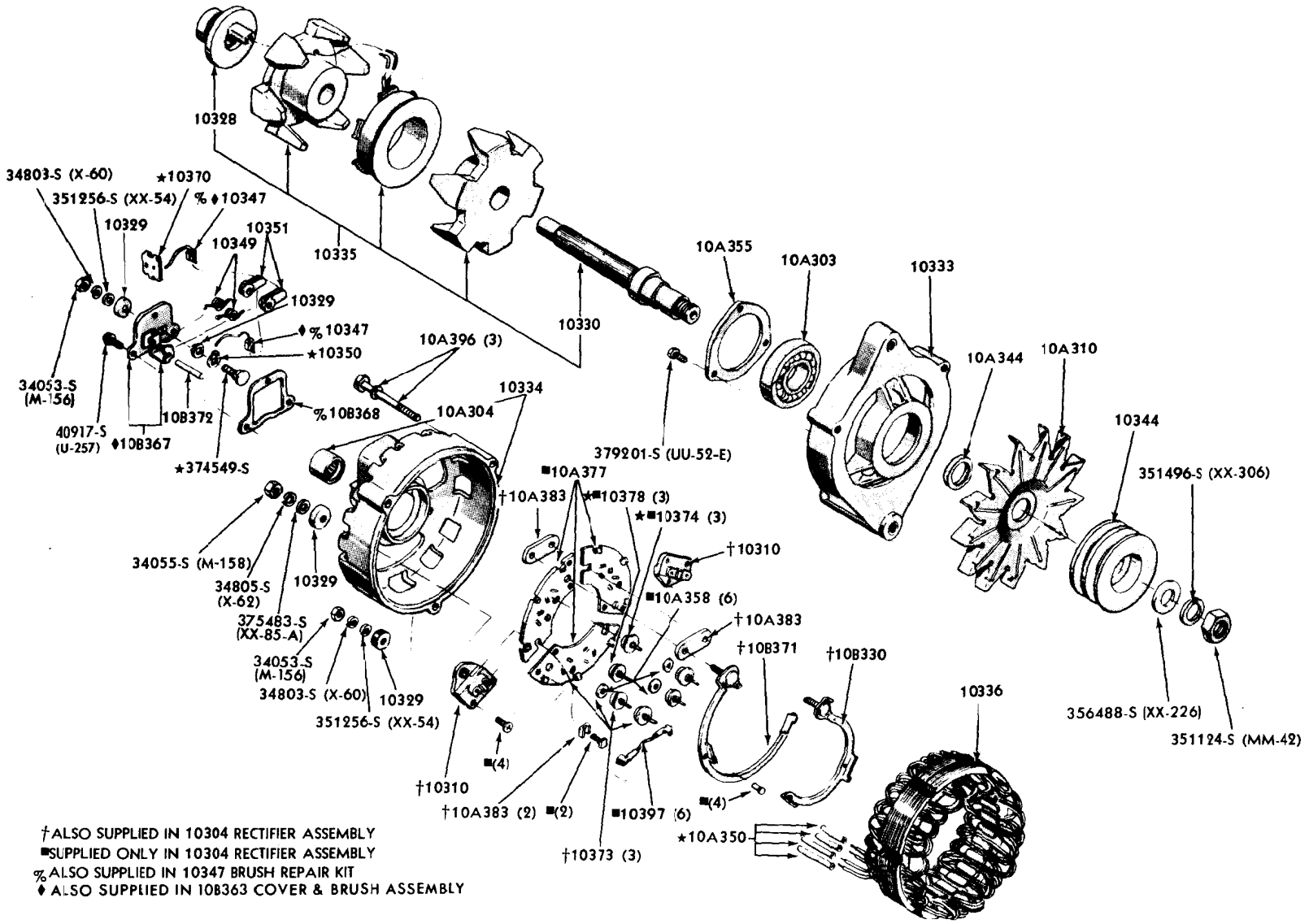
ALTERNATOR (FORD 15 VOLT - 38,42,45,55,60,61 AMP.)
1965/72



♦ SERVICED ONLY IN ASSY. - GROUP 10304
† ALSO SUPPLIED IN 10304 RECTIFIER ASSEMBLY
% ALSO SUPPLIED IN 10334 REAR HOUSING ASSEMBLY

P-4508

ALTERNATOR (FORD 15 VOLT - 65 AMP.)
1967/72



†ALSO SUPPLIED IN 10304 RECTIFIER ASSEMBLY
■SUPPLIED ONLY IN 10304 RECTIFIER ASSEMBLY
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♦ ALSO SUPPLIED IN 10B363 COVER & BRUSH ASSEMBLY

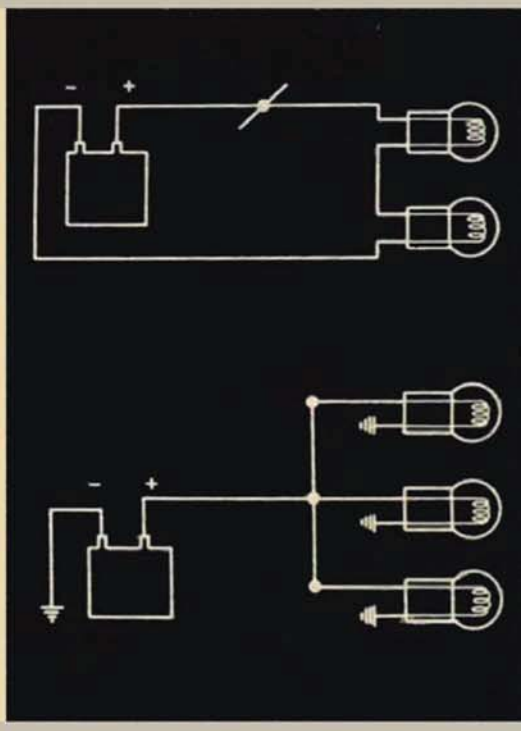
P-5394

READY REFERENCE 13001

HOW TO READ WIRING DIAGRAMS

Ford
REGISTERED TECHNICIAN

VOL 68 S7 L2A



HOW TO READ WIRING DIAGRAMS

COURSE 13001 • VOL. 68 S7 L2A

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NATIONAL SERVICE OFFICE
FORD DIVISION

FIRST PRINTING – JANUARY, 1968

INTRODUCTION

The Why and Wherefore of Wiring Diagrams

To the uninformed, a wiring diagram — or a wiring assembly — looks like it might take a genius to figure out.

Not so — as you'll find out when you get better acquainted with these subjects.

There're as understandable and logical as a road map and road markers, when you're finding your way on a cross-country drive.

The ability to read a wiring diagram and relate it to a vehicle's wiring system is, of course, an essential part of a modern service technician's skill. And it's growing in relative importance, too, due to owner's increasing demands for the comforts and conveniences supplied by electrically-operated options and accessories. This opens up greater opportunities, for the forward-looking technician.

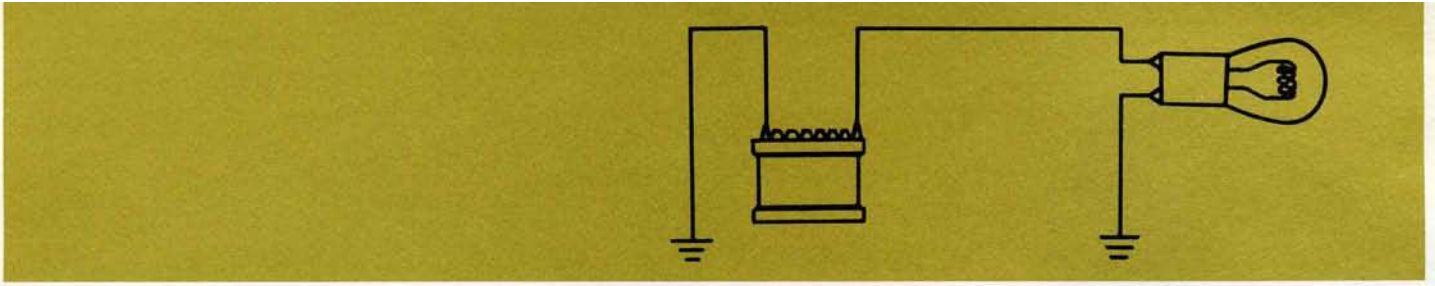
The Purpose of this Booklet . . .

. . . is to acquaint you with the systems by which electrical circuits are traced on vehicles. Specifically, it is designed to help you acquire the ability to make your own power checks, quickly and accurately.

Scope of the Booklet

Basically, this is a printed version of the film, "How to Read a Wiring Diagram." It is in no sense a manual of the shop methods by which electrical repairs are made.

It *can* be a helpful guide that can introduce you to the principles of wiring diagrams and vehicle wiring. As you gain experience in reading wiring diagrams, you'll accumulate your own know-how in this important skill. When it becomes "second nature" to you, these pages will have served their purpose — and yours.

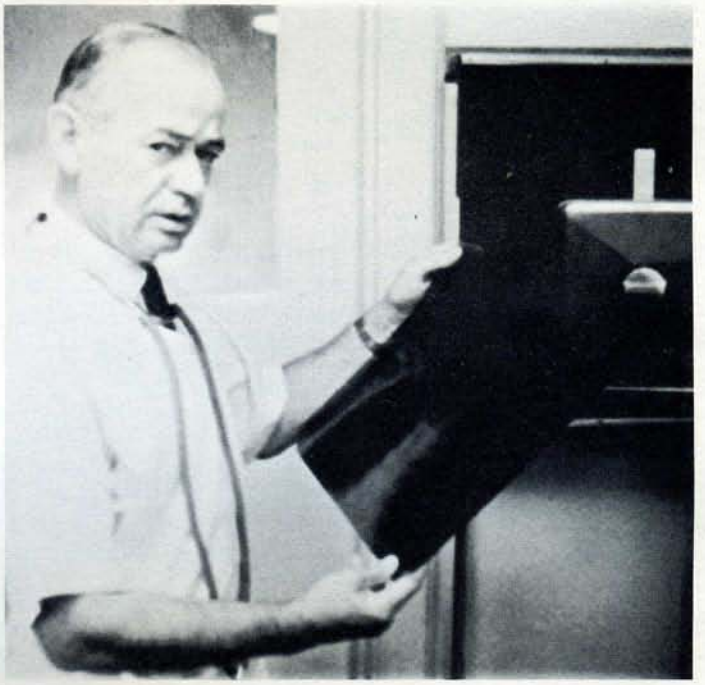


To show how to read wiring diagrams — and to explain how they can be used to help you troubleshoot problems in the electrical system — is what this booklet is all about. Obviously, these are important subjects.

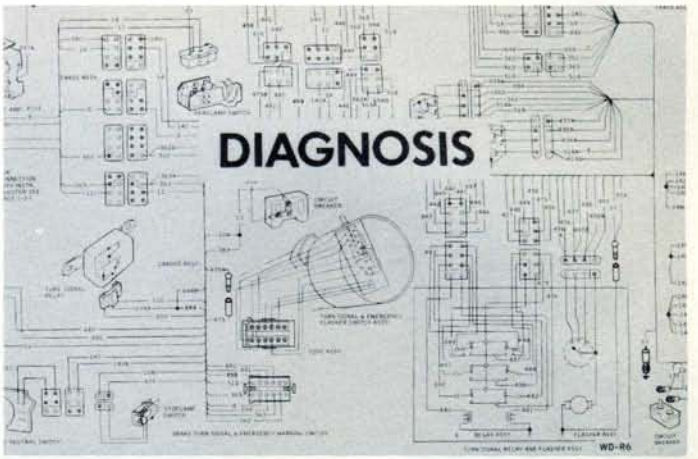
A LOGICAL APPROACH TO ELECTRICAL DIAGNOSIS

If a customer comes in because his headlights aren't working, you can't just make a snap decision. That's not the *professional way*.

Putting in a new sealed-beam unit *may* be the answer . . . but then again, *it may not*. Snap decisions are *out*. They're *not professional*.



When you go to a doctor, for example, he tries to find out what's *really* wrong with you. He looks beyond the aches and pains you feel, to see what's *causing* the trouble. We call this, *diagnosis*.



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