1970 Colorized Mustang Wiring & Vacuum Diagrams

(with Electrical Illustrations)

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"How to Read Wiring Diagrams"
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Color diagrams for:

Automatic Transmission
Convenience System
Exterior and Interior Lights
Heating and Air Conditioning
Horns and Convertible Top
Ignition, Starting and Charging
Instrument Panel, Tachometer
Radio, Stereo and Speakers
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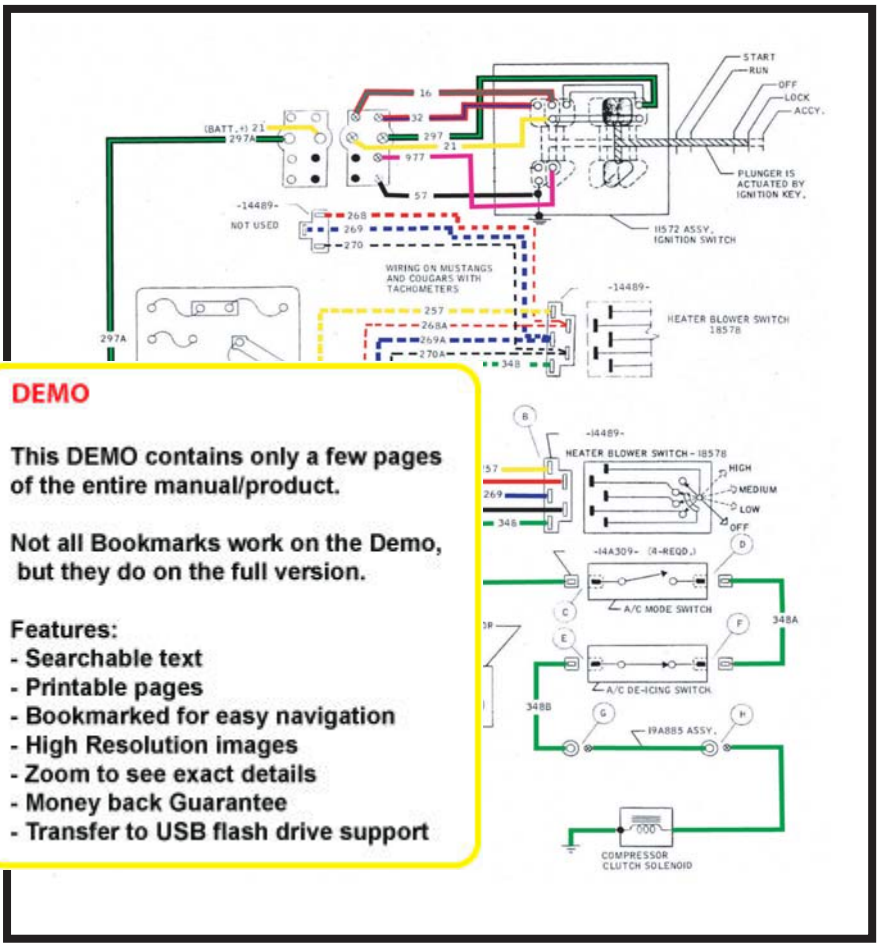

Example of colorized diagrams

1970 Colorized Mustang Wiring and Vacuum Diagrams
(Extracted from Form 7098-70-3, Form FD-7795P-70, FP-7635B, and FD-7943-G)
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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: *1970 Car Shop Manual* (Form 7098-70-3, September 1969), *1965/1972 Ford Car Master Parts and Accessory Catalog* (Form FP-7635B, May 1975, and *1970 Wiring Diagrams* (Form FD-7795P-70) and *How to Read Wiring Diagrams* (FD-7943-G).

Disclaimer

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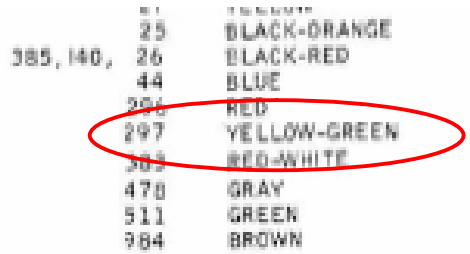
ATTENTION

Please Read This

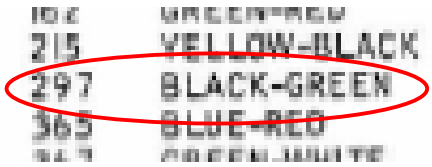
It is important to note that differences exist between similar or like wiring diagrams even though they are original Ford publications. It is for this reason there may be multiple versions of what appears to be the same wiring diagram. If your vehicle has a color coded wire that does not match a diagram you should consult the other diagrams contained in the manual for a possible match.

Example of differences



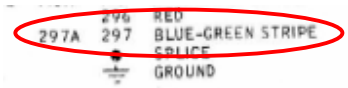
In the wiring diagrams from the Ford publication Form 7795P-70F, the Mustang Exterior Lights Wiring Color Code shows:

297 Yellow-Green



However, in the Wiring Color Code section of the Mustang Warning Lights it has:

297 Black-Green



Then, in the Wiring Color Code section of the Automatic Transmission, it has:

297 Blue-Green Stripe

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.

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1970 Color Wiring Codes

Number	Wire Description	Source
2	WHITE-BLUE STRIPE	Form 7795P-70F
3	GREEN-WHITE STRIPE	Form 7795P-70F
4	WHITE-BLACK STRIPE	Form 7795P-70F
5	ORANGE-BLUE STRIPE	Form 7795P-70F
8	ORANGE-YELLOW STRIPE	Form 7795P-70F
9	GREEN-ORANGE STRIPE	Form 7795P-70F
10	GREEN-RED STRIPE	Form 7795P-70F
11	**GREEN-YELLOW STRIPE**	Form 7795P-70F
11	**BLACK-YELLOW STRIPE**	Form 7795P-70F
11A	BLACK-YELLOW STRIPE	FORM 7795P-69
12	GREEN-BLACK STRIPE	Form 7795P-70F
13	RED-BLACK STRIPE	Form 7795P-70F
14	BLACK	Form 7795P-70F
15	RED-YELLOW STRIPE	Form 7795P-70F
16	**RED-GREEN STRIPE**	**Form 7795P-70F**
16	**PINK**	**Form 7795P-70F**
16A	PINK	Form 7795P-70F
19	BLUE-RED STRIPE	Form 7795P-70F
19A	BLUE-RED STRIPE	Form 7795P-70F
19B	BLUE-RED STRIPE	Form 7795P-70F
19C	BLUE-RED STRIPE	Form 7795P-70F
19D	BLUE-RED STRIPE	Form 7795P-70F
19E	BLUE-RED STRIPE	Form 7795P-70F
21	YELLOW	Form 7795P-70F
22	BLUE-BLACK STRIPE	Form 7795P-70F
25	BLACK-ORANGE STRIPE	Form 7795P-70F
26	BLACK-RED STRIPE	Form 7795P-70F
26A	BLACK-RED STRIPE	Form 7795P-70F
28	BLACK	Form 7795P-70F
29	YELLOW-WHITE STRIPE	Form 7795P-70F
30	**BLACK-GREEN STRIPE**	**Form 7795P-70F**
30	**VIOLET**	**Form 7795P-70F**
30A	VIOLET (Resistance Wire)	Form 7795P-70F
31	WHITE-RED STRIPE	Form 7795P-70F
32	RED-BLUE STRIPE	Form 7795P-70F
32A	RED-BLUE STRIPE	Form 7795P-70F
32B	Not Listed	Form 7795P-70F
34	GREEN-BLACK STRIPE	Form 7795P-70F
35	ORANGE	Form 7795P-70F
37	**BLACK-YELLOW STRIPE**	**Form 7795P-70F**
37	**GREEN-YELLOW STRIPE**	**Form 7795P-70F**

Number	Wire Description	Source
37A	BLACK-YELLOW STRIPE	Form 7795P-70F
38	BLACK	Form 7795P-70F
38A	BLACK	Form 7795P-70F
38B	BLACK	Form 7795P-70F
39	RED-WHITE STRIPE	Form 7795P-70F
40	BLUE-WHITE STRIPE	Form 7795P-70F
44	BLUE	Form 7795P-70F
48	Not Listed	Form 7795P-70F
49	WHITE-BLUE STRIPE	Form 7795P-70F
50	GREEN-WHITE STRIPE	Form 7795P-70F
53A	BLACK-BLUE STRIPE	Form 7795P-70F
53B	BLACK-BLUE STRIPE	Form 7795P-70F
53C	BLACK-BLUE STRIPE	Form 7795P-70F
53D	BLACK-BLUE STRIPE	Form 7795P-70F
53E	BLACK-BLUE STRIPE	Form 7795P-70F
53F	BLACK-BLUE STRIPE	Form 7795P-70F
54	GREEN-YELLOW STRIPE	Form 7795P-70F
54A	GREEN-YELLOW STRIPE	Form 7795P-70F
54B	GREEN-YELLOW STRIPE	Form 7795P-70F
54C	GREEN-YELLOW STRIPE	Form 7795P-70F
54D	GREEN-YELLOW STRIPE	Form 7795P-70F
56	BLUE	Form 7795P-70F
57	BLACK	Form 7795P-70F
57A	BLACK	Form 7795P-70F
57B	BLACK	Form 7795P-70F
57C	BLACK	Form 7795P-70F
57H	BLACK	Form 7795P-70F
58	WHITE	Form 7795P-70F
63	RED	Form 7795P-70F
122	YELLOW	Form 7795P-70F
123	RED	Form 7795P-70F
137	YELLOW-BLACK STRIPE	Form 7795P-70F
140	BLACK-RED STRIPE	Form 7795P-70F
140A	BLACK-RED STRIPE	Form 7795P-70F
152	**YELLOW**	**Form 7795P-70F**
152	**GREEN-BLACK STRIPE**	**Form 7795P-70F**
159	Not Listed	Form 7795P-70F
161	GREEN	Form 7795P-70F
162	GREEN-RED STRIPE	Form 7795P-70F
175	BLACK	Form 7795P-70F
215	YELLOW-BLACK STRIPE	Form 7795P-70F

Number	Wire Description	Source
257	YELLOW	Form 7795P-70F
262	BROWN	Form 7795P-70F
268	RED	Form 7795P-70F
269	BLUE	Form 7795P-70F
270	BLACK	Form 7795P-70F
296	RED	Form 7795P-70F
297	**BLACK-GREEN STRIPE**	**Form 7795P-70F**
297	**BLUE-GREEN STRIPE**	**Form 7795P-70F**
297	**YELLOW-GREEN STRIPE**	**Form 7795P-70F**
297A	BLACK-GREEN STRIPE	Form 7795P-70F
297A	BLUE-GREEN STRIPE	Form 7795P-70F
348A	GREEN	Form 7795P-70F
348B	GREEN	Form 7795P-70F
365	BLUE-RED STRIPE	Form 7795P-70F
366	Not Listed	Form 7795P-70F
367	GREEN-WHITE STRIPE	Form 7795P-70F
383	RED-WHITE STRIPE	Form 7795P-70F
450	Not Listed	Form 7795P-70F
460	YELLOW	Form 7795P-70F
469	GREEN	Form 7795P-70F
478	GRAY	Form 7795P-70F
482	BLUE-YELLOW STRIPE	Form 7795P-70F
482A	BLUE-YELLOW STRIPE	Form 7795P-70F
490	BLACK-RED STRIPE	Form 7795P-70F
511	GREEN	Form 7795P-70F
520	VIOLET	Form 7795P-70F
627	BLACK-VIOLET STRIPE	Form 7795P-70F
640	RED-YELLOW STRIPE	Form 7795P-70F
643	YELLOW-BLACK STRIPE	Form 7795P-70F
654	YELLOW	Form 7795P-70F
655	RED	Form 7795P-70F
70	GRAY	Form 7795P-70F
708	BLACK	Form 7795P-70F
709	BLACK-GREEN STRIPE	Form 7795P-70F
763	ORANGE-WHITE STRIPE	Form 7795P-70F
806	WHITE	Form 7795P-70F
807	ORANGE	Form 7795P-70F
904	VIOLET	Form 7795P-70F
904	VIOLET (Resistance Wire)	Form 7795P-70F
904	GREEN-RED STRIPE	Form 7795P-70F
950	WHITE-BLACK STRIPE	Form 7795P-70F

Number	Wire Description	Source
951	GREEN	Form 7795P-70F
977	VIOLET	Form 7795P-70F
984	BROWN	Form 7795P-70F

Note – wire color codes highlighted in **RED** designate a difference either between the original Ford wiring publications or within the same publication. Those highlighted have the same wire number but have different color codes.

Source Document
Ford Publication Form 7795P-70

COURSE 13003 and 1703

1970 WIRING and VACUUM DIAGRAMS

Ford

SERVICE TRAINING

FORM 7795P-70

HOW TO USE THE WIRING DIAGRAMS

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 1 (WIRE #140 TO #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. THE ELECTRICAL SYMBOLS AND THEIR MEANINGS ARE NOTED ON EACH DIVIDER PAGE TO PROVIDE A CLEARER UNDERSTANDING OF THE DIAGRAMS. 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.

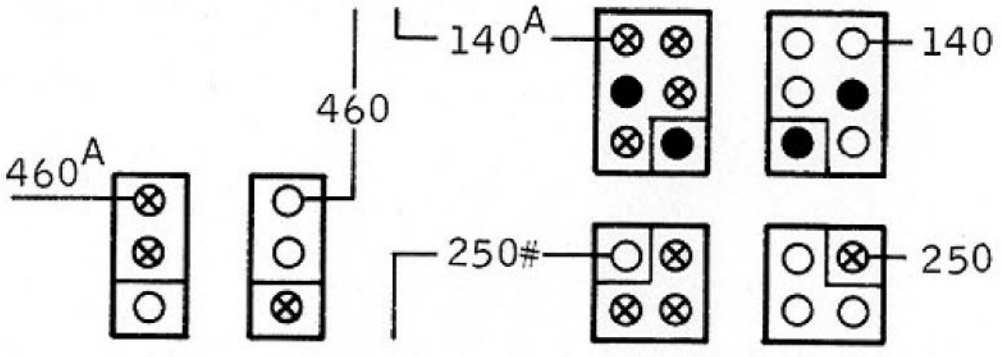
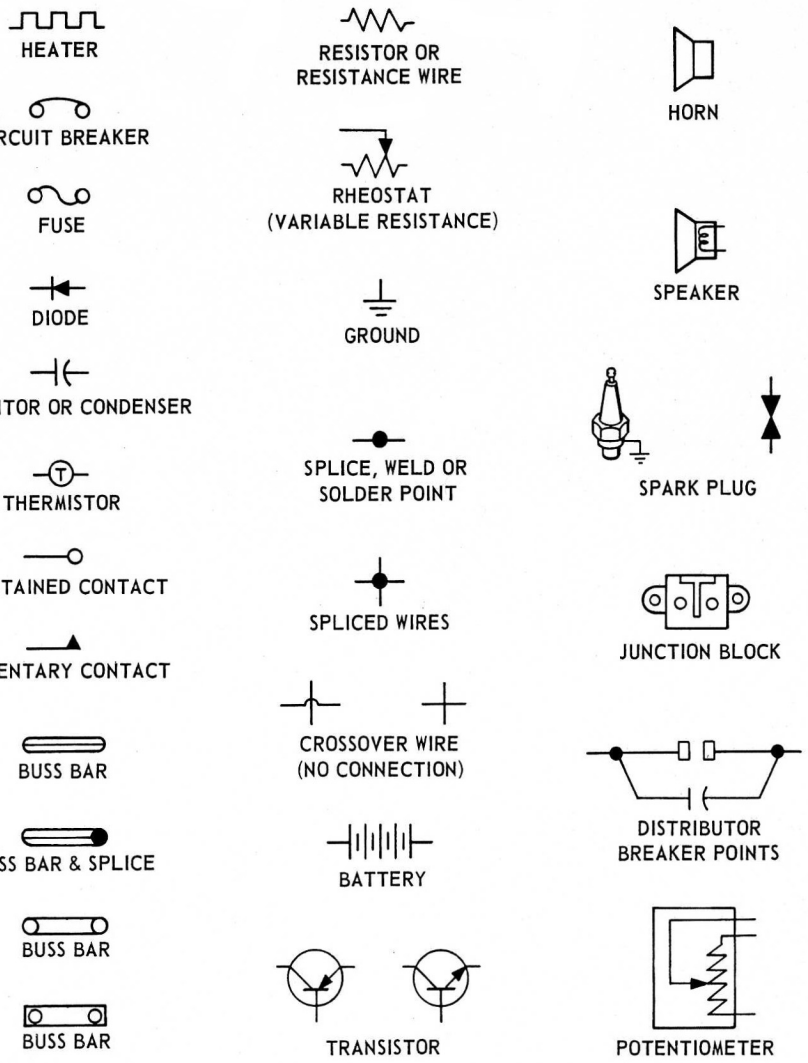
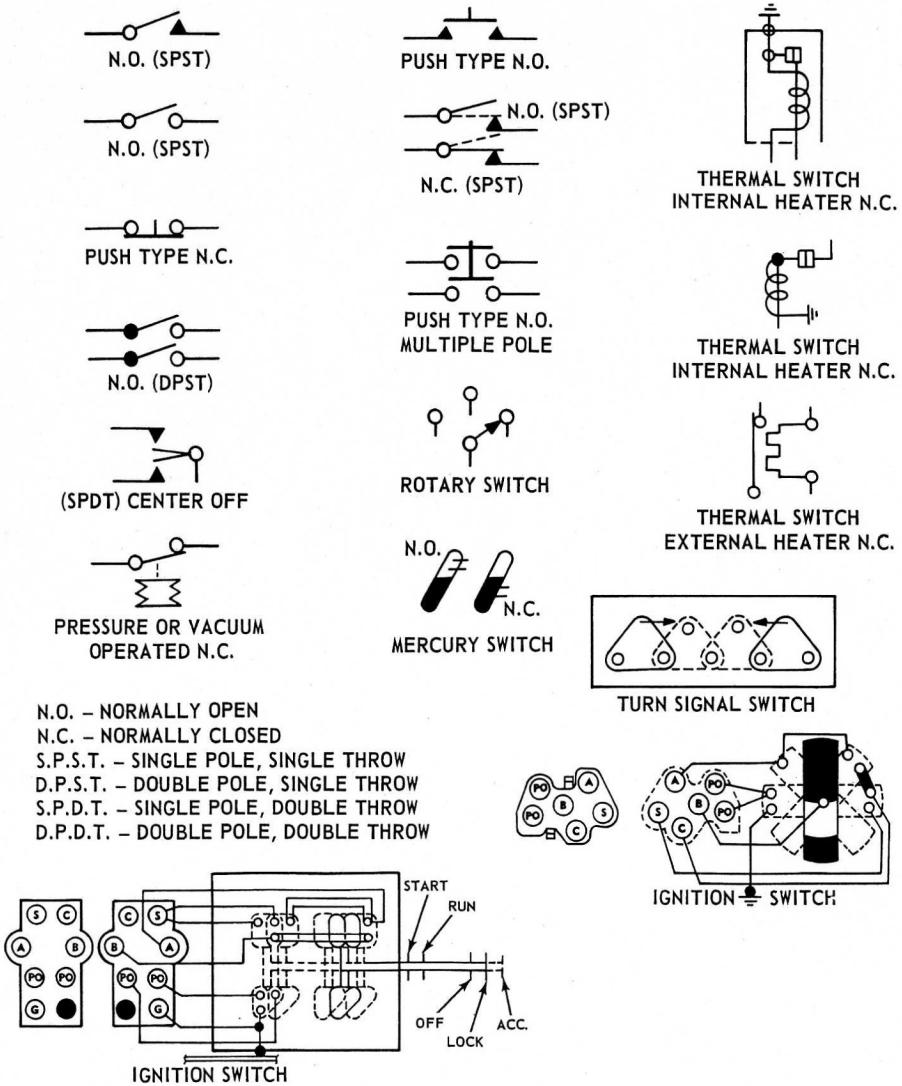


Figure 1

CIRCUIT SYMBOLS

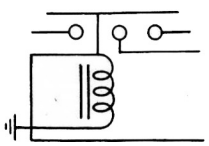


SWITCHES



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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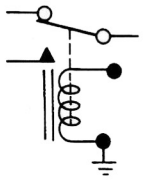
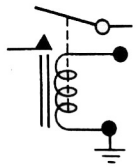


(SPDT)



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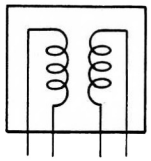
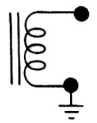
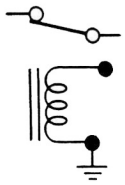


SOLENOID



SOLENOID



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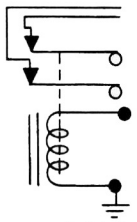

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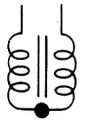
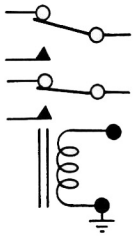
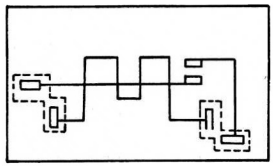


IGNITION COIL



DPDT



MAP LAMP RELAY

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

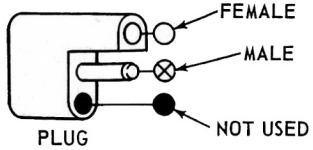
COIL AIR CORE

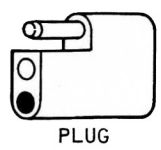
LAMPS

SINGLE FILAMENT

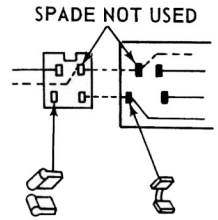
DOUBLE FILAMENT

CONNECTORS



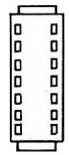


PLUG



FEMALE MALE

BULLET CONNECTOR



MALE

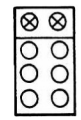
FEMALE

FEMALE

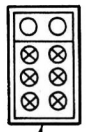
FEMALE

MALE

MALE

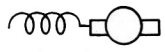


MULTIPLE PLUG

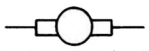


COVER FOR CONNECTOR PINS

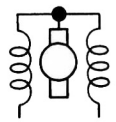
MOTORS



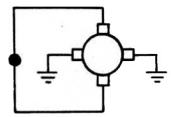
BASIC SERIES



PERMANENT MAGNET

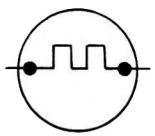


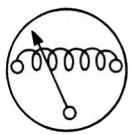
SPLIT SERIES

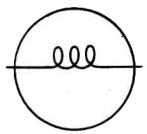


STARTER MOTOR

GAUGES

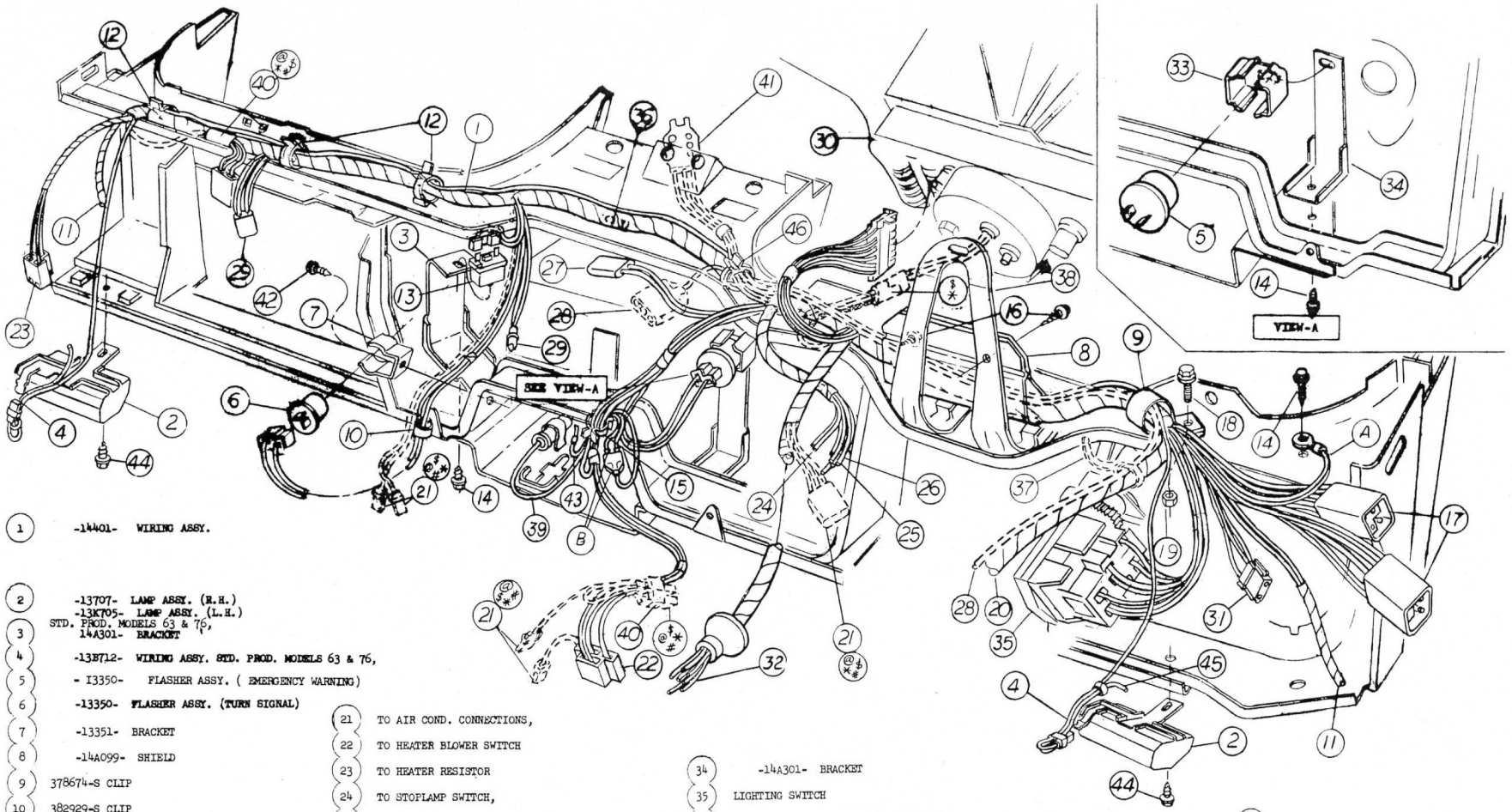






1970 MUSTANG AND COUGAR ELECTRICAL DRAWINGS

SECTION 2 INDEX



1 -14401- WIRING ASSY.

2 -13707- LAMP ASSY. (R.H.)
-13K705- LAMP ASSY. (L.H.)
STD. PROD. MODELS 63 & 76,

3 14A301- BRACKET

4 -13B712- WIRING ASSY. STD. PROD. MODELS 63 & 76,

5 - I3350- FLASHER ASSY. (EMERGENCY WARNING)

6 -13350- FLASHER ASSY. (TURN SIGNAL)

7 -13351- BRACKET

8 -14A099- SHIELD

9 378674-S CLIP

10 382929-S CLIP

11 TO JAMB SWITCH

12 383207-S CLIP (3-REQD.)

13 -13150- BUZZER ASSY.

14 55907-S36 SCREW (3-REQD.)

15 383477-S CLIP

16 40927-S2 SCREW (2-REQD.)

17 TO 14405 WIRING ASSY.,

18 56303-S4 BOLT

19 34659-S2 NUT

20 14401 ASSY. TO FUSE PANEL

21 TO AIR COND. CONNECTIONS,

22 TO HEATER BLOWER SWITCH

23 TO HEATER RESISTOR

24 TO STOPLAMP SWITCH,

25 TO WIPER SWITCH & CIGAR LIGHTER

26 TO IGNITION & 7200 ASSY. CONNECTIONS

27 TO RADIO RECEIVER,

28 PART OF 14A318 ASSY. 1

29 TO CLOCK & MAP LAMP,
TO 13B712 ASSY.

30 INSTRUMENT CLUSTER

31 TO THERMO SWITCH

32 ENGINE COMPT. WIRING,

33 -13351- BRACKET

34 -14A301- BRACKET

35 LIGHTING SWITCH

36 POSITION LOCATOR IN HOLE PROVIDED

37 351053 STRAP

38 BRACE ASSY. BRAKE PEDAL SUPPORT

39 -13A726- LAMP ASSY. (ASH RECP.)

40 ESE-M3G71-A TAPE, USE THREE (.75 x 6.00)
PIECES WHEN A/C IS NOT SPECIFIED

41 TO GRILLE LAMPS

42 55906-S36 SCREW

43 FOR HEATER CONTROL LAMP,

44 55907-S36 SCREW (2-REQD.)

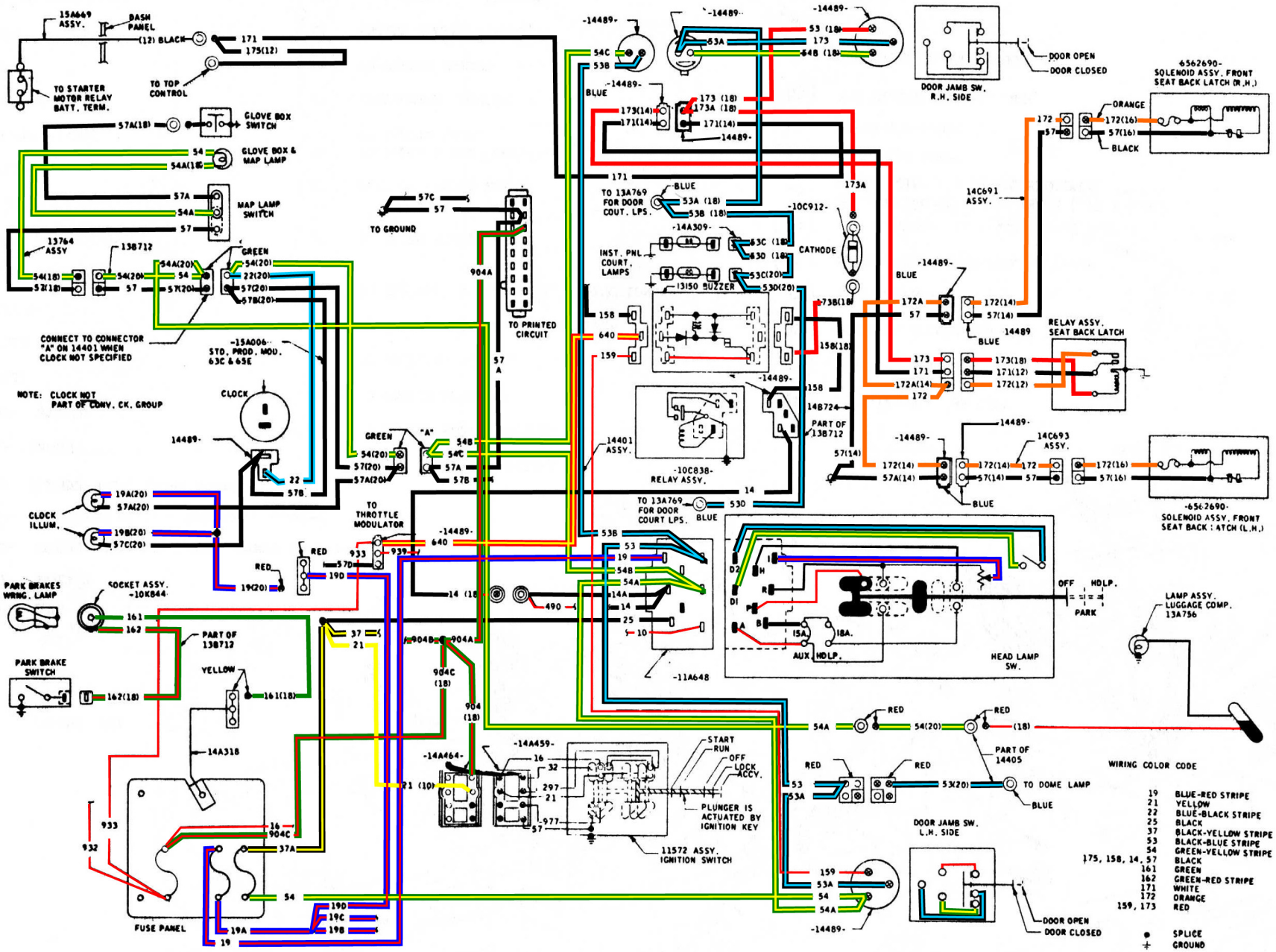
45

46 383312-S CLIP

A 57 BLACK

B RED INSULAROR

1970 MUSTANG INSTRUMENT PANEL



1970 MUSTANG CONVENIENCE SYSTEM

Source Document
Ford Publication Form 7795P-70

COURSE 13003 and 1703

1970 WIRING and VACUUM DIAGRAMS

Ford

SERVICE TRAINING

FORM 7795P-70

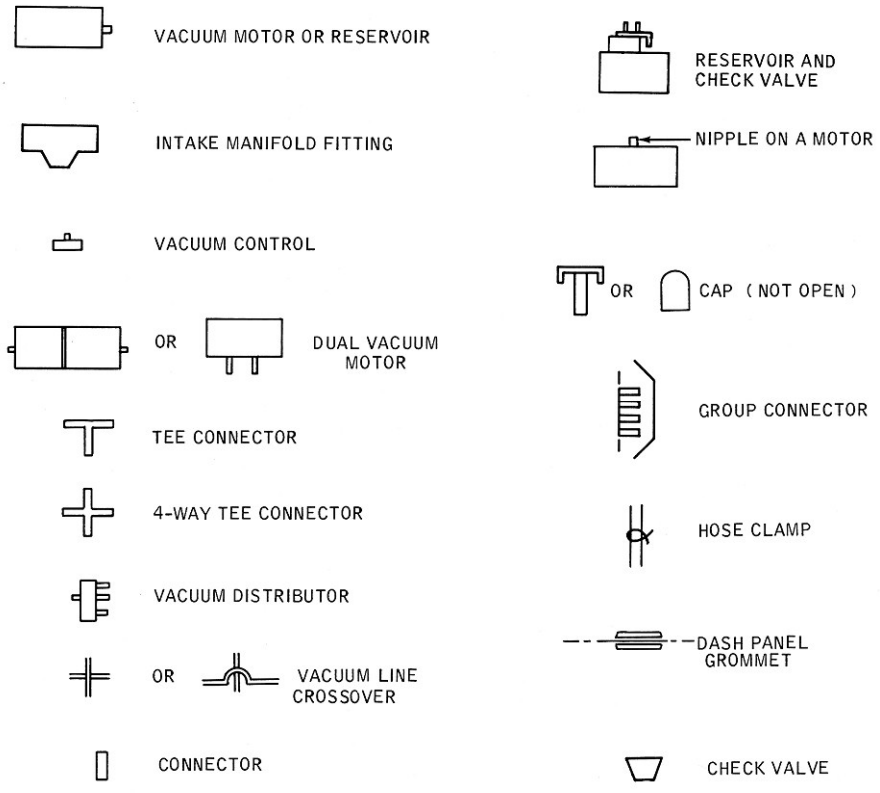
HOW TO USE THE VACUUM DIAGRAMS

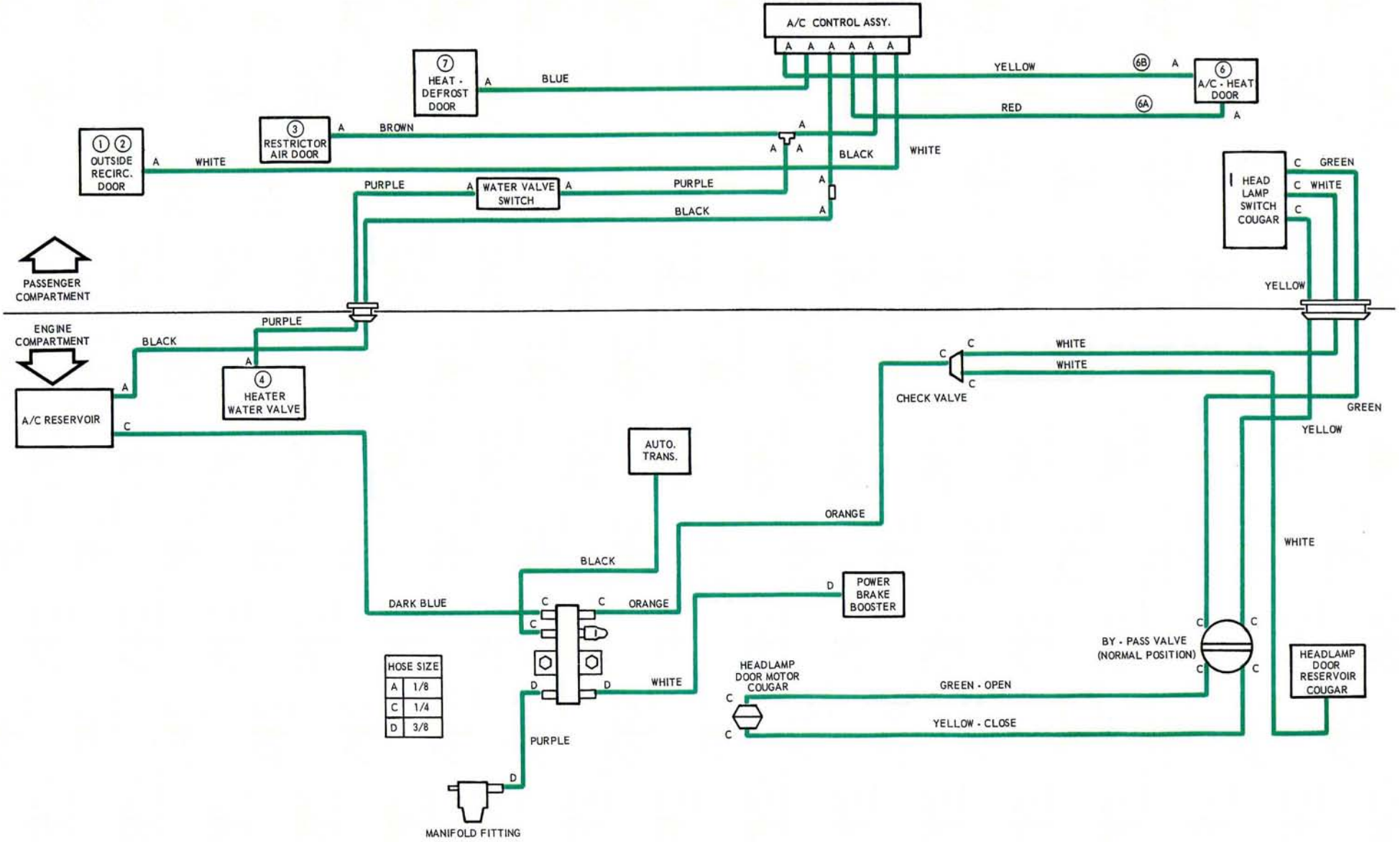
IF IT IS A FORD CAR LINE VACUUM SYSTEM, THE TECHNICIAN WILL FIND A PAGE FOR THE TOTAL SCHEMATIC SYSTEM AS WELL AS A LISTING FOR A SCHEMATIC AND PICTORIAL OF EACH SUBSYSTEM ON EACH SECTION INDEX PAGE. IT IS RECOMMENDED THAT THE TECHNICIAN FIRST TURN TO THE TOTAL SYSTEMS SCHEMATIC TO DETERMINE IF THERE 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





1970 MUSTANG AND COUGAR TOTAL VACUUM SCHEMATIC

1970

CAR SHOP MANUAL

VOLUME THREE ELECTRICAL

METEOR

MAVERICK

FALCON

FAIRLANE

MUSTANG

FORD

THUNDERBIRD

MONTEGO

COUGAR

MERCURY

LINCOLN CONTINENTAL

CONTINENTAL MARK III

Ford

GROUP INDEX

Ford SERVICE PUBLICATIONS

FIRST PRINTING – SEPTEMBER, 1969

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 1970 model passenger cars built by Ford Motor Company in the U.S. and Canada. As changes in the product occur, this information will be updated by Technical Service Bulletins. When issued, TSB information always supersedes that published here.

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."

Those who have previously used Ford Shop Manuals will find a major change this year in the division of information into "groups" and "parts." 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 have been changed so that the first digit of the number indicates the volume in which the group may be found.

Example:

36 – 05 – 13
Volume 3 – Group 6 – Part 5 – Page 13

We hope that this change in indexing will make it easier and quicker to locate desired information within these manuals.

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

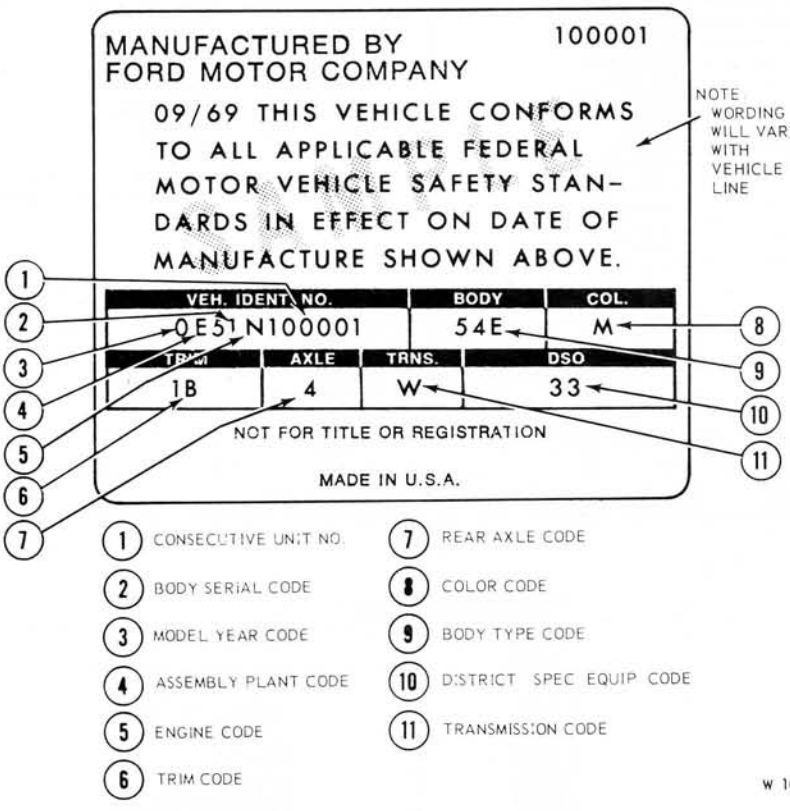
Ford SERVICE PUBLICATIONS

30-01-01

Identification

GROUP 30

W 1002-B



W 1009 A

OFFICIAL VEHICLE IDENTIFICATION NUMBER

The official Vehicle Identification Number (VIN) for title and registration purposes is stamped on an aluminum 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).

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 or semi-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 except for export codes which are designated by two numbers.

MODEL YEAR CODE

The number 0 designates 1970.

ASSEMBLY PLANT CODES

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

CK2455-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.

CONSECUTIVE UNIT NUMBER

Starting Serial Numbers—1970 Passenger Cars

100,001 — Ford, Fairlane, Falcon, Mustang, Thunderbird, Maverick

500,001 — Mercury, Meteor, Montego, Cougar

800,001 — Lincoln Continental & Mark III

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	Transportation Services
90-99	Export

LINCOLN-MERCURY

Code	District
11	Boston
15	New York
16	Philadelphia
17	Washington
21	Altanta
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

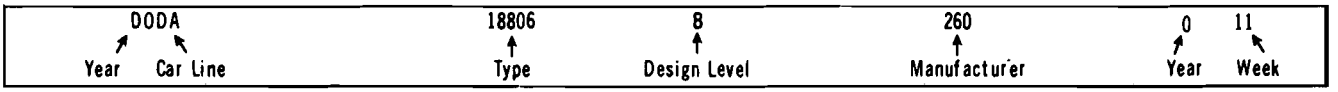
FORD OF CANADA

Code	District
B1	Central
B2	Eastern
B3	Atlantic
I1 thru I7	Export
B4	Midwestern
B6	Western
B7	Pacific

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

RADIO IDENTIFICATION

SAMPLE NUMBER



MANUFACTURER CODE NUMBER

125	Bendix
185	Motorola
260	Philco

BASIC NUMBER AND TYPE RADIO

18806	AM Radio
19A241	AM/FM Multiplex
19A242	AM Radio/Stereo Tape Player
19A243	AM–Dual Channel Stereo
19A244	AM Signal Seeking Radio
19A237	Stereo Tape Player Deck

IDENTIFICATION NUMBER

Number Prefix	Car Line
C9AA	Ford and Meteor
C9ZA	Mustang and Cougar
DOAA	Ford and Meteor
DODA	Maverick
DOGA	Cougar
DOLA	Continental Mark III
DOMA	Mercury
DOOA	Fairlane and Montego
DOSA	Thunderbird
DOVA	Lincoln Continental
DOWA	Cougar
DOYA	Meteor
DOZA	Mustang

CK2456-A

31-01-01

Charging System

GROUP 31

PART 31-01 *General Charging System Service*

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. As a result, the time required to test units and circuits on the vehicle is reduced.

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 are 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 you 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.

Schematic wiring diagrams (Figs. 1, 2 and 3 Parts 31-02 and 03) of the charging circuits show the internal connections and windings of the various units. Color codes are shown to aid in tracing the circuit.

PART 31-02 Autolite Alternators

A page number indicates that the item is for the vehicle listed at the head of the column.
N/A indicates that the item is not applicable to the vehicle listed.

1 DESCRIPTION AND OPERATION

The alternator charging system is a negative (-) ground system, and consists of an alternator, a regulator, a charge indicator, a storage battery and associated wiring. Refer to Wiring Diagram Manual Form 7795-P-70 for schematics and locations of wiring harnesses.

ALTERNATOR

The alternator is belt driven from the engine. Current is supplied from the alternator-regulator system to the rotating field of the alternator through two brushes to two slip rings.

The alternator produces power in the form of alternating current. The alternating current is rectified to direct current by six diodes for use in charging the battery and supplying power to the electrical system. The alternator is self current limiting.

Figs. 1, 2 and 3 show the alternator system schematics.

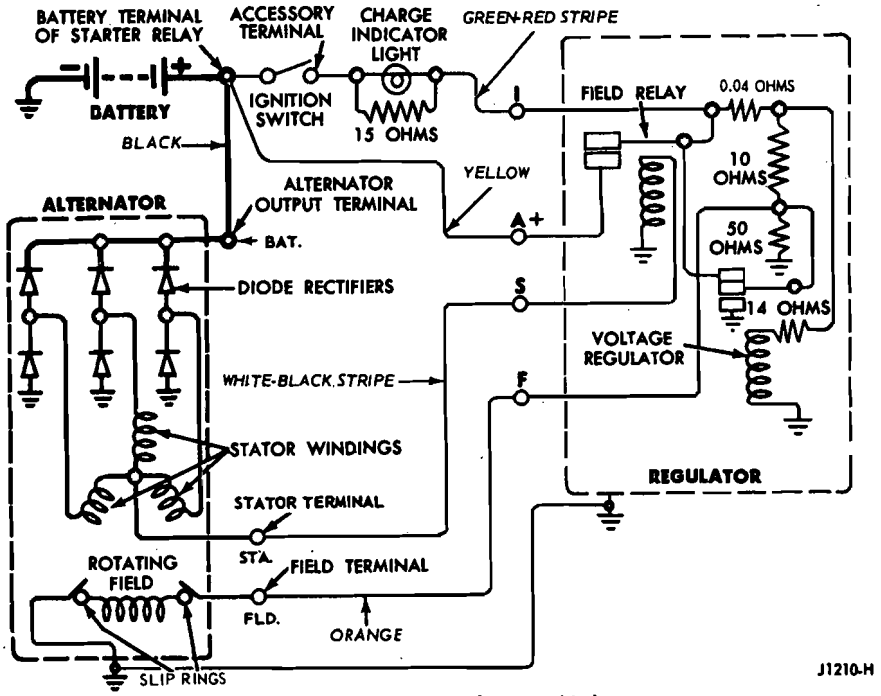


FIG. 1—Autolite Alternator System—Indicator Light

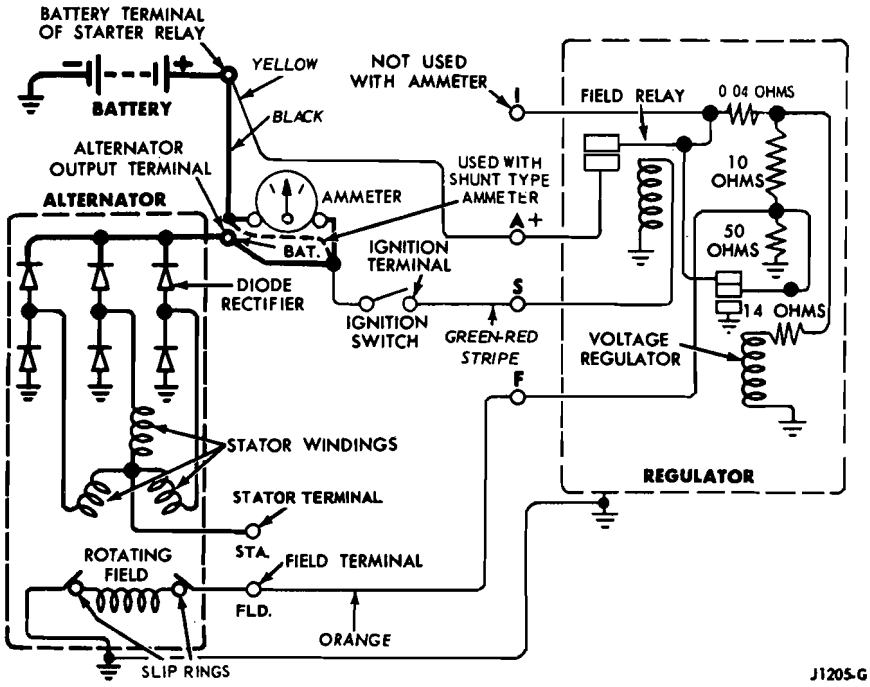


FIG. 2—Autolite Alternator System—Ammeter

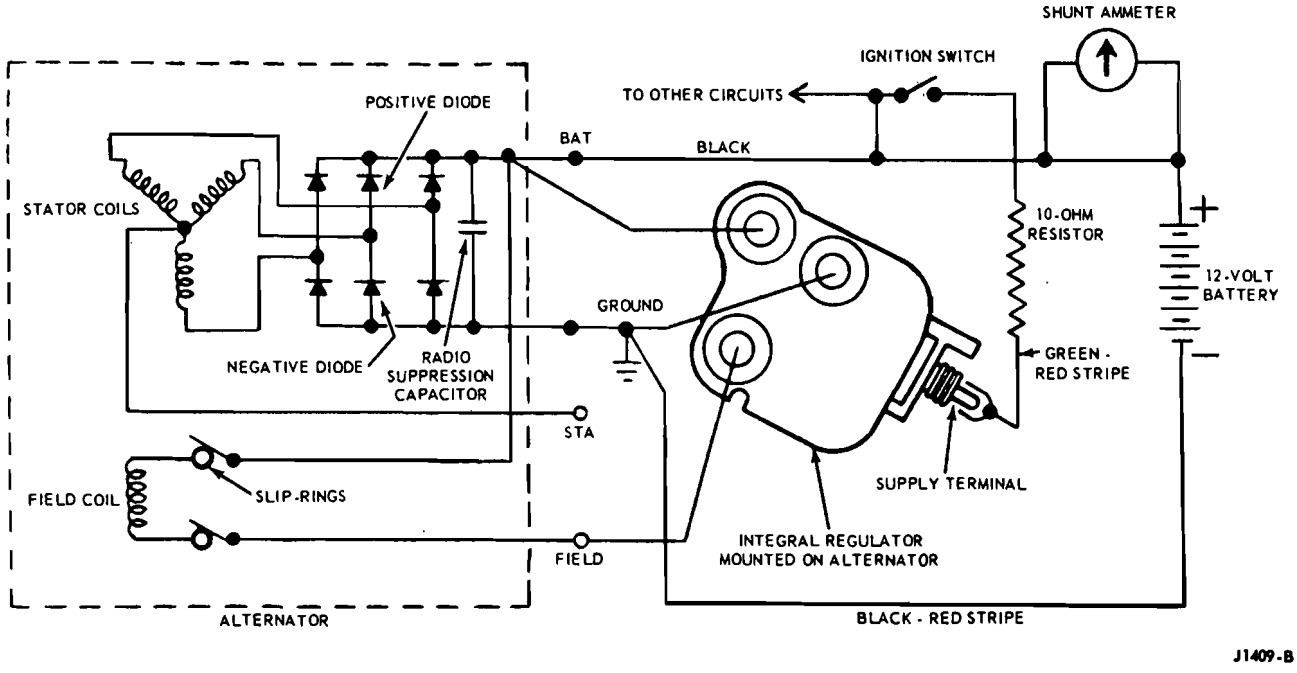


FIG. 3—Autolite Alternator System—With Integral Regulator

2 AUTOLITE ALTERNATOR TESTING

Refer to the Ford Car and Truck Diagnosis Manual for diagnosis of the Autolite alternator system.

Check the alternator drive belt and adjust it to specification (Section 7 in this part), before proceeding with any tests. Check and tighten all connectors at the starter relay and battery.

1965/72
FORD CAR

FINAL ISSUE

Master Parts a and Accessories CATALOG

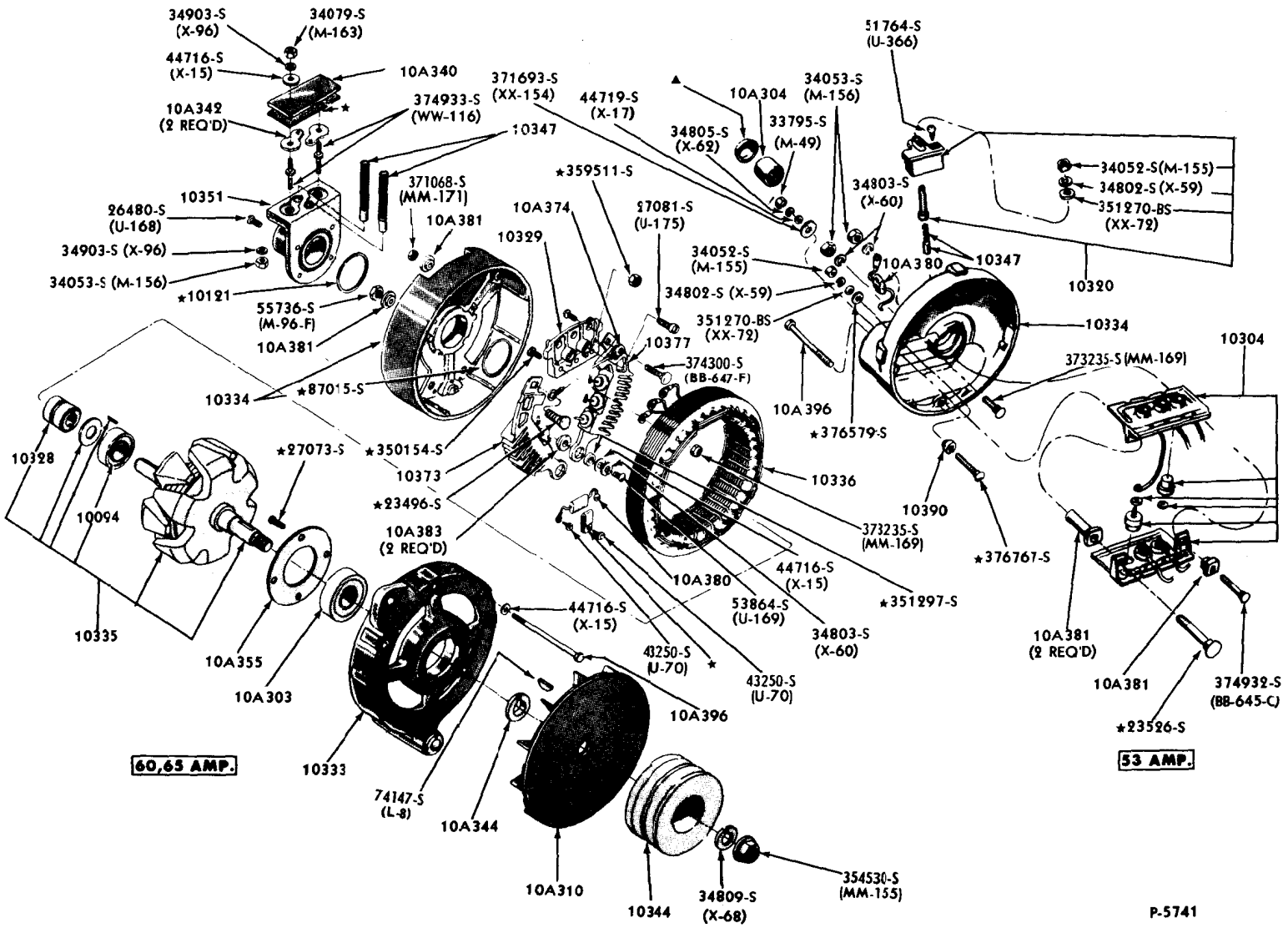
Form FP 7635-A & B

Supersends All Previous Issues, Changes and Revisions

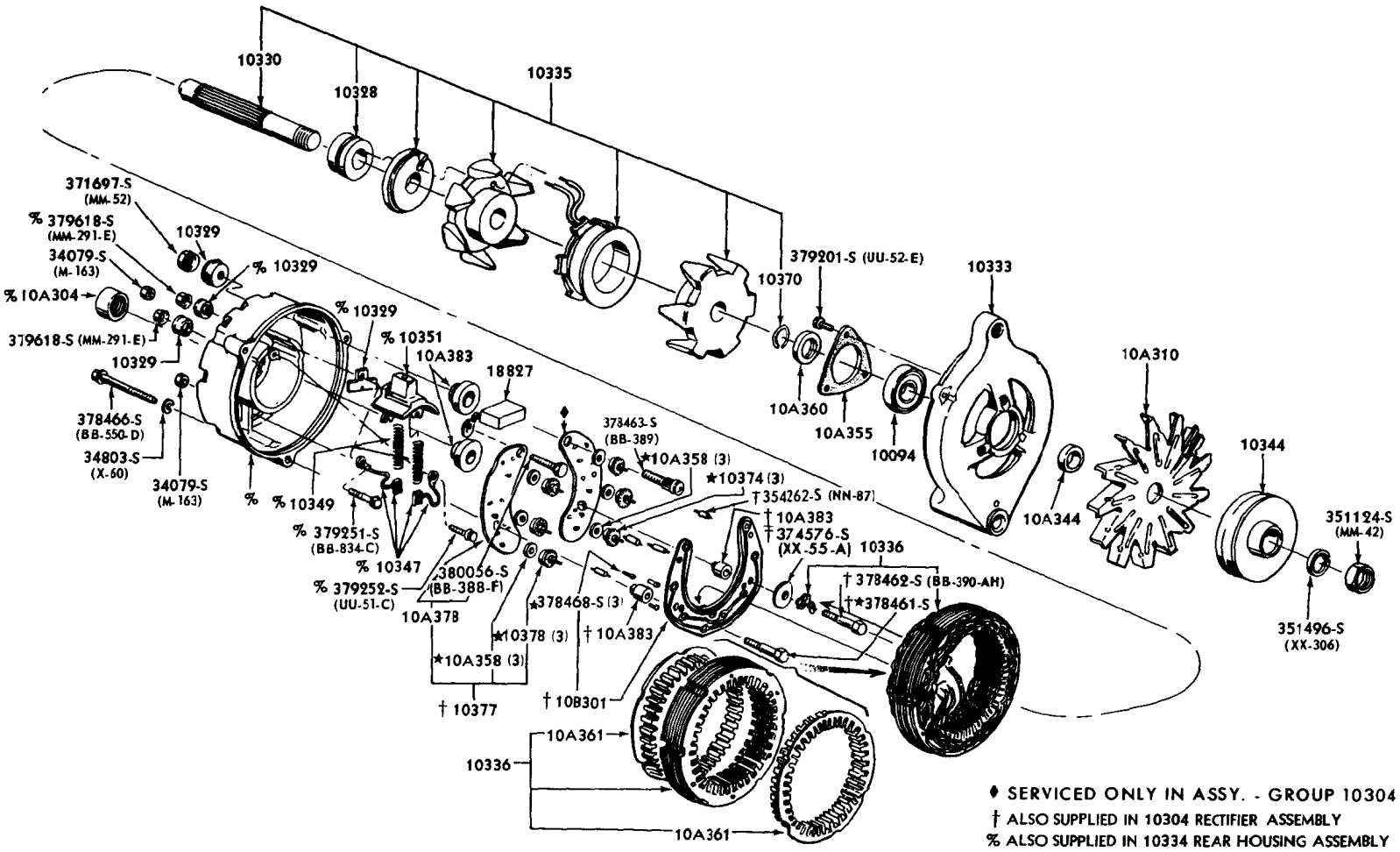
5236

May, 1975

FINAL ISSUE


34903-S (X-96)
34079-S (M-163)
44716-S (X-15)
10A340
10A342 (2 REQ'D)
374933-S (WW-116)
10347
371693-S (XX-154)
44719-S (X-17)
10A304
34053-S (M-156)
34805-S (X-62)
33795-S (M-49)
51764-S (U-366)
34052-S (M-155)
34802-S (X-59)
351270-BS (XX-72)
10320
34803-S (X-60)
10A380
10347
10351
26480-S (U-168)
371068-S (MM-171)
10A381
★359511-S
10A374
87081-S (U-175)
10329
34903-S (X-96)
34053-S (M-156)
★10121
55736-S (M-96-F)
10A381
34052-S (M-155)
34802-S (X-59)
351270-BS (XX-72)
10334
10304
373235-S (MM-169)
10377
374300-S (BB-647-F)
10334
★87015-S
10A396
★376579-S
10328
★27073-S
★350154-S
10373
10336
10390
★376767-S
10094
★23496-S
10A383 (2 REQ'D)
373235-S (MM-169)
10A380
44716-S (X-15)
53864-S (U-169)
★351297-S
34803-S (X-60)
10335
10A355
10A303
44716-S (X-15)
43250-S (U-70)
43250-S (U-70)
10A396
10A381 (2 REQ'D)
10A381
374932-S (BB-645-C)
★23526-S
60,65 AMP.
10333
74147-S (L-8)
10A344
10A310
10344
34809-S (X-68)
354530-S (MM-155)
53 AMP.
P-5741

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

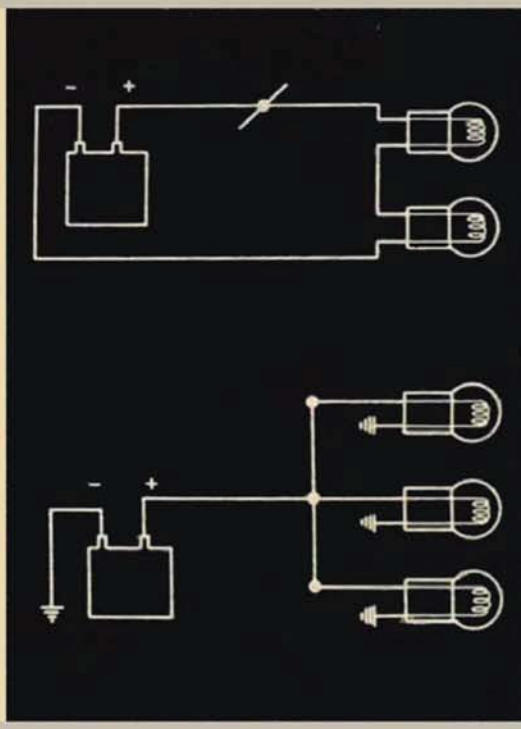
P-4508

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

TABLE OF CONTENTS

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.

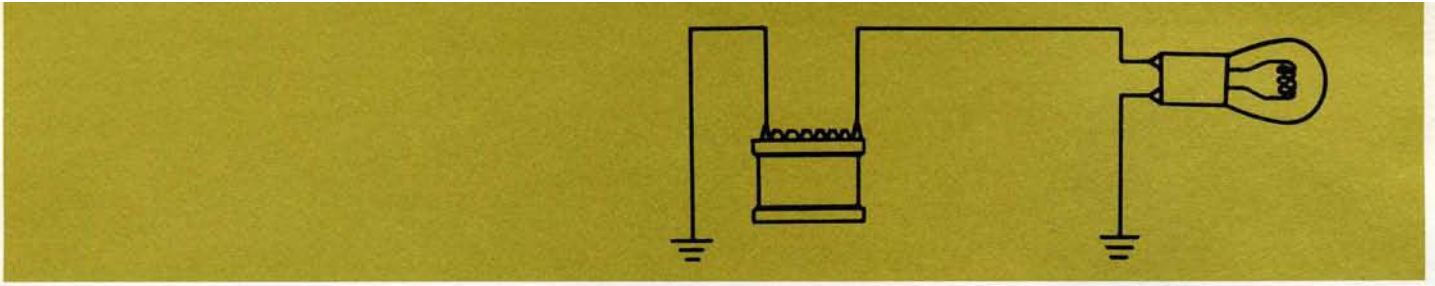
The Purpose of this Booklet . . .

. . . 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.

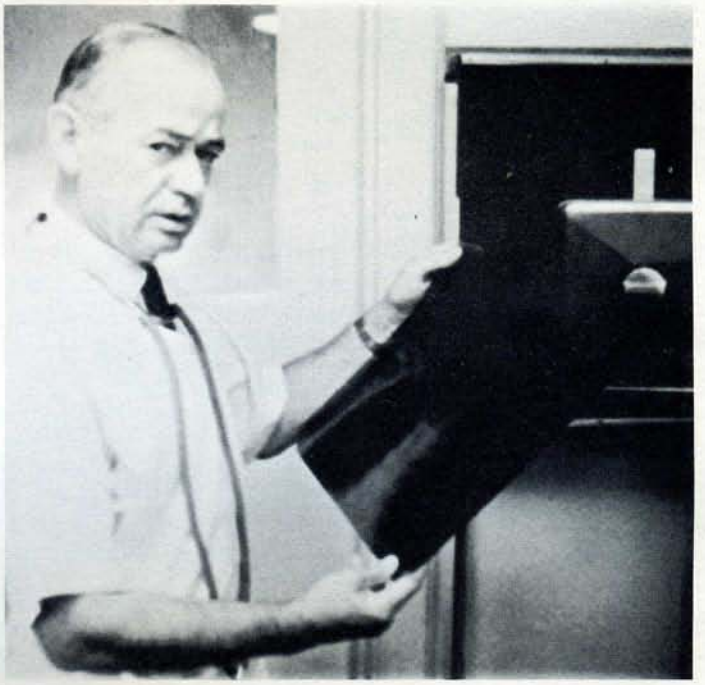


To show how to read wiring diagrams — and to explain how they can be used to help you troubleshoot problems in the electrical system — is what this booklet is all about. Obviously, these are important subjects.

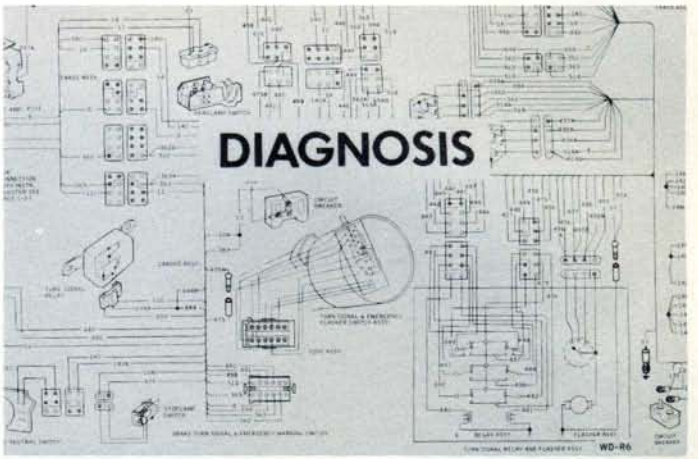
A LOGICAL APPROACH TO ELECTRICAL DIAGNOSIS

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*.



Tr
diagn
docto
troubl