Mercedes-Benz

Service

Service Manual

Electrical Troubleshooting
Series W114, W115

Mercedes-Benz of North America Inc.

Foreword

This service manual contains all available information of the important assembly, adjustment and inspection jobs. Pertinent data, dimensions and tolerances, as well as special tools for various individual operations are listed within the text. The various repair and maintenance procedures outlined herein are procedures designed to be used by trained Mercedes-Benz service and repair station personnel. Supplements as such are no longer available for this Service Manual.

Mercedes-Benz of North America, Inc. recommends that repairs to, and maintenance of Mercedes-Benz automobiles be performed only by Mercedes-Benz trained personnel at authorized Mercedes-Benz repair stations.

Mercedes-Benz of North America, Inc. assumes no liability for any damage to person or property occasioned by the utilization of this publication to effect maintenance or repair work on Mercedes-Benz automobiles.

Instructions for Use of Service Manual

1. The code numbers employed for identifying the individual pages are composed as follows:

   For example: 35–1/3

   35 **Group Designation**

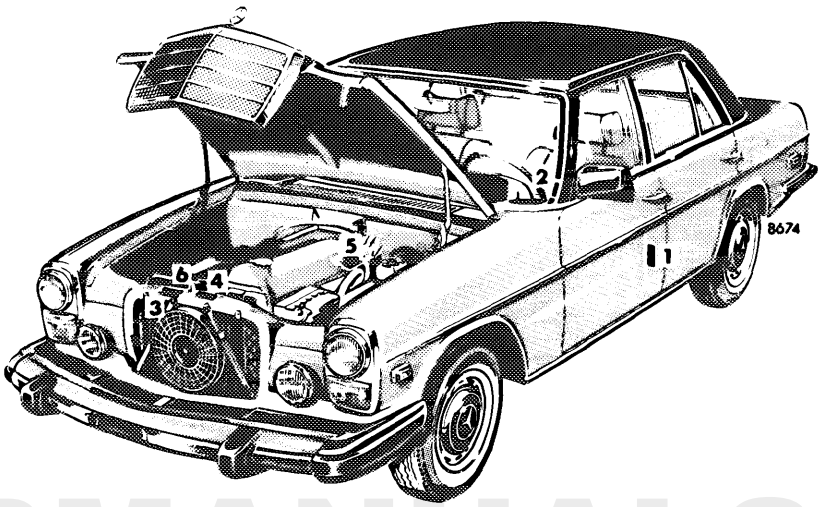
   35–1 **Job Number**
   –1 Job number within Group

   35–1/3 **Page Number**
   /3 Consecutive page within Job Number

   Illustrations are also carrying the Job Number, as well as a serial number.

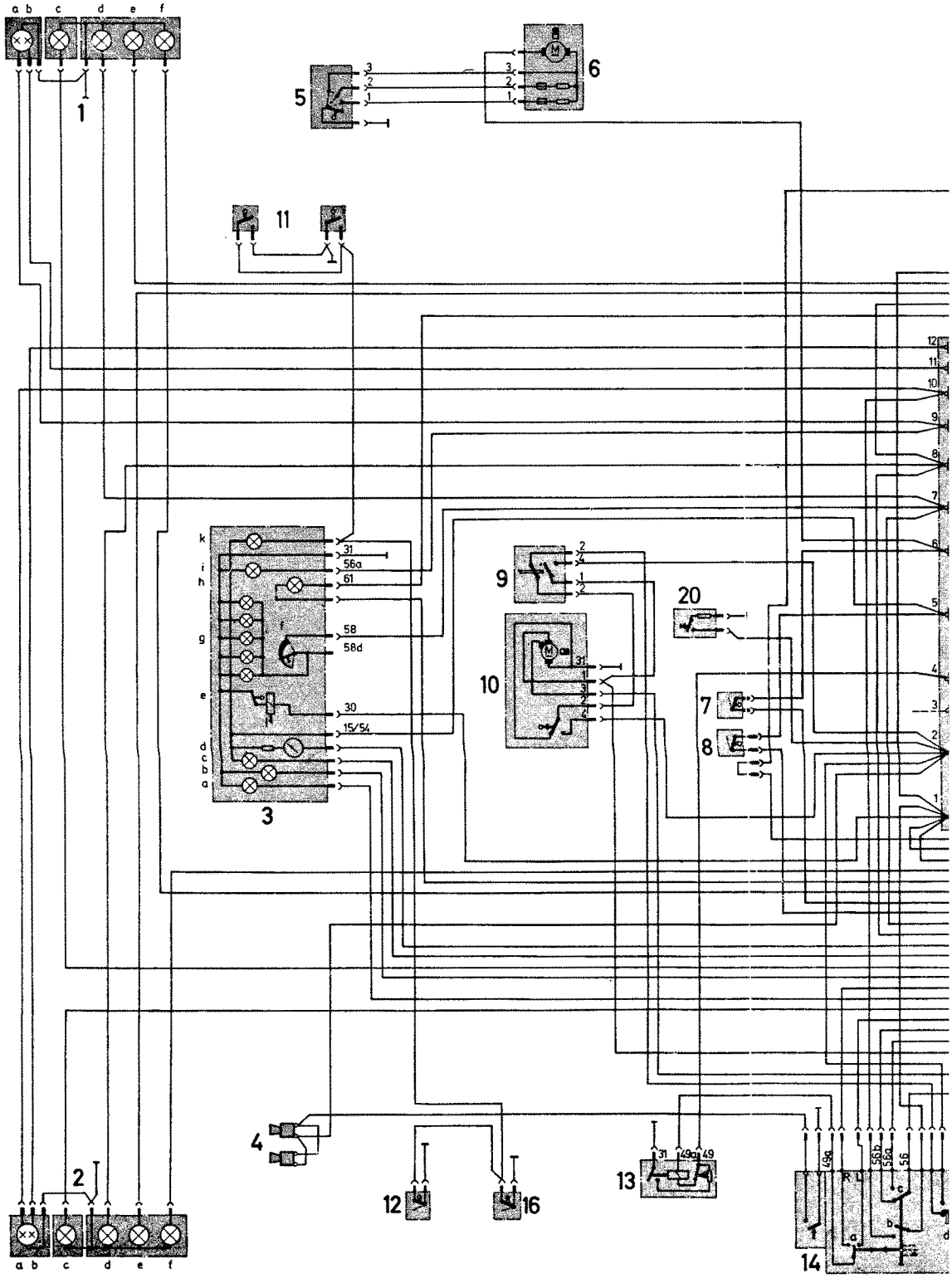
2. All the dimensions are in millimeter (mm) unless otherwise specified, for example kilopond (kp) or liter (lits) etc.

3. Part Numbers are provided only for the identification and better differentiation of the various versions. **When ordering spare parts, be sure to use the Part Numbers provided in the Spare Parts Lists.**



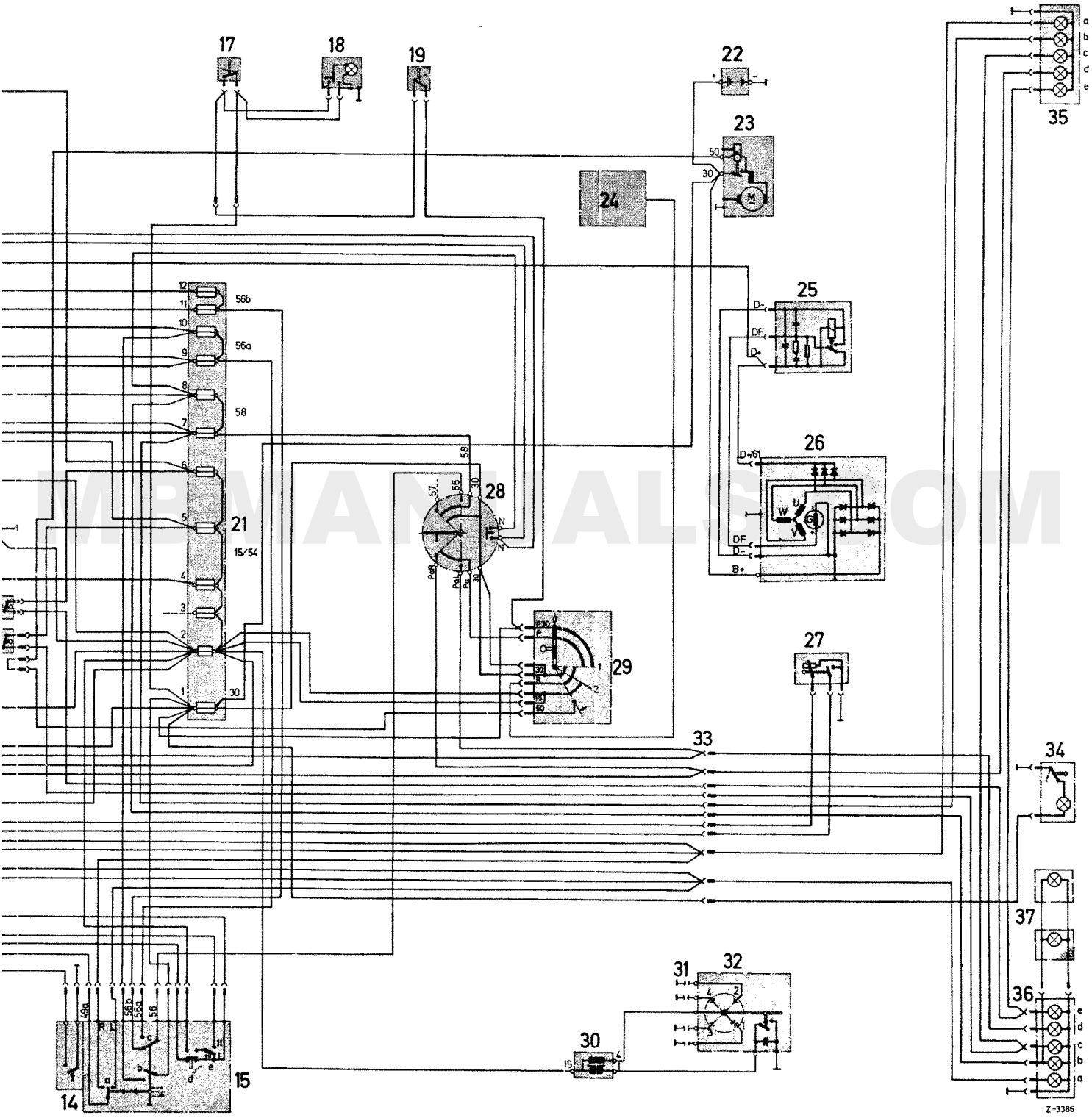
1 Certification Tag (left door pillar)
2 Identification Tag (left windshield post)
3 Chassis No.
4 Engine No.
5 Body No. and Paintwork No.
6 Emission Control Tag
(Model year 1970 and later only)

1 Right lighting unit
2 Left lighting unit
a Upper beam
b Lower beam
c Flash signal
d Parking light
e Fog light
f Clearance light
3 Instrument cluster
a Left signal indicator
b Right signal indicator
c Fuel reserve warning light
d Fuel level indicator
e Electric clock
f Control resistance for instrument lighting
g Instrument lighting
h Charging light
i Upper beam indicator
k Brake control
Choke control indicator
4 Two-tone horn system
5 Blower switch (air intake)
6 Blower motor (air intake)
7 Stop light switch
8 Reversing light switch
9 Foot pump (windshield washer)
10 Wiper motor
11 Control switch for brake fluid
12 Control switch for parking brake
13 Flash signal mechanism
14 Horn ring
15 Combination switch
a Flash signal switch
b Flash approach signal switch
c Hand dimmer
d Windshield wiper switch
e Wiper speed switch
16 Choke cable control switch
17 Front left door contact
18 Reading light
19 Front right door contact
20 Cigar lighter
21 Fuses
22 Battery
23 Starter
24 Lead for optional extra (radio)
25 Voltage regulator
26 Generator
27 Fuel level indicator
28 Rotary light switch
29 Ignition starter switch
30 Ignition coil
31 Spark plugs
32 Distributor
33 Sleeve union for tail light wiring harness
34 Trunk compartment light
35 Right tail light
36 Left tail light
a Flash signal
b Tail light
c Reversing light
d Clearance light
e Stop light
37 License plate light



Circuit Diagram

Models 200/8 and 220/8



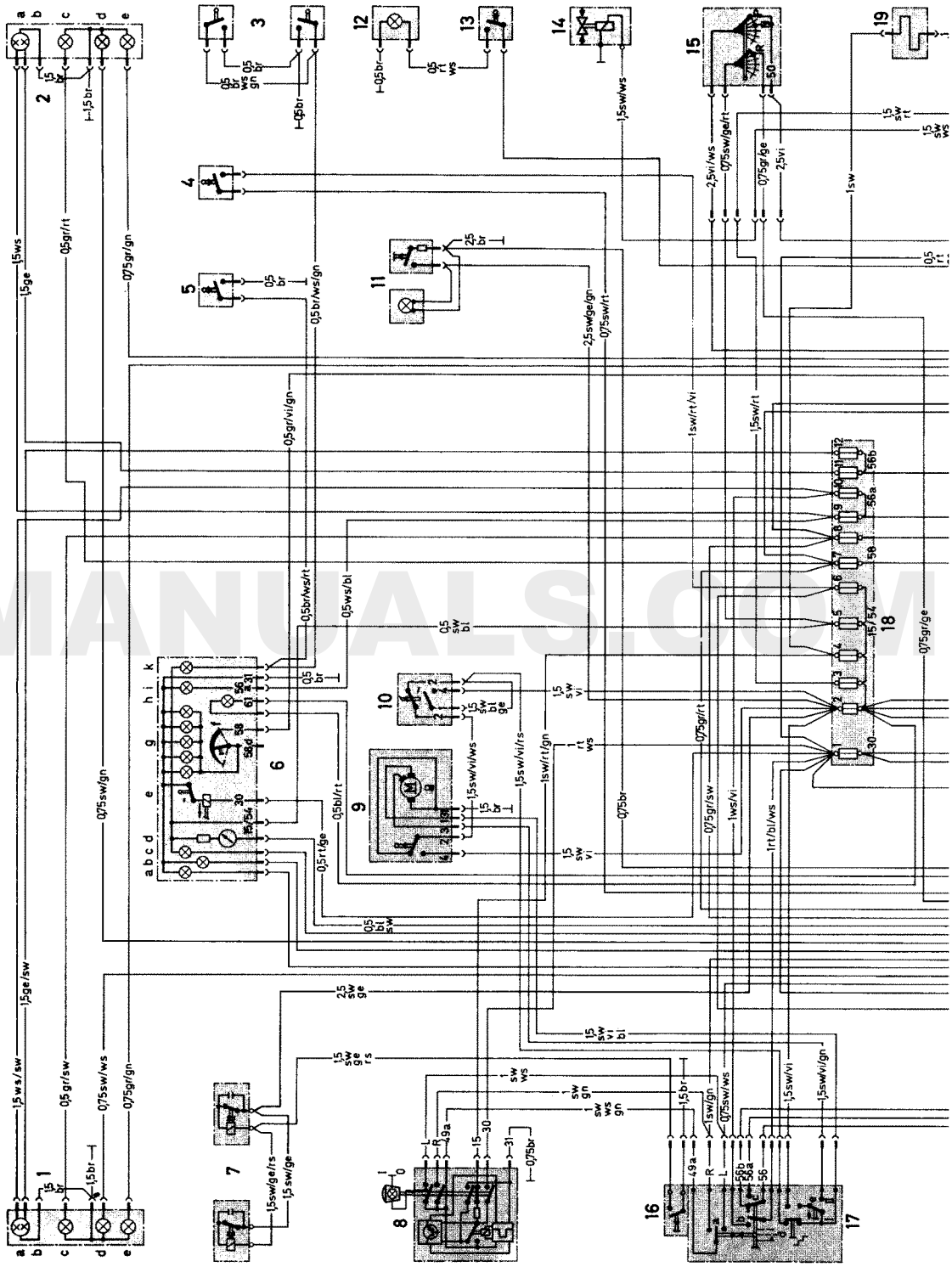
Key to wiring diagram model 200/8, 220/8 from December 1970 to May 1972

1 Headlight unit, left
  a High beam
  b Low beam
  c Standing/parking light
  d Turn signal light
  e Fog light
2 Headlight unit, left
3 Brake fluid indicator light switch
4 Brake light switch
5 Parking brake indicator light switch
6 Instrument cluster
  a Turn signal indicator light, left
  b Turn signal indicator light, right
  c Fuel reserve warning light
  d Fuel gauge
  e Electric clock
  f Rheostat, instrument light
  g Instrument lights
  h Charge indicator light
  i High beam indicator light
  k Brake fluid and parking brake indicator light
7 Dual-tone horns (fanfares)
8 4-way warning flasher switch/timer
9 Wiper motor
10 Washer pump
11 Cigar lighter
12 Glove compartment light
13 Glove compartment light switch
14 Solenoid valve, automatic transmission
15 Starter-lockout and back-up light switch
16 Signal system contact
17 Combination switch
  a Turn signal light switch
  b Passing light switch
  c Dimmer switch
  d Wiper switch
  e Switch for wiping speed
18 Fuse box
19 Carburetor heater, automatic starting device
20 Kick-down switch
21 Door contact switch, front, left
22 Front dome light w/switch
23 Door contact switch, front, right
24 Rotary light switch
25 Ignition starter switch
26 Blower switch
27 Pre-resistance, blower motor
28 Pre-resistance 1.8 Ω
29 Ignition coil
30 Distributor
31 Spark plugs
32 Plug connection, cable to rear components
33 Trunk light
34 Blower motor
35 Fuel gauge sensor
36 Radio
37 Alternator
38 Voltage regulator
39 Starter
40 Battery
41 Tail light unit, right
42 License plate light
43 Tail light unit, left
  a Turn signal light
  b Tail/parking light
  c Back-up light
  d Brake light

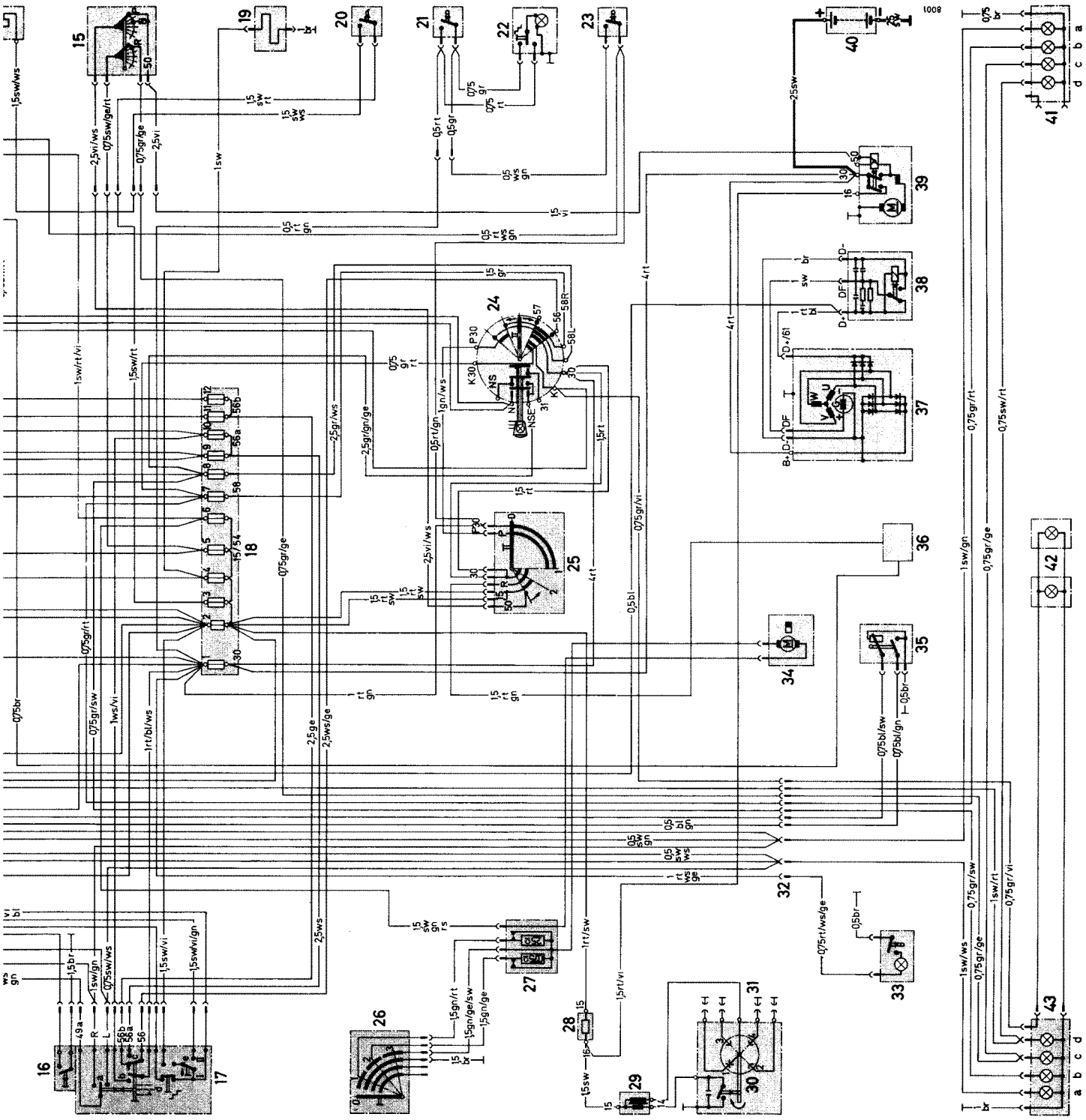
Wire Color Code

ws = white
gn = green
br = brown
ge = yellow
gr = grey
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = purple

Example:
Wire designation 1.5 gr/rt
Basic color gr = grey
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2



Model 200/8, 220/8 from December 1970 to May 1972



Key to wiring diagram model 200/8, 220/8 from May 1972 to August 1973

1 Headlight unit, left
- a High beam
- b Low beam
- c Standing/parking light
- d Turn signal light
- e Fog light

2 Headlight unit, left
- a High beam
- b Low beam
- c Standing/parking light
- d Turn signal light
- e Fog light

3 Brake fluid indicator light switch
4 Brake light switch
5 Parking brake indicator light switch
6 Instrument cluster
- a Turn signal indicator light, left
- b Turn signal indicator light, right
- c Fuel reserve warning light
- d Fuel gauge
- e Electric clock
- f Rheostat instrument lights
- g Instrument lights
- h Charge indicator light
- i High beam indicator light
- k Brake fluid and parking brake indicator light

7 Dual-tone horns (fanfares)
8 4-way warning flasher switch/timer
9 Wiper motor with interval timer
10 Washer pump
11 Cigar lighter
12 Glove compartment light
13 Glove compartment light switch
14 Solenoid valve, automatic transmission
15 Starter-lockout and back-up light switch
16 Signal system contact
17 Combination switch
- a Turn signal light switch
- b Passing light switch
- c Dimmer switch
- d **Wiper switch**
- e Switch for wiping speed

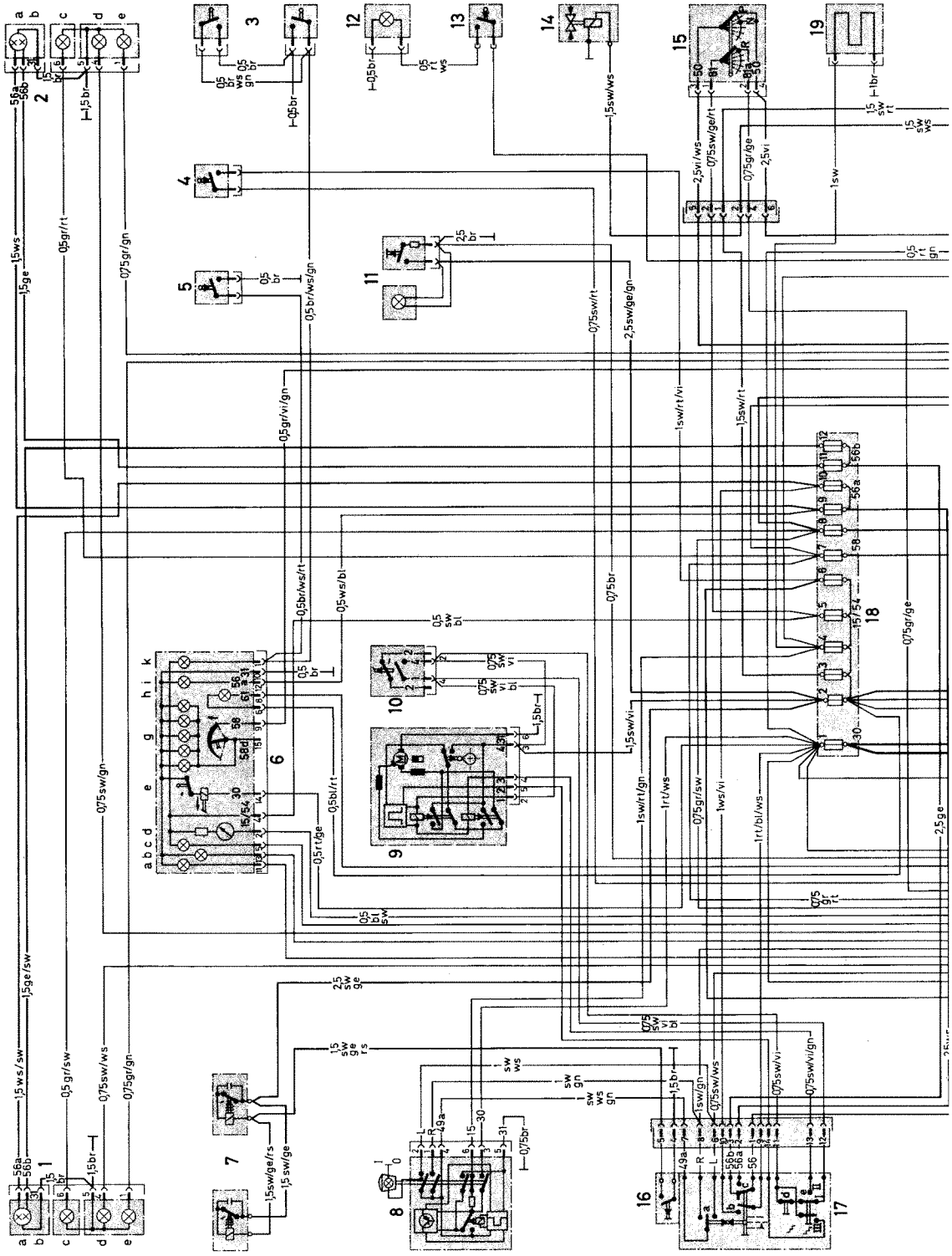
18 Fuse box
19 Carburetor heater, automatic starting device
20 Kick-down switch
21 Door contact switch, front, left
22 Front dome light w/switch
23 Door contact switch, front, right
24 Rotary light switch
25 Ignition starter switch
26 Blower switch
27 Pre-resistance, blower motor
28 Pre-resistance 1.8 Ω
29 Ignition coil
30 Distributor
31 Spark plugs
32 Plug connection, cable to rear components
33 Trunk light
34 Blower motor
35 Fuel gauge sensor
36 Radio
37 Alternator
38 Voltage regulator
39 Starter
40 Idle fuel cut-out valve
41 Time delay switch
42 Battery
43 Tail light unit, right
- a Turn signal light
- b Tail/parking light
- c Back-up light
- d Brake light

44 License plate light
45 Tail light unit, left
- a Turn signal light
- b Tail/parking light
- c Back-up light
- d Brake light

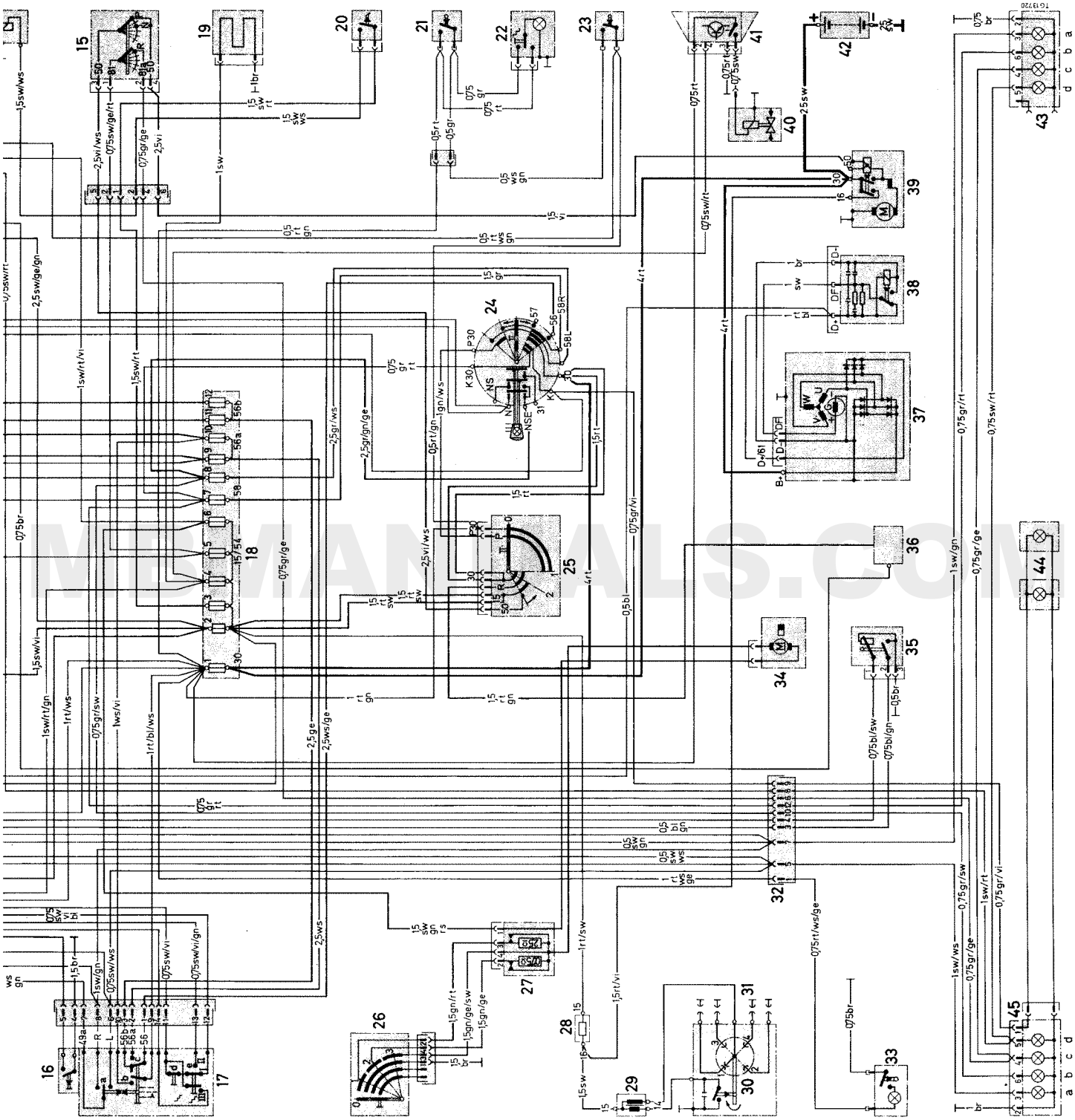
Wire Color Code

ws	=	white
gn	=	green
br	=	brown
ge	=	yellow
gr	=	grey
rs	=	pink
bl	=	blue
rt	=	red
sw	=	black
el	=	ivory
nf	=	neutral
vi	=	purple

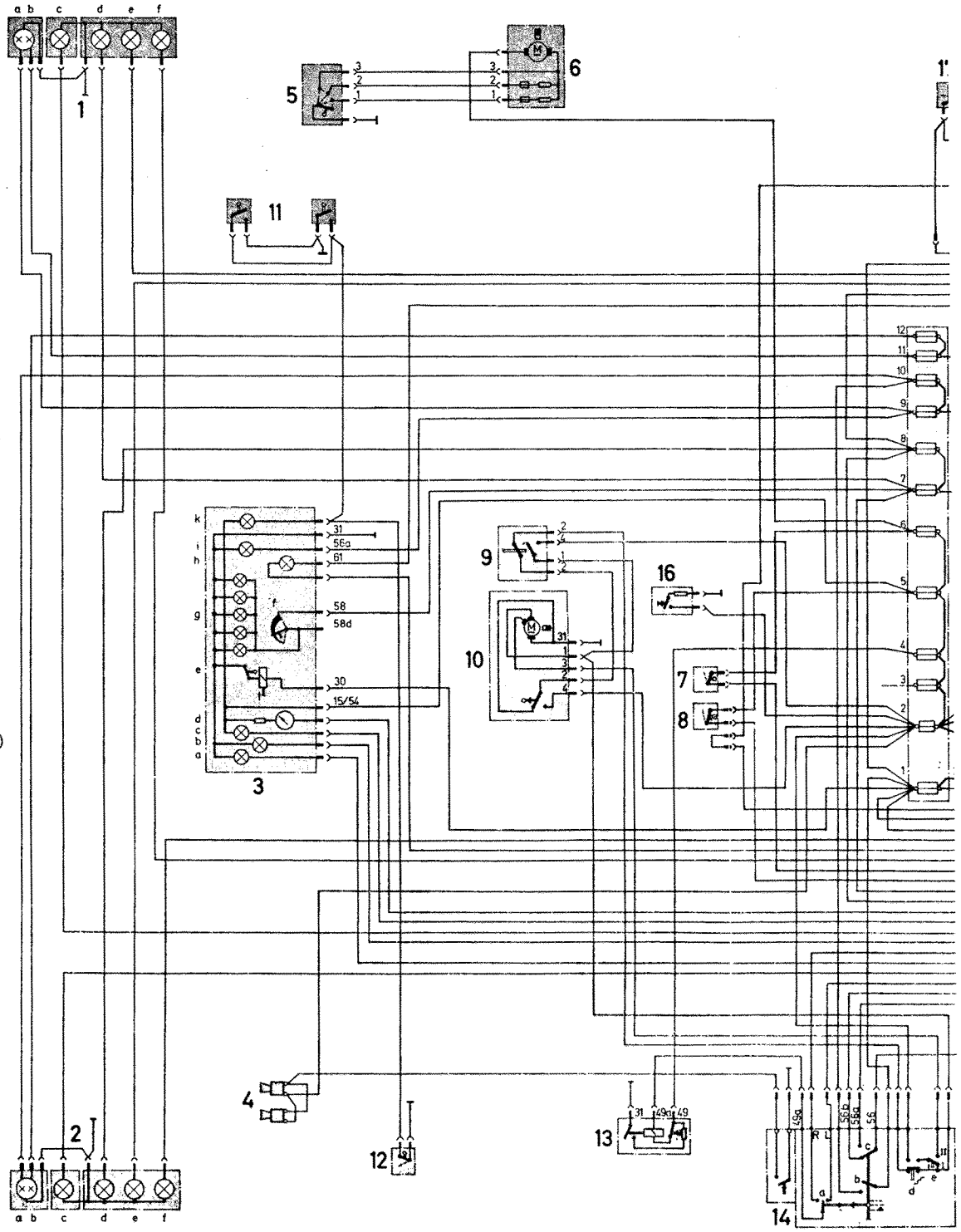
Example:
Wire designation 1.5 gr/rt
Basic color gr = grey
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2



Model 200/8, 220/8 from May 1972 to August 1973

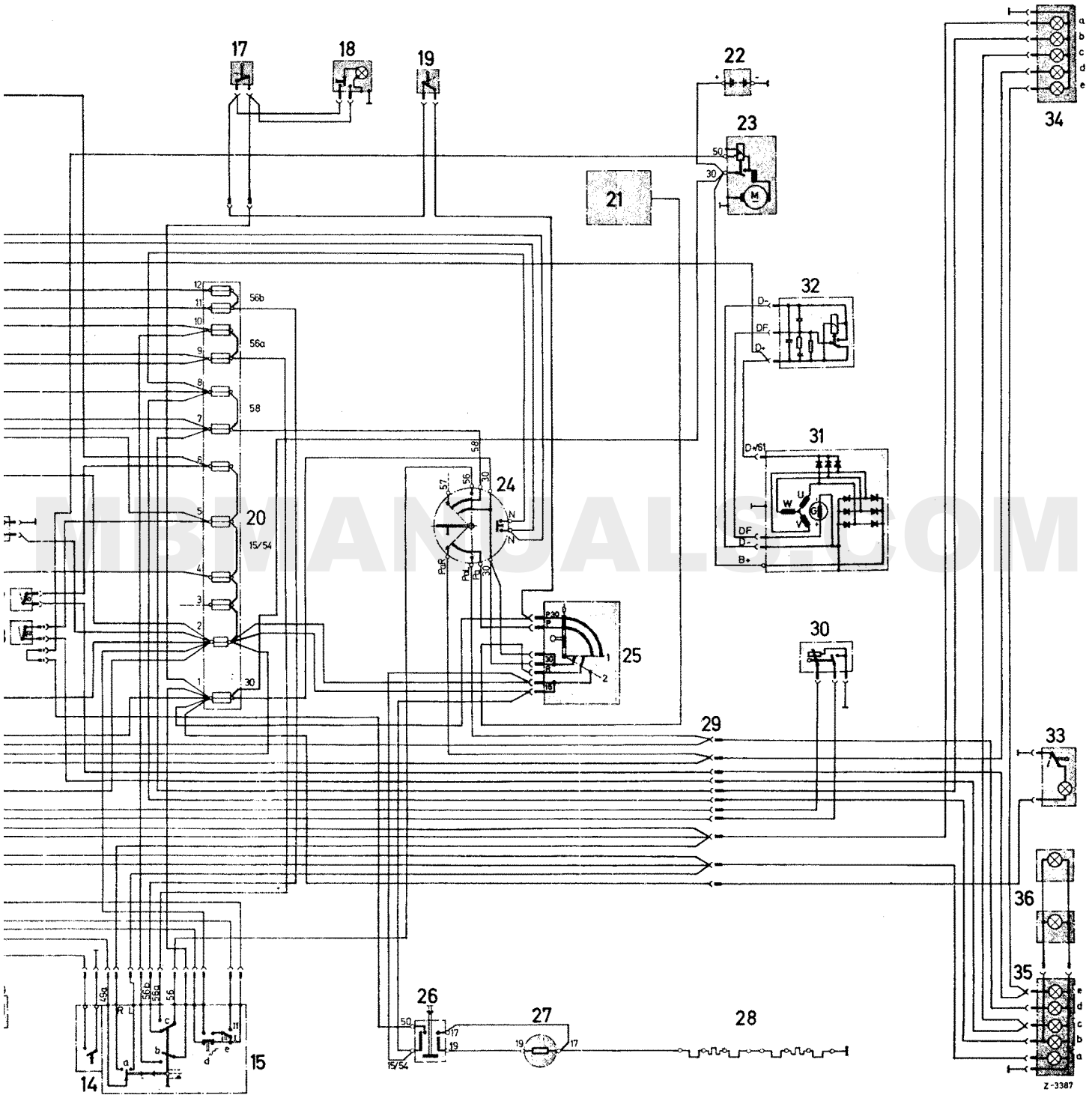


1 Right lighting unit
2 Left lighting unit
a Upper beam
b Lower beam
c Flash signal
d Parking light
e Fog light
f Clearance light
3 Instrument cluster
a Left signal indicator
b Right signal indicator
c Fuel reserve warning light
d Fuel level indicator
e Electric clock
f Control resistance for instrument lighting
g Instrument lighting
h Charging light
i Upper beam control
k Brake control
4 Two-tone horn system
5 Blower switch (air intake)
6 Blower motor (air intake)
7 Stop light switch
8 Reversing light switch
9 Foot pump windshield washer
10 Wiper motor
11 Control switch for brake fluid
12 Control switch for parking brake
13 Flash signal mechanism
14 Horn ring
15 Combination switch
a Flash signal switch
b Flash approach signal switch
c Hand dimmer
d Windshield wiper switch
e Wiper speed switch
16 Cigar lighter
17 Front left door contact
18 Reading light
19 Front right door contact
20 Fuses
21 Lead for optional extra (radio)
22 Battery
23 Starter
24 Rotary light switch
25 Steering lock
26 Glow starter switch
27 Glow plug resistance control
28 Glow plugs
29 Sleeve union for tail light wiring harness
30 Fuel level indicator
31 Generator
32 Voltage regulator
33 Trunk compartment light
34 Right tail light
35 Left tail light
a Flash signal
b Tail light
c Reversing light
d Clearance light
e Stop light
36 License plate light



Circuit Diagram

Models 200 D/8 and 220 D/8



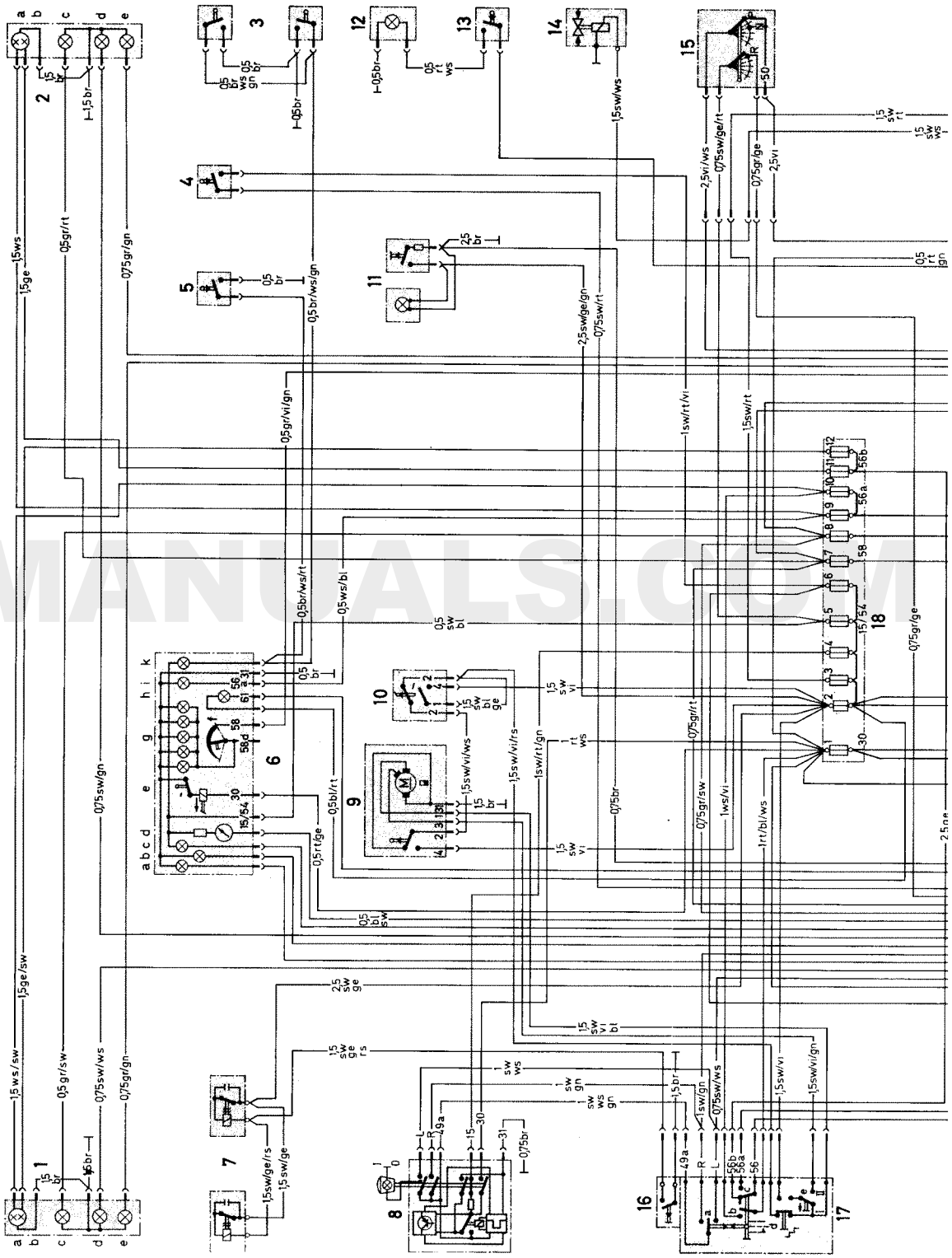
Key to wiring diagram model 200 D/8, 220 D/8 from December 1970 to May 1972

1 Headlight unit, left
2 Headling unit, right
  a High beam
  b Low beam
  c Standing/parking light
  d Turn signal light
  e Fog light
3 Brake fluid indicator light switch
4 Brake light switch
5 Parking brake indicator light switch
6 Instrument cluster
  a Turn signal indicator light, left
  b Turn signal indicator light, right
  c Fuel reserve warning light
  d Fuel gauge
  e Electric clock
  f Rheostat, instrument lights
  g Instrument lights
  h Charge indicator light
  i High beam indicator light
  k Brake fluid and parking brake indicator light
7 Dual-tone horns (fanfares)
8 4-way warning flasher switch/timer
9 Wiper motor
10 Washer pump
11 Cigar lighter
12 Glove compartment light
13 Glove compartment light switch
14 Solenoid valve, automatic transmission
15 Starter-lockout and back-up light switch
16 Signal system contact
17 Combination switch
  a Turn signal light switch
  b Passing light switch
  c Dimmer switch
  d **Wiper switch**
  e Switch for wiping speed
18 Fuse box
19 Kick-down switch
20 Door contact switch, front, left
21 Front dome light w/switch
22 Door contact switch, front, right
23 Rotary light switch
24 Steering lock switch
25 Blower switch
26 Pre-resistance, blower motor
27 Glow starter switch
28 Glow plug resistance control
29 Glow plugs
30 Trunk light
31 Plug connection, cable to rear components
32 Blower motor
33 Fuel gauge sensor
34 Radio
35 Alternator
36 Voltage regulator
37 Starter
38 Battery
39 Tail light unit, right
  a Turn signal light
  b Tail/parking light
  c Back-up light
  d Brake light
40 License plate light
41 Tail light unit, left
  a Turn signal light
  b Tail/parking light
  c Back-up light
  d Brake light

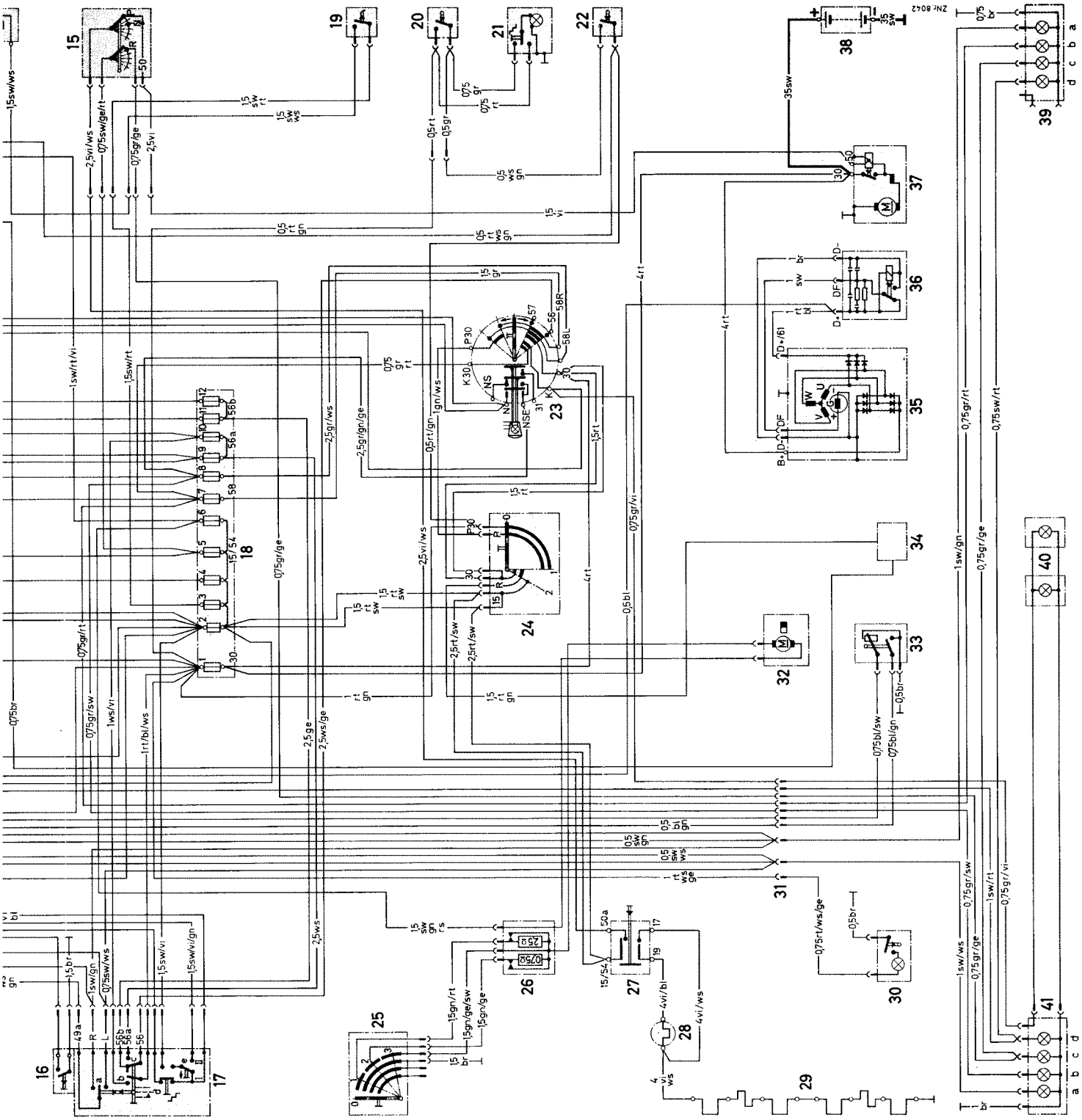
Wire Color Code

ws = white
gn = green
br = brown
ge = yellow
gr = grey
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = purple

Example:
Wire designation 1.5 gr/rt
Basic color gr = grey
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2



Model 200 D/8, 220 D/8 from December 1970 to May 1972



Key to wiring diagram model 200 D/8, 220 D/8 from May 1972 to August 1973

1 Headlight unit, left
- a High beam
- b Low beam
- c Standing/parking light
- d Turn signal light
- e Fog light

2 Headlight unit, left
- a High beam
- b Low Beam
- c Standing/parking light
- d Turn signal light
- e Fog light

3 Brake fluid indicator light switch
4 Brake light switch
5 Parking brake indicator light switch
6 Instrument cluster
- a Turn signal indicator light, left
- b Turn signal indicator light, right
- c Fuel reserve warning light
- d Fuel gauge
- e Electric clock
- f Rheostat, instrument lights
- g Instrument lights
- h Charge indicator light
- i High beam indicator light
- k Brake fluid and parking brake indicator light

7 Dual-tone horns (fanfares)
8 4-way warning flasher switch/timer
9 Wiper motor with interval timer
10 Washer pump
11 Cigar lighter
12 Glove compartment light
13 Glove compartment light switch
14 Solenoid valve, automatic transmission
15 Starter-lockout and back-up light switch
16 Signal system contact
17 Combination switch
- a Turn signal light switch
- b Passing light switch
- c Dimmer switch
- d **Wiper switch**
- e Switch for wiping speed

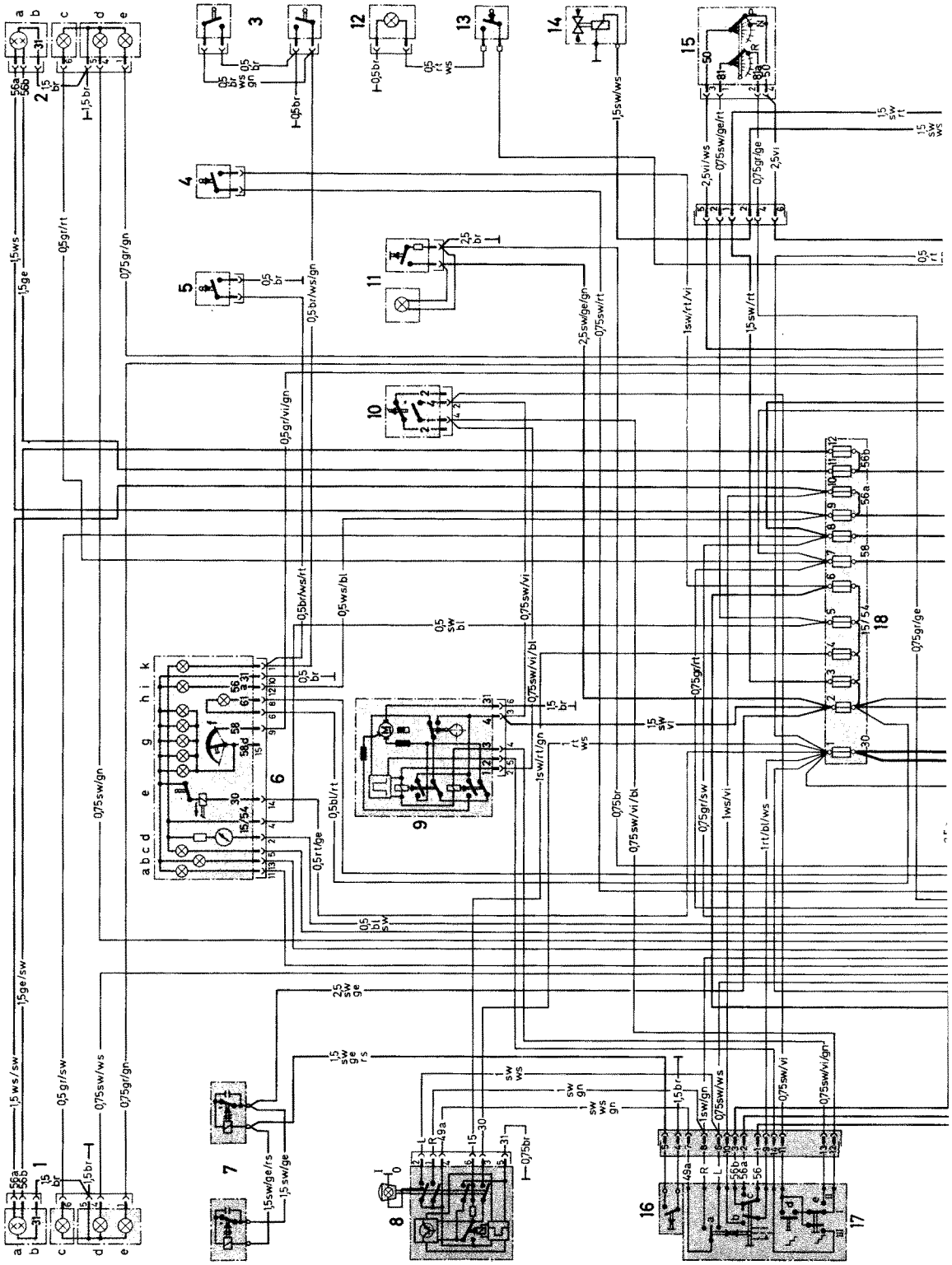
18 Fuse box
19 Kick-down switch
20 Door contact switch, front, left
21 Front dome light w/switch
22 Door contact switch, front, right
23 Rotary light switch
24 Diesel ignition switch
25 Blower switch
26 Pre-resistance, blower motor
27 Glow starter switch
28 Glow plug resistance control
29 Glow plugs
30 Trunk light
31 Plug connection, cable to rear components
32 Blower motor
33 Fuel gauge sensor
34 Radio
35 Alternator
36 Voltage regulator
37 Starter
38 Battery
39 Tail light unit, right
- a Turn signal light switch
- b Tail/parking light
- c Back-up light
- d Brake light

40 License plate light
41 Tail light unit, left
- a Turn signal light
- b Tail/parking light
- c Back-up light
- d Brake light

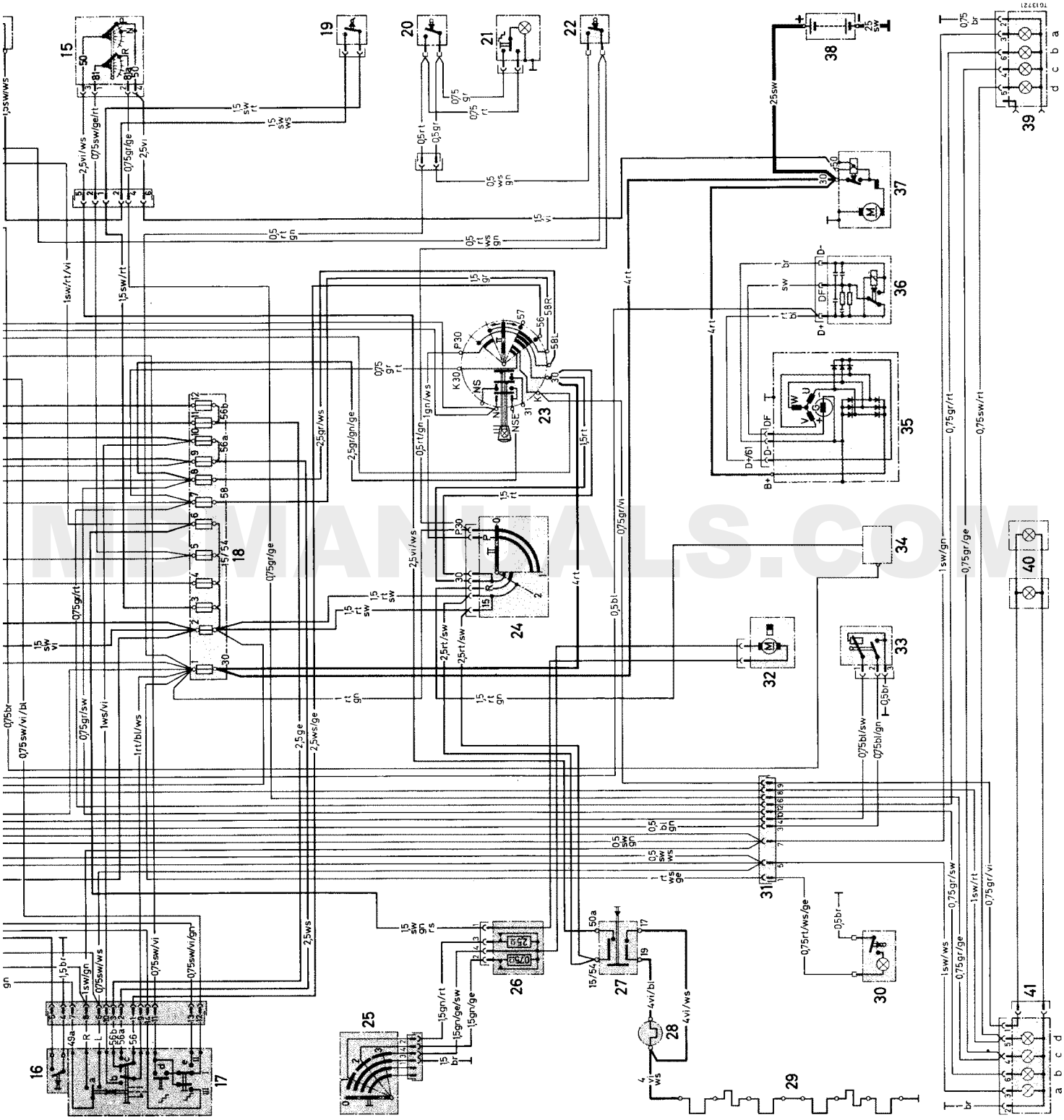
Wire Color Code

ws	=	white
gn	=	green
br	=	brown
ge	=	yellow
gr	=	grey
rs	=	pink
bl	=	blue
rt	=	red
sw	=	black
el	=	ivory
nf	=	neutral
vi	=	purple

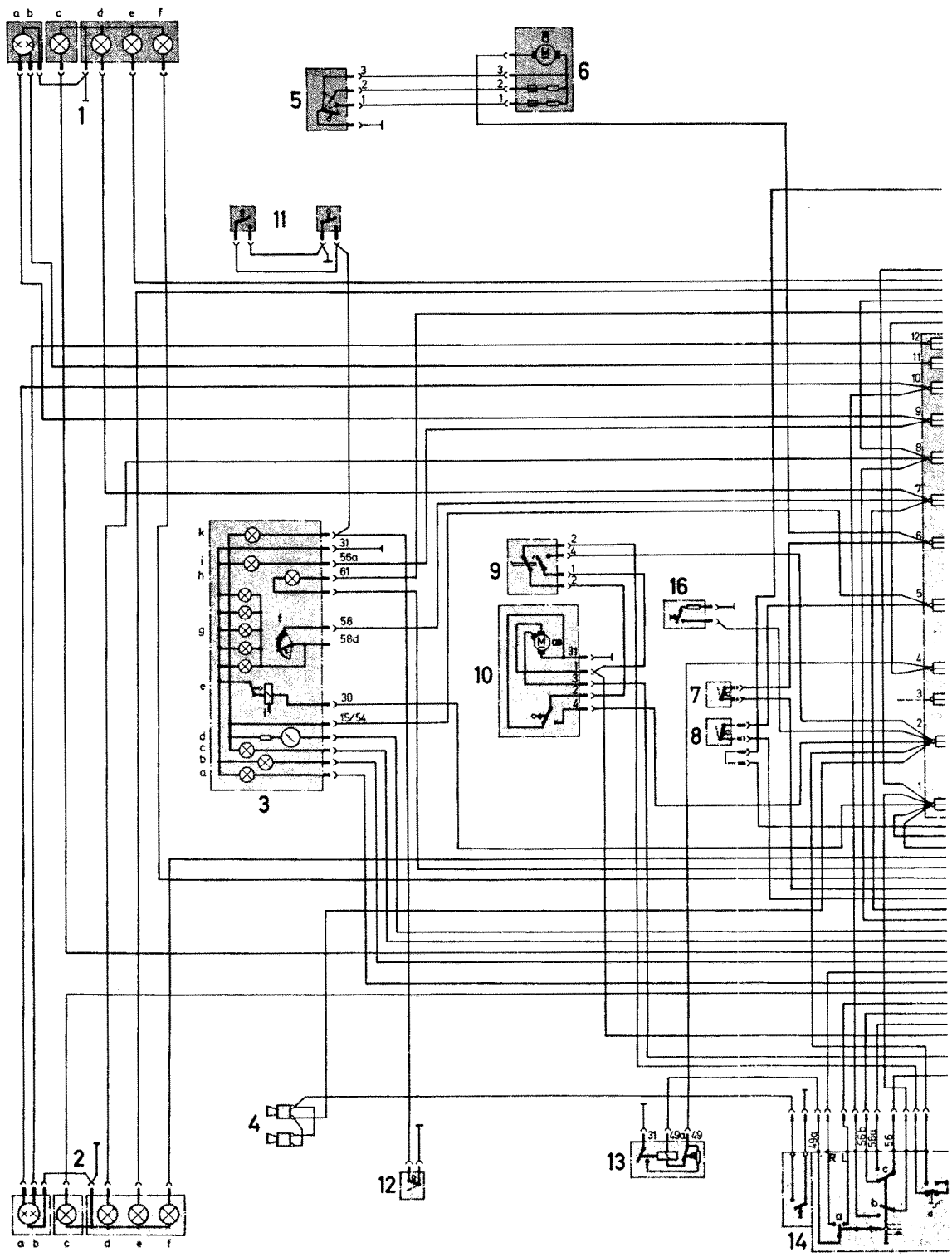
Example:
Wire designation 1.5 gr/rt
Basic color gr = grey
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2



Model 200 D/8 220 D/8 from May 1972 to August 1973

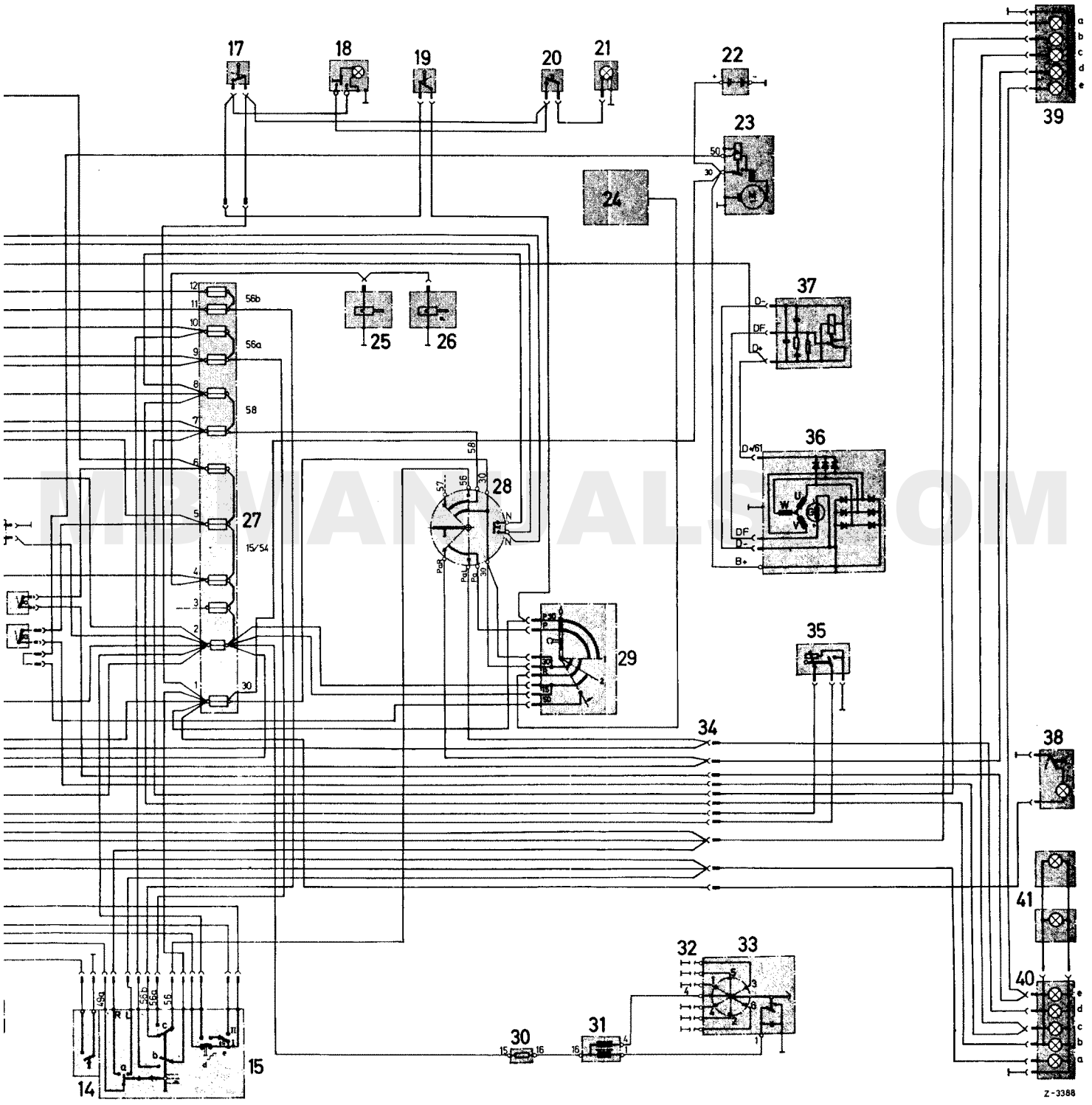


1 Right lighting unit
2 Left lighting unit
a Upper beam
b Lower beam
c Flash signal
d Parking light
e Fog light
f Clearance light
3 Instrument cluster
a Left signal indicator
b Right signal indicator
c Fuel reserve warning light
d Fuel level indicator
e Electric clock
f Control resistance for instrument lighting
g Instrument lighting
h Charging light
i Upper beam control
k Brake control
4 Two-tone horn mechanism
5 Blower switch (air intake)
6 Blower motor (air intake)
7 Stop light switch
8 Reversing light switch
9 Foot pump windshield washer
10 Wiper motor
11 Control switch for brake fluid
12 Control switch for parking brake
13 Flash signal mechanism
14 Horn ring
15 Combination switch
a Flash signal switch
b Flash approach signal switch
c Hand dimmer
d Windshield wiper switch
e Wiper speed switch
16 Cigar lighter
17 Front left door contact
18 Reading light
19 Front right door contact
20 Roof-light switch (on Model 250 only)
21 Rear roof light (on Model 250 only)
22 Battery
23 Starter
24 Lead for optional extra (radio)
25 Automatic start mechanism on rear carburetor
26 Automatic start mechanism on front carburetor
27 Fuses
28 Rotary light switch
29 Ignition starter switch
30 Series resistance
31 Ignition coil
32 Spark plugs
33 Distributor
34 Sleeve union for tail light wiring harness
35 Fuel level indicator
36 Generator
37 Voltage regulator
38 Trunk compartment light
39 Right tail light
40 Left tail light
a Flash signal
b Tail light
c Reversing light
d Clearance light
e Stop light
41 License plate light



Circuit Diagram

Models 230/8 and 250/8

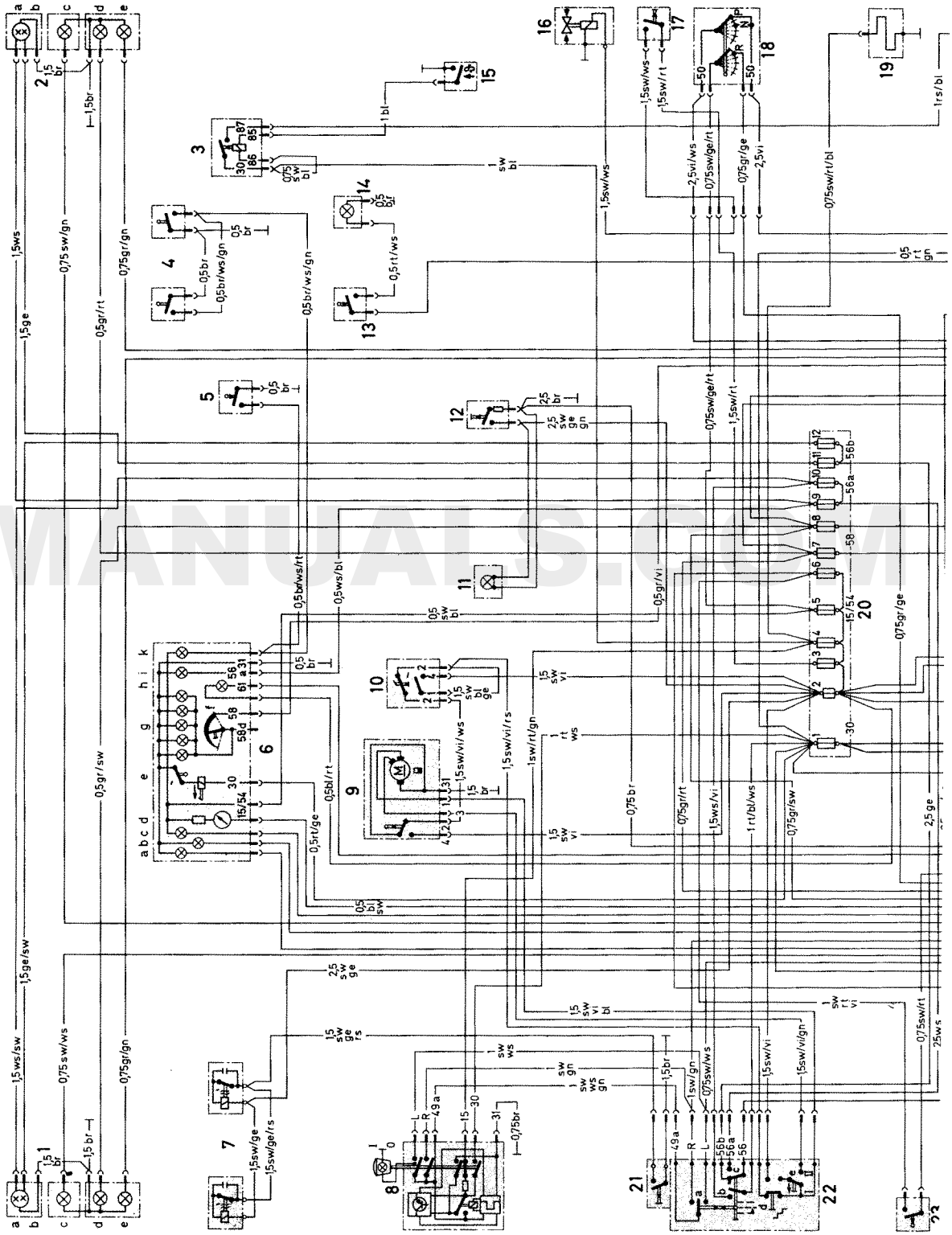


Key to wiring diagram model 230/8, 250/8, 250 C/8 from December 1970 to May 1972

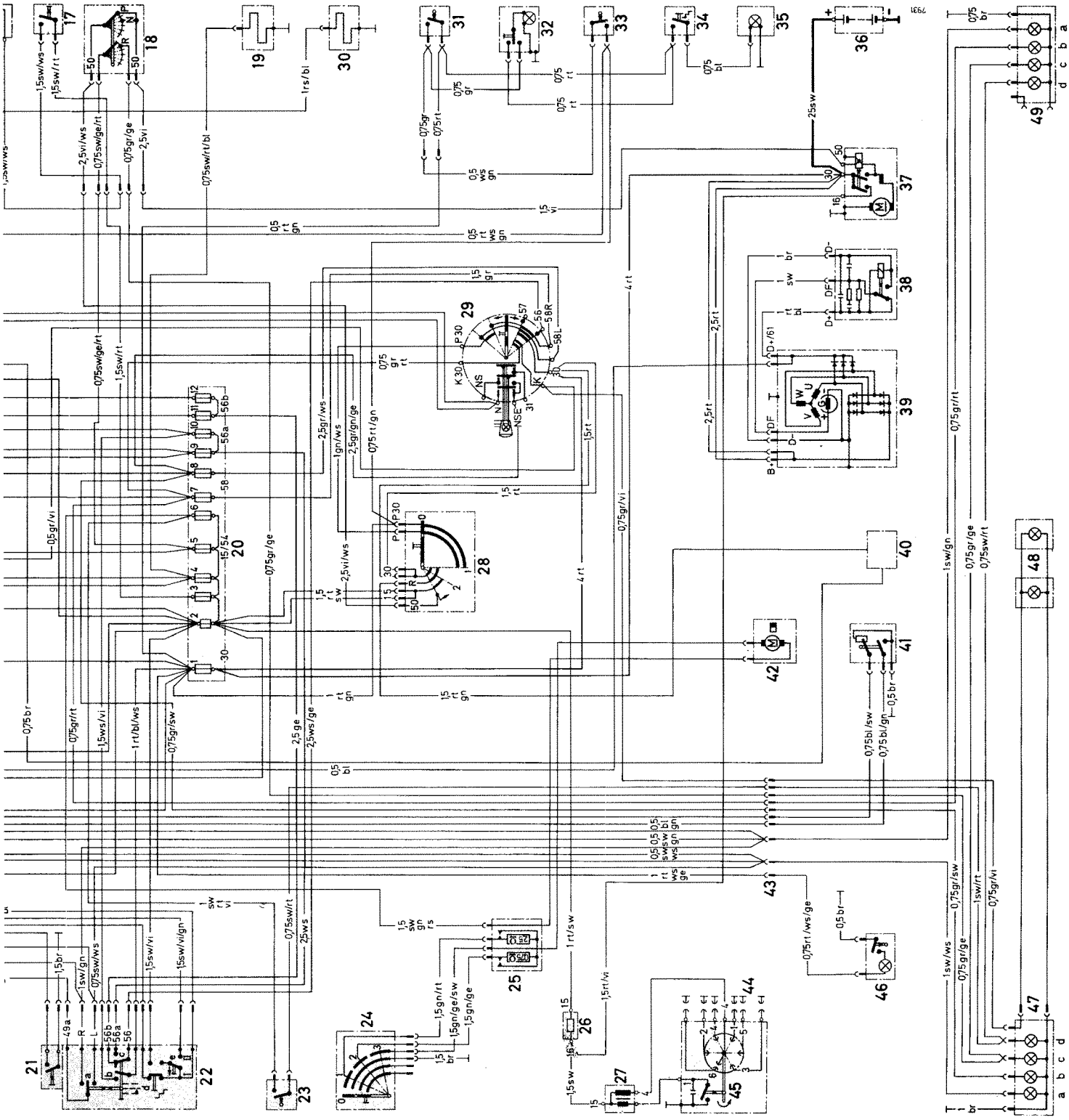
1 Headlight unit, left
2 Headlight unit, right
  a High beam
  b Low beam
  c Turn signal light
  d Standing/parking light
  e Fog light
3 Relay of carburetor heater, rear
4 Brake fluid indicator light switch
5 Parking brake indicator light switch
6 Instrument cluster
  a Turn signal indicator light, left
  b Turn signal indicator light, right
  c Fuel reserve warning light
  d Fuel gauge
  e Electric clock
  f Rheostat, instrument lights
  g Instrument lights
  h Charge indicator light
  i High beam indicator light
  k Brake fluid and parking brake indicator light
7 Dual-tone horns (fanfares)
8 4-way warning flasher switch/timer
9 Wiper motor
10 Washer pump
11 Ashtray illumination
12 Cigar lighter
13 Glove compartment light switch
14 Glove compartment light
15 Thermoswitch 65° C
16 Solenoid valve, automatic transmission
17 Kick-down switch
18 Starter-lockout and back-up light switch
19 Heater coil, automatic choke, front
20 Fuse box
21 Signal system contact
22 Combination switch
  a Turn signal light switch
  b Passing light switch
  c Dimmer switch
  d **Wiper switch**
  e Switch for wiping speed
23 Brake light switch
24 Blower switch
25 Pre-resistance, blower motor
26 Pre-resistance
27 Ignition coil
28 Ignition starter switch
29 Rotary light switch
30 Heater coil, automatic choke, rear
31 Door contact switch, front, left
32 Front dome light w/switch
33 Door contact switch, front, right
34 Rear dome light switch
35 Rear dome light
36 Battery
37 Starter
38 Voltage regulator
39 Alternator
40 Radio
41 Fuel gauge sensor
42 Blower motor
43 Plug connection, cable to rear components
44 Spark plugs
45 Distributor
46 Trunk light
47 Tail light unit, left
  a Turn signal light
  b Tail/parking light
  c Back-up light
  d Brake light
48 License plate light
49 Tail light unit, right
  a Turn signal light
  b Tail/parking light
  c Back-up light
  d Brake light

Wire Color Code
Ws = white
gn = green
br = brown
ge = yellow
gr = grey
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = purple

Example:
Wire designation 1.5 gr/rt
Basic color Gr = grey
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2



Model 230/8, 250/8, 250 C/8 from December 1970 to May 1972



Key to wiring diagram model 230/8, 250/8, 250 C/8 from May 1972 to August 1973

1 Headlight unit, left
- a High beam
- b Low beam
- c Turn signal light
- d Standing/parking light
- e Fog light

2 Headlight unit, right
- a High beam
- b Low beam
- c Turn signal light
- d Standing/parking light
- e Fog light

3 Relay for carburetor heater, rear
4 Brake fluid indicator light switch
5 Parking brake indicator light switch
6 Instrument cluster
- a Turn signal indicator light, left
- b Turn signal indicator light, right
- c Fuel reserve warning ligth
- d Fuel gauge
- e Coolant temperature gauge
- f Electric clock
- g Instrument lights
- h Rheostat, instrument lights
- i Charge indicator light
- k High beam indicator light
- l Brake fluid and parking brake indicator light

7 Temperature sensor, coolant
8 Dual-tone horns (fanfares)
9 4-way warning flasher switch/timer
10 Signal system contact
11 Wiper motor with interval timer
12 Washer pump
13 Ashtray illumination
14 Cigar lighter
15 Glove compartment light switch
16 Glove compartment light
17 Temperature switch 65° C
18 Solenoid valve, automatic transmission
19 Kick-down switch
20 Starter-lockout and back-up light switch
21 Heater coil, automatic choke, front
22 Fuse box
23 Combination switch
- a Turn signal light switch
- b Passing light switch
- c Dimmer switch
- d **Wiper switch**
- e Switch for wiping speed
  - I Slow wiping
  - II Fast wiping
  - III Interval wiping

24 Brake light switch
25 Blower switch
26 Pre-resistance, blower motor
27 Pre-resistance
28 Ignition coil
29 Ignition starter switch
30 Rotary light switch
31 Heater coil, automatic choke, rear
32 Door contact switch, front, left
33 Front dome light w/switch
34 Door contact switch, front, right
35 Rear dome light switch
36 Rear dome light
37 Battery
38 Starter
39 Voltage regulator
40 Alternator
41 Radio
42 Fuel gauge sensor
43 Blower motor
44 Plug connection, cable to rear components
45 Spark plugs
46 Distributor
47 Trunk light
48 Tail light unit, left
- a Turn signal light
- b Tail/parking light
- c Back-up light
- d Brake light

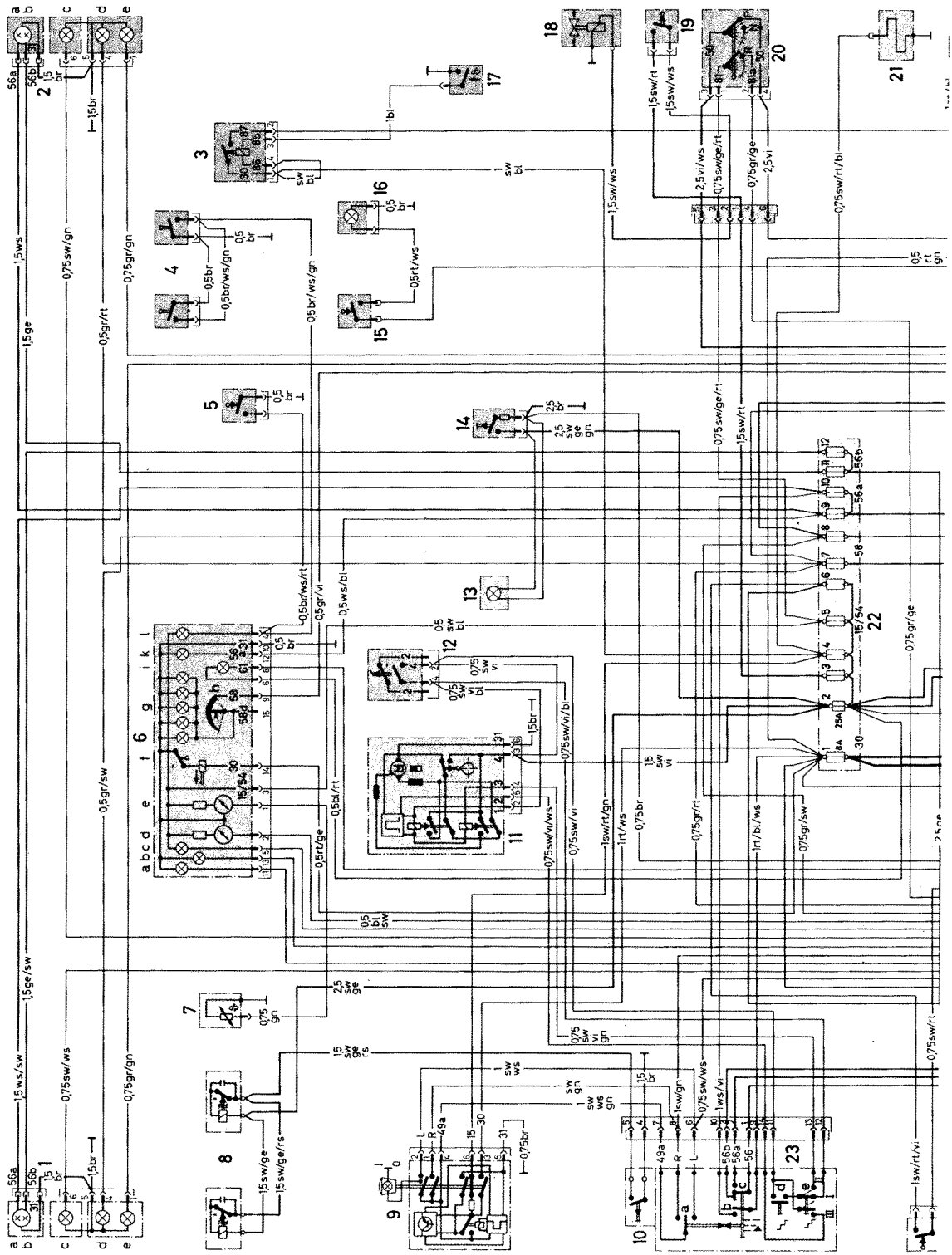
49 License plate lights
50 Tail light unit, right
- a Turn signal light
- b Tail/parking light
- c Back-up light
- d Brake light

Wire Color Code

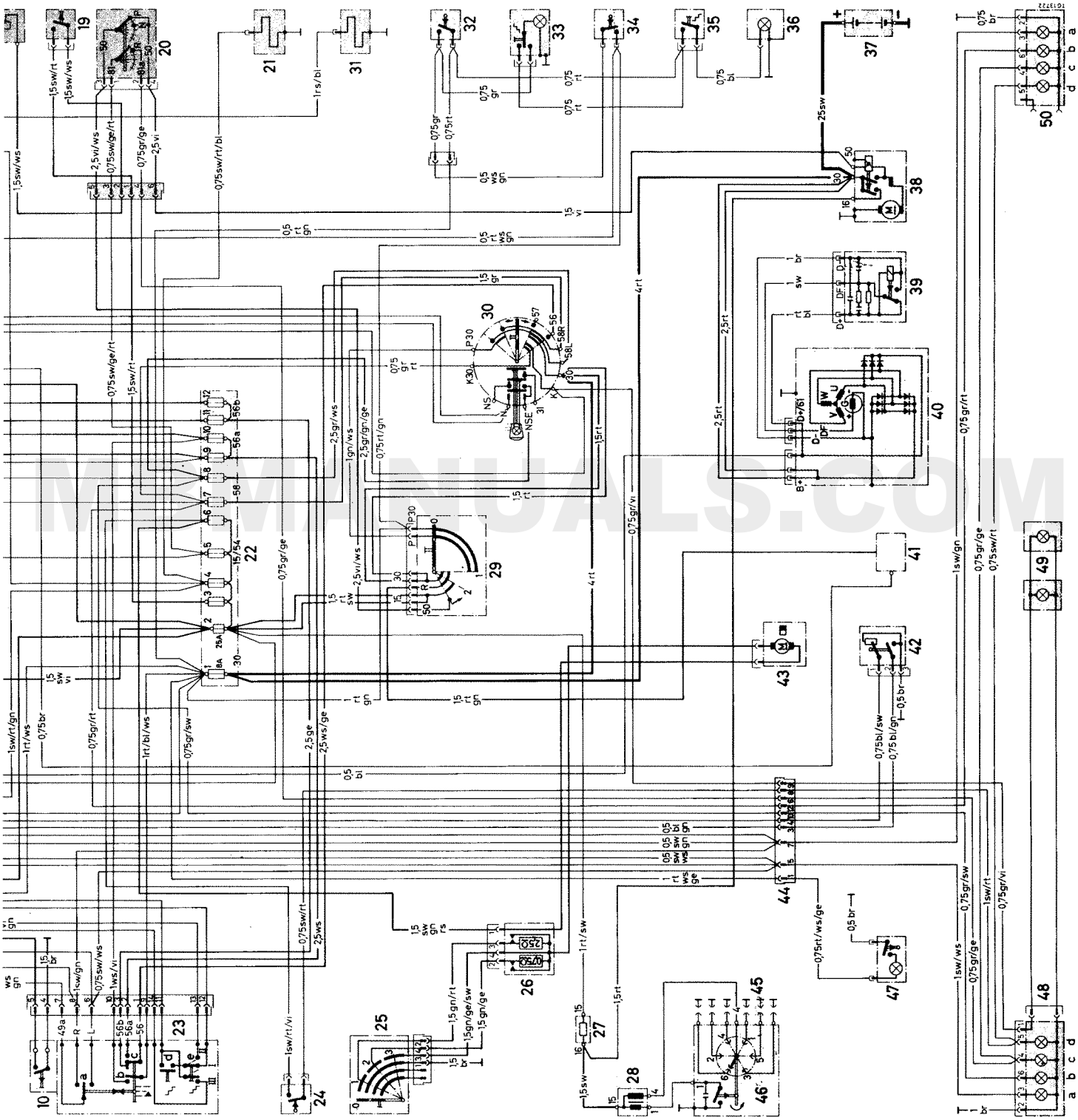
ws	=	white
gn	=	green
br	=	brown
ge	=	yellow
gr	=	grey
rs	=	pink
bl	=	blue
rt	=	red
sw	=	black
el	=	ivory
nf	=	neutral
vi	=	purple

Example:
Wire designation 1.5 gr/rt
Basic color gr = grey
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2

13722



Model 230/8, 250/8, 250 C/8 from May 1972 to August 1973



MERCEDES-BENZ

Electric wiring diagram

Emission control 1972

220

Explanation of wiring diagram with "Automatic Transmission", "Air Conditioner" and "Emission control 1972"

1 Light assembly, left
- a High beam
- b Low beam
- c Turn signal
- d Parking light/Side light
- e Fog light

2 Side marker light, left

3 Solenoid valve on automatic transmission

4 Two-tone horn

5 Cigar lighter with ashtray illumination

6 Instrument cluster
- a Turn signal indicator, left
- b Turn signal indicator, right
- c Fuel reserve warning light
- d Fuel gauge
- e Electric clock
- f Instrument lighting rheostat
- g Instrument lighting
- h Charging indicator light
- i High beam indicator light
- j Brake fluid level/ parking brake warning light

7 Warning light for safety belt warning system

8 Electrically operated fan

9 Parking brake warning light switch

10 Light assembly, right
- a High beam
- b Low beam
- c Turn signal
- d Parking light/Side light
- e Fog light

11 Side marker light, right

12 Warning buzzer

13 Buzzer switch

14 Relay of electrically operated fan

15 Hazard warning flasher switch

16 Warning light switch, brake fluid level

17 Flasher transmitter

18 Stop light switch

19 Windshield wiper motor

20 Foot pump, windshield washer

21 Relay emission control

22 Door contact switch, left, front

23 Courtesy light

24 Door contact switch, right, front

25 Thermostatic switch dehydrator (air conditioner)

26 Fuse box, houses 2 fuses (auxiliary fan)

27 Switch, glove compartment light

28 Glove compartment light

29 Rear roof light switch

30 Rear roof light

31 Fuses

32 Horn ring

33 Combination switch
- a Turn signal switch
- b Headlight flasher switch
- c Hand-operated dimmer switch
- d Windshield wiper switch
- e Switch windshield wiper speed

34 Starting lock switch and back-up light switch (automatic transmission)

35 Kickdown switch (automatic transmission)

36 Idle speed shut-off valve

37 Two-way valve ignition distributor (emission control)

38 Two-way valve, throttle valve (emission control)

39 Lead for radio

40 Starter relay (automatic transmission)

41 Relay warning system (automatic transmission)

42 Control switches for safety belt warning system
- a switch in driver's seat belt reel
- b switch in front passenger seat belt reel
- c switch in front passenger seat

43 Blower switch

44 Light switch

45 Ignition switch

46 Carburetor heater (emission control)

47 Rpm-controlled switch (emission control)

48 Delay switch

49 Relay-Two-way valve ignition distributor (emission control)

50 Transitorized ignition switch unit

51 Ignition coil

52 Series resistor 0.6 Ω

53 Series resistor 0.4 Ω

54 Blower motor (air conditioner)

55 Thermostat and control switch (air conditioner)

56 Change-over switch, cooling - heating

57 Blower motor series resistor

58 Blower motor (heater)

59 Relay (air conditioning compressor)

60 Electro-magnetic clutch air conditioning compressor

61 Indicator light (air conditioner)

62 Fuse box, houses 2 fuses (air conditioner)

63 Battery

64 Starter

65 Regulator

66 Alternator

67 Fuel gauge sending unit

68 Plug connection for tail light wiring harness

69 Temperature switch 212° F (100° C)

70 Trunk light

71 Spark plugs

72 Ignition distributor

73 Side marker light, left

74 Tail light assembly, L-H side
- a Turn signal
- b Tail light/Side light
- c Back-up light
- d Stop light

75 Licence plate light

76 Tail light assembly, R-H side
- a Turn signal
- b Tail light/Side light
- c Back-up light
- d Stop light

77 Side marker light, right

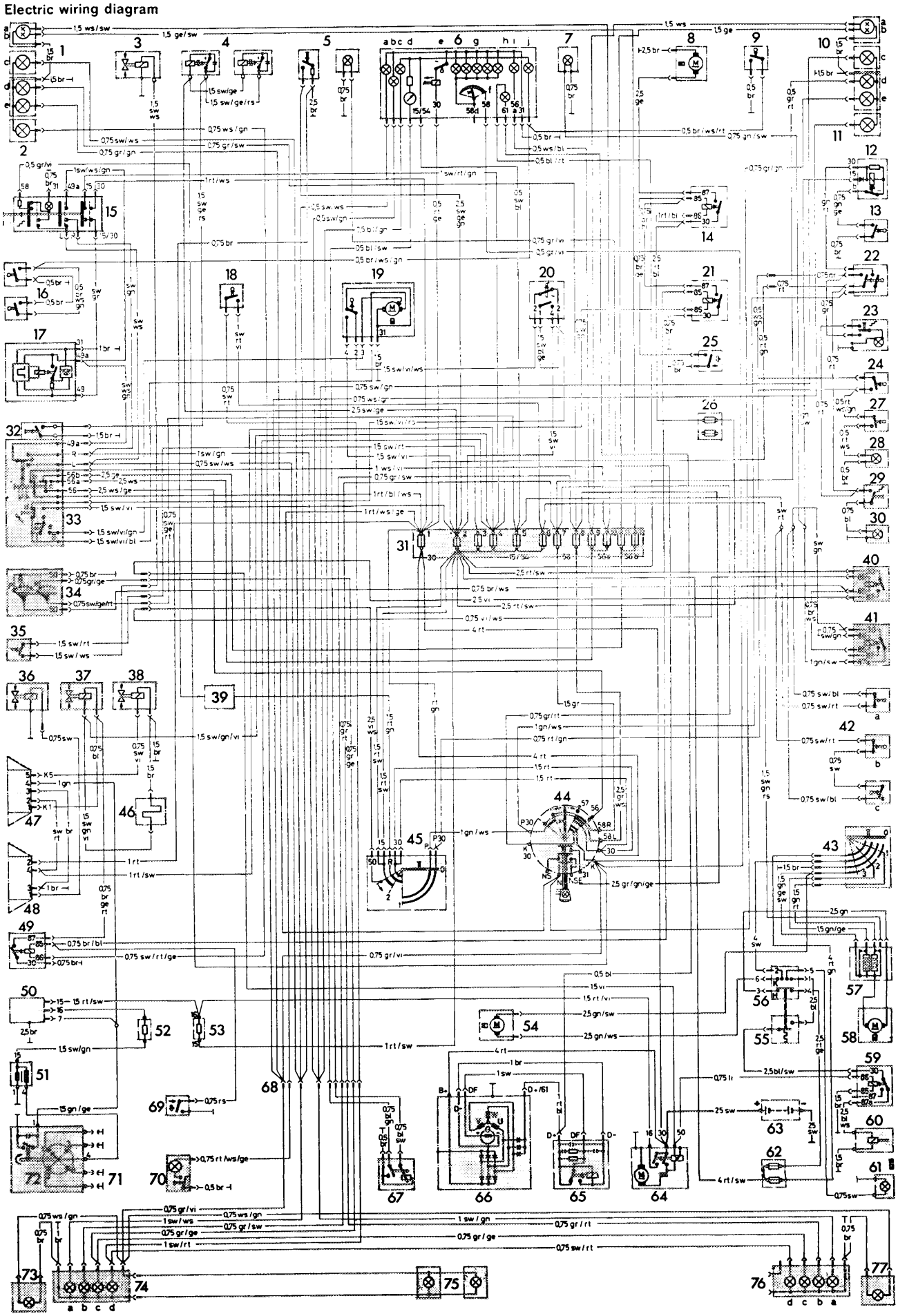
Wire color code

ws = white
gn = green
br = brown
ge = yellow
gr = gray
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = violet
li = lilac

Example:

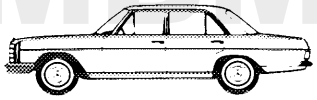
wire designation 1,5 gr/rt
Basic color gr = gray
Identification color rt = red
Cross section of wire 1,5 = 1.5 mm²

Electric wiring diagram



Mercedes-Benz

220 D



Electric wiring diagram

USA Model

Explanation of wiring diagram with "Automatic Transmission" and "Air Conditioner"

1 Light assembly, left
- a High beam
- b Low beam
- c Turn signal
- d Parking light/Side light
- e Fog light

2 Side marker light, left

3 Solenoid valve on automatic transmission

4 Two-tone horn

5 Cigar lighter with ashtray illumination

6 Instrument cluster
- a Turn signal indicator, left
- b Turn signal indicator, right
- c Fuel reserve warning light
- d Fuel gauge
- e Electric clock
- f Instrument lighting rheostat
- g Instrument lighting
- h Charging indicator light
- i High beam indicator light
- j Brake fluid level/ parking brake warning light

7 Warning light for safety belt warning system

8 Electrically operated fan

9 Parking brake warning light switch

10 Light assembly, right
- a High beam
- b Low beam
- c Turn signal
- d Parking light/Side light
- e Fog light

11 Side marker light, right

12 Warning buzzer

13 Buzzer switch

14 Relay of electrically operated fan

15 Hazard warning flasher switch

16 Warning light switch, brake fluid level

17 Flasher transmitter

18 Stop light switch

19 Windshield wiper motor

20 Foot pump, windshield washer

21 Temperature switch 212° F (100° C)

22 Door contact switch, left, front

23 Courtesy light

24 Door contact switch, right, front

25 Thermostatic switch dehydrator (air conditioner)

26 Fuse box, houses 2 fuses (auxiliary fan)

27 Switch, glove compartment light

28 Glove compartment light

29 Rear roof light switch

30 Rear roof light

31 Fuses

32 Horn ring

33 Combination switch
- a Turn signal switch
- b Headlight flasher switch
- c Hand-operated dimmer switch
- d Windshield wiper switch
- e Switch windshield wiper speed

34 Starting lock switch and back-up light switch (automatic transmission)

35 Kickdown switch (automatic transmission)

36 Starter relay (automatic transmission)

37 Relay warning system (automatic transmission)

38 Control switches for safety belt warning system
- a switch in driver's seat belt reel
- b switch in front passenger seat belt reel
- c switch in front passenger seat

39 Glow plug switch

40 Glow plug control lamp

41 Alternator

42 Lead for radio

43 Ignition switch

44 Light switch

45 Blower switch

46 Blower motor series resistor

47 Blower motor (heater)

48 Change-over switch, cooling – heating

49 Thermostat and control switch (air conditioner)

50 Blower motor (air conditioner)

51 Regulator

52 Glow plugs and series resistor

53 Starter

54 Battery

55 Plug connection for tail light wiring harness

56 Fuel gauge sending unit

57 Trunk light

58 Fuse box, houses 2 fuses (air conditioner)

59 Relay (air conditioning compressor)

60 Electro-magnetic clutch air conditioning compressor

61 Indicator light (air conditioner)

62 Side marker light, right

63 Tail light assembly, R-H side
- a Turn signal
- b Tail light/Side light
- c Back-up light
- d Stop light

64 Licence plate light

65 Tail light assembly, L-H side
- a Turn signal
- b Tail light/Side light
- c Back-up light
- d Stop light

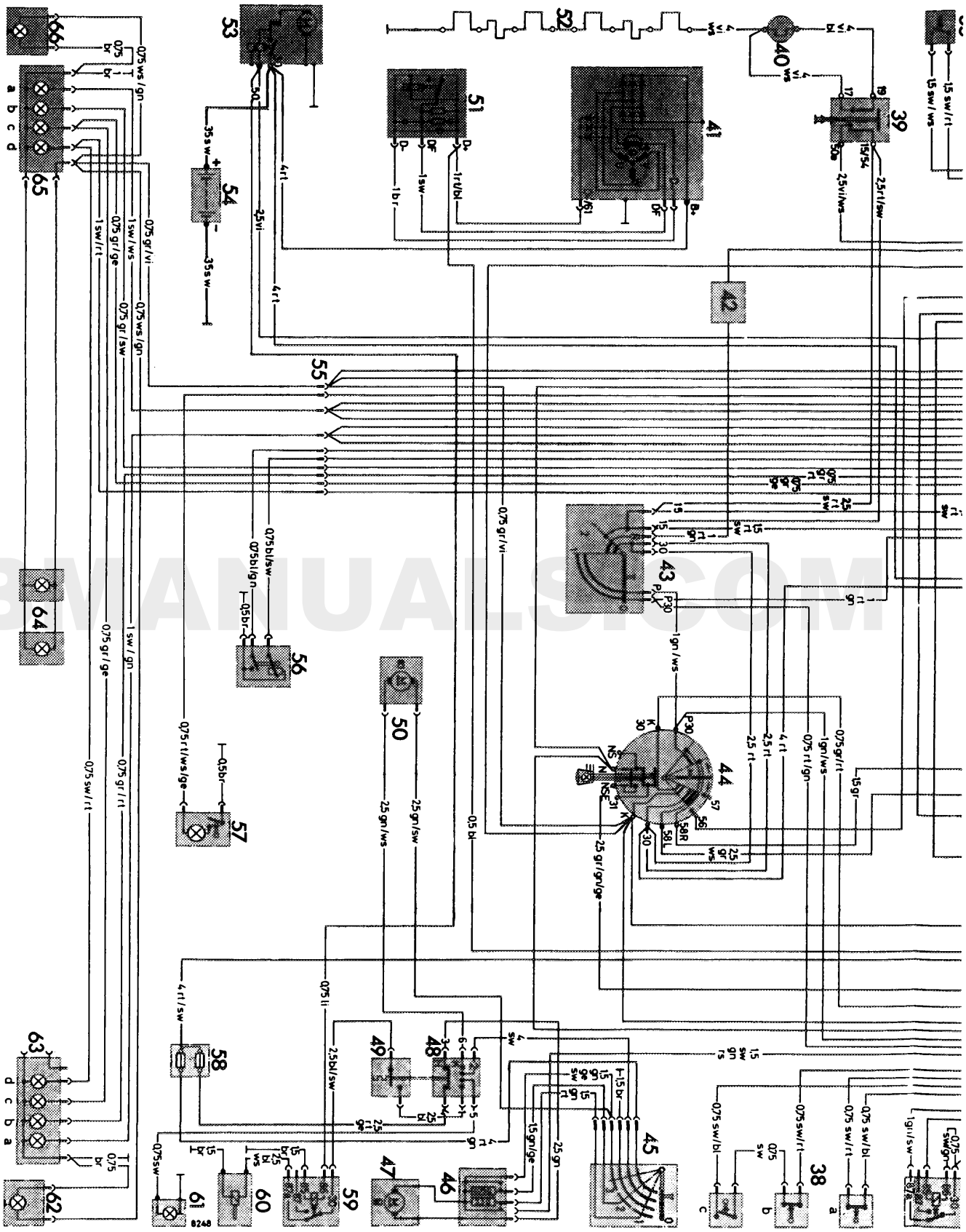
66 Side marker light, left

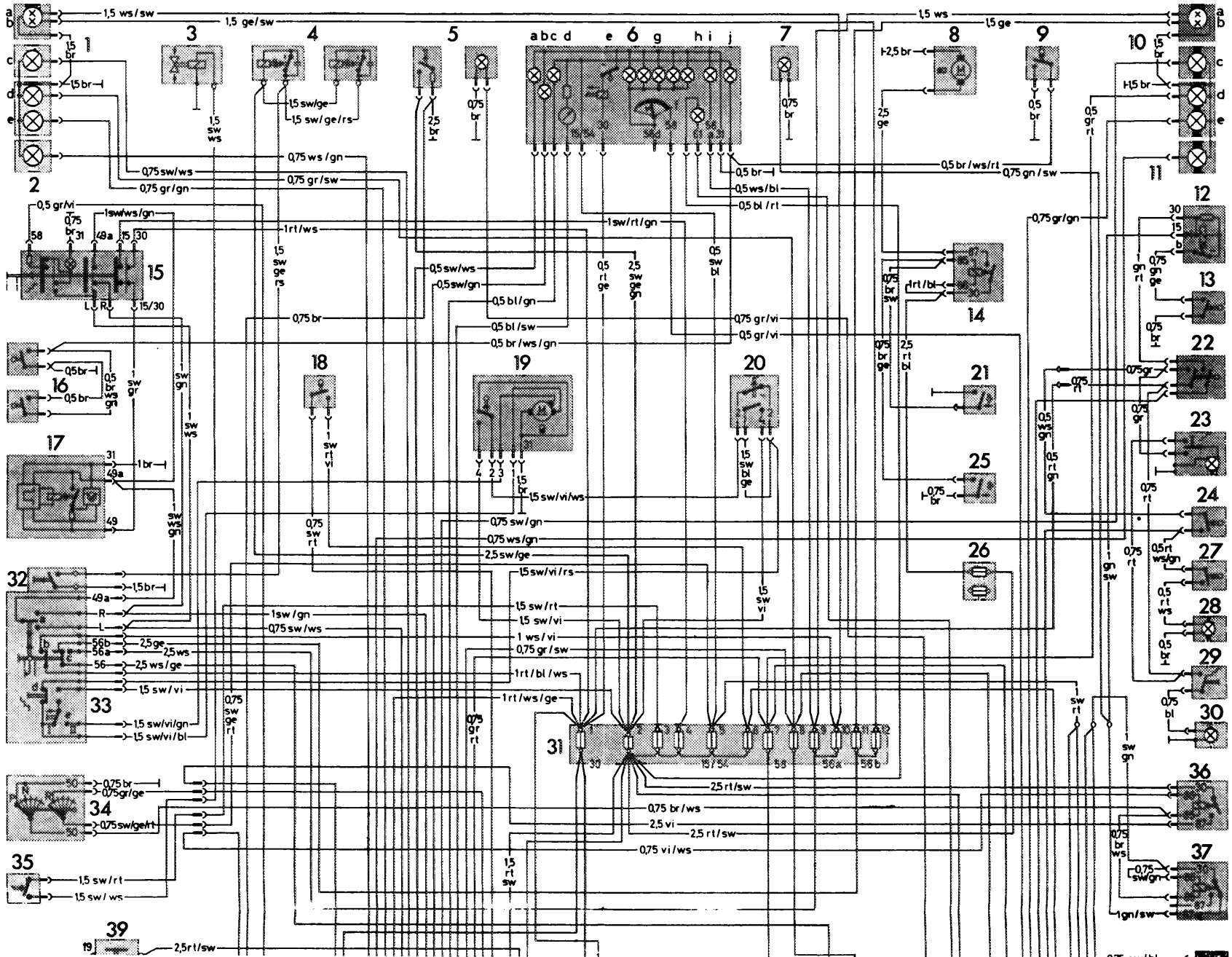
Wire color code

ws = white
gn = green
br = brown
ge = yellow
gr = gray
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = violet
li = lilac

Example:

wire designation 1,5 gr/rt
Basic color gr = gray
Identification color rt = red
Cross section of wire 1,5 = 1.5 mm^2

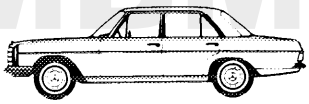


 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
39
a
b
c
d
e
a b c d
e
g
h i
j
1,5 ws/sw
1,5 ge/sw
1,5 ws
1,5 ge
1,5 br
0,75 ws/gn
0,75 sw/ws
0,75 gr/sw
0,75 gr/gn
0,5 br/ws/rt
0,75 gn/sw
0,5 br
0,5 ws/bl
0,5 bl/rt
0,75 gr/gn
0,5 gr/vi
1 sw/ws/gn
1 rt/ws
1 sw/rt/gn
0,5 sw/ws
0,5 sw/gn
0,5 bl/gn
0,5 bl/sw
0,5 br/ws/gn
0,75 br
0,75 gr/vi
0,5 gr/vi
1 rt/bl
1,5 sw/ge
1,5 sw/ge/rs
2,5 ge
2,5 br
2,5 rt bl
0,75 br ge
0,75 br sw
0,75 sw/gn
0,75 ws/gn
2,5 sw/ge
1,5 sw/vi/rs
1,5 sw/vi/ws
1,5 sw/rt
1,5 sw/vi
1 ws/vi
0,75 gr/sw
1 rt/bl/ws
1 rt/ws/ge
1 sw/gn
0,75 sw/ws
2,5 ge
2,5 ws
2,5 ws/ge
1,5 sw/vi/gn
1,5 sw/vi/bl
1,5 br
49a
R
L
56b
56a
56
58
31
15
30
15/30
49
1 br
0,75 br
0,75 gr/ge
0,75 sw/ge/rt
2,5 rt/sw
0,75 br/ws
2,5 vi
0,75 vi/ws
1,5 sw/rt
1,5 sw/ws
1,5 rt sw
1 gn/sw
0,75 sw/gn
15/54
56a
56b

Mercedes-Benz

220

service



Electric Wiring Diagram

Emission control 1973

Electrical Wiring Diagram Type 220

1 Light unit left
  a High beam
  b Low beam
  c Turn signal light
  d Standing / parking light
  e Fog lamp
2 Side marker light left
3 Solenoid valve for automatic transmission
4 Dual-tone horns (fanfares)
5 Cigar lighter with ashtray illumination
6 Instrument cluster
  a Turn signal control - left
  b Turn signal control - right
  c Fuel reserve warning light
  d Fuel gauge
  e Electric clock
  f Rheostat – instrument lights
  g Instrument lights
  h Charge indicator light
  i High beam pilot
  j Service and parking brake pilot
7 Safety belt warning light
8 Electric fan
9 Switch for parking brake pilot
10 Light unit right
  a High beam
  b Low beam
  c Turn signal light
  d Standing / parking light
  e Fog lamp
11 Side marker light right
12 Warning buzzer
13 Warning buzzer contact
14 Electric fan relay
15 Temperature switch 100° C (212° F)
16 Radio
17 4-way warning flasher switch
18 Brake fluid control switch
19 Flasher transmitter
20 Brake light switch
21 Wiper motor
22 Carburetor heater
23 Footpump – windshield washer
24 Door contact switch for warning buzzer
25 Thermostatic switch dehydrator (air conditioner)
26 Fuse box, 2 fuses (auxiliary fan)
27 Door contact left front
28 Reading light
29 Door contact switch right front
30 Switch for glove compartment light
31 Glove compartment light
32 Rear dome light switch
33 Rear dome light
34 Fuses
35 Horn ring
36 Combination switch
  a Turn signal light switch
  b Passing light switch
  c Manual dimmer switch
  d Wiper switch
  e Switch for wiping speed
37 Starter-lockout and back-up light switch
38 Kick-down switch
39 Change-over valve, emission recycling
40 Relay box emission control
41 Rpm switch emission control
42 Change-over valve, ignition switch-over
43 Delay relay
44 Change-over valve, throttle valve lift
45 Idle fuel cut-out valve
46 Ignition starter switch
47 Rotary light switch
48 Relay starter
49 Warning system relay
50 Safety belt warning system
  a Driver's seat retractor switch
  b Passenger seat retractor switch
  c Switch in front passenger seat
51 Blower switch
52 Pre-resistance for blower motor
53 Blower motor (heater)
54 Relay refrigerant compressor
55 Change-over switch, cooling-heating
56 Thermostat and control switch (air conditioner)
57 Blower motor (air conditioner)
58 Pre-resistance 0.4 Ω
59 Pre-resistance 0.6 Ω
60 Transistorized ignition switching unit
61 Ignition coil
62 Distributor
63 Spark plugs
64 Trunk light
65 Temperature switch 25° C (77° F) emission control
66 Plug connection for tail light unit
67 Fuel tank gauge sensor
68 Alternator
69 Regulator
70 Starter
71 Battery
72 Fuse box, 2 fuses (air conditioner)
73 Solenoid clutch for refrigerant compressor
74 Control light (air conditioner)
75 Side marker light right
76 Tail light - right
  a Turn signal light
  b Tail and parking light
  c Back-up light
  d Brake light
77 License plate light
78 Tail light left
  a Turn signal light
  b Tail and parking light
  c Back-up light
  d Brake light
79 Side marker light left

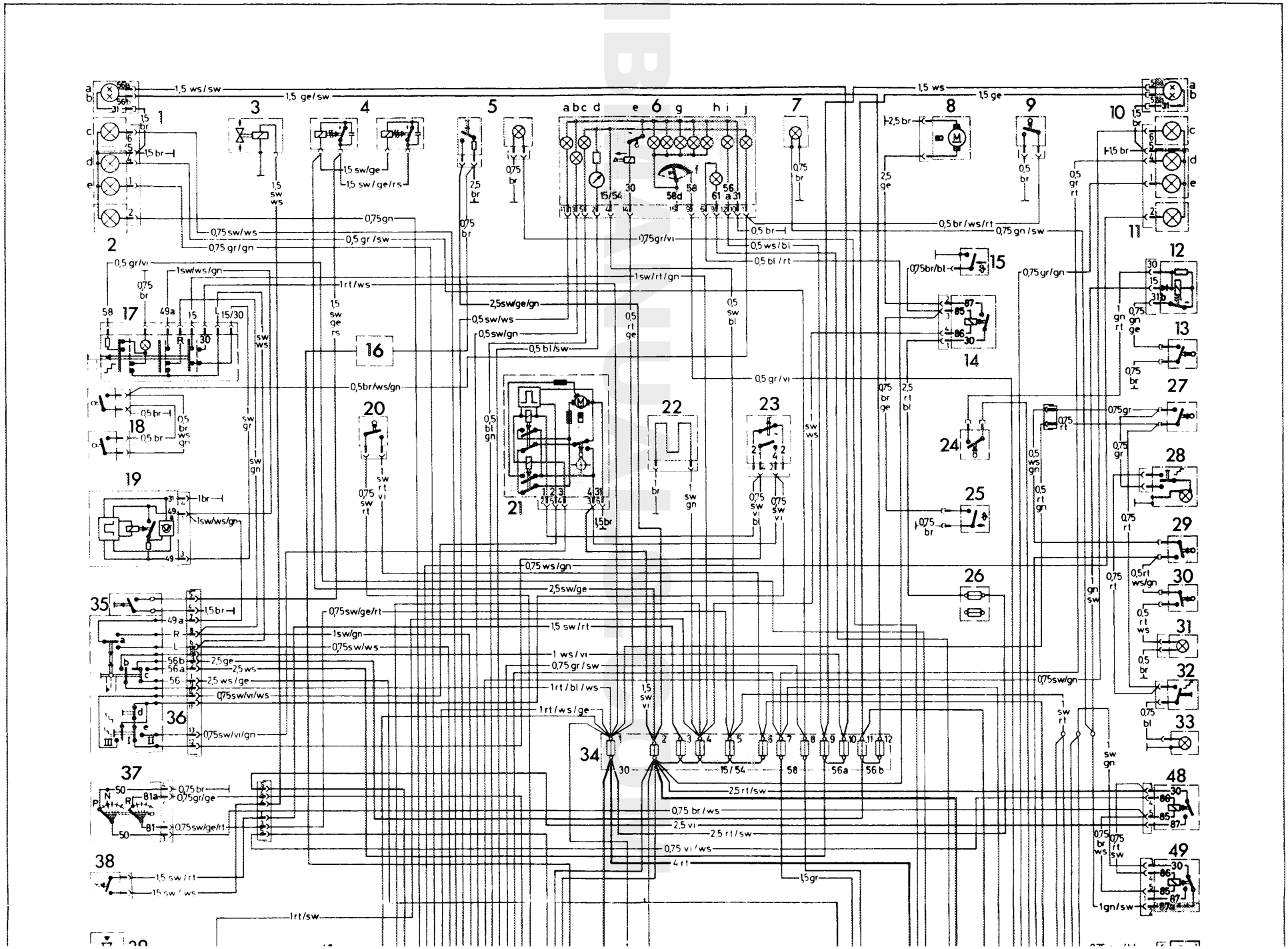
Wire Color Code

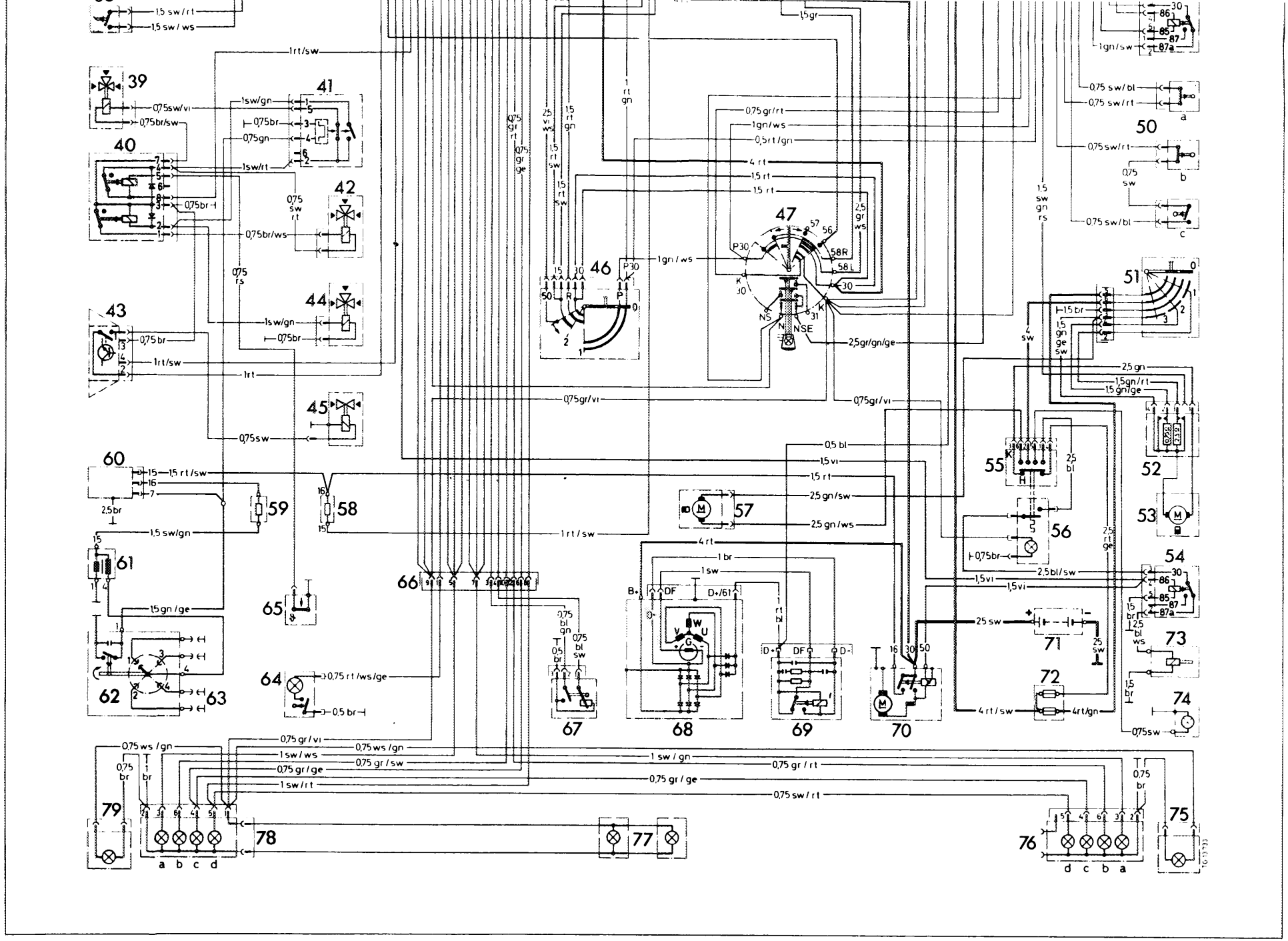
ws = white
gn = green
br = brown
ge = yellow
gr = gray
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = violet

Example:

Wire designation 1.5 gr/rt
Basic color gr = gray
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2

137 33

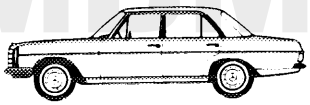

1,5 ws/sw
1,5 ge/sw
1,5 ws
1,5 ge
1,5 sw/ge
1,5 sw/ge/rs
0,75gn
0,75 sw/ws
0,5 gr/sw
0,75 gr/gn
0,5 gr/vi
1sw/ws/gn
1rt/ws
0,75gr/vi
0,5 br
0,5 ws/bl
0,5 bl/rt
0,5 br/ws/rt
0,75 gn/sw
0,75br/bl
0,75 gr/gn
2,5sw/ge/gn
0,5 sw/ws
0,5sw/gn
0,5 bl/sw
0,5br/ws/gn
0,5 gr/vi
1sw/rt/gn
0,75 ws/gn
2,5sw/ge
0,75sw/ge/rt
1sw/gn
0,75sw/ws
1,5 sw/rt
1 ws/vi
0,75 gr/sw
1rt/bl/ws
1rt/ws/ge
0,75sw/gn
2,5 rt/sw
0,75 br/ws
2,5 vi
2,5 rt/sw
0,75 vi/ws
4 rt
1,5gr
1rt/sw
1gn/sw
1,5 sw/rt
1,5 sw/ws
0,75sw/vi/ws
0,75sw/vi/gn
0,75 br
0,75gr/ge
0,75sw/ge/rt
0,75gr
0,75 rt
0,5rt ws/gn
0,5 rt ws
0,5 br
0,75 bl
0,75 gn ge
0,75 br ge
0,75 br bl
0,75 rt bl
0,5 ws gn
0,5 rt gn
0,75 rt sw
0,75 br ws
1 gn sw
1 sw rt
1 sw gn
1 sw ws
1 sw gr
1 sw rt vi
0,75 sw rt
0,75 sw vi bl
0,75 sw vi
0,5 bl gn
0,5 sw bl
0,5 rt ge
0,5 sw ge rs
0,5 br ws gn
1br
1,5br
br
15/54
58
56a
56b
30
86
85
87
87a


39
40
41
42
43
44
45
46
47
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
1,5 sw/rt
1,5 sw/ws
1rt/sw
0,75sw/vi
0,75br/sw
1sw/gn
0,75br
0,75gn
1sw/rt
0,75br
0,75br/ws
0,75 sw rt
0,75 rs
0,75br
1sw/gn
0,75br
0,75br
1rt/sw
1rt
0,75sw
1,5 rt/sw
2,5br
1,5 sw/gn
1,5 gn/ge
0,75 rt/ws/ge
0,5 br
0,75 ws/gn
0,75 br
1 br
0,75 gr/vi
1 sw/ws
0,75 gr/ge
1 sw/rt
0,75 ws/gn
0,75 gr/sw
1 sw/gn
0,75 gr/rt
0,75 gr/ge
0,75 sw/rt
a b c d
d c b a
1gn/ws
0,75 gr/rt
0,5rt/gn
4 rt
1,5 rt
1,5 rt
2,5gr/gn/ge
0,75gr/vi
0,75gr/vi
0,5 bl
1,5 vi
1,5 rt
2,5 gn/sw
2,5 gn/ws
1rt/sw
4 rt
1 br
1 sw
0,75 bl gn
0,75 bl sw
1gn/sw
0,75 sw/bl
0,75 sw/rt
0,75 sw/rt
0,75 sw/bl
1,5 br
2,5 gn
1,5gn/rt
1,5 gn/ge
2,5 bl
0,75br
2,5bl/sw
1,5vi
1,5vi
25 sw
4rt/sw
4rt/gn
0,75sw
1,5 br
2,5 bl ws
1,5 br
2,5 rt ge
1,5 sw gn rs
1,5 gn ge sw
4 sw
2,5 gr ws
2,5 gr rt
P30
58R
58L
30
NSE
NS
N
K
31
B+
DF
D+/61
D+
DF
D-
16
30
50
25 sw
4rt/gn
TG 13933

Mercedes-Benz

220 D

service



Electric Wiring Diagram

Emission control 1973

Electrical Wiring Diagram Type 220 D

1 Light unit left
  a High beam
  b Low beam
  c Turn signal light
  d Standing/parking light
  e Fog lamp
2 Side marker light left
3 Solenoid valve for automatic transmission
4 Dual-tone horns (fanfares)
5 Cigar lighter with ashtray illumination
6 Instrument cluster
  a Turn signal control – left
  b Turn signal control – right
  c Fuel reserve warning light
  d Fuel gauge
  e Electric clock
  f Rheostat – instrument lights
  g Instrument lights
  h Charge indicator control
  i High beam pilot
  j Service and parking brake pilot
7 Safety belt warning light
8 Electric fan
9 Switch for parking brake pilot
10 Light unit right
  a High beam
  b Low beam
  c Turn signal light
  d Standing/parking light
  e Fog lamp
11 Side marker light – left
12 Warning buzzer
13 Warning buzzer contact
14 Door contact switch – right
15 Electric fan relay
16 4-way warning flasher switch
17 Brake fluid control switch
18 Flasher transmitter
19 Brake light switch
20 Wiper motor
21 Foot pump – windshield washer
22 Temperature switch: 100° (212° F)
23 Door contact left
24 Reading light
25 Door contact – right front
26 Thermostatic switch dehydrator (air conditioner)
27 Fuse box, 2 fuses (auxiliary fan)
28 Switch for glove compartment light
29 Glove compartment light
30 Rear dome light switch
31 Rear dome light
32 Fuses
33 Horn ring
34 Combination switch
  a Turn signal light switch
  b Passing light switch
  c Manual dimmer switch
  d Wiper switch
  e Switch for wiping speed
35 Starter-lockout and back-up light switch (automatic transmission)
36 Kick-down switch
37 Starter relay
38 Warning system relay
39 Safety belt warning system
  a Driver's seat retractor switch
  b Passenger seat retractor switch
  c Switch in front passenger seat
40 Glow starter switch
41 Glow plug resistance control
42 Alternator
43 Radio
44 Steering lock switch
45 Rotary light switch
46 Blower switch
47 Pre-resistance for blower motor
48 Blower motor (heater)
49 Change-over switch, cooling - heating
50 Thermostat and control switch (air conditioner)
51 Blower motor (air conditioner)
52 Regulator
53 Glow plugs and series resistor
54 Starter
55 Battery
56 Plug connection for tail light unit
57 Fuel tank gauge sensor
58 Trunk light
59 Fuse box, 2 fuses (refrigerant compressor)
60 Relay (refrigerant compressor)
61 Solenoid clutch for refrigerant compressor
62 Control light (air conditioner)
63 Side marker light right
64 Tail light – right
  a Turn signal light
  b Tail and parking light
  c Back-up light
  d Brake light
65 License plate lights
66 Tail light – left
  a Turn signal light
  b Tail and parking light
  c Back-up light
  d Brake light
67 Side marker light left

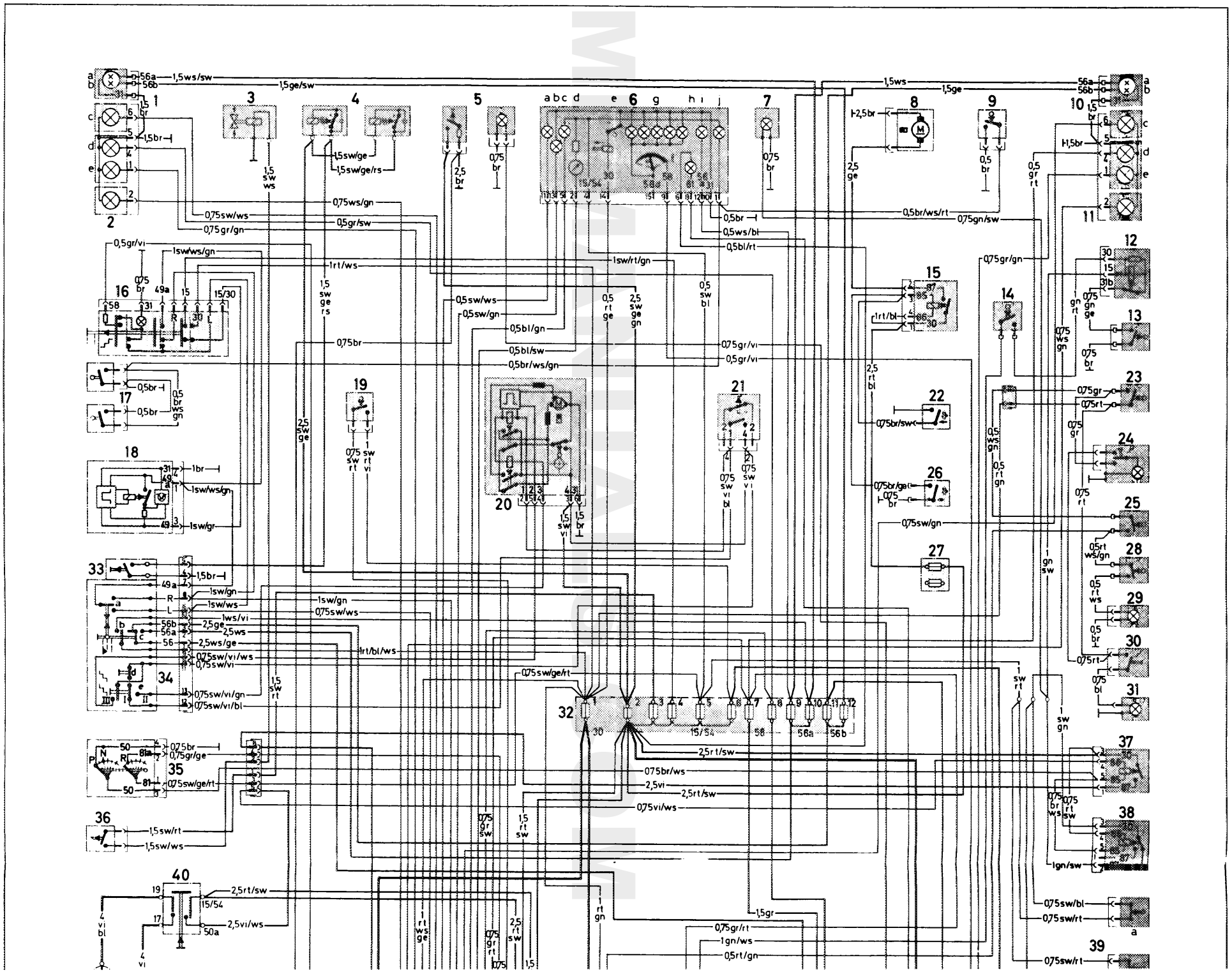
Wire Color Code

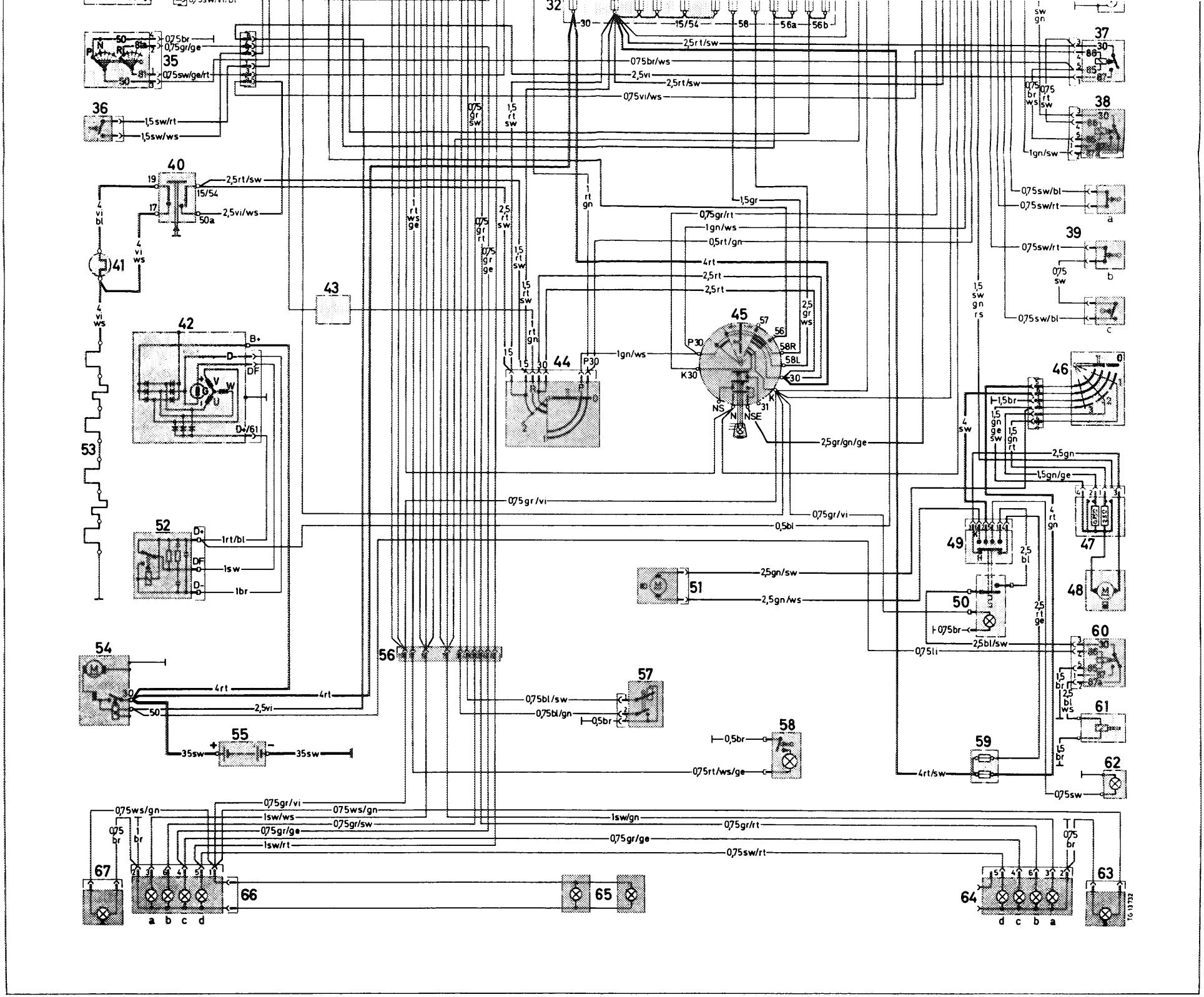
ws = white
gn = green
br = brown
ge = yellow
gr = gray
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = violet

Example:

Wire designation 1.5 gr/rt
Basic color gr = gray
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2

13732


1,5ws/sw
1,5ge/sw
1,5ws
1,5ge
1,5sw/ge
1,5sw/ge/rs
0,75ws/gn
0,75sw/ws
0,75gr/gn
0,5gr/sw
0,5gr/vi
1sw/ws/gn
1rt/ws
1sw/rt/gn
0,5sw/ws
0,5sw/gn
0,5bl/gn
0,5bl/sw
0,5br/ws/gn
0,75br
0,5br
0,5br/ws/rt
0,75gn/sw
0,5ws/bl
0,5bl/rt
0,75gr/vi
0,5gr/vi
0,75gr/gn
1rt/bl
0,75br/sw
0,75br/ge
0,75sw/gn
1br
1sw/ws/gn
1sw/gr
1sw/gn
1sw/ws
0,75sw/ws
1ws/vi
2,5ge
2,5ws
2,5ws/ge
1rt/bl/ws
0,75sw/vi/ws
0,75sw/vi
0,75sw/vi/gn
0,75sw/vi/bl
0,75sw/ge/rt
2,5rt/sw
0,75br/ws
2,5vi
0,75vi/ws
0,75br
0,75gr/ge
1,5sw/rt
1,5sw/ws
2,5rt/sw
2,5vi/ws
1,5gr
0,75gr/rt
1gn/ws
0,5rt/gn
0,75sw/bl
0,75sw/rt
1gn/sw
0,75sw/rt

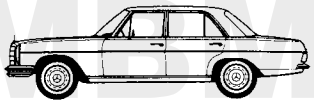

32
30
15/54
58
56a
56b
2,5rt/sw
0,75br/ws
2,5vi
2,5rt/sw
0,75vi/ws
35
0,75br
0,75gr/ge
0,75sw/ge/rt
36
1,5sw/rt
1,5sw/ws
37
38
1gn/sw
40
19
17
15/54
50a
2,5rt/sw
2,5vi/ws
41
42
B+
D
DF
D+/61
43
44
P30
1gn/ws
45
57
56
58R
58L
30
P30
K30
NS
N
NSE
K
31
2,5gr/gn/ge
46
1,5br
2,5gn
1,5gn/ge
47
48
49
50
0,75br
51
2,5gn/sw
2,5gn/ws
52
D+
DF
D-
1rt/bl
1sw
1br
53
54
30
50
4rt
2,5vi
55
35sw
35sw
56
57
0,75bl/sw
0,75bl/gn
0,5br
58
0,5br
0,75rt/ws/ge
59
4rt/sw
60
2,5bl/sw
0,75li
61
62
0,75sw
63
64
d c b a
65
66
a b c d
67
0,75ws/gn
0,75gr/vi
1sw/ws
0,75gr/sw
0,75gr/ge
1sw/rt
1sw/gn
0,75gr/rt
0,75gr/ge
0,75sw/rt
0,75br
1br
0,75br
1G 11732

Mercedes-Benz

280

280 C

service



Electric Wiring Diagram

Emission control 1973

Electrical Wiring Diagram Type 280 · 280 C (114.060/073)

1 Light unit left
- a High beam
- b Low beam
- c Turn signal light
- d Standing / parking light
- e Fog lamp

2 Side marker light left
3 Solenoid valve for automatic transmission
4 Dual-tone horns (fanfares)
5 Cigar lighter with ashtray illumination
6 Instrument cluster
- a Turn signal control - left
- b Turn signal control - right
- c Fuel reserve warning light
- d Fuel gauge
- e Temperature gauge
- f Electric clock
- g Instrument light
- h Rheostat — instrument lights
- i Charge indicator light
- k High beam pilot
- l Service and parking brake pilot

7 Switch for parking brake pilot
8 Relay, cut-out air conditioner (auxiliary fan from ignition switch-over)
9 Safety belt warning light
10 Light unit right
- a High beam
- b Low beam
- c Turn signal light
- d Standing / parking light
- e Fog lamp

11 Side marker light right
12 Warning buzzer
13 Warning buzzer contact
14 Temperature switch: 100° C (212° F)
15 Electric fan
16 Carburetor heater
17 Illumination, selector lever, automatic transmission
18 Temperature sensor, coolant
19 Brake light switch
20 4-way warning flasher switch
21 Brake fluid control switch
22 Flasher transmitter
23 Radio
24 Wiper motor
25 Foot pump — windshield washer
26 Idle cut-off valves, carburetor
27 Idle cut-off valves, carburetor
28 Electric fan relay
29 Door contact switch for warning bozzer
30 Thermostatic switch dehydrator (air conditioner)
31 Fuse box, 2 fuses (auxilary fan)
32 Door contact switch — left front
33 Reading ligth
34 Door contact switch — right front
35 Switch for glove compartment light
36 Glove compartment light
37 Rear dome light switch
38 Rear dome light
39 Warning system relay
40 Horn ring
41 Combination switch
- a Turn signal light switch
- b Passing light switch
- c Manual dimmer switch
- d Wiper switch
- e Switch for wiping speed and intermittent wiping

42 Starter-lockout and back-up light switch
43 Temperature switch 65° C (149° F), emission control
44 Kick down switch
45 Fuses
46 Safety belt warning system
- a Driver's seat retractor switch
- b Passenger seat retractor switch
- c Switch in front passenger seat

47 Relay starter/air conditioner
48 Oil pressure switch 1.2 atü (17 psi)
49 Rpm switch (emission control)
50 Relay box, emission control (5)
51 Change-over valve, throttle valve lift
52 0.2 atu (6") vacuum switch
53 Change-over valve, exhaust recycling
54 Relay box, emission control (5a)
55 Change-over valve, ignition switch-over
56 Temperature switch 17° C (63° F) (emission control)
57 Ignition starter switch
58 Rotary light switch
59 Blower motor, auxiliary fan
60 Blower switch
61 Pre-resistance for blower motor
62 Blower motor (heater)
63 Thermostat and control switch (air conditioner)
64 Change-over switch, cooling/heating
65 Pre-resistance 0.6 Ω
66 Pre-resistance 0.4 Ω
67 Transistorized ignition switching unit
68 Diagnostic plug
69 Distributor
70 Spark plugs
71 Impulse trigger sensor
72 Top dead center sensor
73 Ignition coil
74 Plug connection for tail light unit
75 Fuel tank gauge sensor
76 Alernator with electronic regulator
77 Starter
78 Battery
79 Fuse box, 2 fuses (air conditioner)
80 Control light (air conditioner)
81 Solenoid clutch for refrigerant compressor
82 Side marker light right
83 Tail light — right
- a Turn signal light
- b Tail and parking light
- c Back-up light
- d Brake light

84 Trunk light
85 Licence plate light
86 Tail light — left
- a Turn signal light
- b Tail and parking light
- c Back-up light
- d Brake light

87 Side marker light left

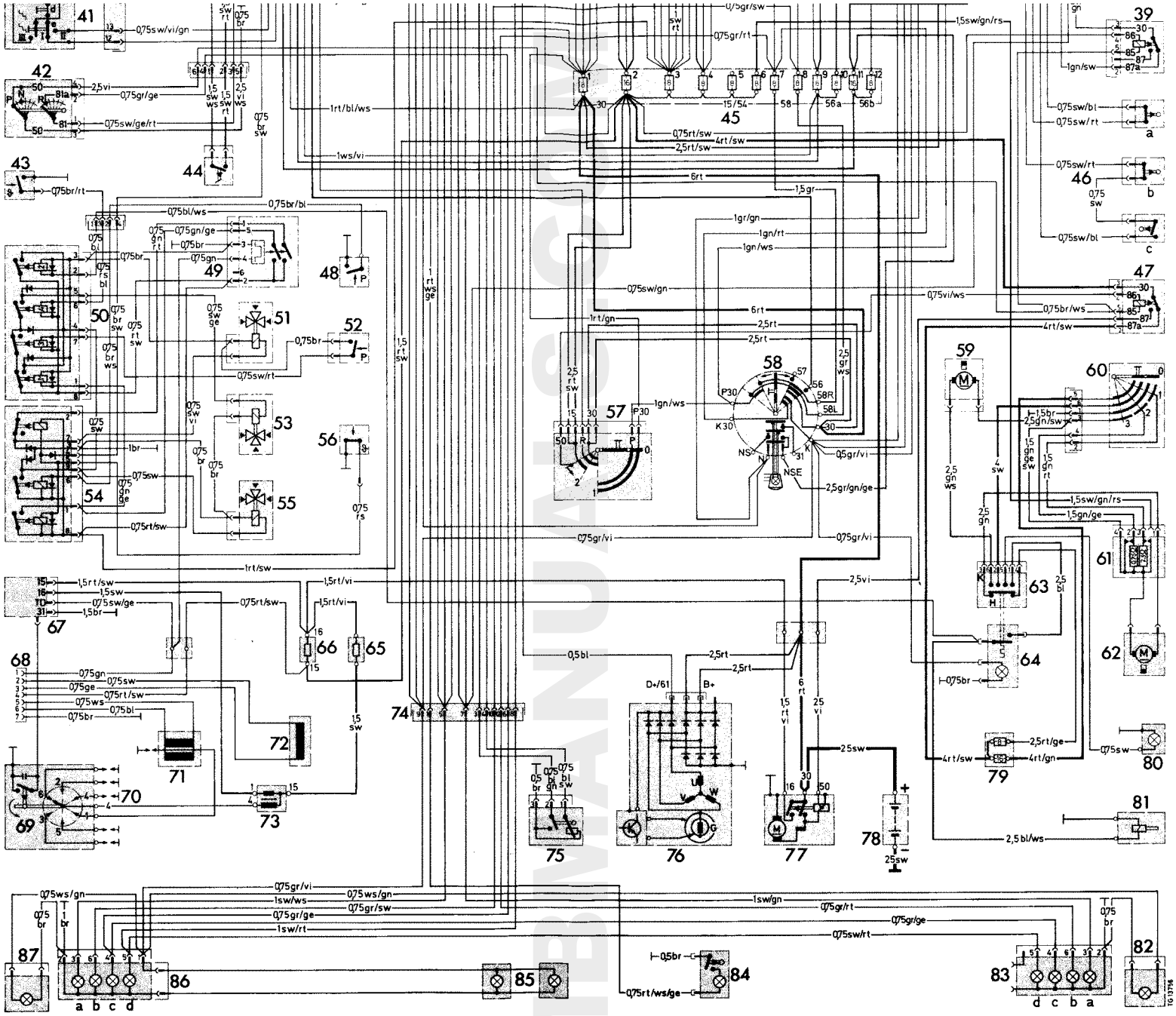
Wire Color Code

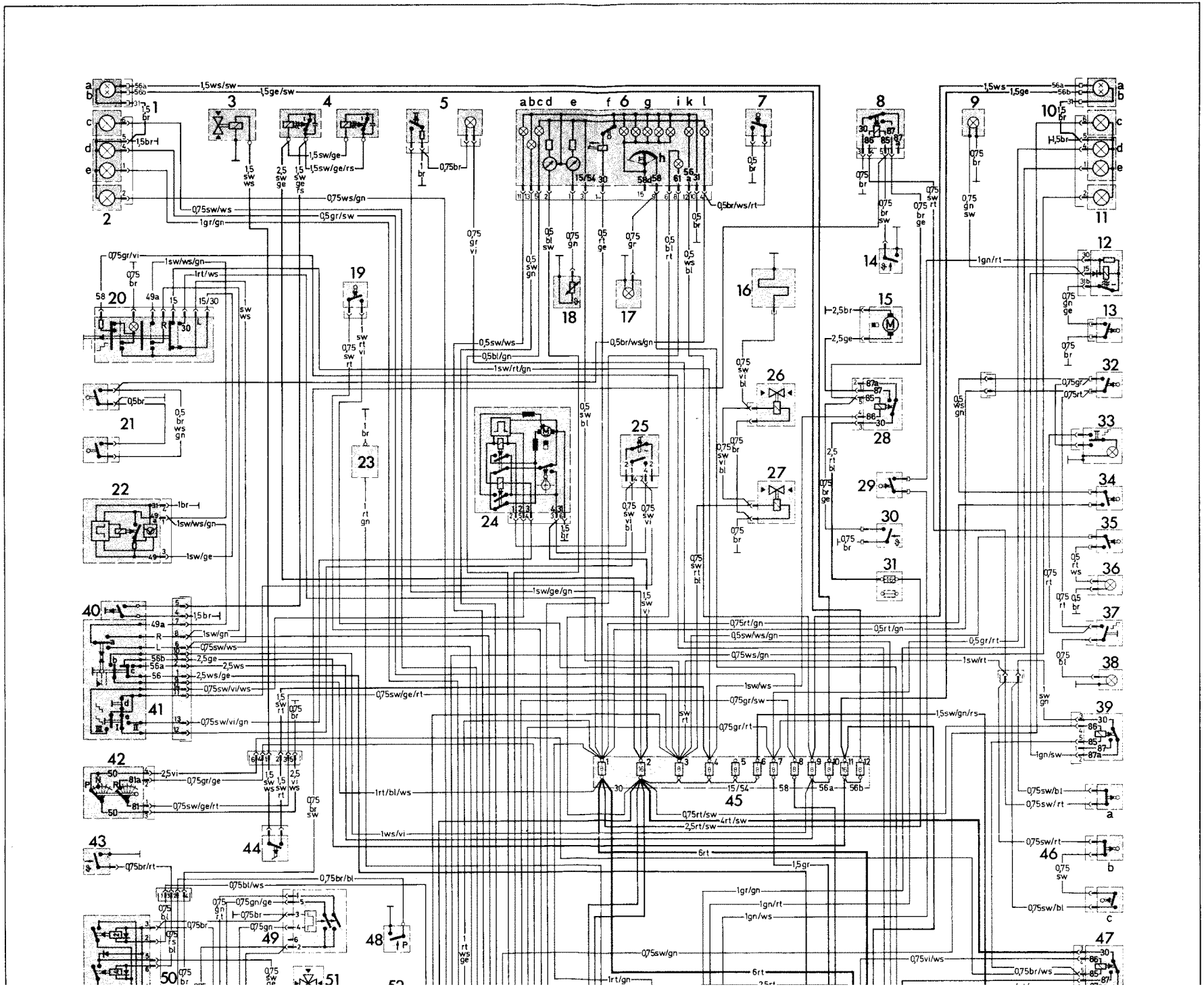
ws = white
gn = green
br = brown
ge = yellow
gr = gray
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = violet

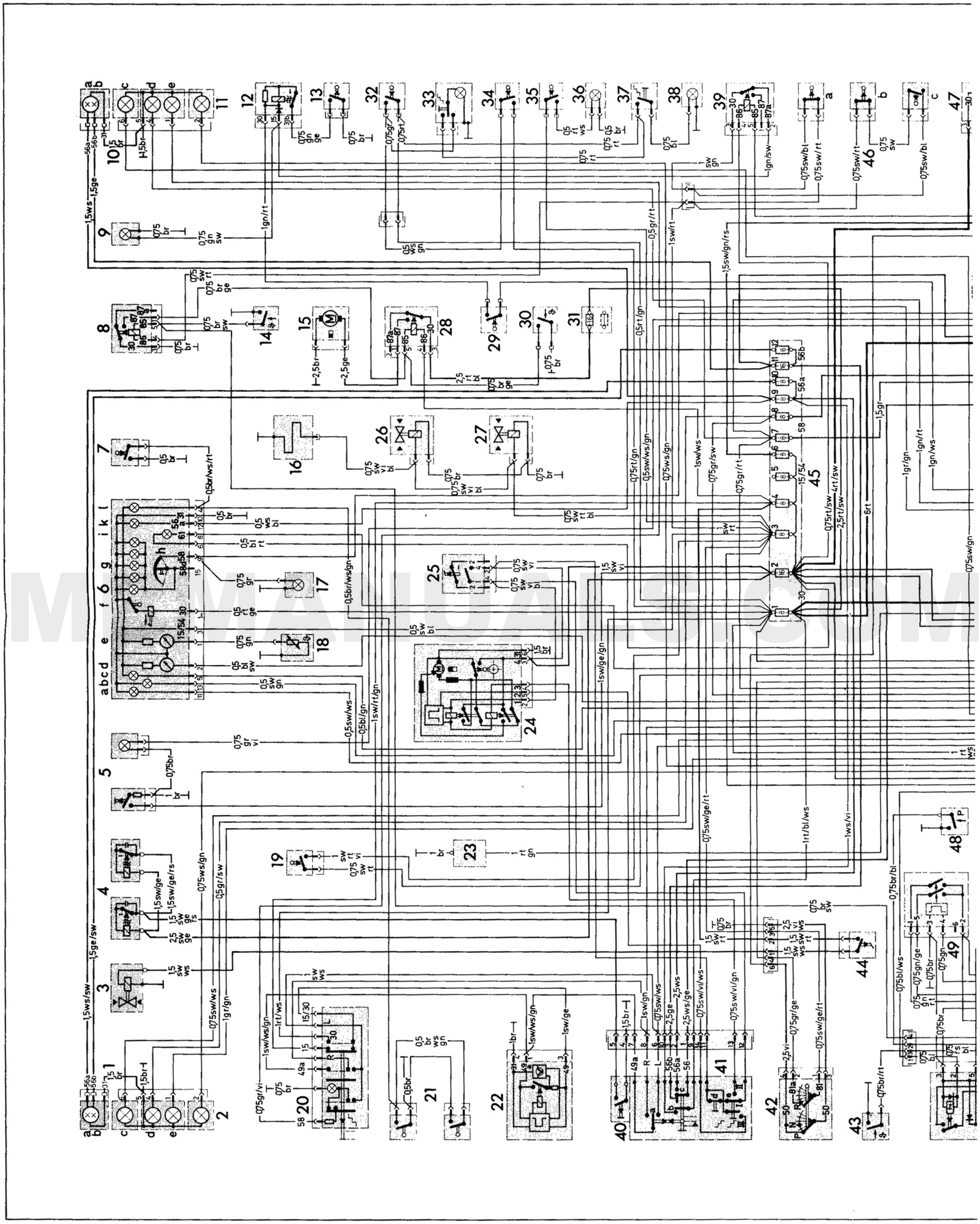
Example:

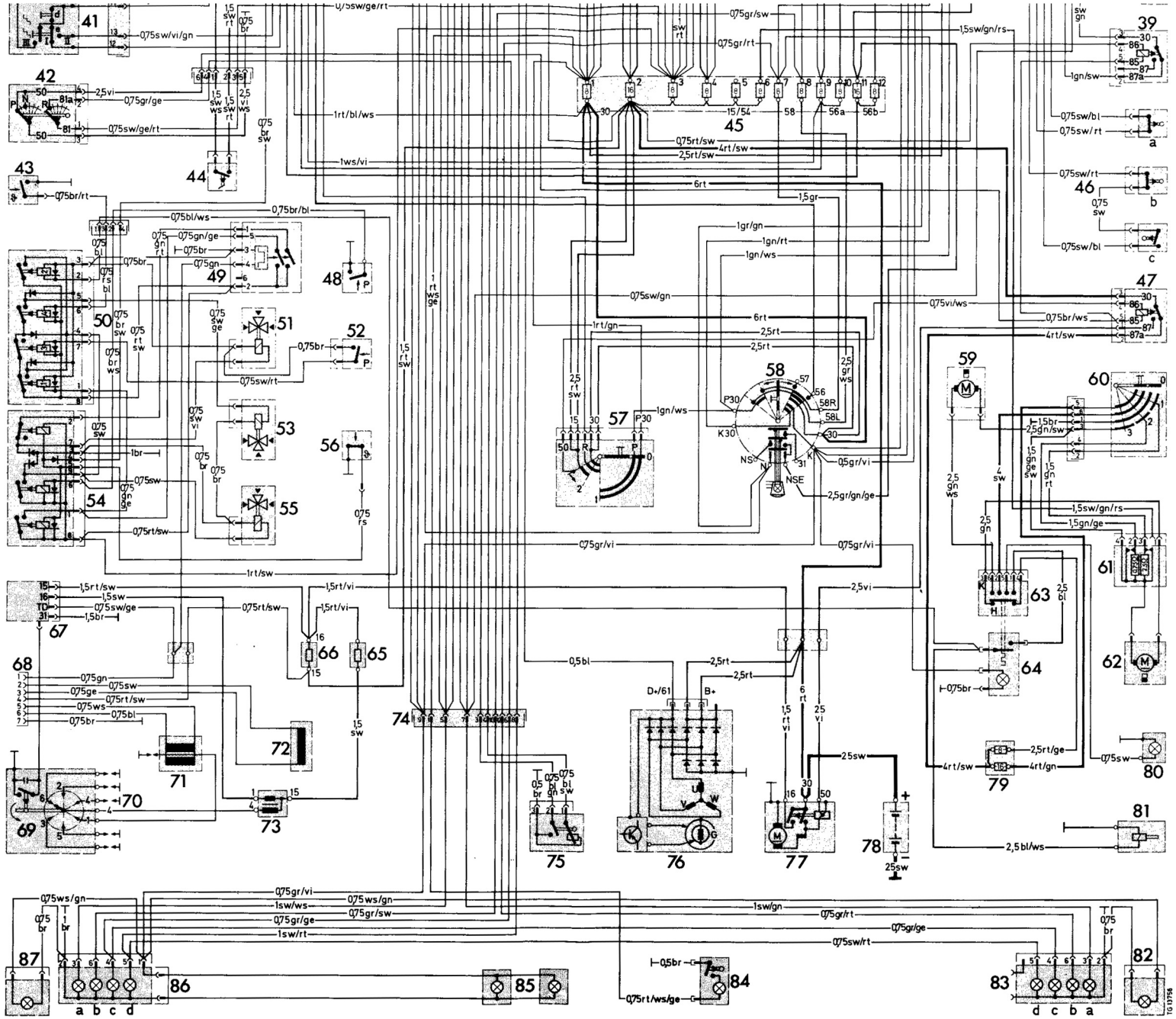
Wire designation 1.5 gr/rt
Basic color gr = gray
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2

13756




1,5ws/sw
1,5ge/sw
1,5ws
1,5ge
1,5sw/ge
1,5sw/ge/rs
0,75sw/ws
0,75ws/gn
1gr/gn
0,5gr/sw
0,5br/ws/rt
0,5sw/ws
0,5bl/gn
1sw/rt/gn
0,5br/ws/gn
1gn/rt
1sw/ws/gn
1rt/ws
1sw/ge
1sw/ge/gn
0,75rt/gn
0,5sw/ws/gn
0,5rt/gn
0,5gr/rt
0,75ws/gn
1sw/rt
1sw/ws
0,75gr/sw
0,75gr/rt
1,5sw/gn/rs
1gn/sw
0,75sw/ge/rt
1rt/bl/ws
0,75rt/sw
4rt/sw
2,5rt/sw
1ws/vi
6rt
1,5gr
1gr/gn
1gn/rt
1gn/ws
0,75sw/gn
0,75vi/ws
0,75br/ws
1rt/gn
0,75br/rt
0,75bl/ws
0,75br/bl
0,75gn/ge
0,75br
0,75gn
0,75sw/bl
0,75sw/rt
0,75sw/rt
0,75sw/bl


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49


41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
39
a
b
c
0,75sw/vi/gn
0,75sw/ge/rt
0,75gr/ge
2,5vi
0,75br/rt
0,75bl/ws
0,75br/bl
0,75gn/ge
0,75br
0,75gn
0,75sw/rt
0,75rt/sw
1rt/bl/ws
1ws/vi
0,75sw/ge/rt
0,75gr/sw
0,75gr/rt
1,5sw/gn/rs
1gn/sw
0,75sw/bl
0,75sw/rt
0,75rt/sw
2,5rt/sw
4rt/sw
6rt
1,5gr
1gr/gn
1gn/rt
1gn/ws
0,75sw/gn
0,75vi/ws
0,75br/ws
1rt/gn
2,5rt
1gn/ws
0,5gr/vi
2,5gr/gn/ge
0,75gr/vi
1rt/sw
1,5rt/sw
1,5sw
0,75sw/ge
1,5br
1,5rt/vi
0,75rt/sw
0,5bl
2,5rt
2,5vi
0,75br
2,5rt/ge
4rt/gn
0,75sw
2,5bl/ws
0,75gn
0,75ge
0,75ws
0,75bl
0,75ws/gn
1sw/ws
0,75gr/vi
0,75gr/ge
1sw/rt
1sw/gn
0,75gr/rt
0,75sw/rt
0,5br
0,75rt/ws/ge
TG 13756

Electrical Wiring Diagram Type 280 · 280 C (114.060/073)

1 Light unit left
  a High beam
  b Low beam
  c Turn signal light
  d Standing / parking light
  e Fog lamp
2 Side marker light left
3 Solenoid valve for automatic transmission
4 Dual-tone horns (fanfares)
5 Cigar lighter with ashtray illumination
6 Instrument cluster
  a Turn signal control - left
  b Turn signal control - right
  c Fuel reserve warning light
  d Fuel gauge
  e Temperature gauge
  f Electric clock
  g Instrument light
  h Rheostat — instrument lights
  i Charge indicator light
  k High beam pilot
  l Service and parking brake pilot
7 Switch for parking brake pilot
8 Relay, cut-out air conditioner (auxiliary fan from ignition switch-over)
9 Safety belt warning light
10 Light unit right
  a High beam
  b Low beam
  c Turn signal light
  d Standing / parking light
  e Fog lamp
11 Side marker light right
12 Warning buzzer
13 Warning buzzer contact
14 Temperature switch: 100° C (212° F)
15 Electric fan
16 Carburetor heater
17 Illumination, selector lever, automatic transmission
18 Temperature sensor, coolant
19 Brake light switch
20 4-way warning flasher switch
21 Brake fluid control switch
22 Flasher transmitter
23 Radio
24 Wiper motor
25 Foot pump — windshield washer
26 Idle cut-off valves, carburetor
27 Idle cut-off valves, carburetor
28 Electric fan relay
29 Door contact switch for warning bozzer
30 Thermostatic switch dehydrator (air conditioner)
31 Fuse box, 2 fuses (auxilary fan)
32 Door contact switch — left front
33 Reading ligth
34 Door contact switch — right front
35 Switch for glove compartment light
36 Glove compartment light
37 Rear dome light switch
38 Rear dome light
39 Warning system relay
40 Horn ring
41 Combination switch
  a Turn signal light switch
  b Passing light switch
  c Manual dimmer switch
  d Wiper switch
  e Switch for wiping speed and intermittent wiping
42 Starter-lockout and back-up light switch
43 Temperature switch 65° C (149° F), emission control
44 Kick down switch
45 Fuses
46 Safety belt warning system
  a Driver's seat retractor switch
  b Passenger seat retractor switch
  c Switch in front passenger seat
47 Relay starter/air conditioner
48 Oil pressure switch 1.2 atü (17 psi)
49 Rpm switch (emission control)
50 Relay box, emission control (5)
51 Change-over valve, throttle valve lift
52 0.2 atu (6") vacuum switch
53 Change-over valve, exhaust recycling
54 Relay box, emission control (5a)
55 Change-over valve, ignition switch-over
56 Temperature switch 17° C (63° F) (emission control)
57 Ignition starter switch
58 Rotary light switch
59 Blower motor, auxiliary fan
60 Blower switch
61 Pre-resistance for blower motor
62 Blower motor (heater)
63 Thermostat and control switch (air conditioner)
64 Change-over switch, cooling/heating
65 Pre-resistance 0.6 Ω
66 Pre-resistance 0.4 Ω
67 Transistorized ignition switching unit
68 Diagnostic plug
69 Distributor
70 Spark plugs
71 Impulse trigger sensor
72 Top dead center sensor
73 Ignition coil
74 Plug connection for tail light unit
75 Fuel tank gauge sensor
76 Alernator with electronic regulator
77 Starter
78 Battery
79 Fuse box, 2 fuses (air conditioner)
80 Control light (air conditioner)
81 Solenoid clutch for refrigerant compressor
82 Side marker light right
83 Tail light — right
  a Turn signal light
  b Tail and parking light
  c Back-up light
  d Brake light
84 Trunk light
85 Licence plate light
86 Tail light — left
  a Turn signal light
  b Tail and parking light
  c Back-up light
  d Brake light
87 Side marker light left

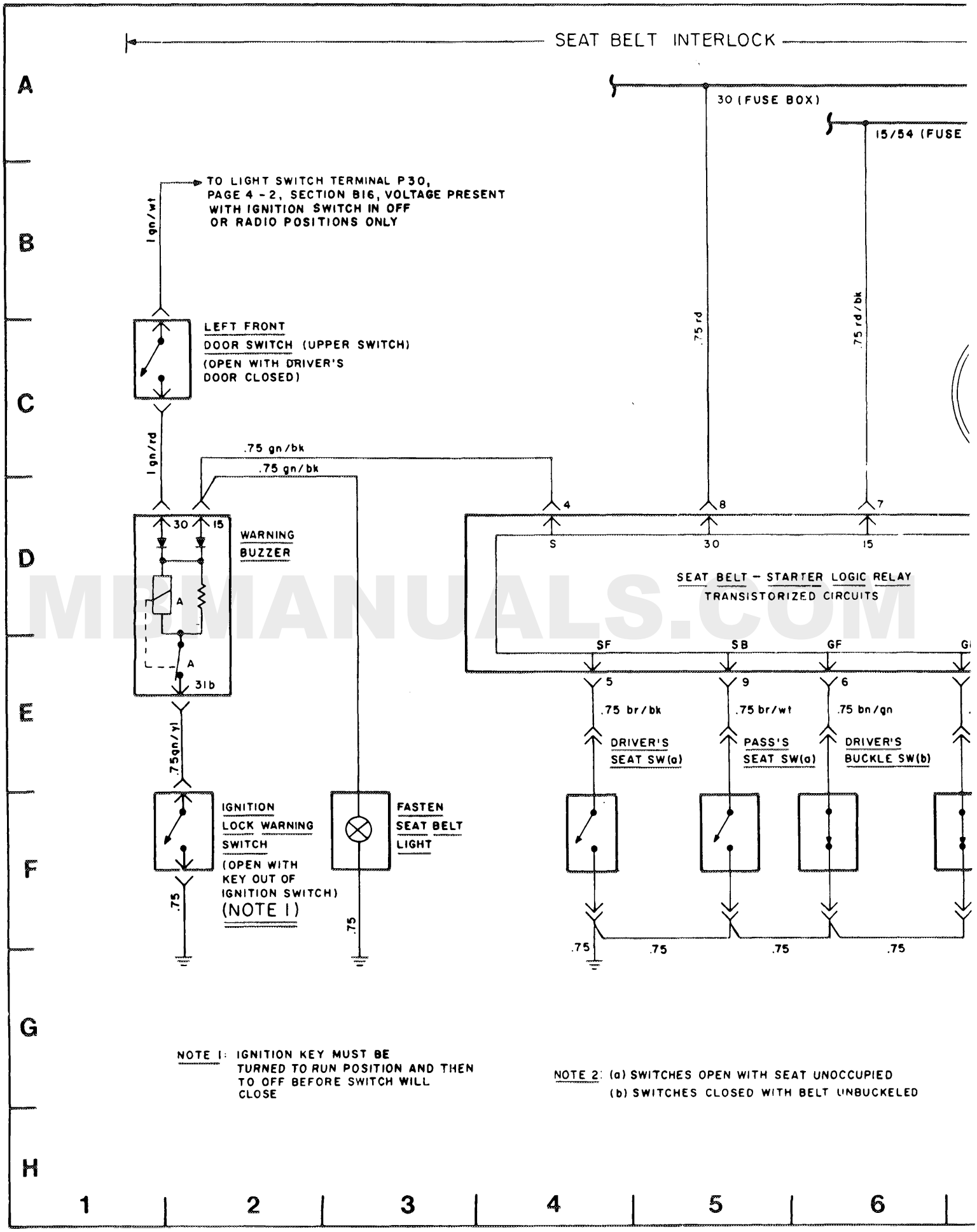
Wire Color Code

ws = white
gn = green
br = brown
ge = yellow
gr = gray
rs = pink
bl = blue
rt = red
sw = black
el = ivory
nf = neutral
vi = violet

Example:

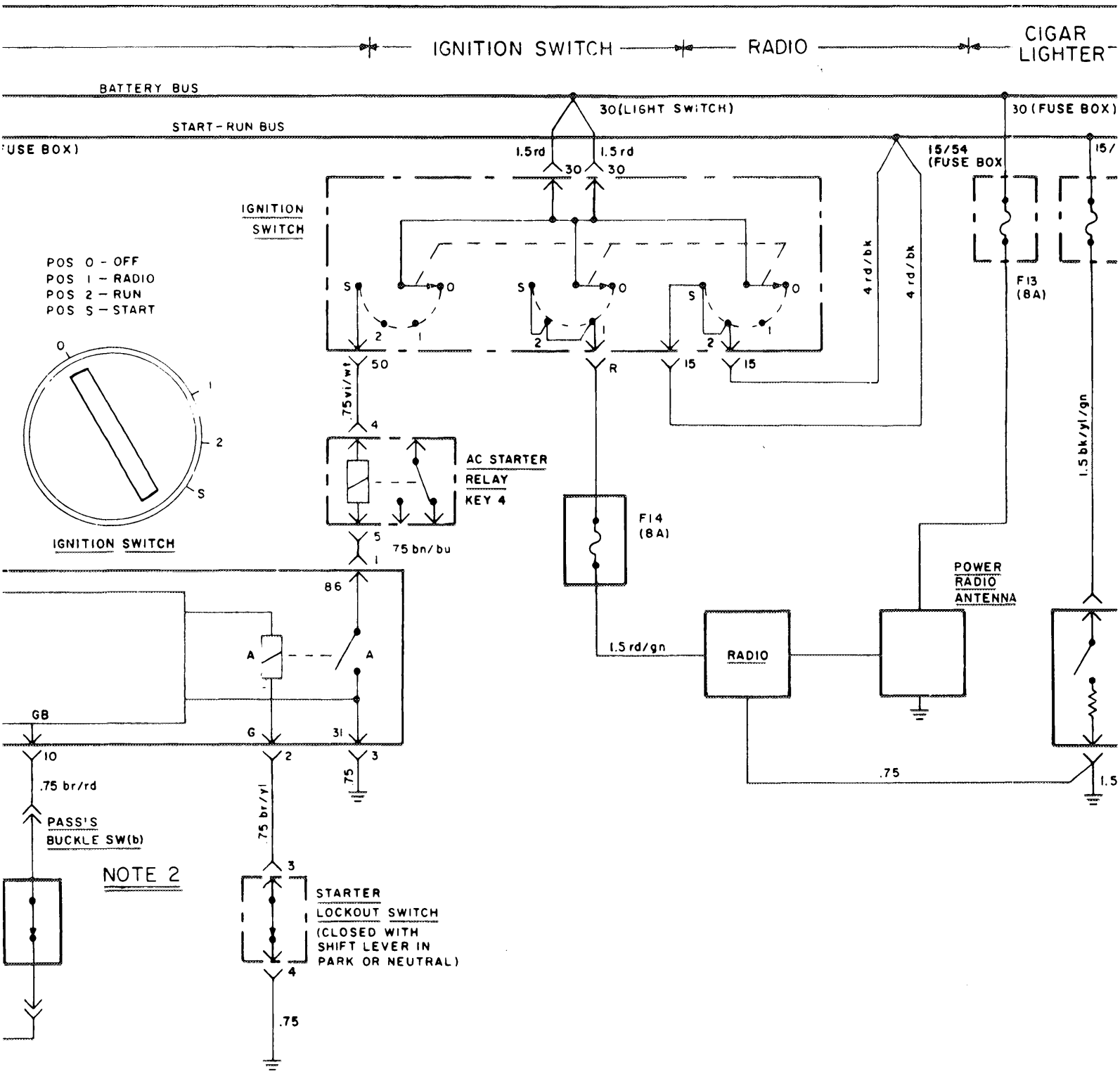
Wire designation 1.5 gr/rt
Basic color gr = gray
Identification color rt = red
Cross section of wire 1.5 = 1.5 mm^2

MODEL 230



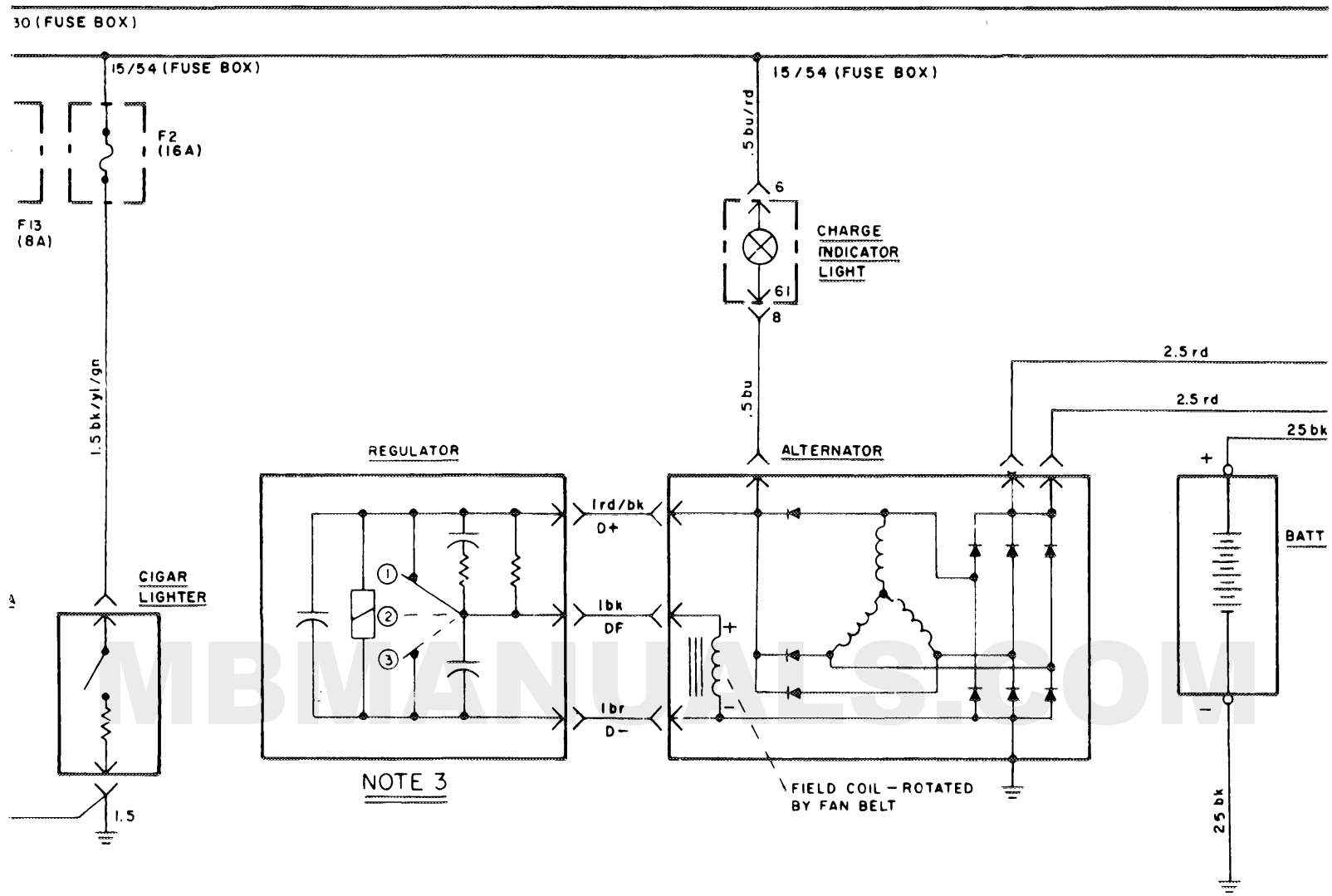
NOTE 1: IGNITION KEY MUST BE TURNED TO RUN POSITION AND THEN TO OFF BEFORE SWITCH WILL CLOSE

NOTE 2: (a) SWITCHES OPEN WITH SEAT UNOCCUPIED
(b) SWITCHES CLOSED WITH BELT UNBUCKELED



GENERAL NOTE: SOLID BROWN WIRE INSULATION ALWAYS INDICATES GROUND. COMPONENT TERMINAL 31 IS ALWAYS GROUNDE

CIGAR LIGHTER — CHARGE



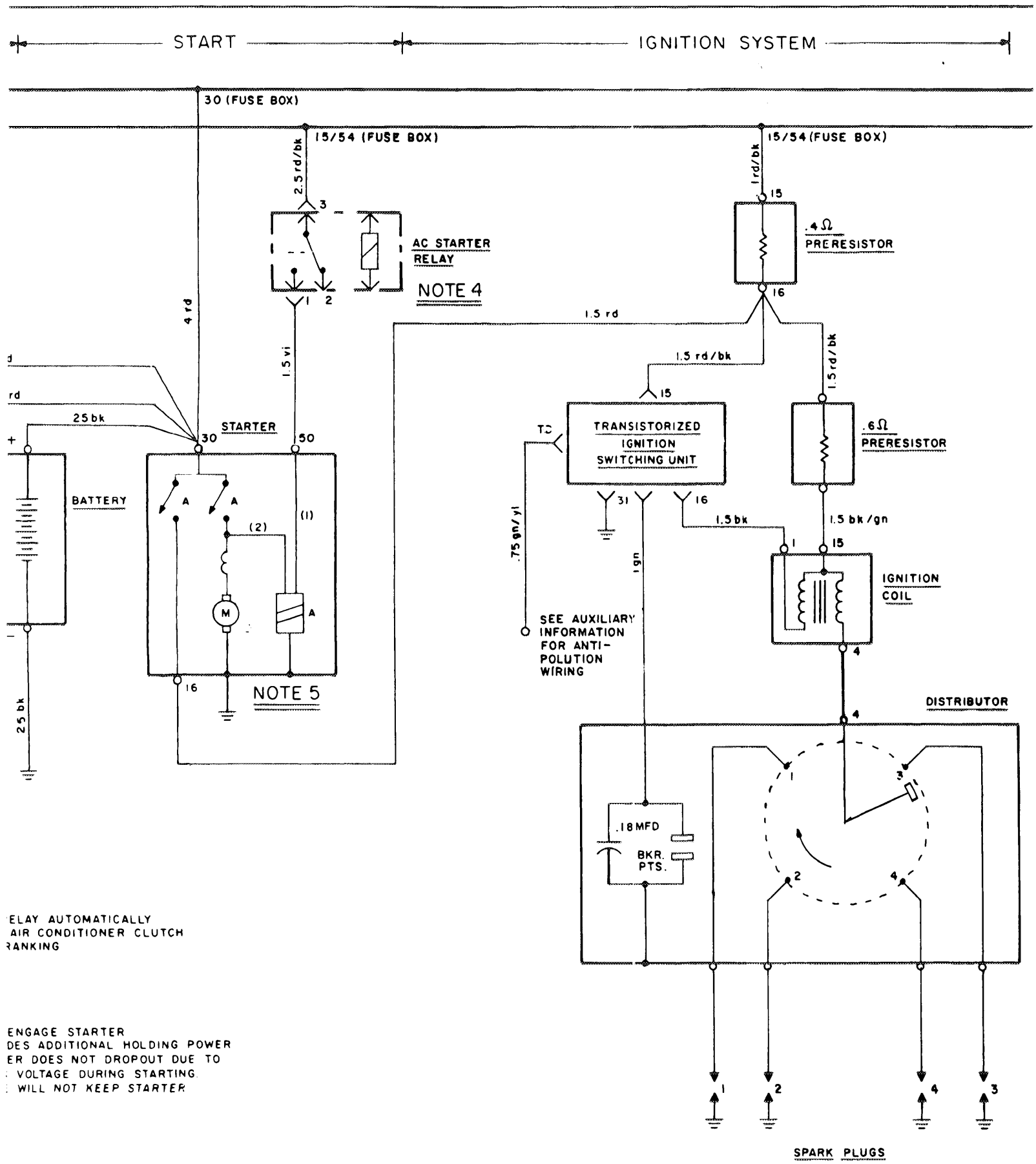
NOTE 3 FOR NORMAL OPERATION REGULATOR SHOULD BE SET TO PRODUCE BATTERY BUS VOLTAGE BETWEEN 13.9V AND 14.8V @ 2200 RPM

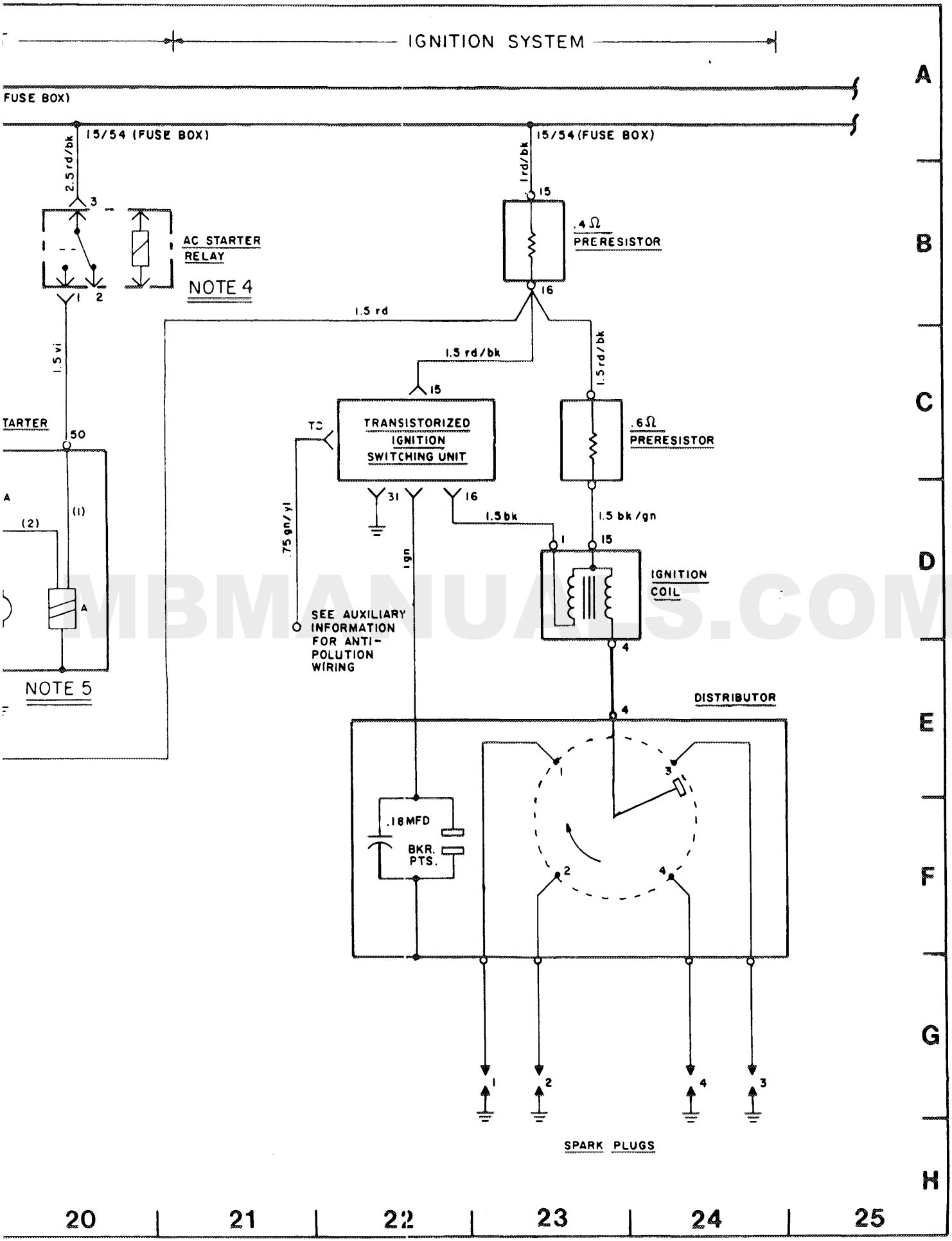
POS 1 – ENGINE OFF/BATTERY UNDERCHARGED
POS 2 – NORMAL OPERATION
POS 3 – BATTERY OVERCHARGED

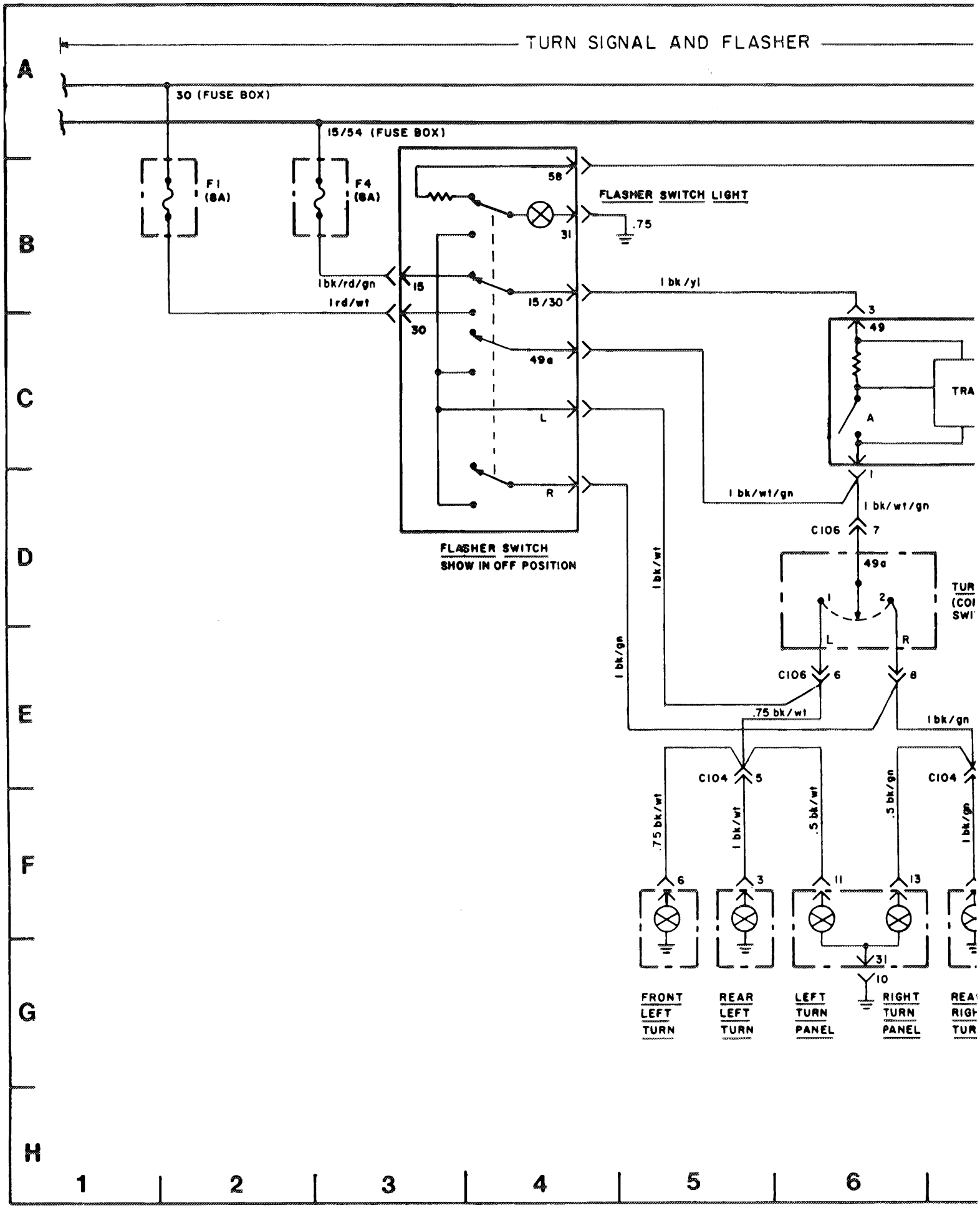
NOTE 4: THE AC/STARTER RELAY AUTOMAT DISCONNECTS THE AIR CONDITION DURING ENGINE CRANKING

NOTE 5: WINDING (1) WILL ENGAGE START WINDING (2) PROVIDES ADDITIONA TO ASSURE STARTER DOES NOT LOW BATTERY BUS VOLTAGE DUR WINDING (2) ALONE WILL NOT KE ENGAGED

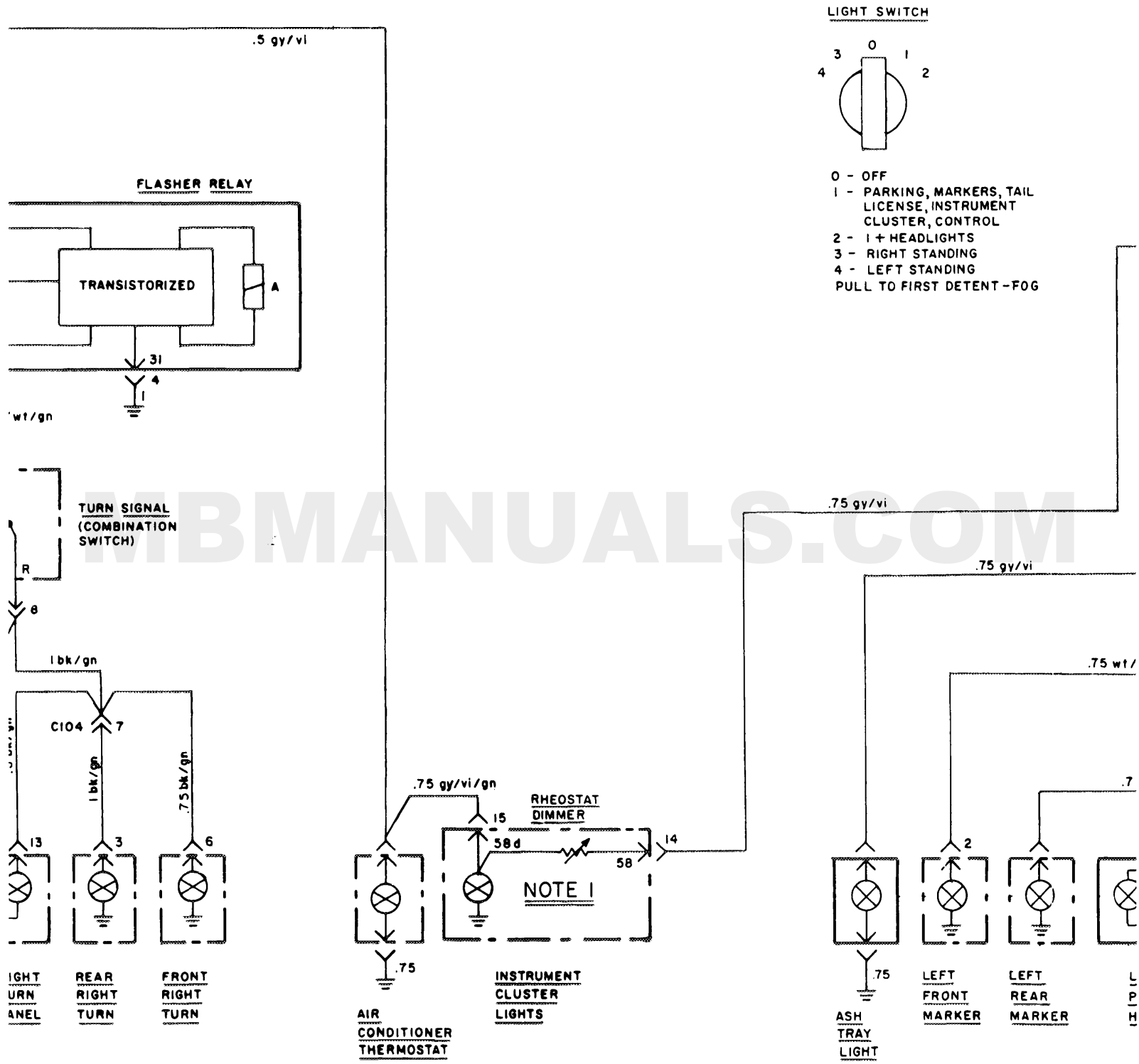
NDICATES
WAYS GROUNDED


START
IGNITION SYSTEM
30 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
2.5 rd/bk
1 rd/bk
AC STARTER RELAY
NOTE 4
.4 Ω PRERESISTOR
4 rd
1.5 vi
1.5 rd
1.5 rd/bk
1.5 rd/bk
25 bk
STARTER
BATTERY
TRANSISTORIZED IGNITION SWITCHING UNIT
.6 Ω PRERESISTOR
.75 gn/yl
1 gn
1.5 bk
1.5 bk/gn
IGNITION COIL
SEE AUXILIARY INFORMATION FOR ANTI-POLUTION WIRING
NOTE 5
25 bk
DISTRIBUTOR
.18 MFD
BKR. PTS.
SPARK PLUGS
ELAY AUTOMATICALLY
AIR CONDITIONER CLUTCH
RANKING
ENGAGE STARTER
DES ADDITIONAL HOLDING POWER
ER DOES NOT DROPOUT DUE TO
VOLTAGE DURING STARTING
WILL NOT KEEP STARTER
19
20
21
22
23
24

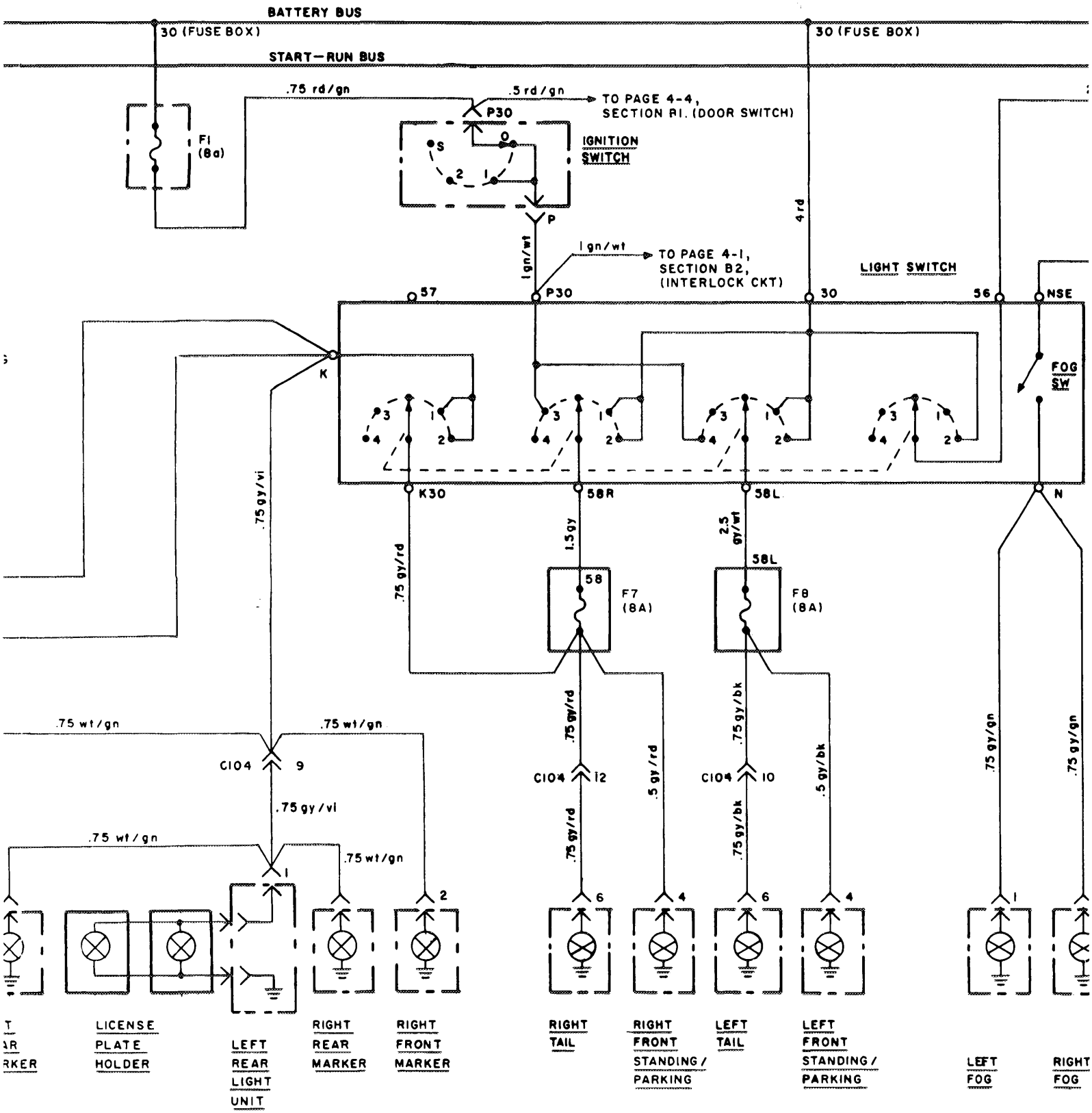



TURN SIGNAL AND FLASHER
30 (FUSE BOX)
15/54 (FUSE BOX)
F1 (8A)
F4 (8A)
58
FLASHER SWITCH LIGHT
.75
31
1 bk/rd/gn
1 rd/wt
15
30
15/30
49a
L
R
1 bk/yl
3
49
TRA
A
1
1 bk/wt/gn
1 bk/wt/gn
C106
7
49a
TUR
(CO
SWI
1
2
L
R
1 bk/wt
1 bk/gn
C106
6
8
.75 bk/wt
1 bk/gn
FLASHER SWITCH
SHOW IN OFF POSITION
C104
5
C104
.75 bk/wt
1 bk/wt
.5 bk/wt
.5 bk/gn
1 bk/gn
6
3
11
13
31
10
FRONT LEFT TURN
REAR LEFT TURN
LEFT TURN PANEL
RIGHT TURN PANEL
REA
RIGH
TUR
A
B
C
D
E
F
G
H
1
2
3
4
5
6

AC/INST. CLUSTER/ASH TRAY LIGHTS

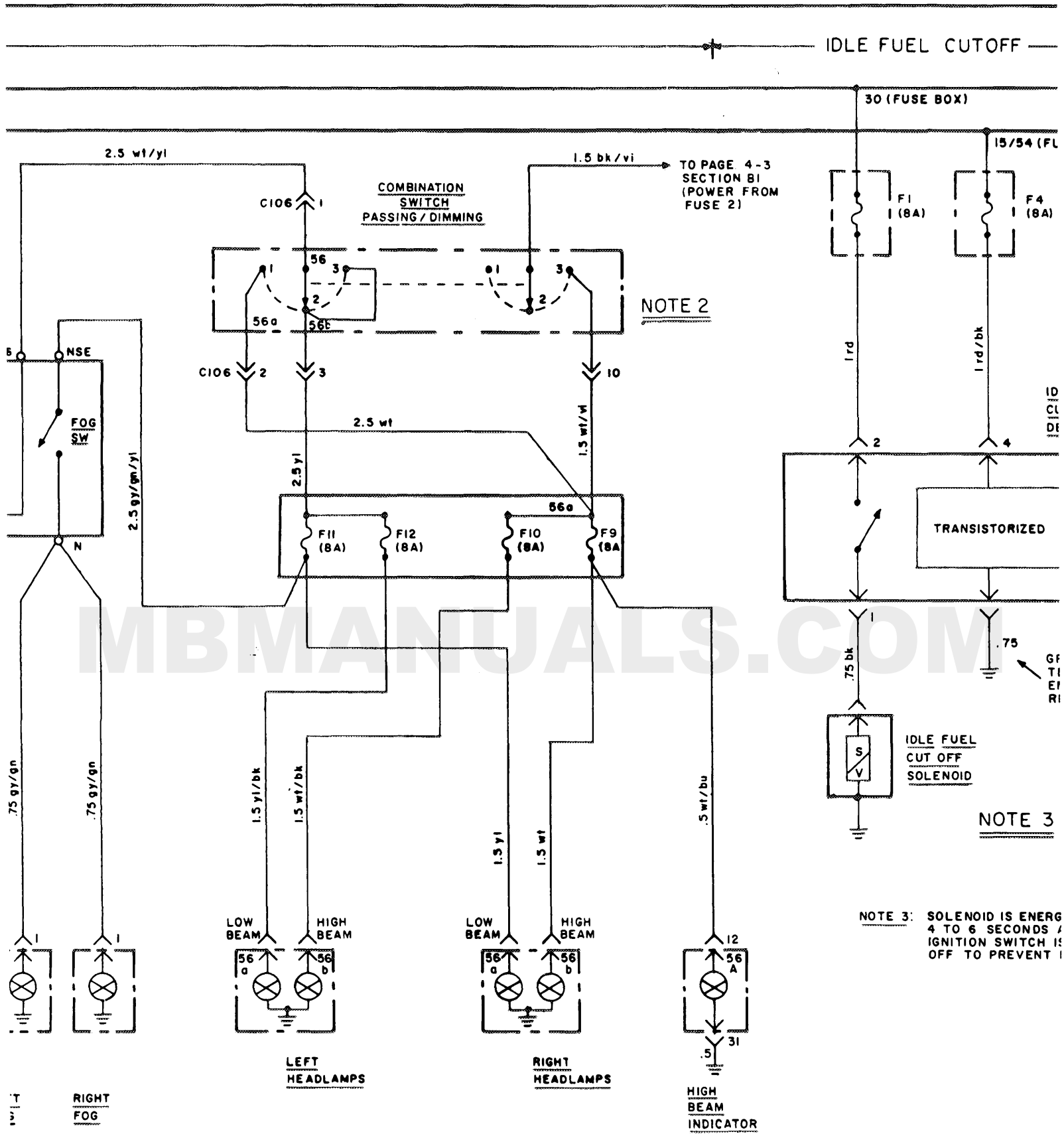


NOTE 1: THERE ARE 5 INSTRUMENT CLUSTER BULBS IN PARALLEL

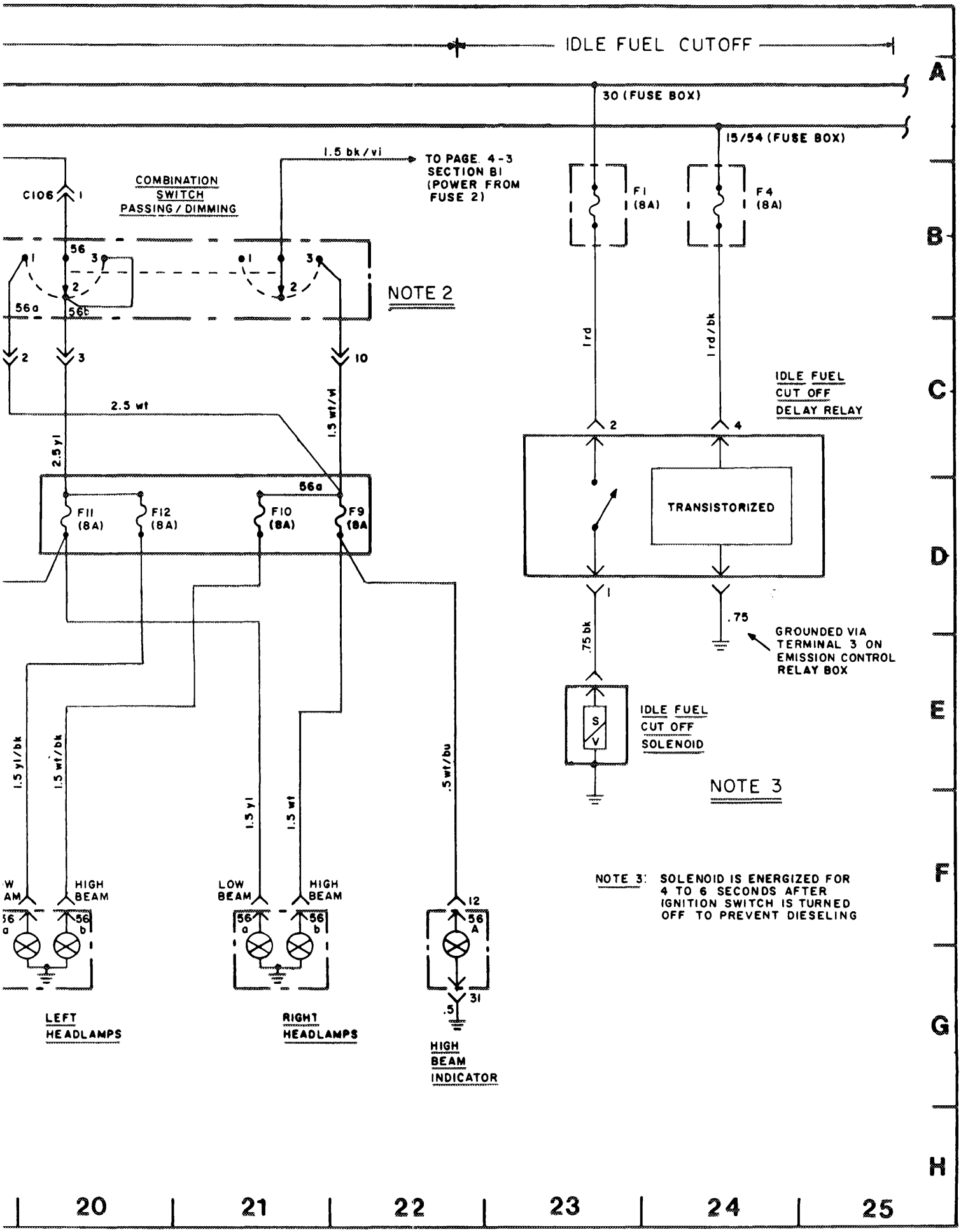


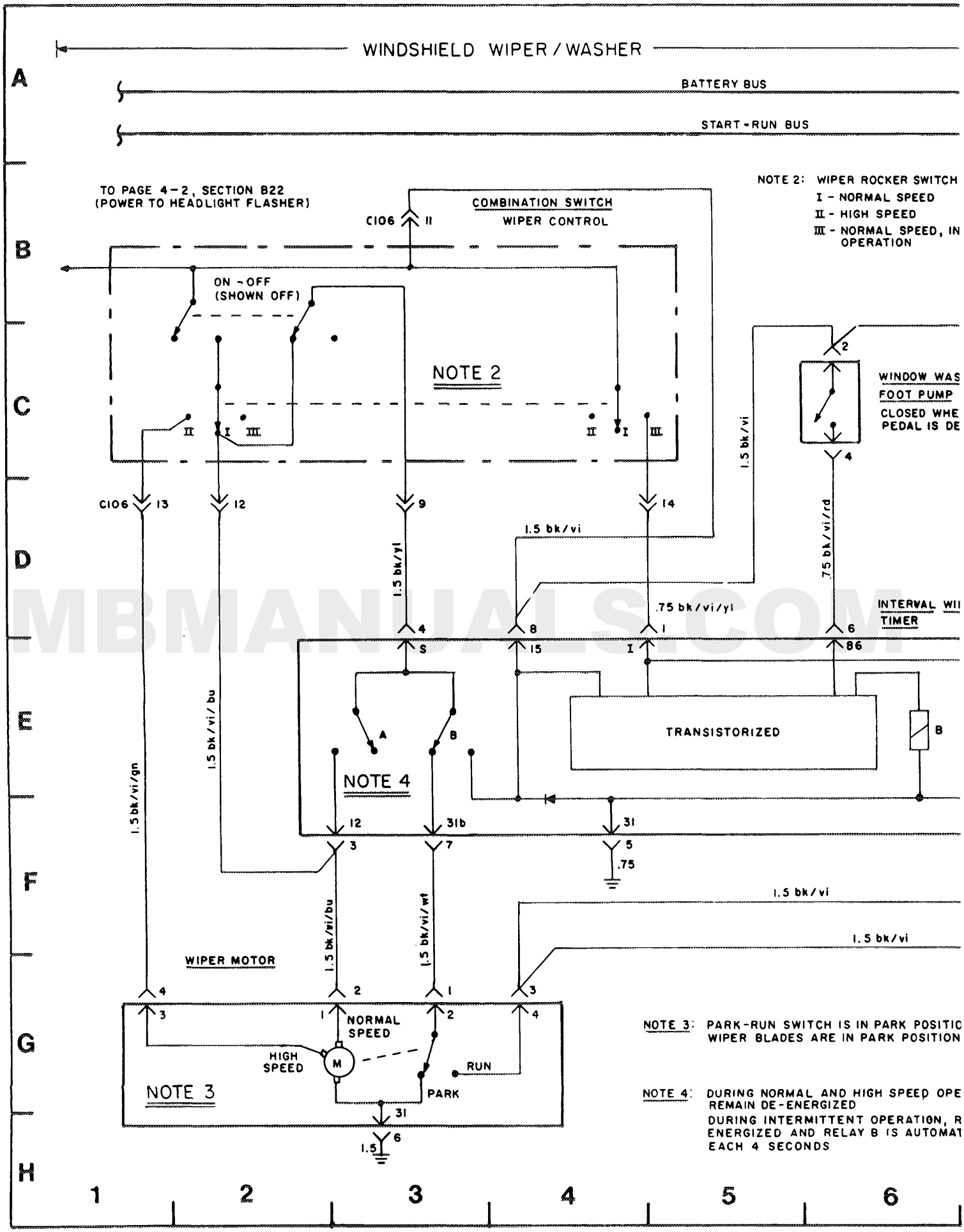
NOTE 2: POSITION 1 - H
POSITION 2 -
POSITION 3 -

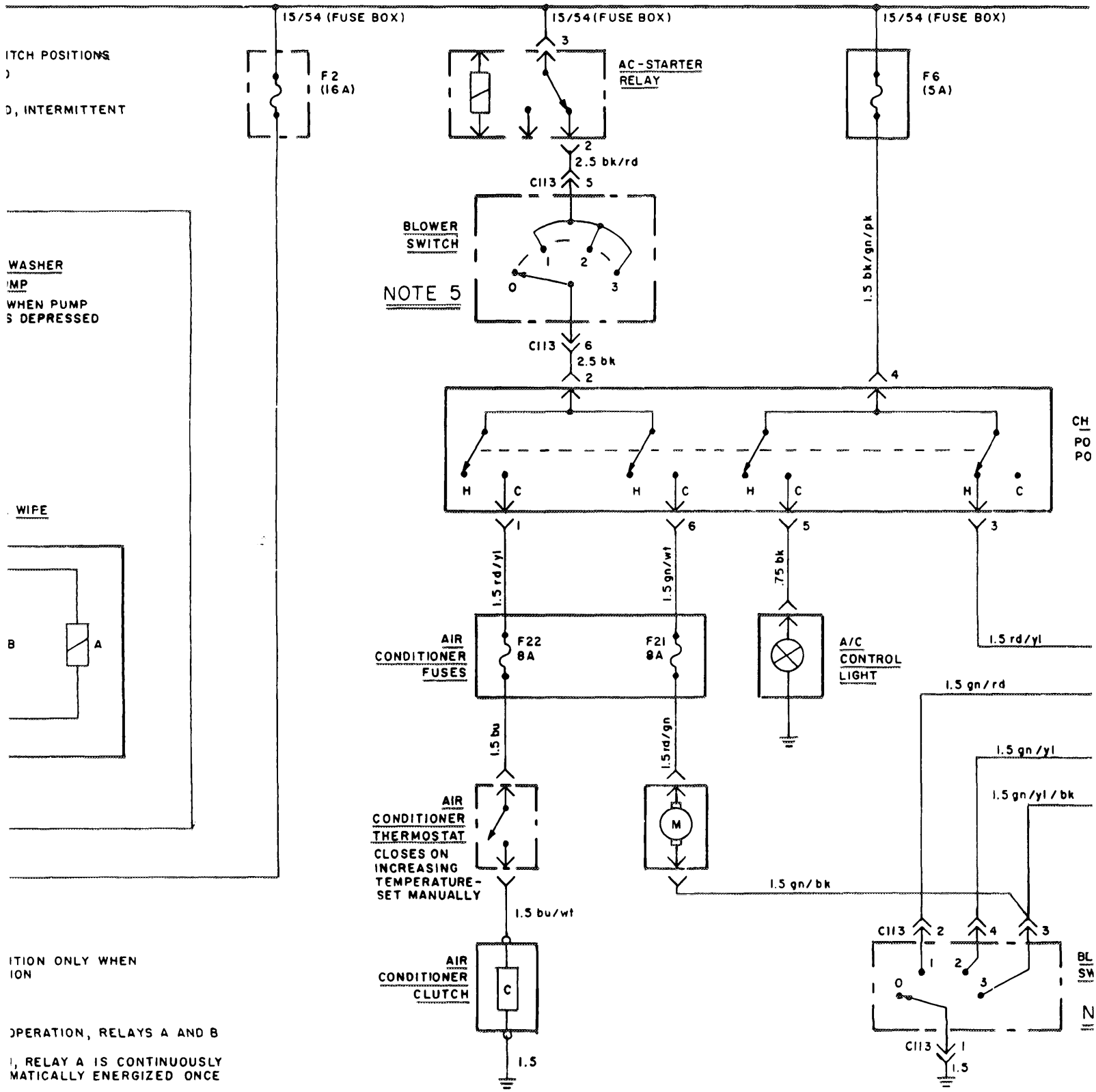
13 | 14 | 15 | 16 | 17 | 18

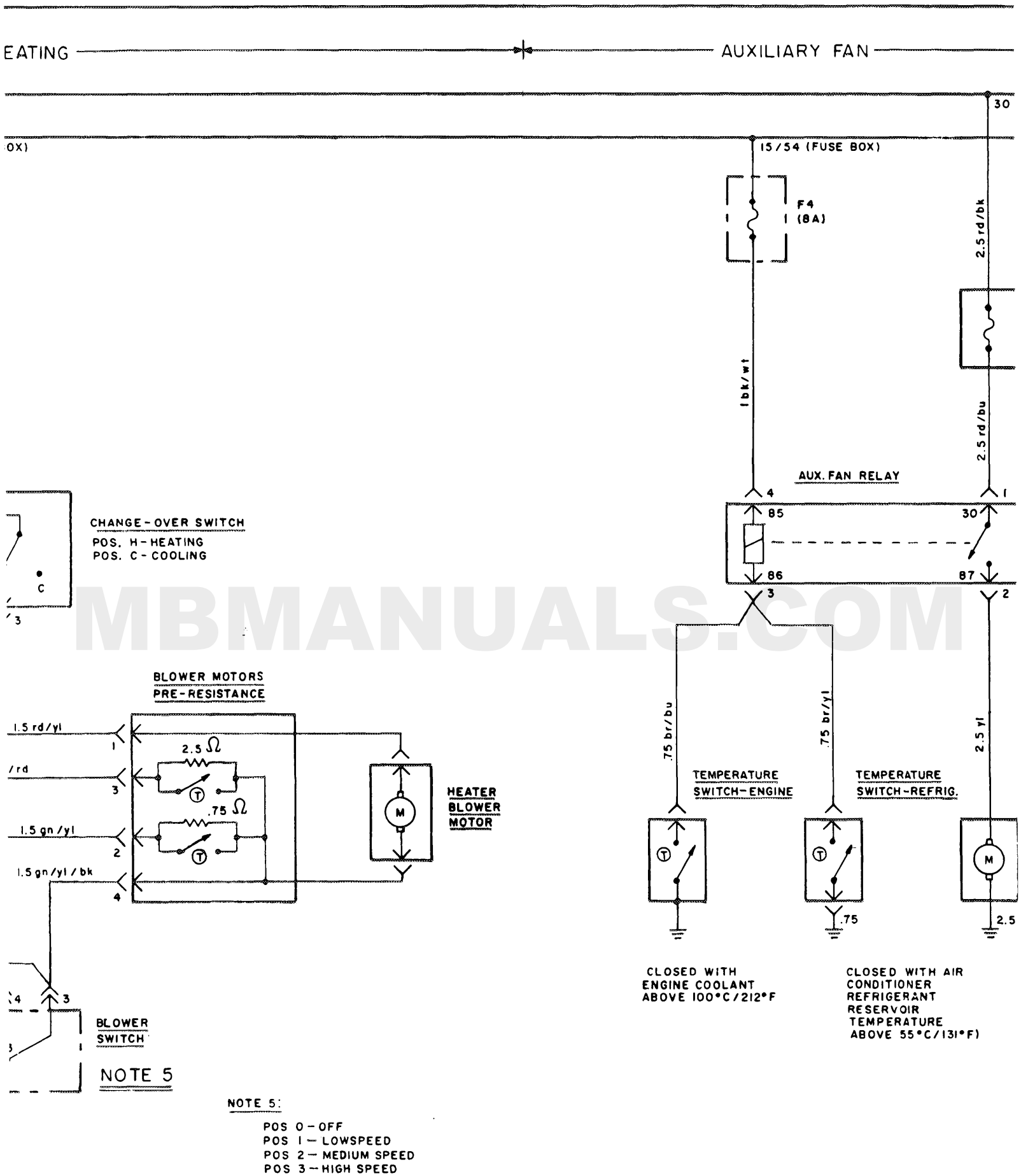


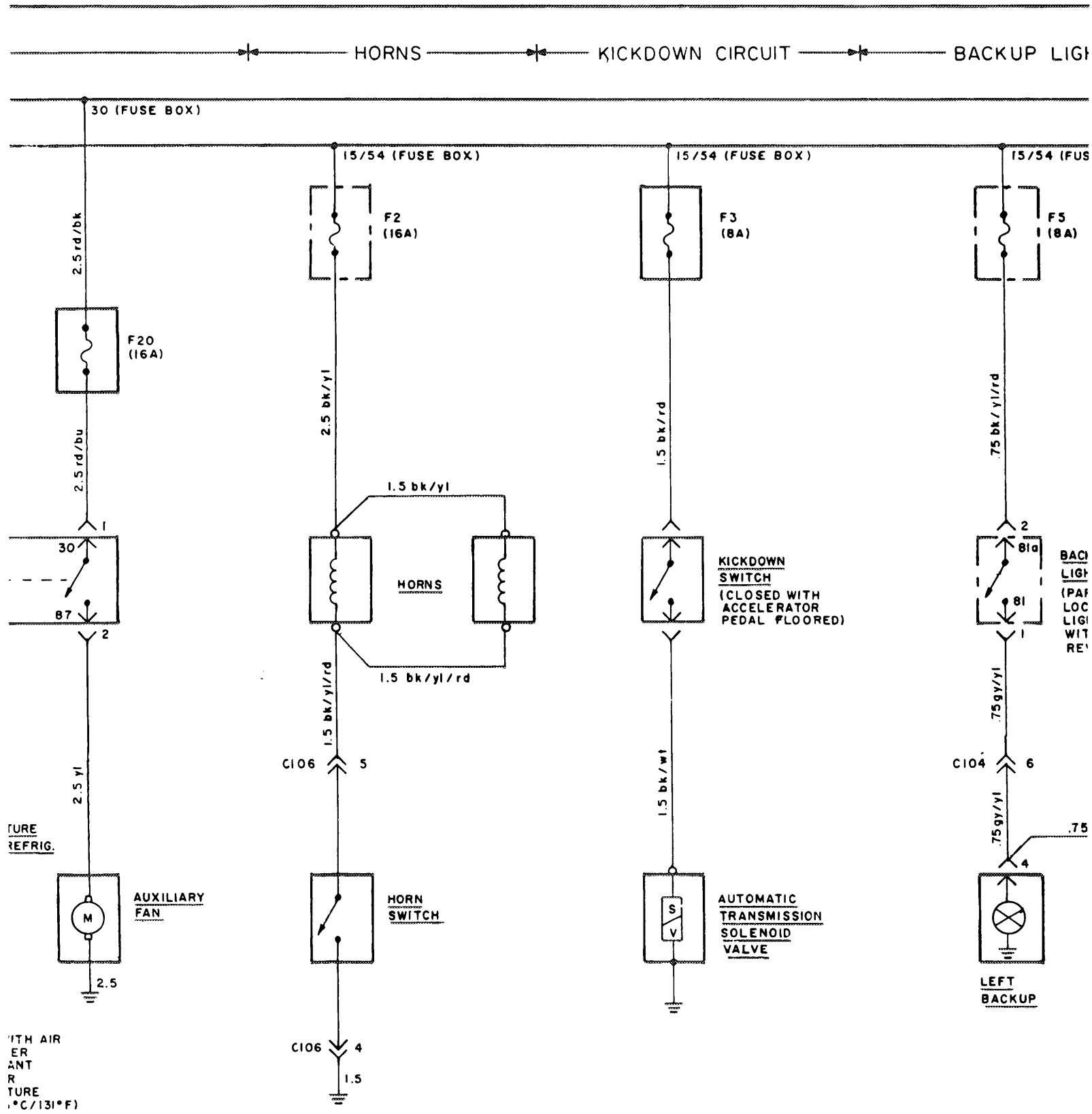
POSITION 1 - HIGH BEAM
POSITION 2 - LOW BEAM
POSITION 3 - HIGH BEAM FLASH

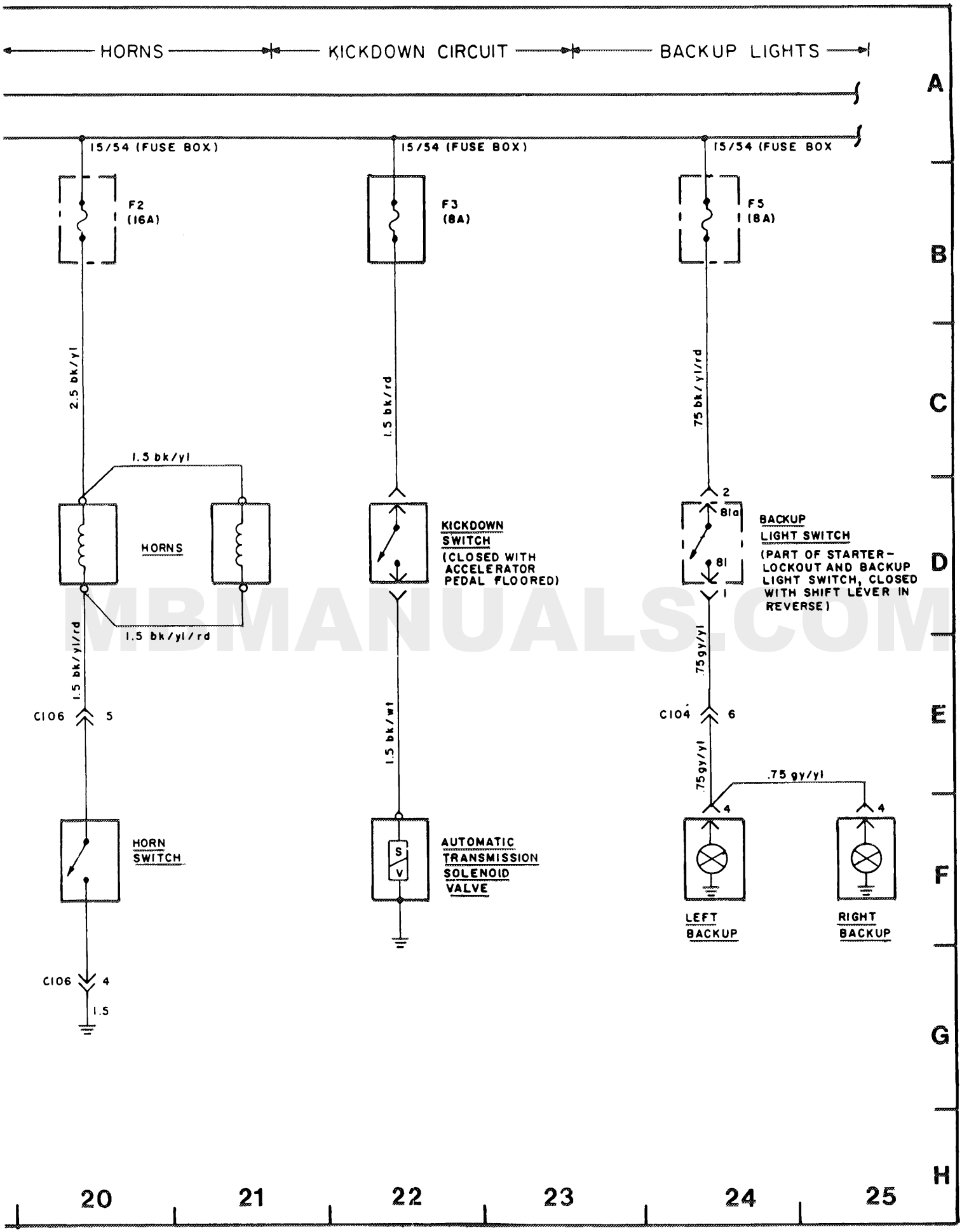

IDLE FUEL CUTOFF
30 (FUSE BOX)
15/54 (FUSE BOX)
1.5 bk/vi
TO PAGE 4-3 SECTION B1 (POWER FROM FUSE 2)
C106
COMBINATION SWITCH PASSING/DIMMING
NOTE 2
56a
56b
2.5 wt
2.5 yl
1.5 wt/vi
F11 (8A)
F12 (8A)
F10 (8A)
F9 (8A)
F1 (8A)
F4 (8A)
1 rd
1 rd/bk
IDLE FUEL CUT OFF DELAY RELAY
TRANSISTORIZED
.75 bk
.75
GROUNDED VIA TERMINAL 3 ON EMISSION CONTROL RELAY BOX
IDLE FUEL CUT OFF SOLENOID
NOTE 3
NOTE 3: SOLENOID IS ENERGIZED FOR 4 TO 6 SECONDS AFTER IGNITION SWITCH IS TURNED OFF TO PREVENT DIESELING
1.5 yl/bk
1.5 wt/bk
1.5 yl
1.5 wt
.5 wt/bu
HIGH BEAM
LOW BEAM
LEFT HEADLAMPS
RIGHT HEADLAMPS
HIGH BEAM INDICATOR
A
B
C
D
E
F
G
H
20
21
22
23
24
25

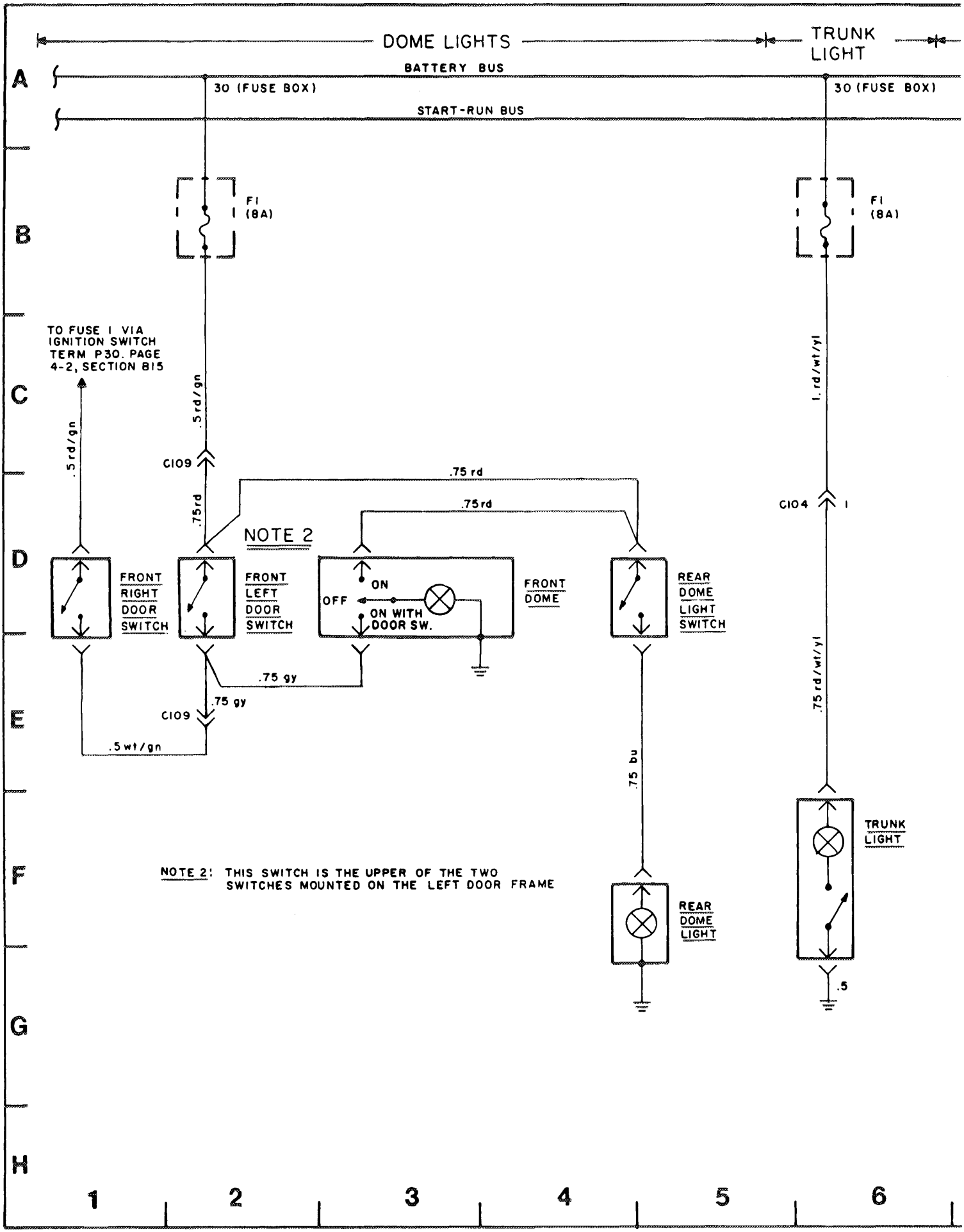


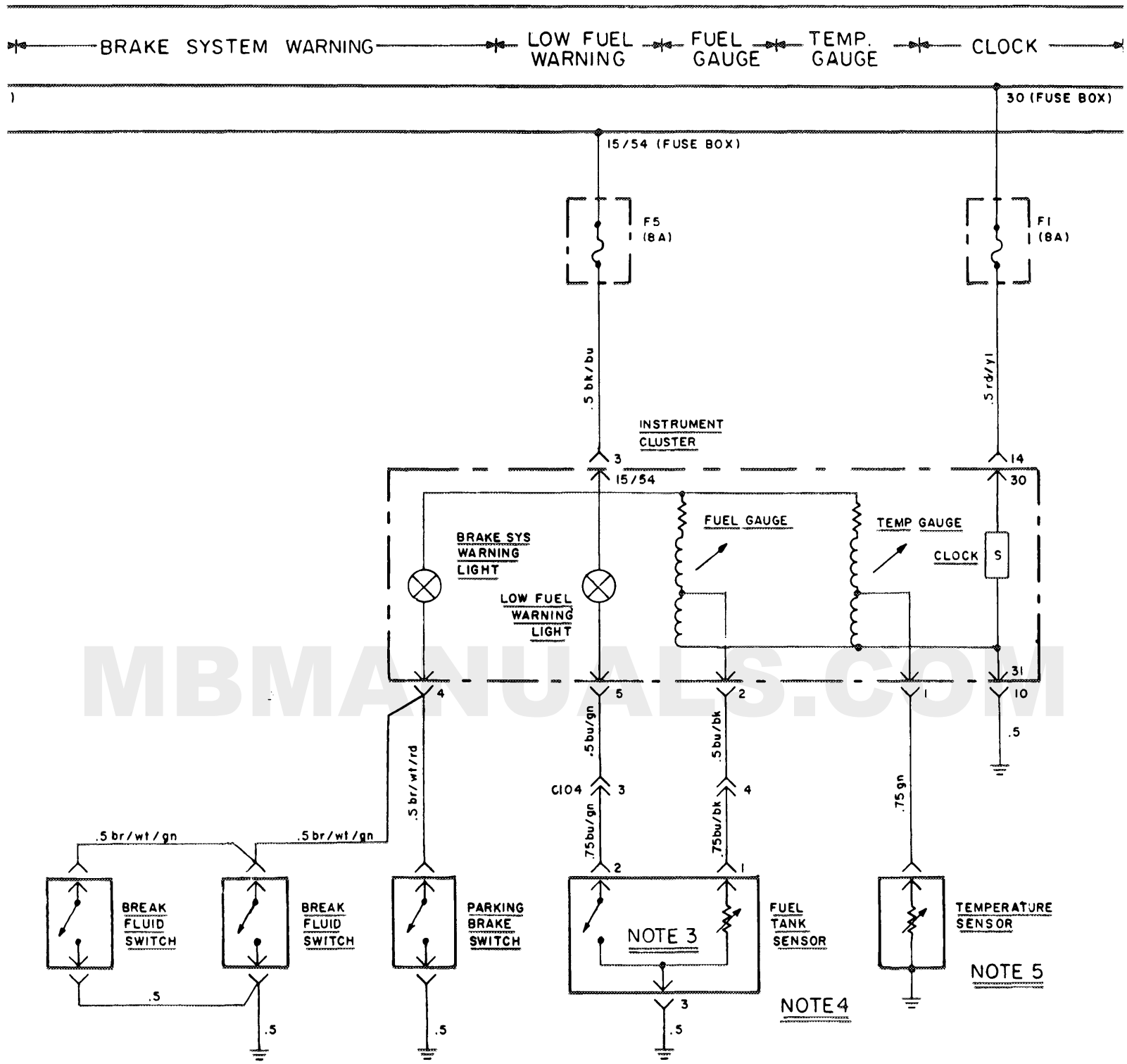

15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
F2 (16A)
AC-STARTER RELAY
F6 (5A)
2.5 bk/rd
C113
BLOWER SWITCH
NOTE 5
1.5 bk/gn/pk
2.5 bk
H
C
1.5 rd/yl
1.5 gn/wt
.75 bk
AIR CONDITIONER FUSES
F22 8A
F21 8A
A/C CONTROL LIGHT
1.5 gn/rd
1.5 bu
1.5 rd/gn
1.5 gn/yl
1.5 gn/yl/bk
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE-SET MANUALLY
1.5 gn/bk
1.5 bu/wt
AIR CONDITIONER CLUTCH
1.5
WASHER
WHEN PUMP
WIPE
ITION ONLY WHEN
OPERATION, RELAYS A AND B
, RELAY A IS CONTINUOUSLY
MATICALLY ENERGIZED ONCE
7
8
9
10
11
12




HORNS
KICKDOWN CIRCUIT
BACKUP LIGH
30 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUS
2.5 rd/bk
F20
(16A)
2.5 rd/bu
1
30
87
2
2.5 yl
TURE
REFRIG.
AUXILIARY
FAN
M
2.5
ITH AIR
ER
ANT
R
TURE
°C/131°F)
F2
(16A)
2.5 bk/yl
1.5 bk/yl
HORNS
1.5 bk/yl/rd
1.5 bk/yl/rd
C106
5
HORN
SWITCH
C106
4
1.5
F3
(8A)
1.5 bk/rd
KICKDOWN
SWITCH
(CLOSED WITH
ACCELERATOR
PEDAL FLOORED)
1.5 bk/wt
S
V
AUTOMATIC
TRANSMISSION
SOLENOID
VALVE
F5
(8A)
.75 bk/yl/rd
2
81a
81
1
BACI
LIGI
(PAI
LOC
LIGI
WIT
RE
.75 gy/yl
C104
6
.75 gy/yl
.75
4
LEFT
BACKUP
18
19
20
21
22
23
24




DOME LIGHTS
TRUNK LIGHT
BATTERY BUS
30 (FUSE BOX)
30 (FUSE BOX)
START-RUN BUS
F1 (8A)
F1 (8A)
TO FUSE 1 VIA IGNITION SWITCH TERM P30. PAGE 4-2, SECTION B15
.5 rd/gn
.5 rd/gn
C109
.75 rd
.75 rd
.75 rd
NOTE 2
1. rd/wt/yl
C104
1
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
ON
OFF
ON WITH DOOR SW.
FRONT DOME
REAR DOME LIGHT SWITCH
.75 gy
.75 gy
C109
.5 wt/gn
.75 bu
.75 rd/wt/yl
TRUNK LIGHT
NOTE 2: THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME
REAR DOME LIGHT
.5
A
B
C
D
E
F
G
H
1
2
3
4
5
6

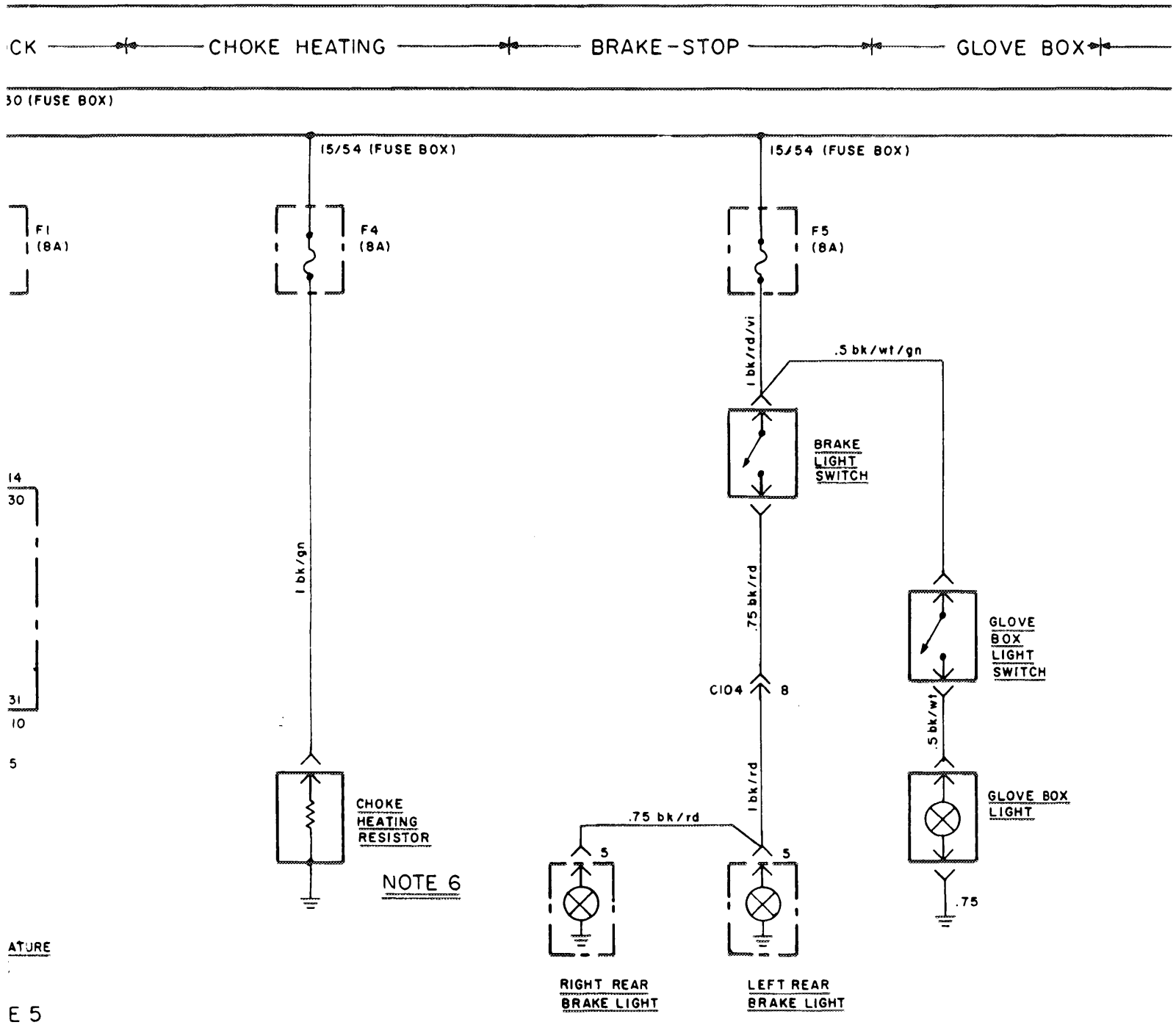


NOTE 3: SWITCH CLOSED WITH APPROX. 5 GALLONS OR LESS FUEL IN TANK

NOTE 4: RESISTANCE OF SENSOR
FULL TANK – 6 Ω
3/4 TANK – 10 Ω
1/2 TANK – 28 Ω
1/4 TANK – 54 Ω
R TANK – 62 Ω

NOTE 5: RESISTANCE A

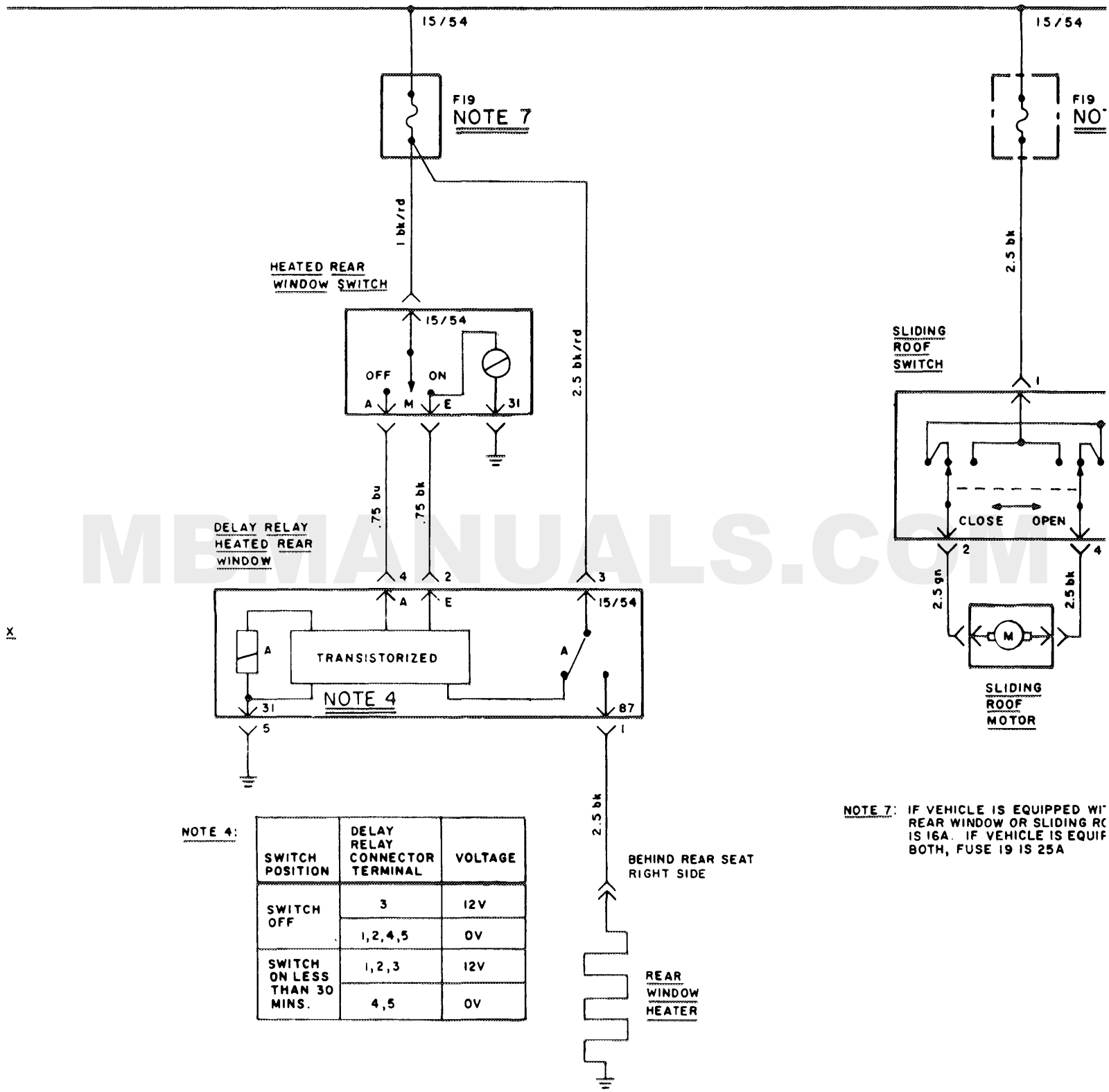
NOTE 6: RESISTANCE -



RESISTANCE AT 65° F – 460 Ω

RESISTANCE - 7 Ω

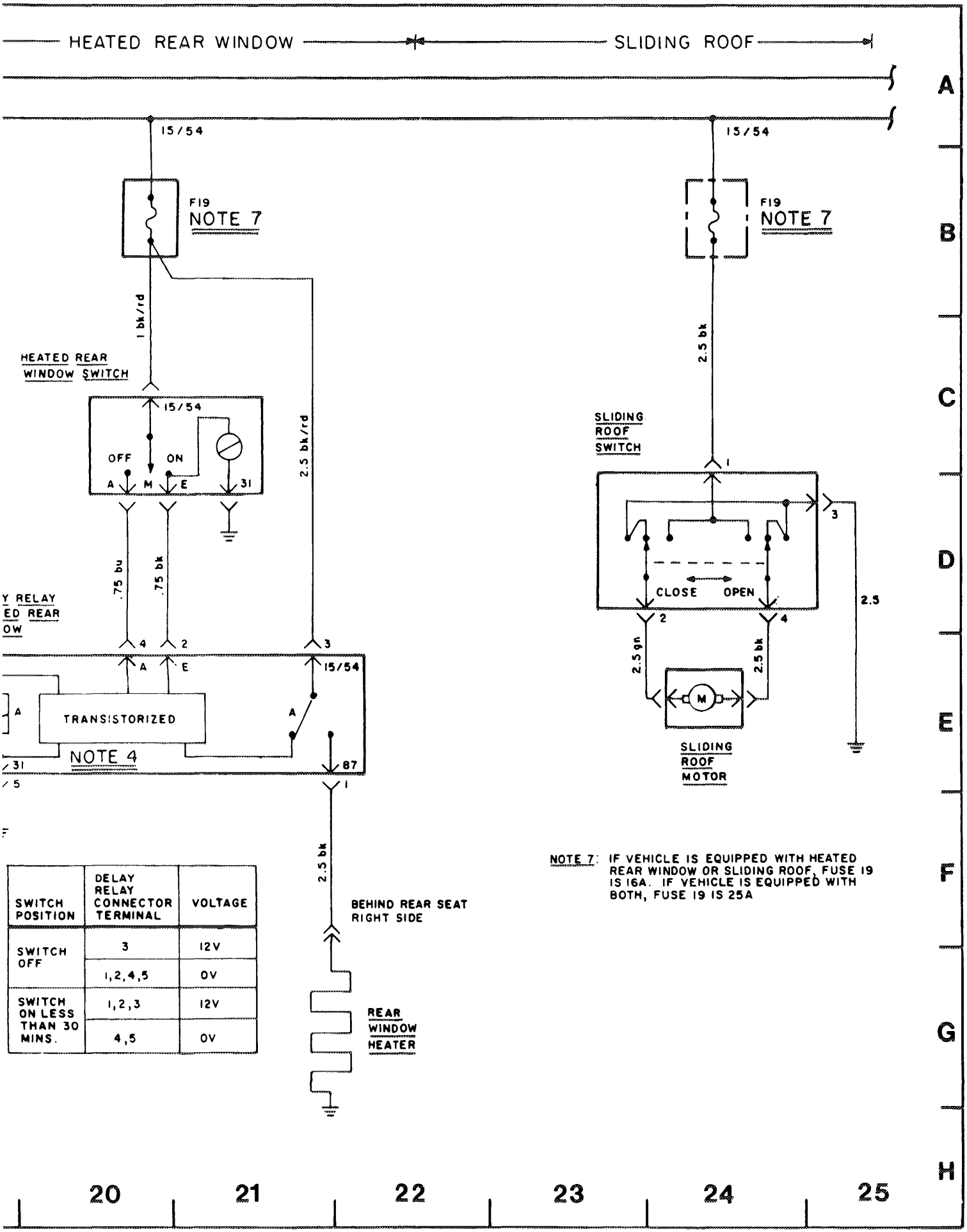
13 14 15 16 17 18



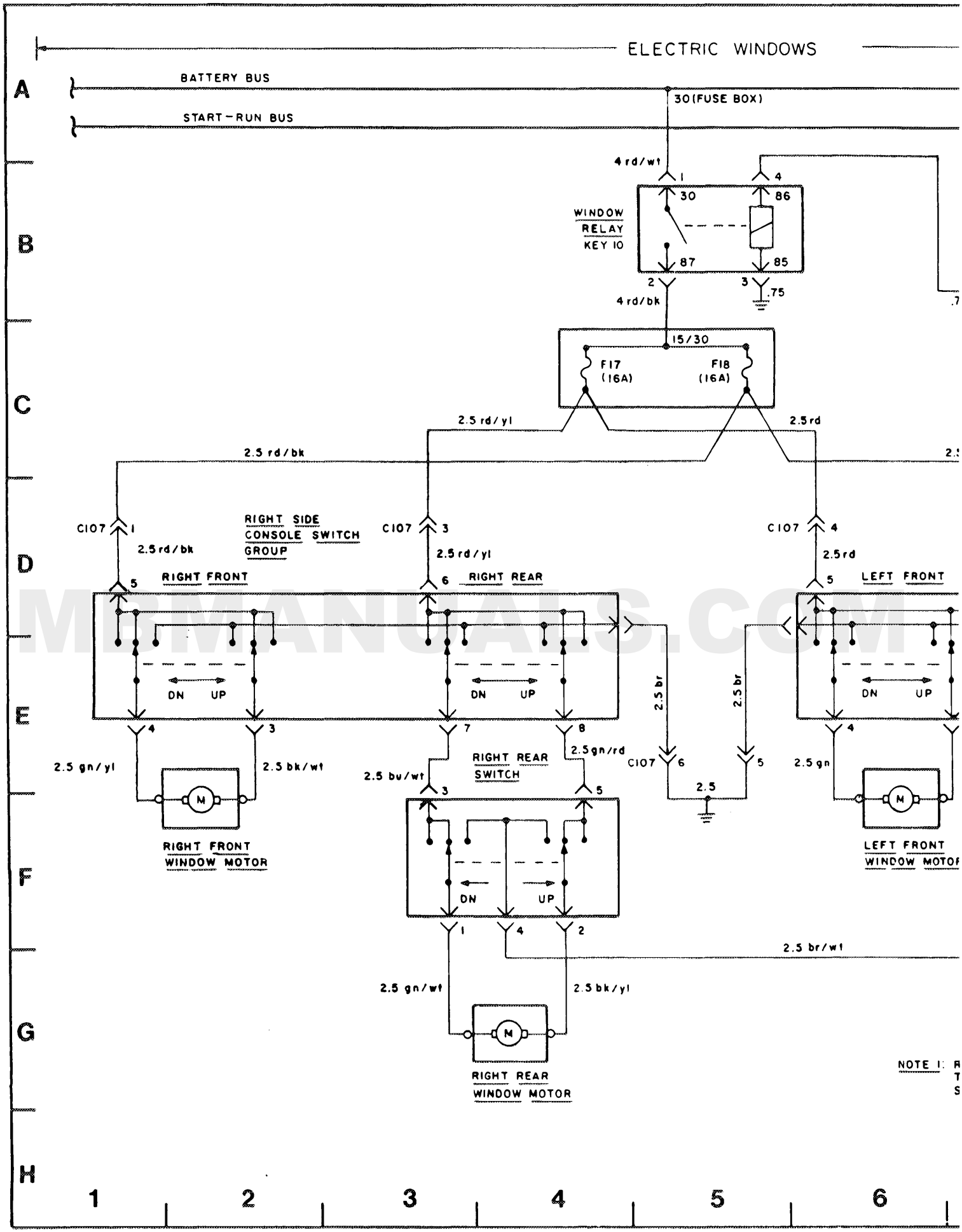
NOTE 4:

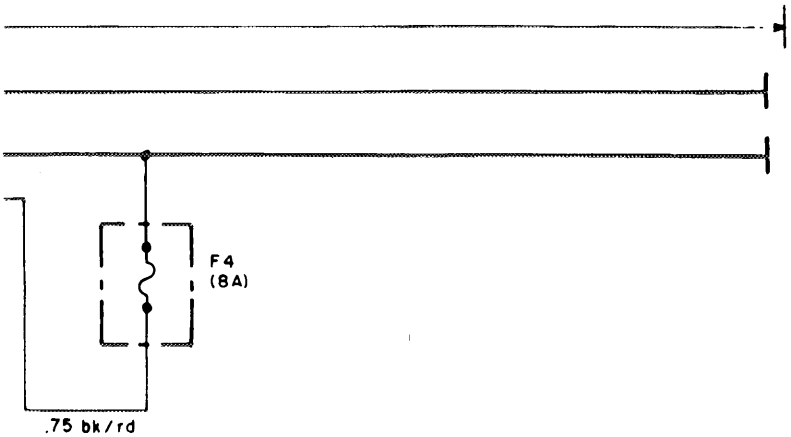
SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS.	1,2,3	12V
	4,5	0V

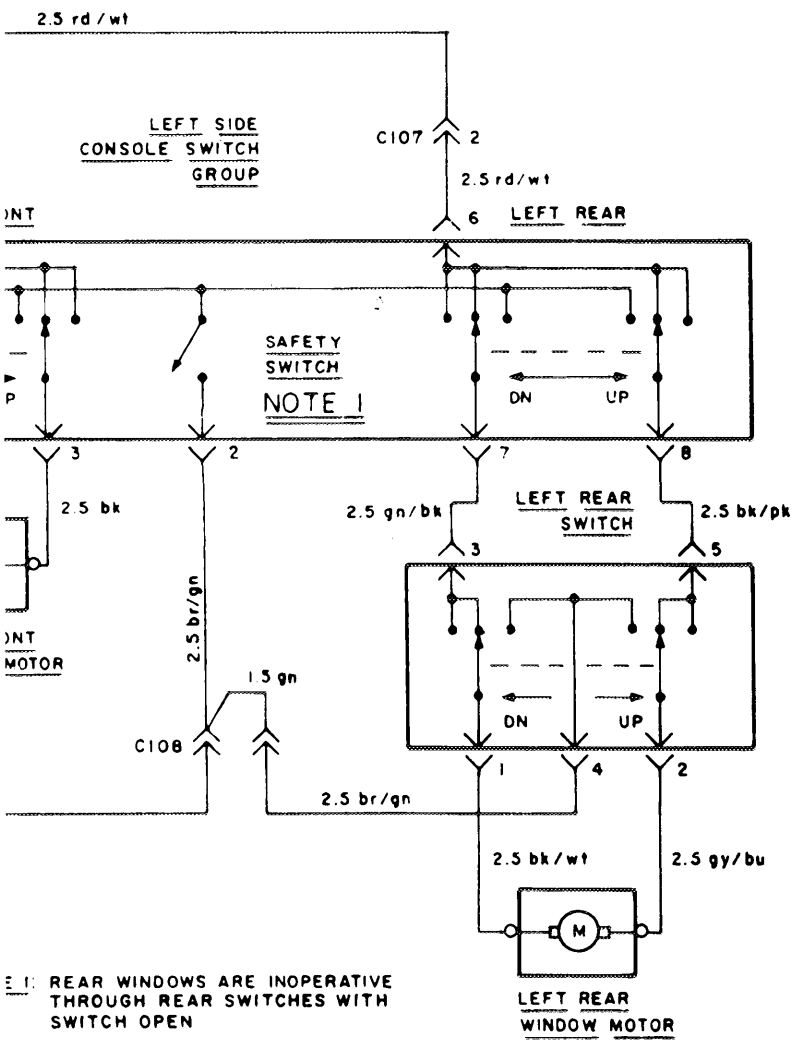
NOTE 7: IF VEHICLE IS EQUIPPED WI REAR WINDOW OR SLIDING RO IS 16A. IF VEHICLE IS EQUIP BOTH, FUSE 19 IS 25A



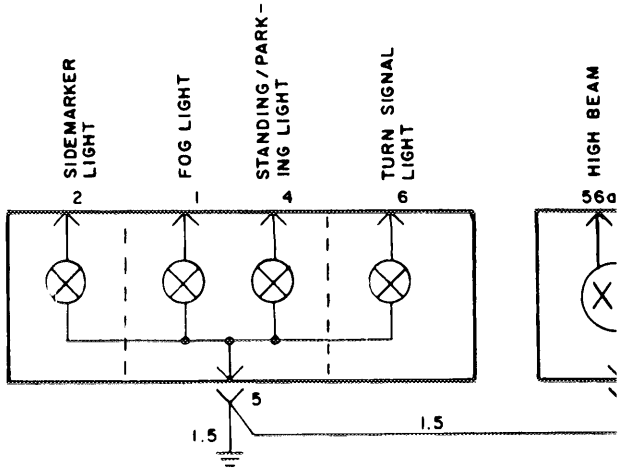
SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS.	1,2,3	12V
	4,5	0V



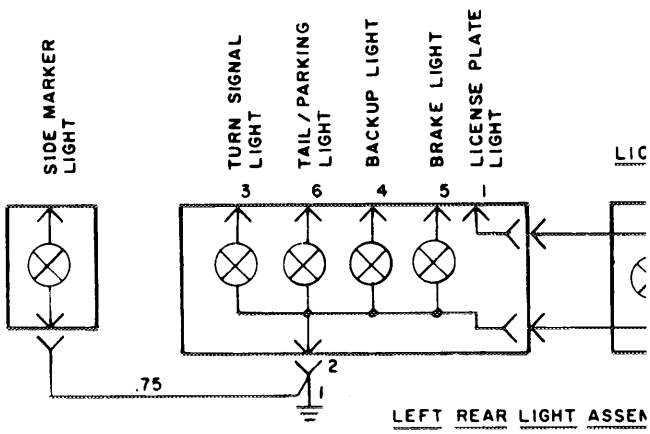




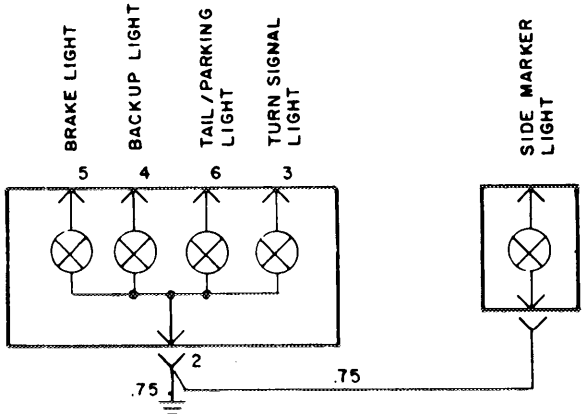
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES – RIGHT & LEFT

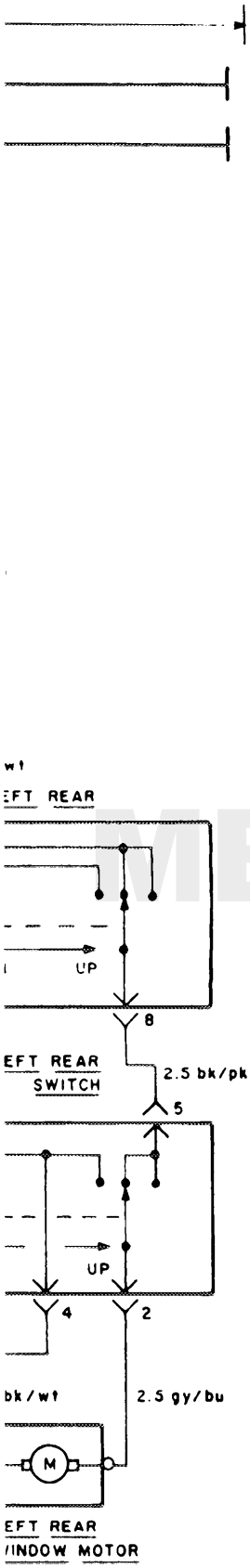


LEFT REAR LIGHT ASSEM

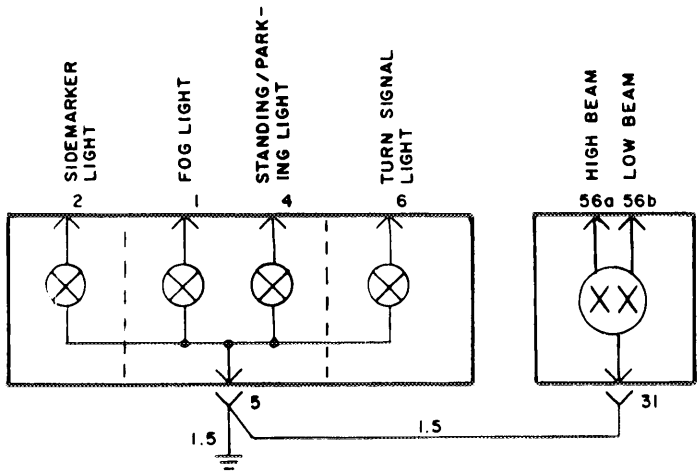


RIGHT REAR LIGHT ASSEMBLY

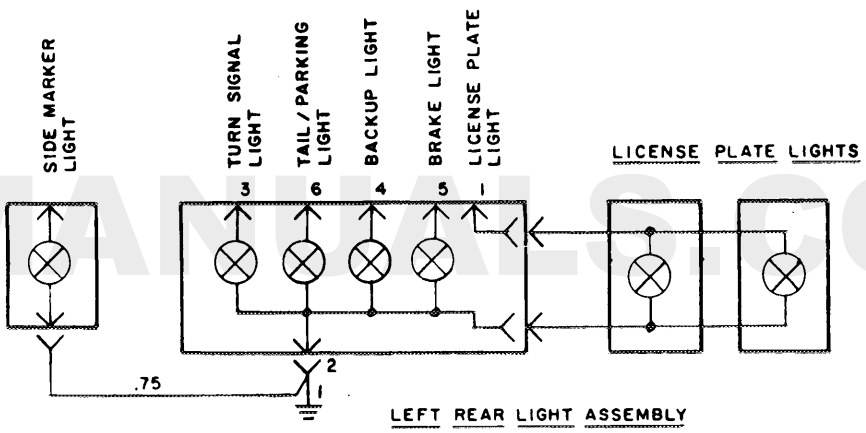
7 8 9 10 11 12



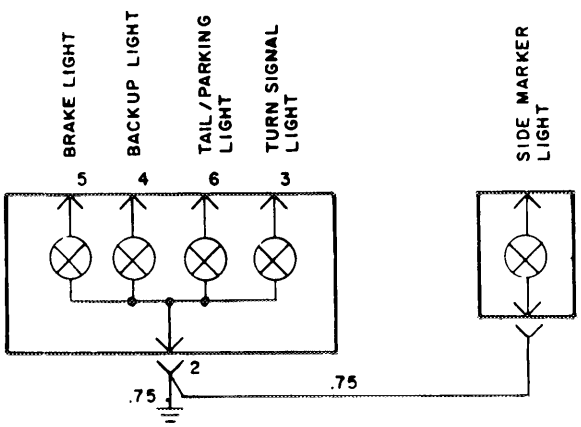
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES – RIGHT & LEFT



LEFT REAR LIGHT ASSEMBLY



RIGHT REAR LIGHT ASSEMBLY

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
AIR CONDITIONING/HEATING			
A/C blower motor	center of console	3-1	
A/C clutch	front of compressor		
A/C control light	console	3-2	
A/C starter relay, key 4	rt. firewall under fuse bracket		3-37
A/C thermostat	console	3-2	
Blower switch	console	3-2	
Change-over switch	console, left side	3-27	
Fuse 6	fuse box	3-4	3-48
Fuse 21 (A/C blower)	right firewall		3-40
Fuse 22 (A/C clutch)	right firewall		
Heater blower motor	behind A/C blower		
Heater blower motor pre-resistor	left firewall	3-4	
C113	mounted to heater control lever plate	3-6	3-32
AUXILIARY FAN			
Auxiliary fan	front of radiator	3-7	
Aux. fan relay, key 6	below radio fuse		
Fuse 4	fuse box	3-4	3-47
Fuse 20 (aux. fan)	left fender		3-48
Temp. sw.—engine	thermostat housing		
Temp. sw.—refrigerant	right firewall	3-9	
CHARGE			
Alternator	below A/C compressor		
Charge indicator light	inst. cluster	3-10	
Regulator	right front fender		
CHOKE HEATING			
Choke heating resistor	carburetor	3-25	
Fuse 4	fuse box	3-4	3-48
CIGAR LIGHTER			
Cigar lighter	console	3-2	
Fuse 2	fuse box	3-4	3-48
CLOCK			
Clock	inst. cluster	3-10	
Fuse 1	fuse box	3-4	3-48

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
FUEL GAUGE			
Fuel gauge	inst. cluster	3-10	
Fuel tank sensor	below trunk floor	3-14	
Fuse 5	fuse box	3-4	3-48
C 104	under dash—drivers side	3-15	
HEATED REAR WINDOW			
Time delay relay	under dash—drivers side	3-15	3-44
Fuse 19 (window)	left fender		
Heater	rear window		
Switch	console		
C 112	behind rear seat—right side	3-2 3-16	
HORNS			
Horn switch			
Horns			
Fuse 2	fuse box	3-4	3-48
C 106	under dash—drivers side	3-15	3-35
IDLE FUEL CUTOFF			
Time delay relay	left front fender	3-26	
Fuse 1	fuse box	3-4	3-48
Fuse 4	fuse box	3-4	3-48
Solenoid	carburetor	3-25	
IGNITION SWITCH			
A/C starter relay, key 4	rt. firewall—under fuseholder		3-37
Seat belt-starter logic	under dash—drivers side	3-15	3-39
Starter lockout switch	left side transmission		
Switch	dash		
IGNITION SYSTEM			
Coil	front left fender	3-26	
Distributor	front left engine		
.4 ohm preresistor	front left fender	3-26	
.6 ohm preresistor	front left fender	3-26	
Transistorized ignition switching unit	left front fender		

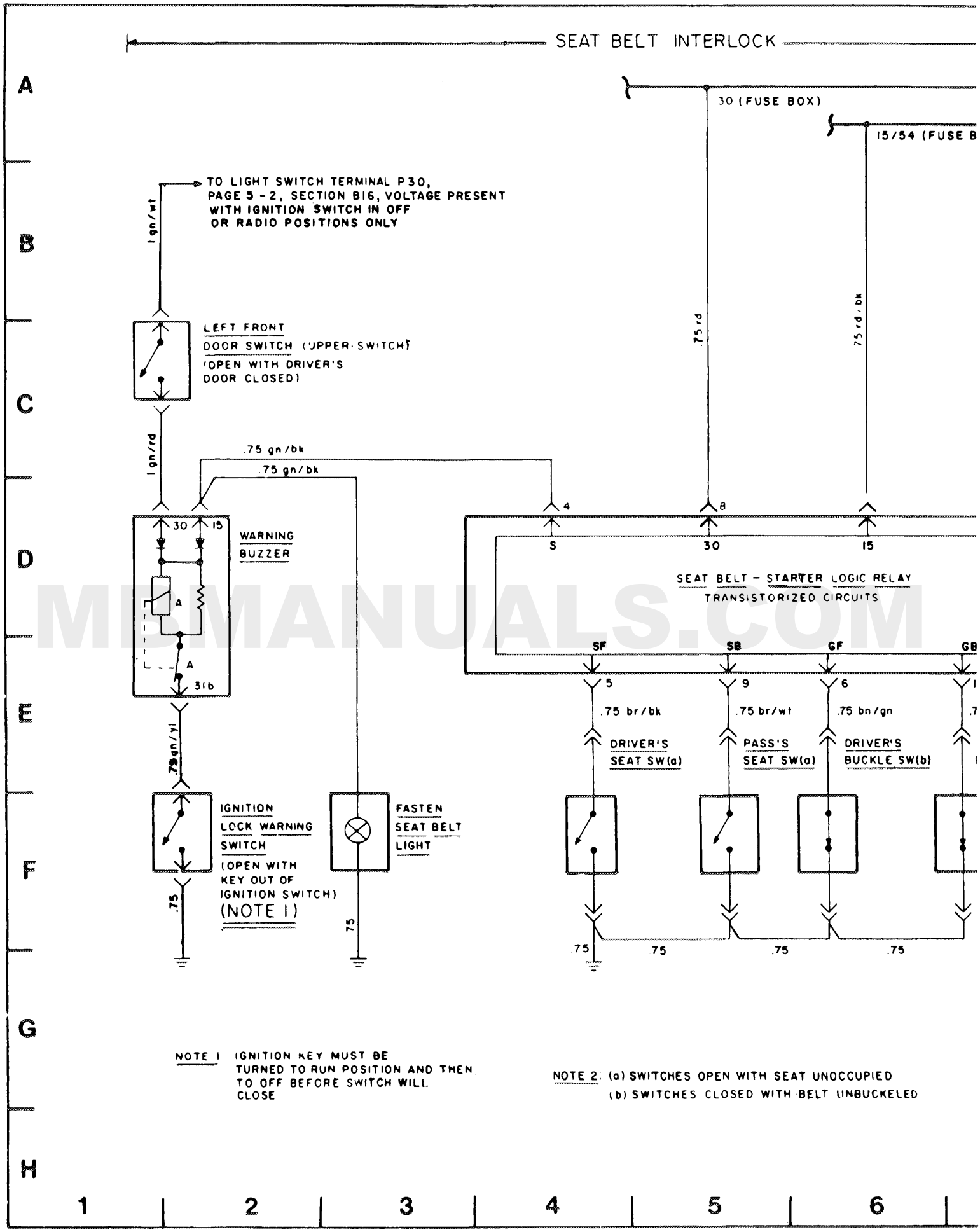
COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
KICKDOWN			
Fuse 3	fuse box	3-4	3-48
Solenoid	right side transmission		
Switch	below accelerator pedal	3-19	
LIGHT CIRCUITS			
A/C CONTROL			
Change-over switch	console	3-27	
Fuse 6	fuse box	3-4	3-48
Light, A.C. contact	console	3-2	
Light, A.C. thermostat	console		
ASH TRAY			
Fuse 7	fuse box	3-4	3-48
Light switch	dash		
BACKUP			
Fuse 5	fuse box	3-4	3-48
Lights	rear light assemblies		
Switch	left side transmission		
C 104	under dash—drivers side	3-15	
BRAKE SYSTEM WARNING			
Fluid switches	fluid reservoir	3-4	
Fuse 5	fuse box	3-4	3-48
Parking switch	top, parking brake		
Reservoir & parking brake light	inst. cluster	3-10	
DOME (FRONT)			
Front left door switch	door post		
Front right door switch	door post		
Fuse 1	fuse box	3-4	3-48
C 109	console		
DOME (REAR)			
Fuse 1	fuse box	3-4	3-48
Switch	dash	3-20	

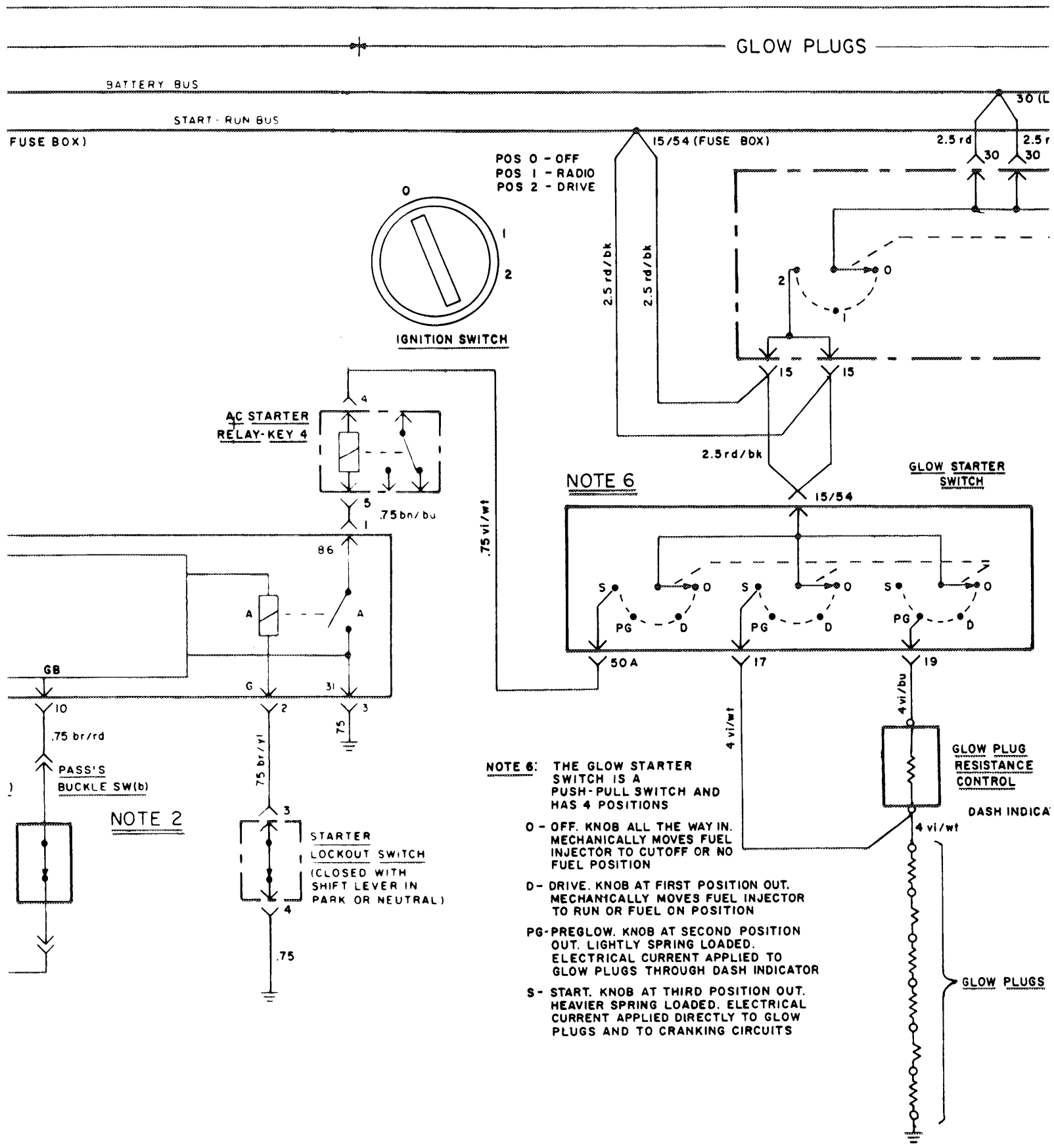
COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
FOG (PERIMETER)			
Fuse 11	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
Pass/dim switch	steering column	3-20	
C 106	under dash—drivers side	3-15	3-35
GLOVE BOX			
Fuse 5	fuse box	3-4	3-48
Switch	glove box		
HEAD			
Fuse 9	fuse box	3-4	3-48
Fuse 10	fuse box	3-4	3-48
Fuse 11	fuse box	3-4	3-48
Fuse 12	fuse box	3-4	3-48
High beam indicator	inst. cluster	3-10	
Light switch	dash	3-20	3-43
Pass/dim switch	steering column	3-20	
C 106	under dash—drivers side	3-16	3-35
INSTRUMENT CLUSTER			
Fuse 7	fuse box	3-4	3-48
light switch	dash	3-20	3-43
Rheostat	inst. cluster	3-10	
LOW FUEL WARNING			
Fuse 5	fuse box	3-4	3-48
Sender unit	below trunk floor	3-14	
C 104	under dash—drivers side	3-15	
Light	inst. cluster	3-10	
MARKER			
Fuse 7	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
C 104	under dash—drivers side	3-15	
STANDING			
Fuse 1	fuse box	3-4	3-48
Fuse 7	fuse box	3-4	3-48
Fuse 8	fuse box	3-4	3-48
Ignition switch	dash		
Light switch	dash	3-20	3-43

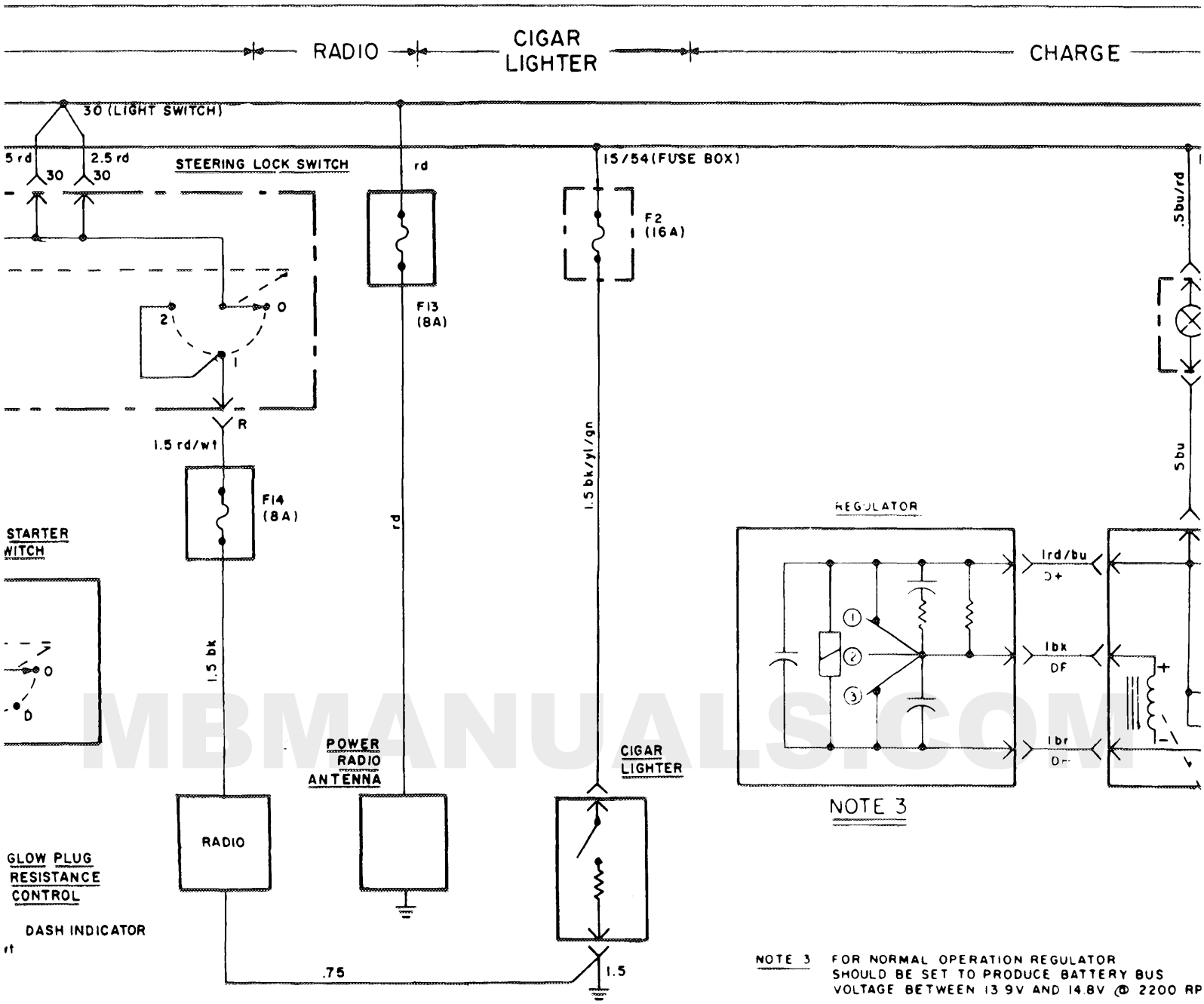
COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
STOP			
Fuse 5	fuse box	3-4	3-48
Switch	above brake pedal		
C 104	under dash—drivers side	3-15	
TAIL			
Fuse 1	fuse box	3-4	3-48
Fuse 7	fuse box	3-4	3-48
Fuse 8	fuse box	3-4	3-48
Ignition Switch	dash		
Light Switch	dash	3-20	3-43
C 104	under dash—drivers side	3-15	
TRUNK			
Fuse 1	fuse box	3-4	3-48
C 104	under dash—drivers side	3-15	
Switch	on trunk lid		
RADIO			
Antenna			
Fuse 13 (power antenna)	left fender		
Ignition switch	dash		
Radio	console		
Fuse 14 (radio)	left fender		
SEAT BELT INTERLOCK			
A/C starter relay, key 4	rt. firewall—under fuse bracket		3-37
Door switch	left front door—lower		
Driver's buckle switch	buckle		
Driver's seat switch	seat		
Fasten seat belt light	dash	3-2	
Ignition switch	dash		
Ignition warning switch	ignition switch		3-42
Logic relay	under dash—drivers side	3-15	3-39
Passenger buckle switch	buckle		
Passenger seat switch	seat		
Starter lockout switch	left side transmissions		
Warning buzzer	under dash—drivers side		
SLIDING ROOF			
Fuse 19	behind spare tire		
Motor	console		
Switch		3-2	

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
START			
A/C starter relay, key 4	rt. firewall—under fuse bracket		3-37
Battery			
Motor			
TEMPERATURE GAUGE			
Fuse 5	fuse box	3-4	3-48
Sensor	engine—left side	3-21	
TURN SIGNAL AND FLASHER			
Flasher relay	under dash—drivers side	3-15	
Hazzard switch	console	3-2	3-46
Fuse 1	fuse box	3-4	3-48
Fuse 4	fuse box	3-4	3-48
Turn signal switch	steering column	3-20	
C 104	under dash—drivers side	3-15	
C 106	under dash—drivers side	3-15	
WINDOWS			
Fuse F4	fuse box	3-4	3-48
Fuse F17 (FL/RR)	firewall—right side		
Fuse F18 (FR/RL)	firewall—right side		
Left front motor	door		
Left rear motor	door		
Left rear switch	side panel		
Left side switch group	console		3-38
Relay, key 10	rt. firewall under fuse bracket		3-47
Right front motor	door		
Right rear motor	door		
Right rear switch	side panel		
Right side switch group	console		3-38
C 107	console		
C 108	console		
WINDSHIELD WIPER/WASHER			
Combination switch	steering column	3-20	
Foot pump switch	left floor	3-5	
Fuse 2	fuse box	3-4	3-48
Interval wipe timer	under dash—driver side	3-15	3-40
Motor	firewall—left side	3-4	
C 106	under dash—drivers side	3-15	3-35

MODEL 240D



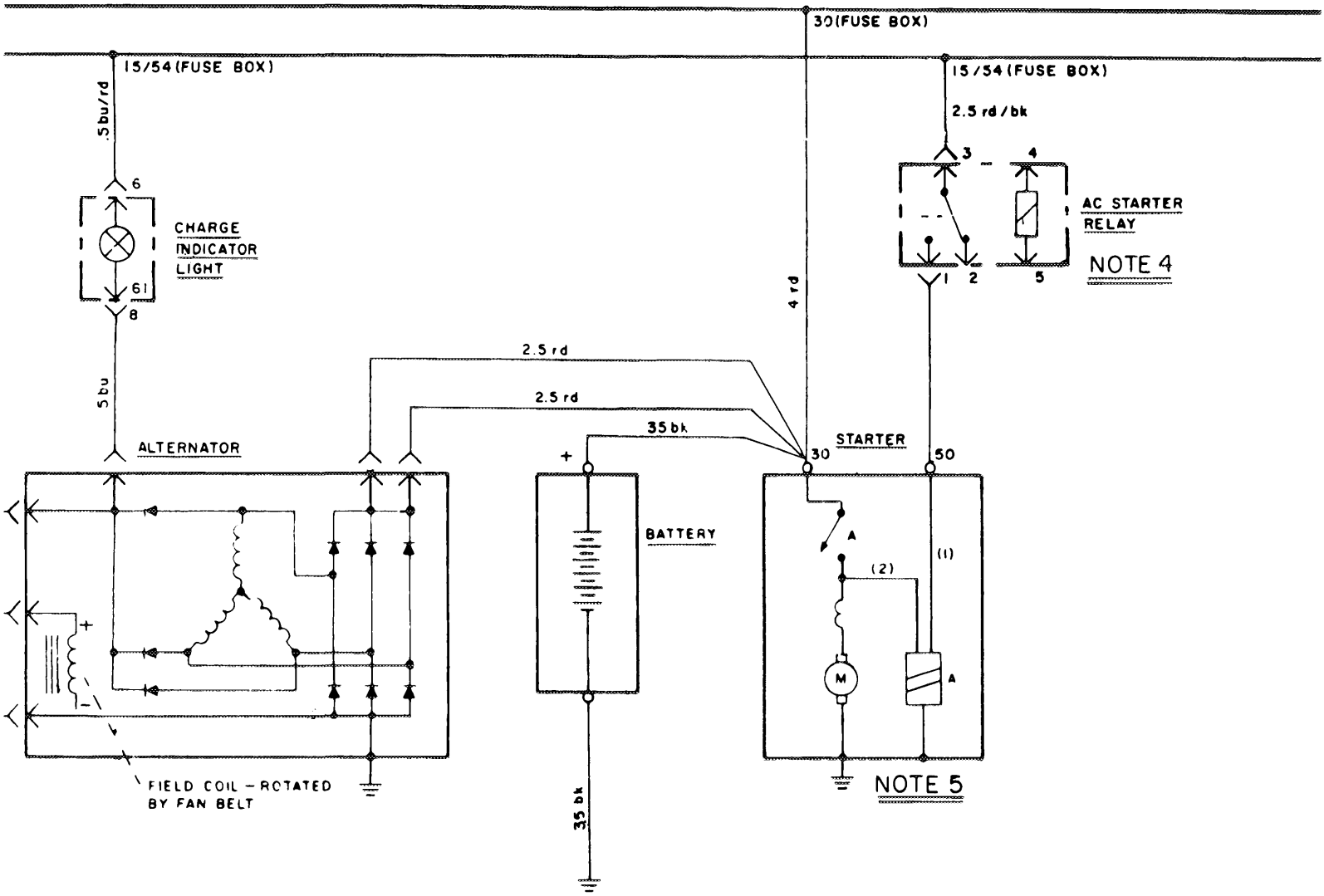

GLOW PLUGS
BATTERY BUS
START - RUN BUS
FUSE BOX)
15/54 (FUSE BOX)
30 (L
2.5 rd
2.5 r
30
30
POS 0 - OFF
POS 1 - RADIO
POS 2 - DRIVE
0
1
2
IGNITION SWITCH
2.5 rd/bk
2.5 rd/bk
2
0
1
15
15
AC STARTER
RELAY-KEY 4
4
5
.75 bn/bu
1
2.5 rd/bk
NOTE 6
GLOW STARTER
SWITCH
15/54
.75 vi/wt
86
A
A
S
0
PG
D
50A
17
19
GB
G
31
10
2
3
.75 br/rd
75 br/yl
75
4 vi/wt
4 vi/bu
GLOW PLUG
RESISTANCE
CONTROL
DASH INDICA
PASS'S
BUCKLE SW(b)
NOTE 2
3
STARTER
LOCKOUT SWITCH
(CLOSED WITH
SHIFT LEVER IN
PARK OR NEUTRAL)
4
.75
4 vi/wt
GLOW PLUGS
NOTE 6: THE GLOW STARTER SWITCH IS A PUSH-PULL SWITCH AND HAS 4 POSITIONS
O - OFF. KNOB ALL THE WAY IN. MECHANICALLY MOVES FUEL INJECTOR TO CUTOFF OR NO FUEL POSITION
D - DRIVE. KNOB AT FIRST POSITION OUT. MECHANICALLY MOVES FUEL INJECTOR TO RUN OR FUEL ON POSITION
PG - PREGLOW. KNOB AT SECOND POSITION OUT. LIGHTLY SPRING LOADED. ELECTRICAL CURRENT APPLIED TO GLOW PLUGS THROUGH DASH INDICATOR
S - START. KNOB AT THIRD POSITION OUT. HEAVIER SPRING LOADED. ELECTRICAL CURRENT APPLIED DIRECTLY TO GLOW PLUGS AND TO CRANKING CIRCUITS



NOTE 3 FOR NORMAL OPERATION REGULATOR SHOULD BE SET TO PRODUCE BATTERY BUS VOLTAGE BETWEEN 13.9V AND 14.8V @ 2200 RP

POS 1 – ENGINE OFF/BATTERY UNDERCHARGE
POS 2 – NORMAL OPERATION
POS 3 – BATTERY OVERCHARGED

▶ GLOW PLUGS



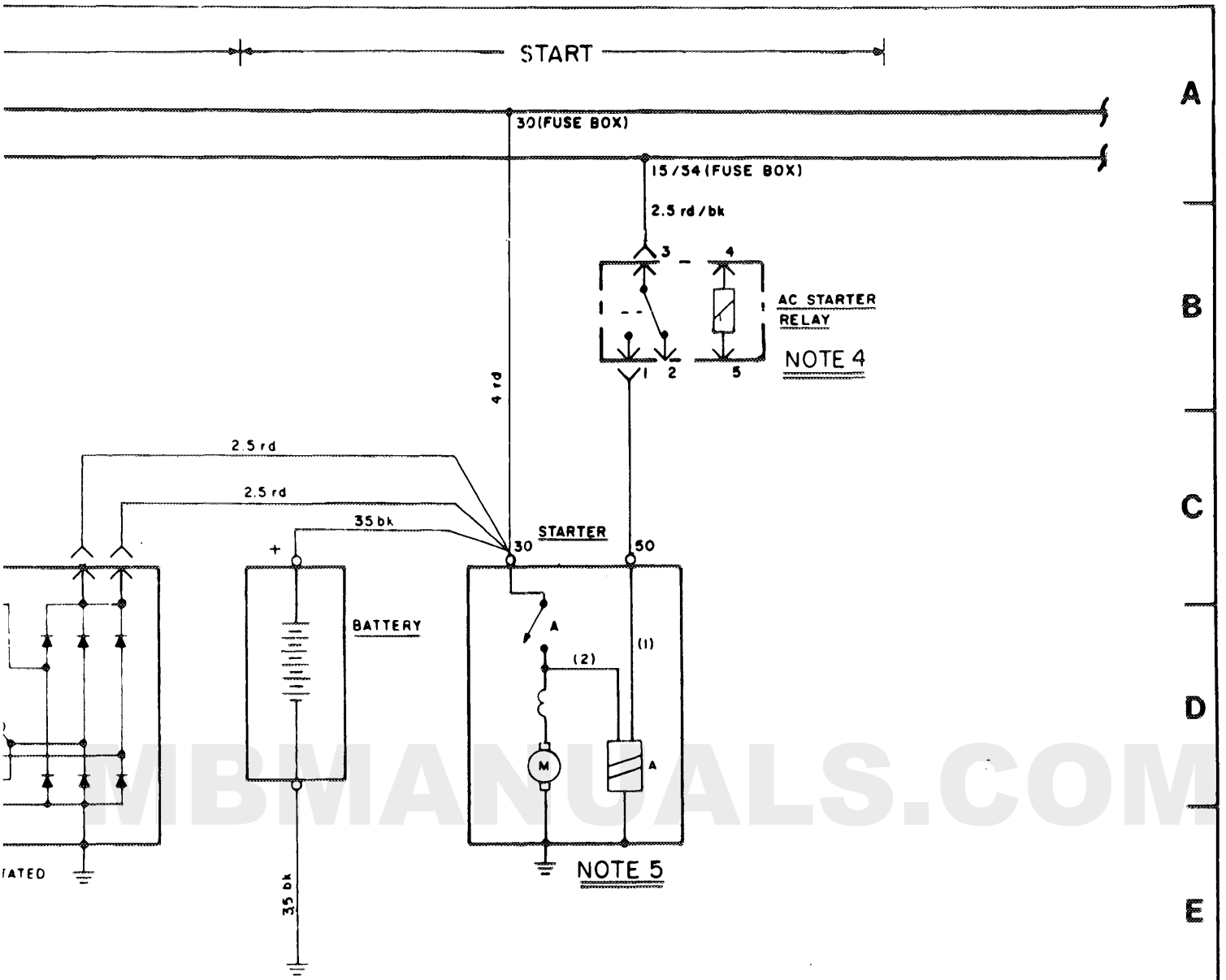
TOR
TERY BUS
BV @ 2200 RPM

UNDERCHARGED

D

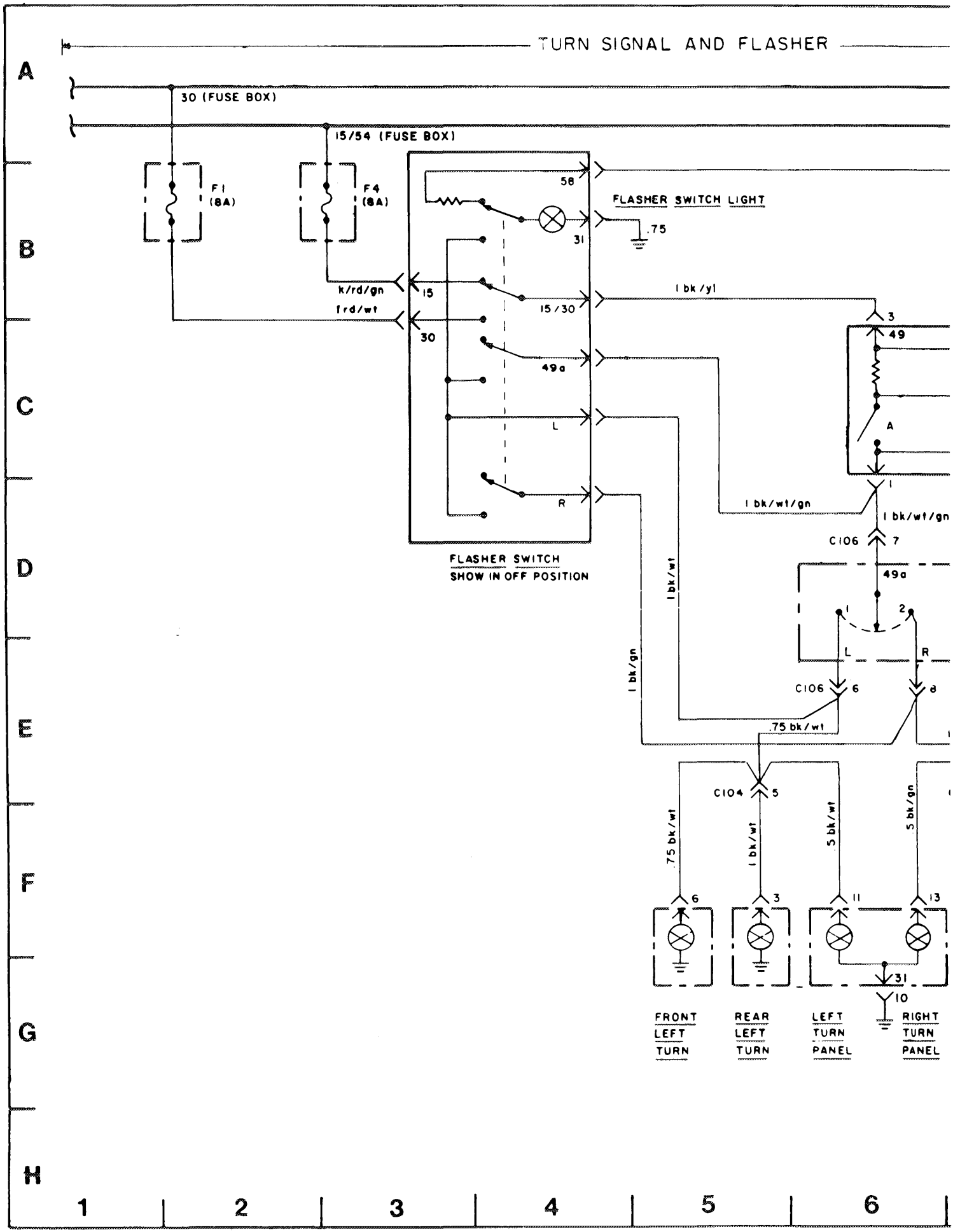
NOTE 4: THE AC/STARTER RELAY AUTOMATICALLY DISCONNECTS THE AIR CONDITIONER CLUTCH DURING ENGINE CRANKING

NOTE 5 WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROPOUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED

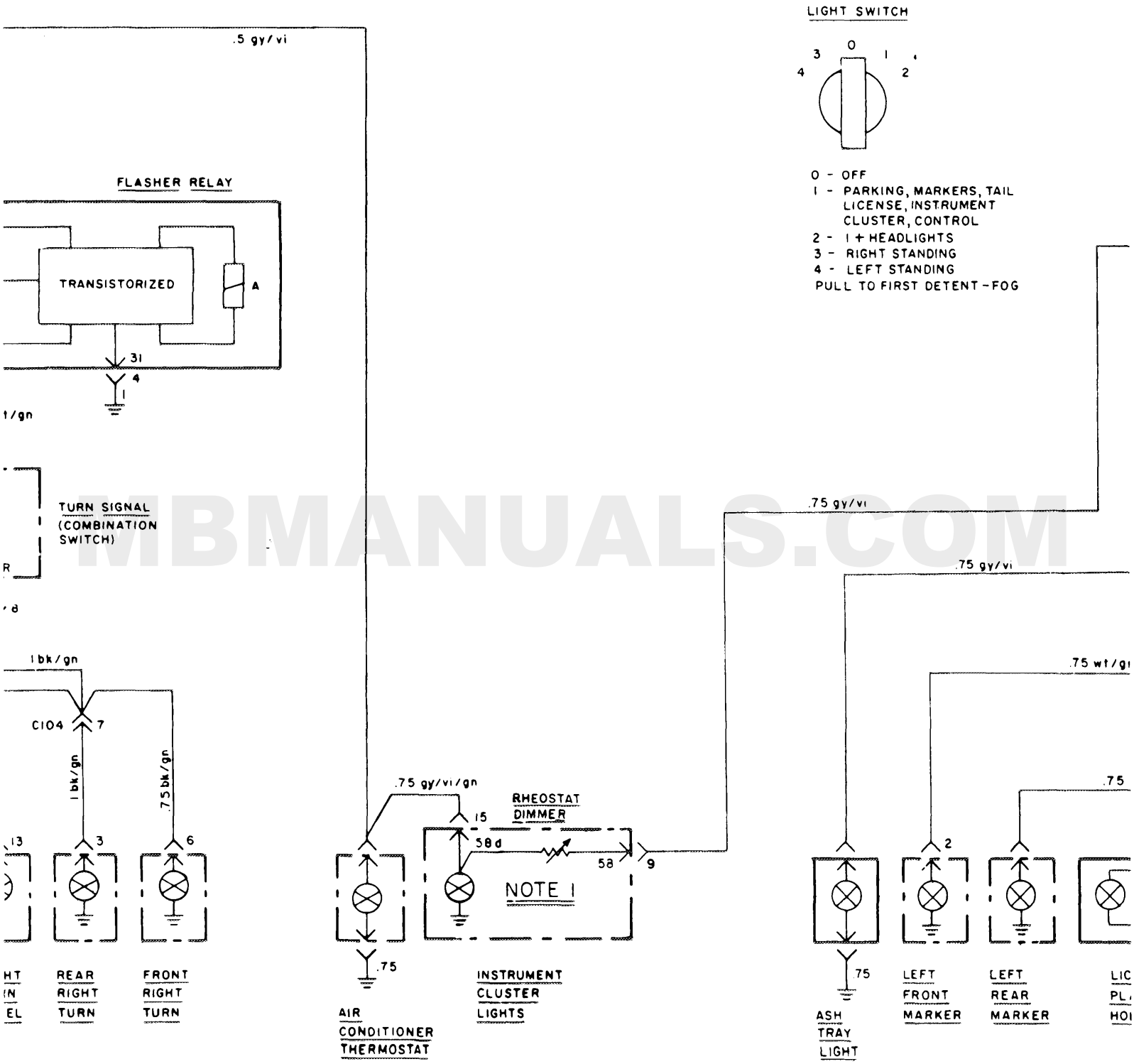


NOTE 4: THE AC/STARTER RELAY AUTOMATICALLY DISCONNECTS THE AIR CONDITIONER CLUTCH DURING ENGINE CRANKING

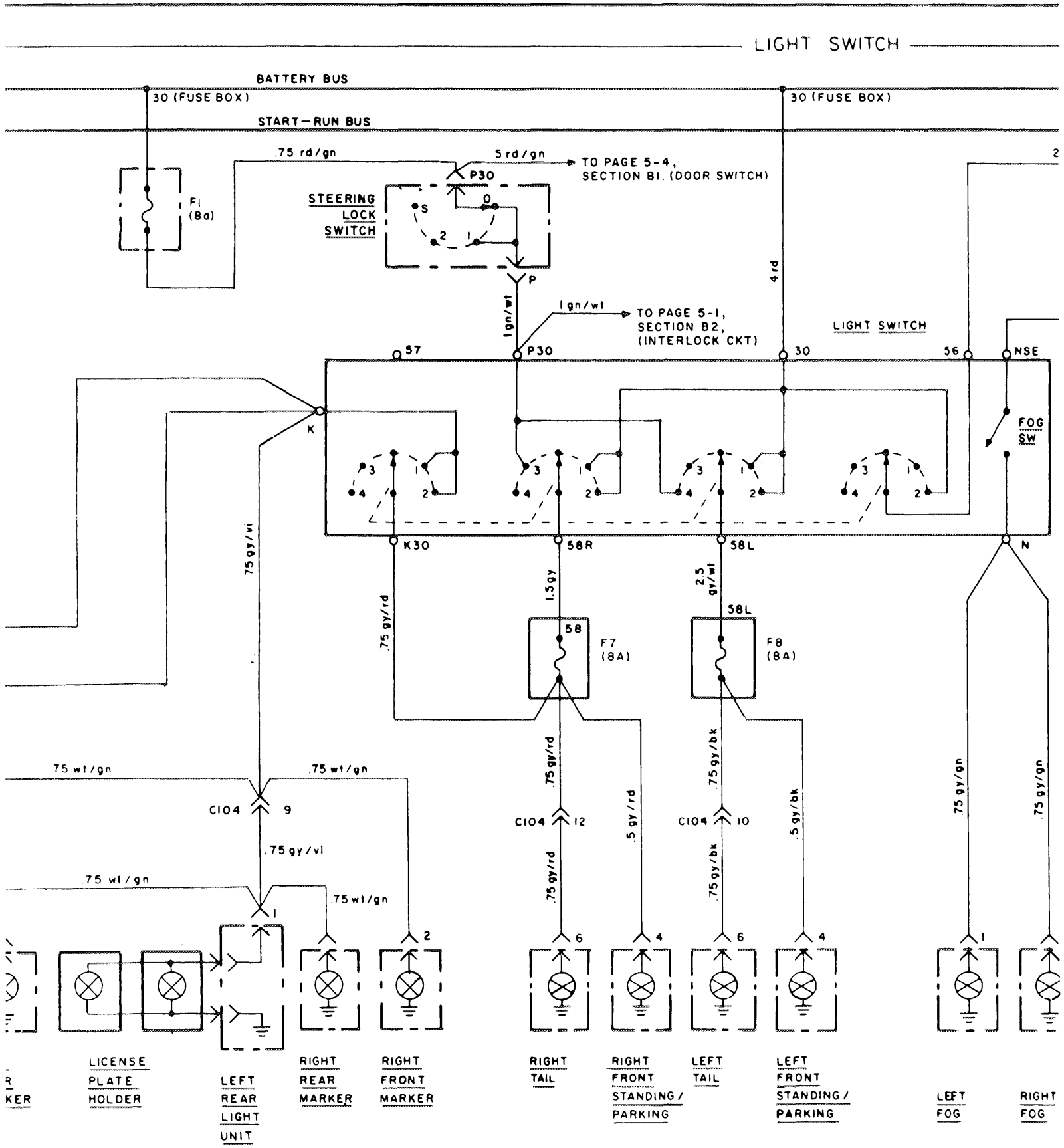
NOTE 5 WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROPOUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED

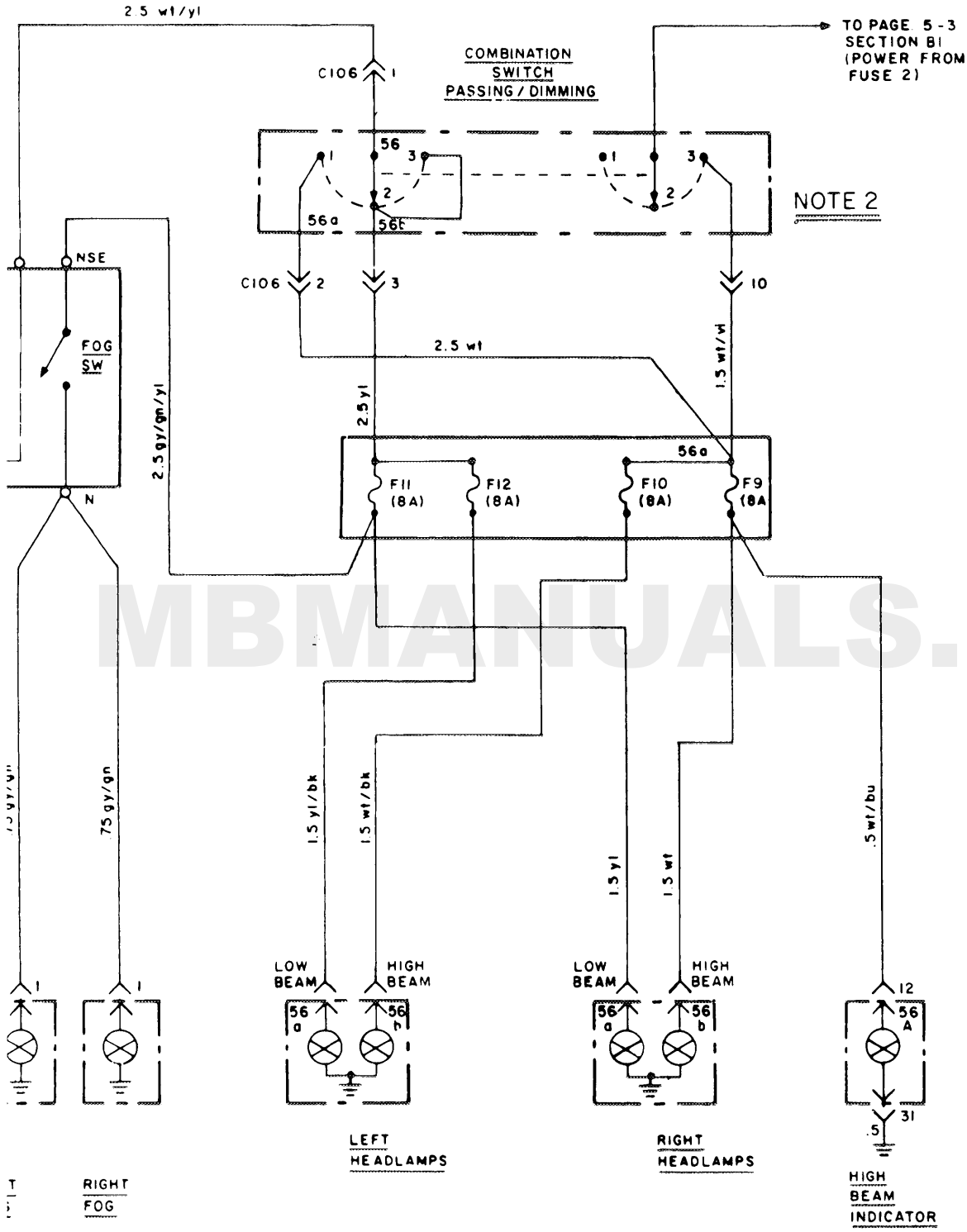

TURN SIGNAL AND FLASHER
30 (FUSE BOX)
15/54 (FUSE BOX)
F1 (8A)
F4 (8A)
58
FLASHER SWITCH LIGHT
31
.75
k/rd/gn
15
1 rd/wt
30
15/30
49a
L
R
FLASHER SWITCH
SHOW IN OFF POSITION
1 bk/yl
3
49
A
1
1 bk/wt/gn
1 bk/wt/gn
C106
7
49a
1
2
L
R
C106
6
8
1 bk/wt
1 bk/gn
.75 bk/wt
C104
5
.75 bk/wt
1 bk/wt
.5 bk/wt
.5 bk/gn
6
3
11
13
31
10
FRONT LEFT TURN
REAR LEFT TURN
LEFT TURN PANEL
RIGHT TURN PANEL
A
B
C
D
E
F
G
H
1
2
3
4
5
6

AC/INST. CLUSTER/ASH TRAY LIGHTS

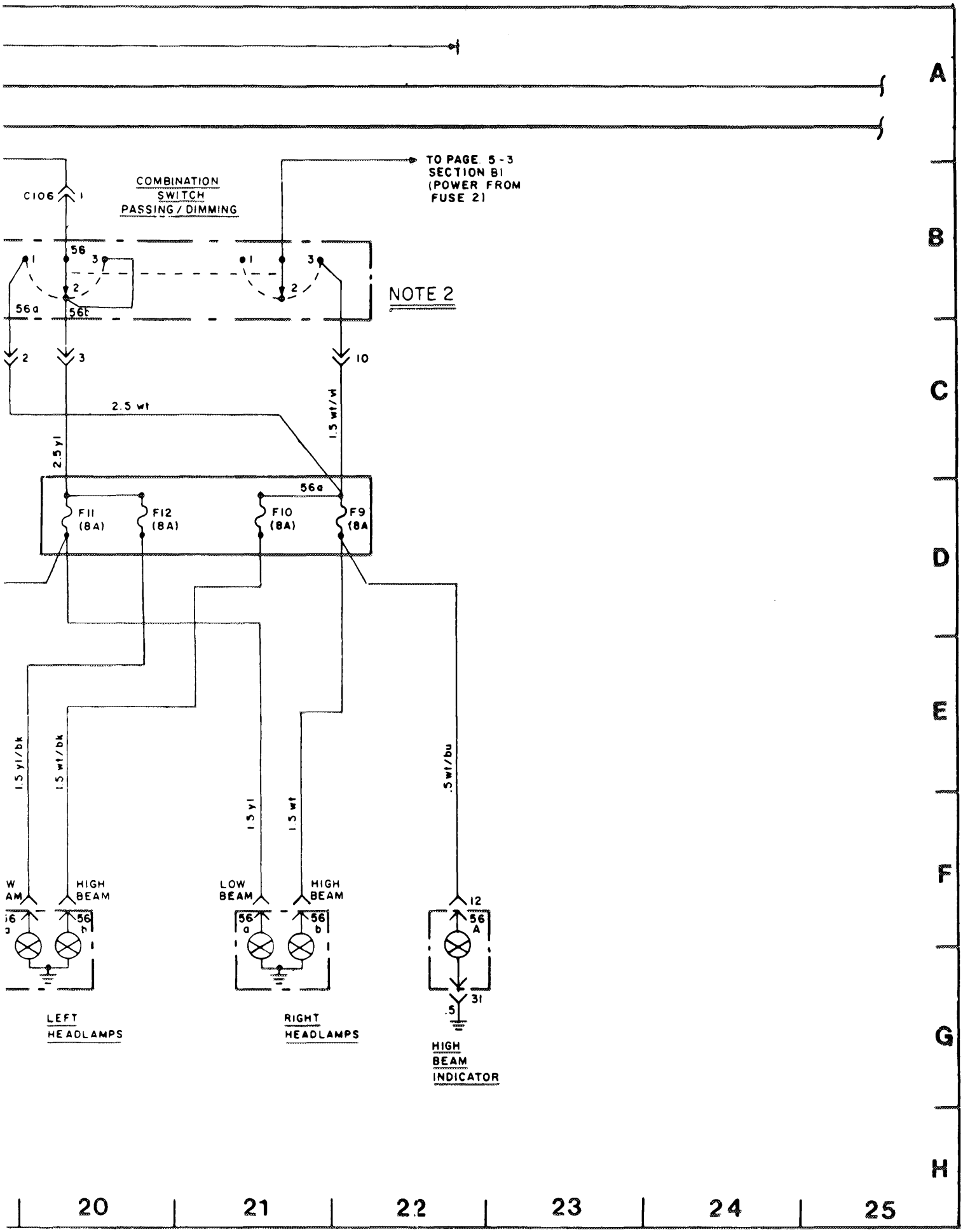


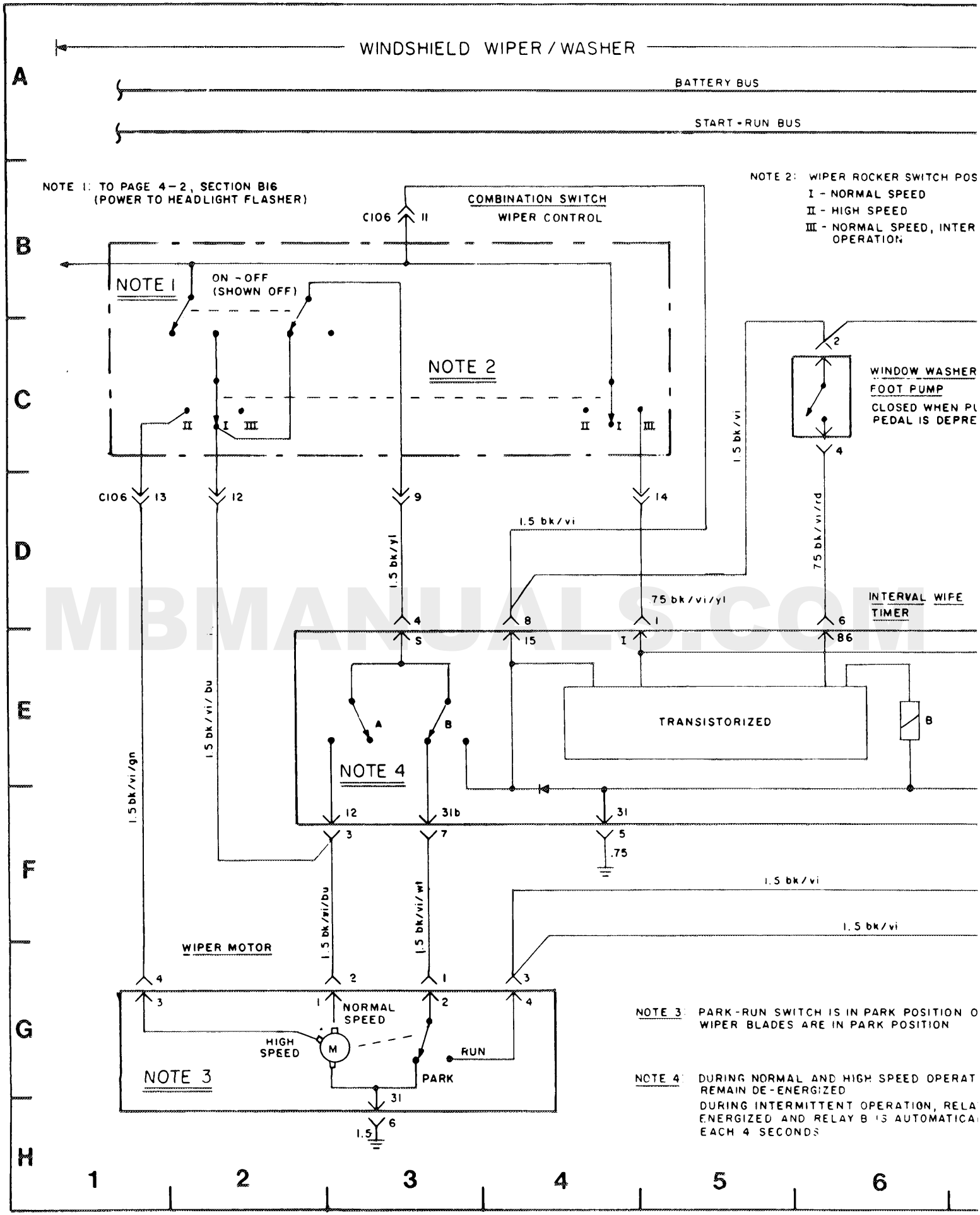
NOTE 1: THERE ARE 5 INSTRUMENT CLUSTER BULBS IN PARALLEL

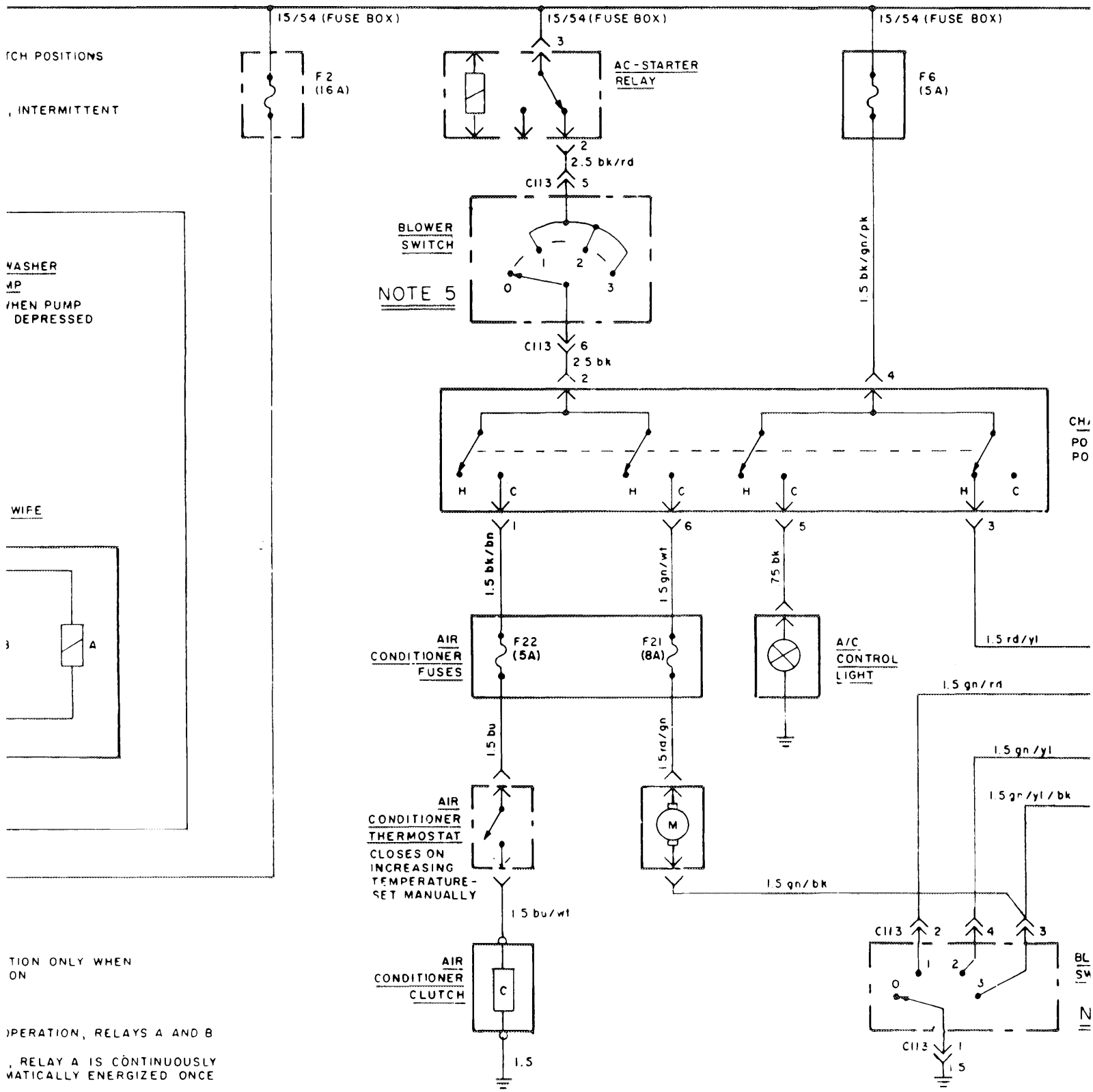

LIGHT SWITCH
BATTERY BUS
30 (FUSE BOX)
30 (FUSE BOX)
START—RUN BUS
.75 rd/gn
5 rd/gn
TO PAGE 5-4, SECTION B1. (DOOR SWITCH)
P30
F1 (8a)
STEERING LOCK SWITCH
S
0
2
1
P
1 gn/wt
1 gn/wt
TO PAGE 5-1, SECTION B2, (INTERLOCK CKT)
4 rd
LIGHT SWITCH
57
P30
30
56
NSE
K
FOG SW
K30
58R
58L
N
.75 gy/vi
.75 gy/rd
1.5 gy
2.5 gy/wt
58
F7 (8A)
58L
F8 (8A)
.75 gy/rd
.75 gy/bk
.75 wt/gn
.75 wt/gn
C104
9
.75 gy/vi
C104
12
.5 gy/rd
C104
10
.5 gy/bk
.75 gy/gn
.75 gy/gn
.75 wt/gn
.75 wt/gn
1
2
6
4
6
4
1
LICENSE PLATE HOLDER
LEFT REAR LIGHT UNIT
RIGHT REAR MARKER
RIGHT FRONT MARKER
RIGHT TAIL
RIGHT FRONT STANDING/ PARKING
LEFT TAIL
LEFT FRONT STANDING/ PARKING
LEFT FOG
RIGHT FOG
NOTE 2: POSITION 1 - HI
POSITION 2 - L
POSITION 3 - H
13
14
15
16
17
18



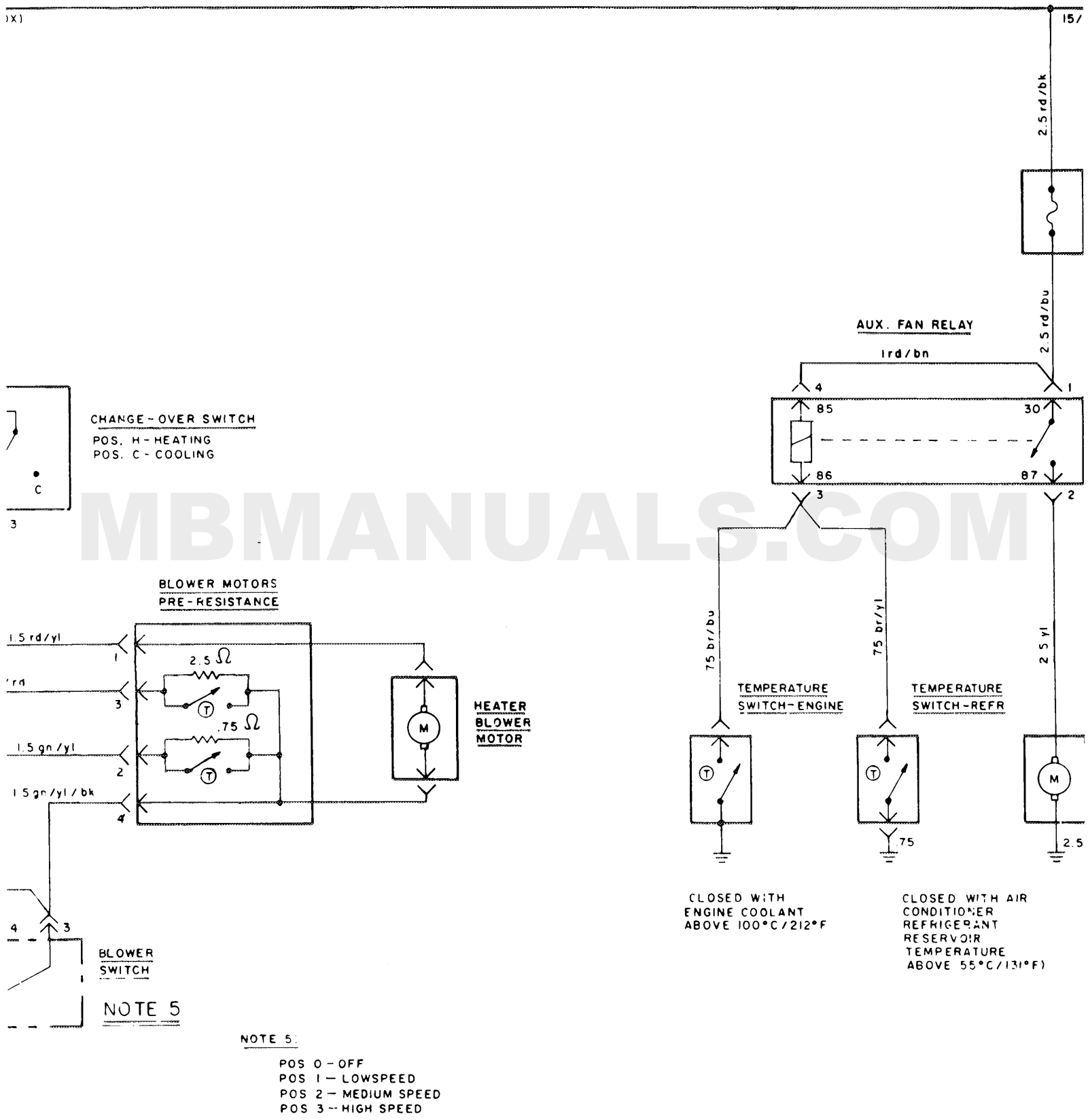
POSITION 1 - HIGH BEAM
POSITION 2 - LOW BEAM
POSITION 3 - HIGH BEAM FLASH


TO PAGE 5-3
SECTION B1
(POWER FROM
FUSE 21)
C106
COMBINATION
SWITCH
PASSING / DIMMING
56
56a
56b
NOTE 2
2
3
10
2.5 wt
2.5 yl
1.5 wt/wt
56a
F11
(8A)
F12
(8A)
F10
(8A)
F9
(8A
1.5 yl/bk
1.5 wt/bk
1.5 yl
1.5 wt
.5 wt/bu
HIGH
BEAM
LOW
BEAM
HIGH
BEAM
12
56
A
31
.5
LEFT
HEADLAMPS
RIGHT
HEADLAMPS
HIGH
BEAM
INDICATOR
A
B
C
D
E
F
G
H
20
21
22
23
24
25



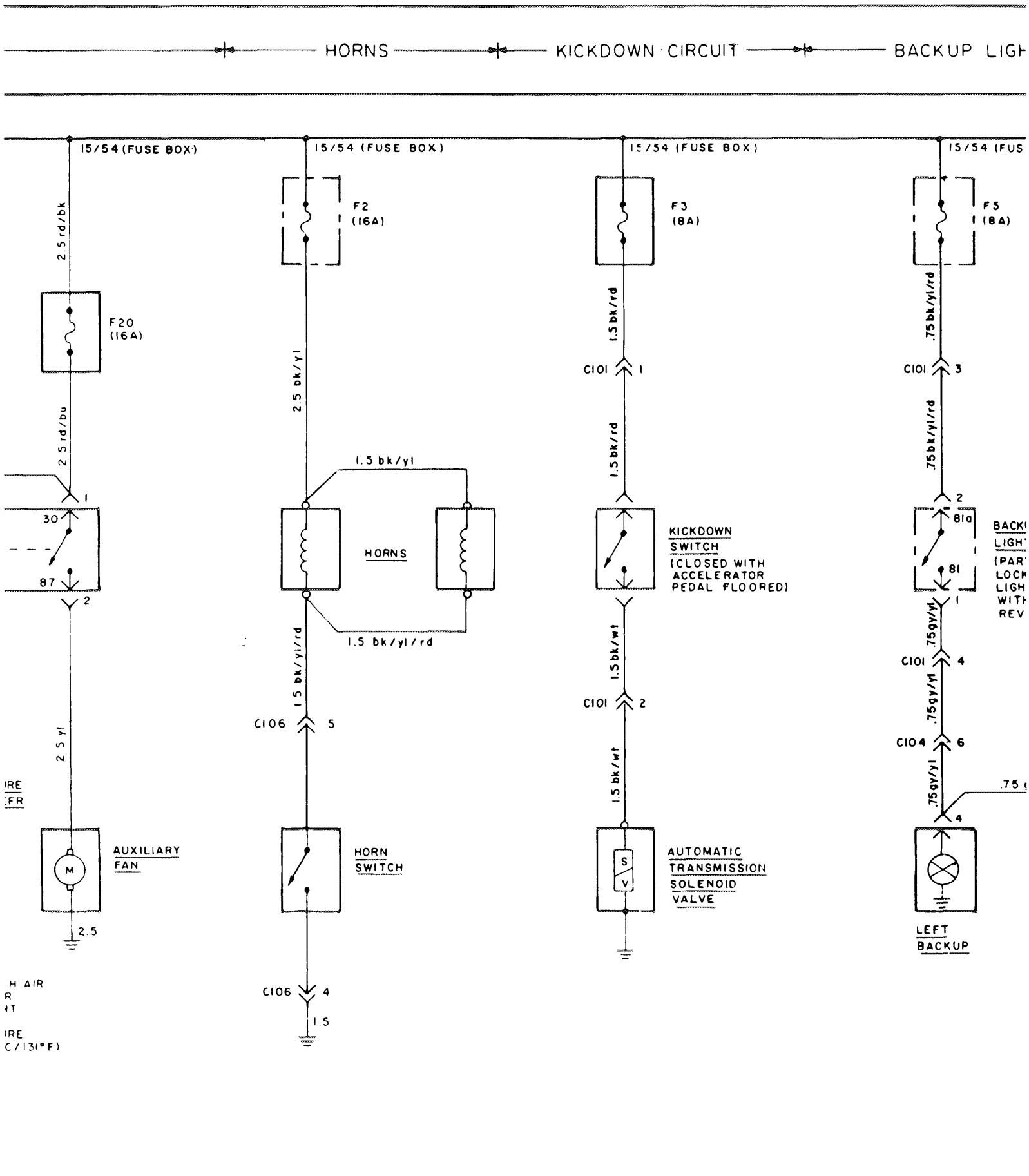

15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
F2 (16A)
AC-STARTER RELAY
F6 (5A)
2.5 bk/rd
C113
BLOWER SWITCH
NOTE 5
1.5 bk/gn/pk
2.5 bk
H
C
1.5 bk/bn
1.5 gn/wt
7.5 bk
1.5 rd/yl
AIR CONDITIONER FUSES
F22 (5A)
F21 (8A)
A/C CONTROL LIGHT
1.5 gn/rd
1.5 bu
1.5 rd/gn
1.5 gn/yl
1.5 gn/yl/bk
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE-SET MANUALLY
1.5 gn/bk
1.5 bu/wt
AIR CONDITIONER CLUTCH
1.5
WASHER
MP
WHEN PUMP DEPRESSED
WIPE
TION ONLY WHEN ON
OPERATION, RELAYS A AND B
, RELAY A IS CONTINUOUSLY MATICALLY ENERGIZED ONCE

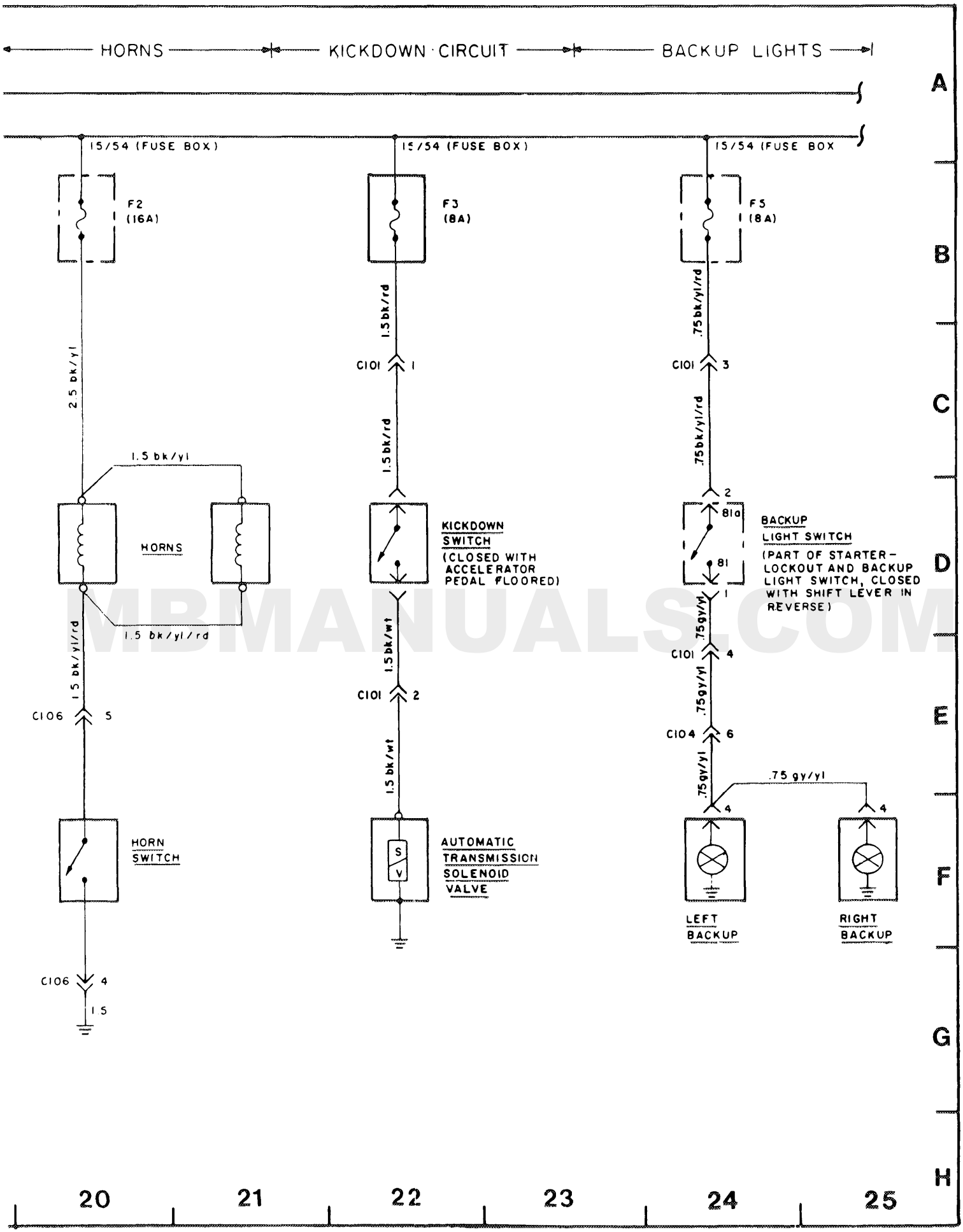
7 8 9 10 11 12

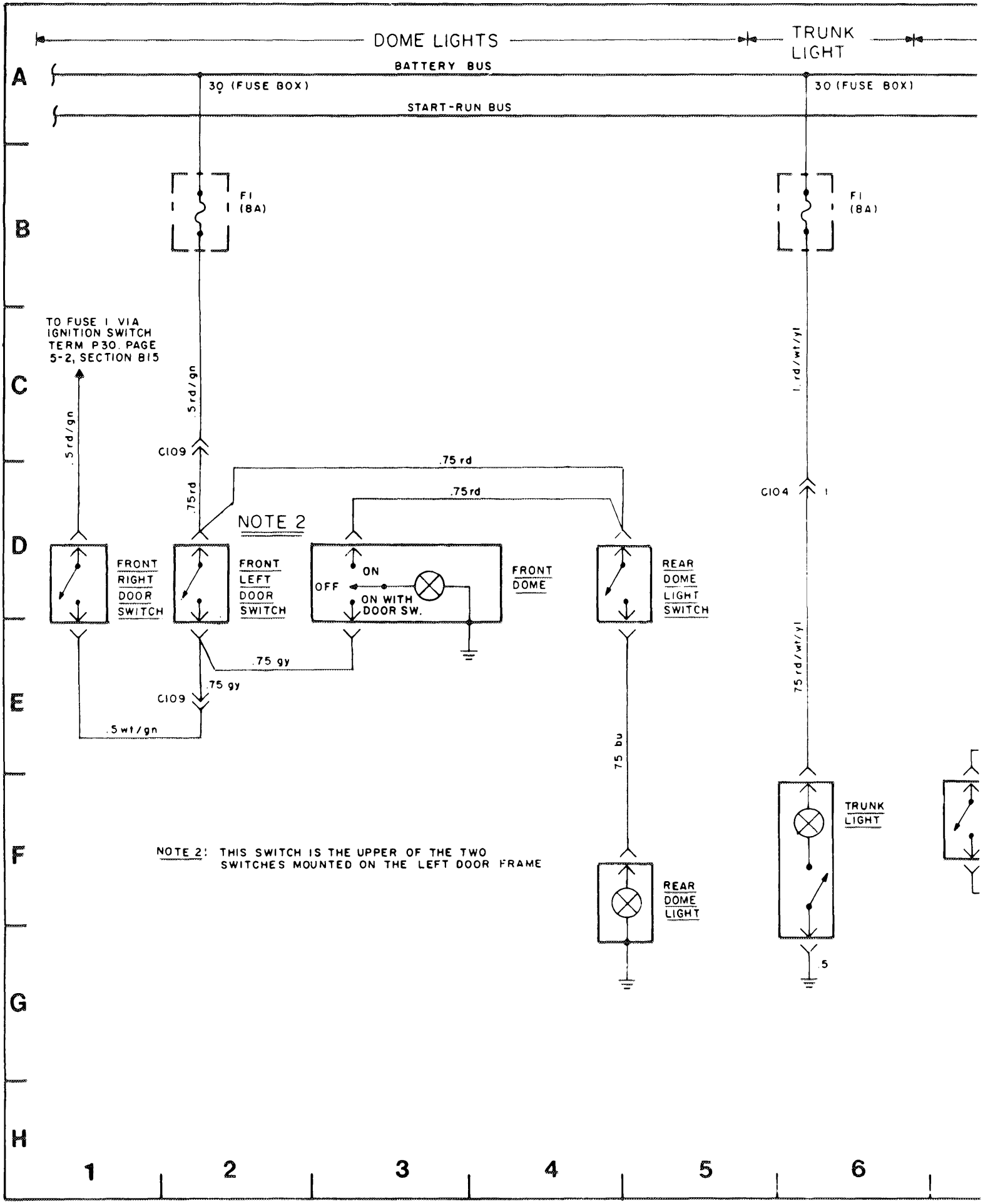


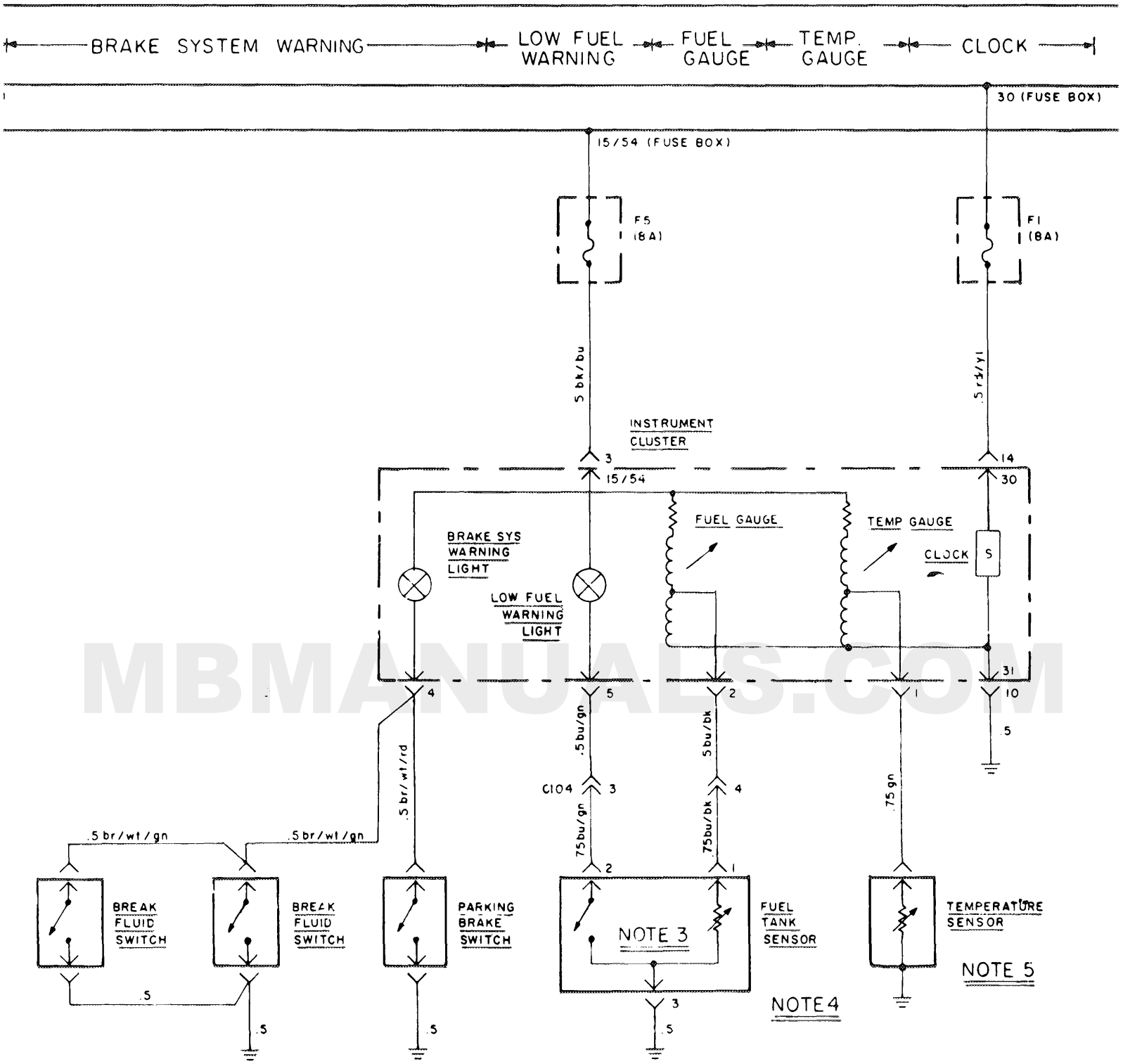
NOTE 5:

POS 0 – OFF
POS 1 – LOWSPEED
POS 2 – MEDIUM SPEED
POS 3 – HIGH SPEED


HORNS
KICKDOWN CIRCUIT
BACKUP LIGH
15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUS
2.5 rd/bk
F20 (16A)
2.5 rd/bu
30
87
2.5 yl
AUXILIARY FAN
M
2.5
F2 (16A)
2.5 bk/yl
1.5 bk/yl
HORNS
1.5 bk/yl/rd
1.5 bk/yl/rd
C106
5
HORN SWITCH
C106
4
1.5
F3 (8A)
1.5 bk/rd
C101
1
1.5 bk/rd
KICKDOWN SWITCH
(CLOSED WITH ACCELERATOR PEDAL FLOORED)
1.5 bk/wt
C101
2
1.5 bk/wt
S
V
AUTOMATIC TRANSMISSION SOLENOID VALVE
F5 (8A)
.75 bk/yl/rd
C101
3
.75 bk/yl/rd
2
81a
81
1
.75 gy/yl
C101
4
.75 gy/yl
C104
6
.75 gy/yl
4
LEFT BACKUP
19
20
21
22
23
24



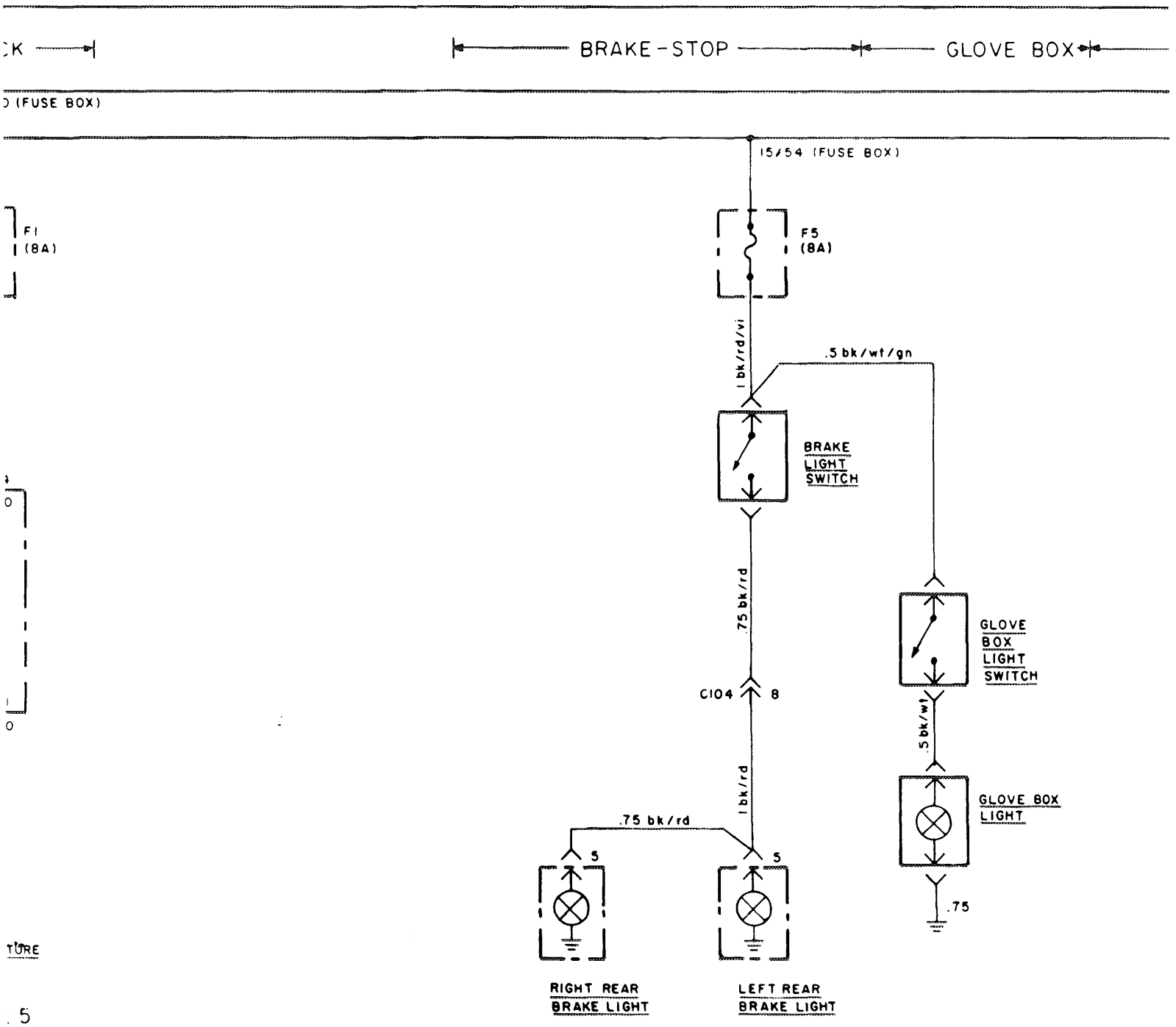

DOME LIGHTS
TRUNK LIGHT
BATTERY BUS
30 (FUSE BOX)
30 (FUSE BOX)
START-RUN BUS
F1 (8A)
F1 (8A)
TO FUSE 1 VIA IGNITION SWITCH TERM P30. PAGE 5-2, SECTION B15
.5 rd/gn
.5 rd/gn
C109
.75 rd
.75 rd
.75 rd
NOTE 2
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
ON
OFF
ON WITH DOOR SW.
FRONT DOME
REAR DOME LIGHT SWITCH
.75 gy
.75 gy
C109
.5 wt/gn
75 bu
REAR DOME LIGHT
1 rd/wt/yl
C104
1
75 rd/wt/yl
TRUNK LIGHT
5
NOTE 2: THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME
A
B
C
D
E
F
G
H
1
2
3
4
5
6



NOTE 3 SWITCH CLOSED WITH APPROX. 5 GALLONS OR LESS FUEL IN TANK

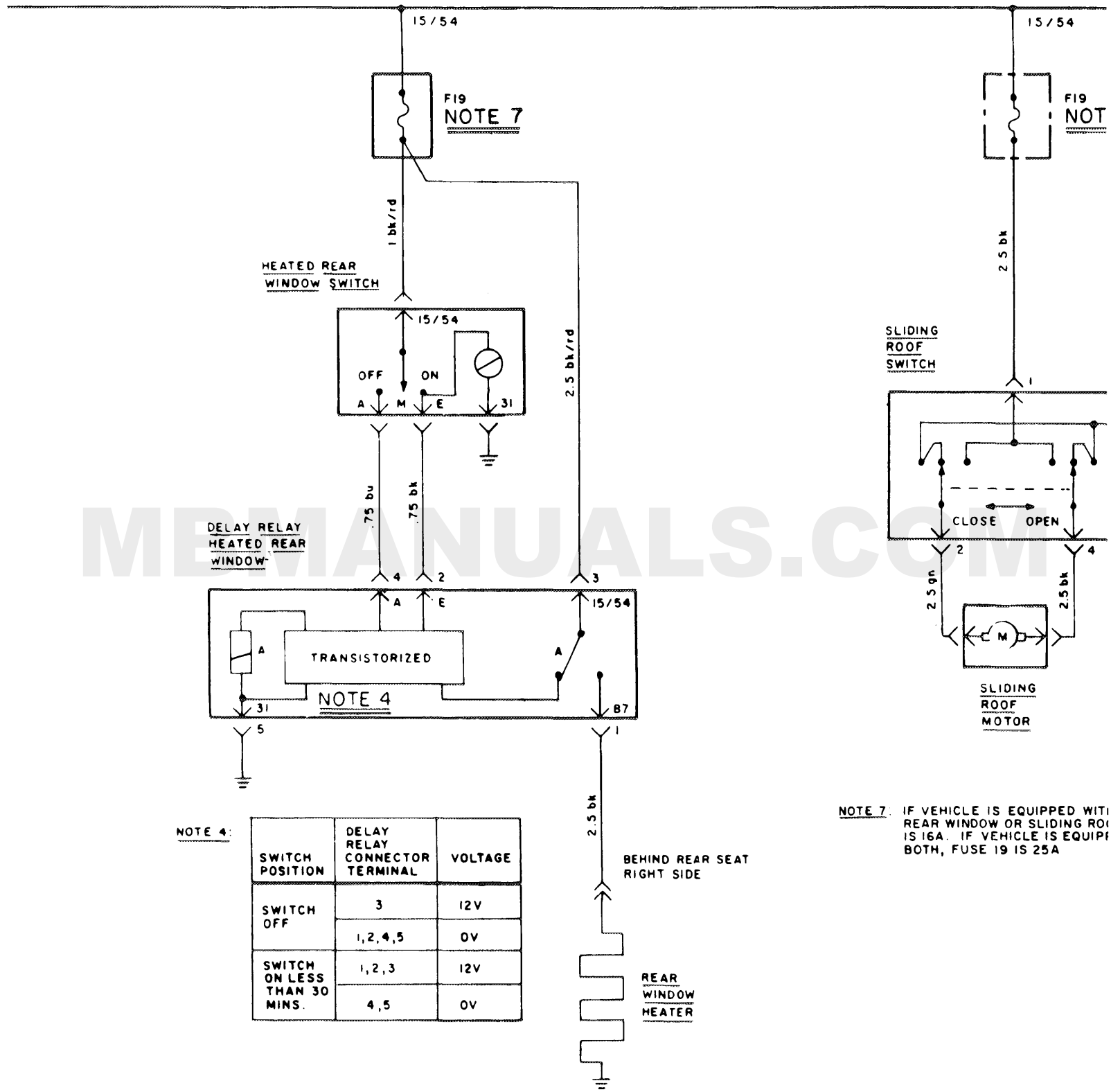
NOTE 4 RESISTANCE OF SENSOR
FULL TANK – 6 Ω
3/4 TANK – 10 Ω
1/2 TANK – 28 Ω
1/4 TANK – 54 Ω
R TANK — 62 Ω

NOTE 5 RESISTANCE A



RESISTANCE AT 65° F – 460 Ω

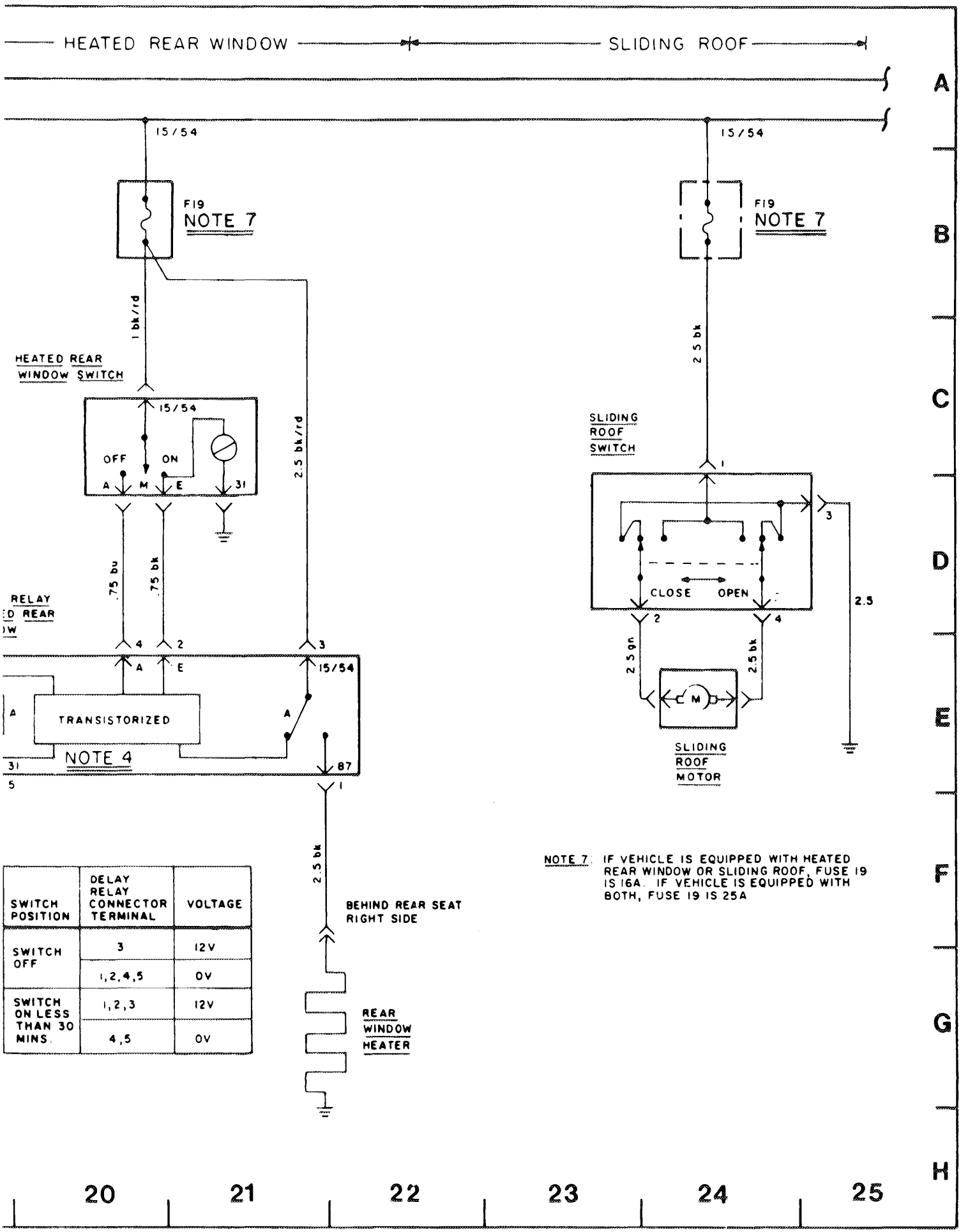
13 14 15 16 17 18



NOTE 4:

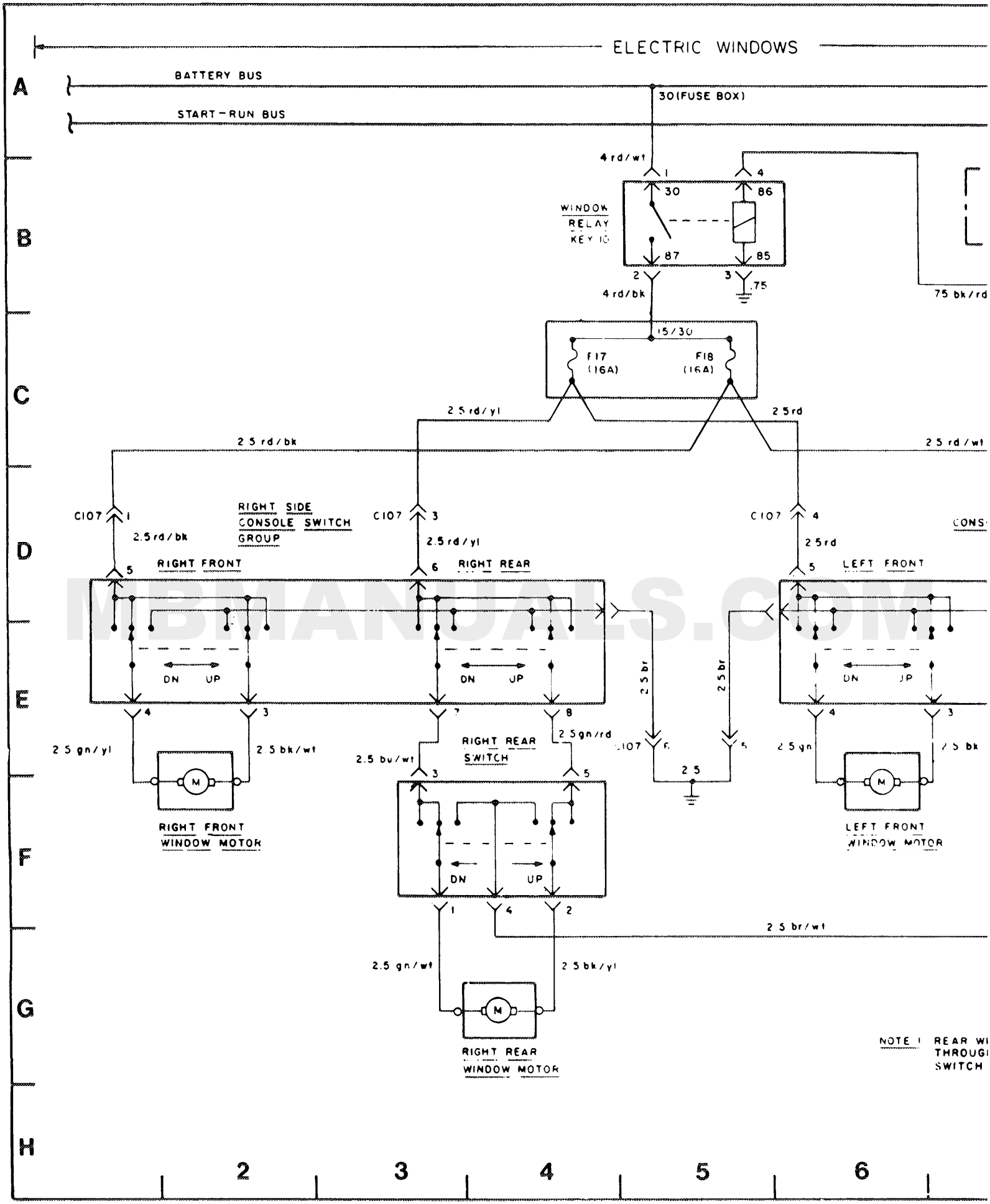
SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS.	1,2,3	12V
	4,5	0V

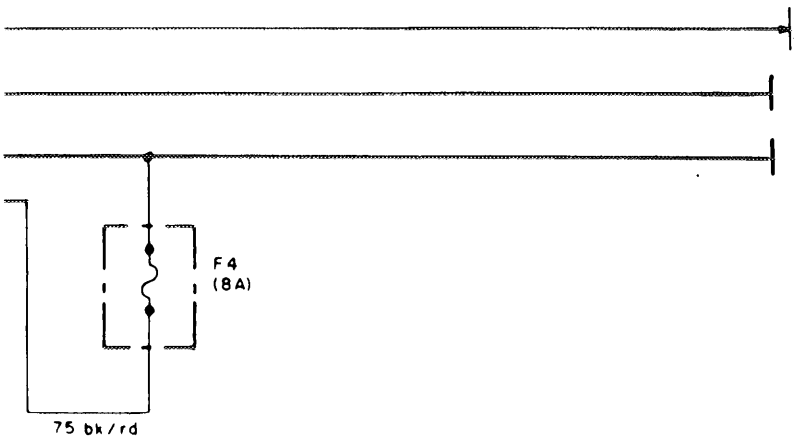
NOTE 7: IF VEHICLE IS EQUIPPED WITI REAR WINDOW OR SLIDING ROI IS 16A. IF VEHICLE IS EQUIPP BOTH, FUSE 19 IS 25A

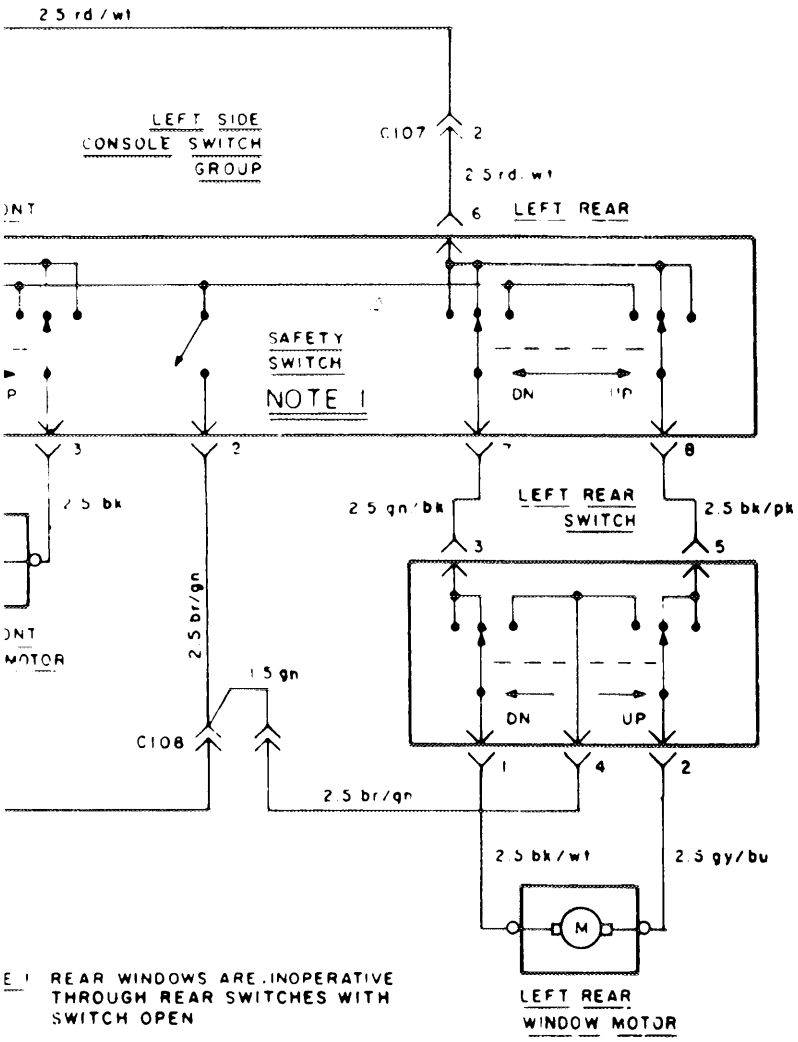


SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS.	1,2,3	12V
	4,5	0V

NOTE 7: IF VEHICLE IS EQUIPPED WITH HEATED REAR WINDOW OR SLIDING ROOF, FUSE 19 IS 16A. IF VEHICLE IS EQUIPPED WITH BOTH, FUSE 19 IS 25A

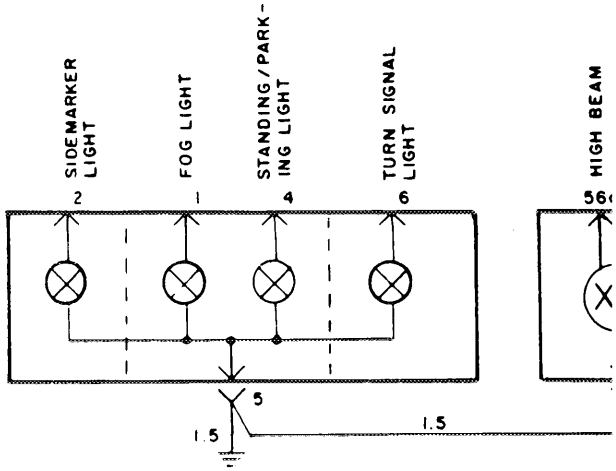




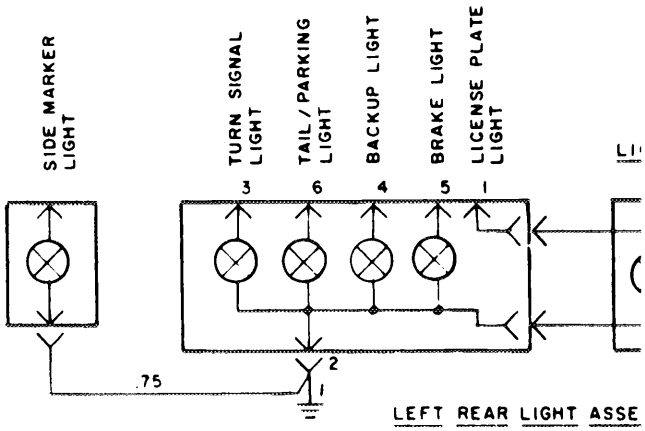


E 1 REAR WINDOWS ARE INOPERATIVE THROUGH REAR SWITCHES WITH SWITCH OPEN

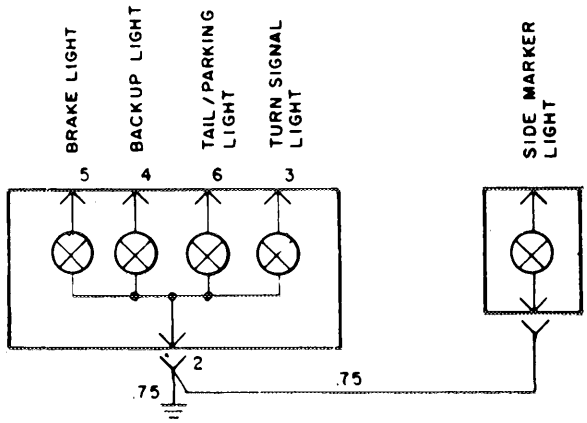
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES - RIGHT & LEFT

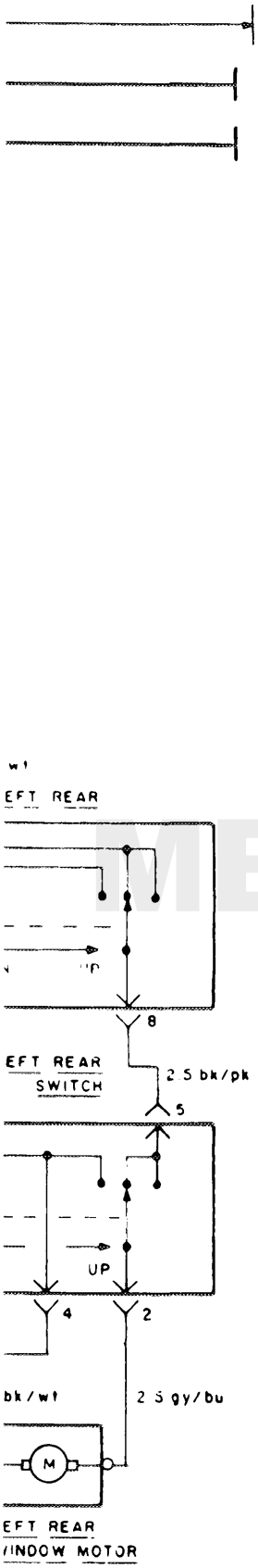


LEFT REAR LIGHT ASSE

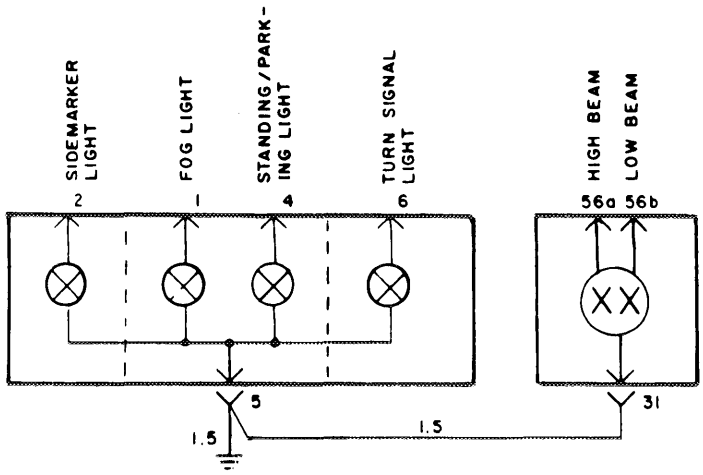


RIGHT REAR LIGHT ASSEMBLY

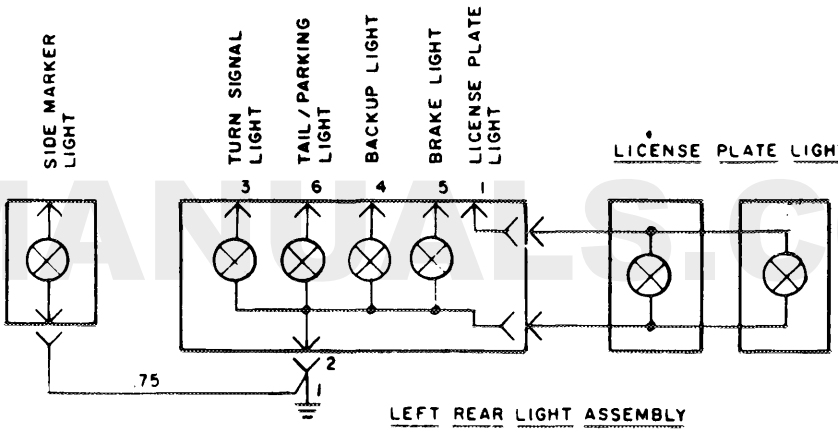
7 8 9 10 11 12



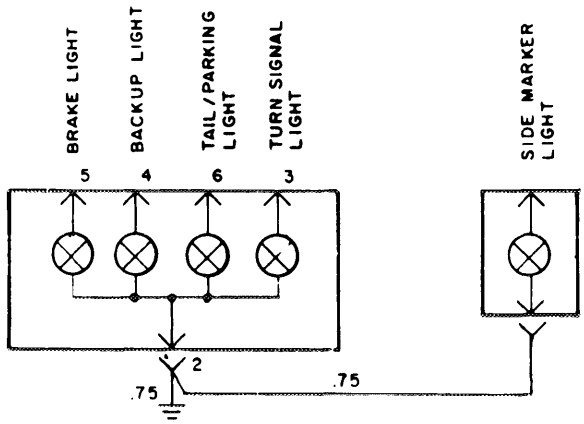
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES — RIGHT & LEFT



LEFT REAR LIGHT ASSEMBLY



RIGHT REAR LIGHT ASSEMBLY

240D

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
AIR CONDITIONING/HEATING			
A/C blower motor	center of console	3-1	
A/C clutch	front of compressor		
A/C control light	console	3-2	
A/C starter relay key 4	right firewall—under fuse bracket		3-37
A/C thermostat	console	3-2	
Blower switch	console	3-2	
Change-over switch	console, left side	3-27	
Fuse 6	fuse box	3-4	3-48
Fuse 21 (A/C blower)	firewall—right side	3-4	
Fuse 22 (A/C clutch)	firewall—right side		
Heater blower motor	behind A/C blower		
Heater blower motor pre-resistor	left firewall	3-4	
C 113	mounted to heater control lever plate	3-6	3-32
AUXILIARY FAN			
Auxiliary fan	front of radiator	3-7	
Aux. fan relay key 6	below radio fuse box	3-23	3-37
Fuse 20 (Aux. fan)	left fender		
Temp. sw. (100°c/212°F) engine	thermostat housing		
Temp sw.(65°c/149°F)refrigerant	right firewall	3-9	
CHARGE			
Alternator	below A/C compressor		
Charge indicator light	inst. cluster	3-10	
Regulator	right front fender		
CIGAR LIGHTER			
Cigar lighter	console	3-2	
Fuse 2	fuse box	3-4	3-48
CLOCK			
Clock	inst. cluster	3-10	
Fuse 1	fuse box	3-4	3-48
FUEL GAUGE			
Fuel gauge	inst. cluster	3-10	
Fuel tank sensor	below trunk floor	3-14	
Fuse 5	fuse box	3-4	3-48
C 104	under dash—drivers side	3-15	

240D

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
GLOW PLUGS			
A/C starter relay, key 4	rt. firewall—under fuse bracket		3-37
Glow plug indicator	dash		
Glow plugs	engine		
Glow/starter switch	dash		
Seat belt-starter logic relay	under dash—drivers side	3-15	3-39
Starter lockout switch	L. side trans. (auto. trans.) top of trans. (stand. trans.)		
Steering lock switch (ignition switch)	dash		
C 101	lower center console		
HEATED REAR WINDOW			
Time delay relay	under dash—drivers side	3-15	3-44
Fuse 19 (window)	left fender		
Heater	rear window		
Switch	console	3-2	
C 112	behind rear seat—right side	3-16	
HORNS			
Horn switch			
Horns			
Fuse 2	fuse box	3-4	3-48
C 106	under dash—drivers side	3-15	3-35
KICKDOWN			
Fuse 3	fuse box	3-4	3-48
Solenoid	right side transmission		
Switch	below accelerator pedal		
C 101	lower console	3-19	
LIGHT CIRCUITS			
A/C CONTROL			
Change-over switch	console	3-27	
Fuse 6	fuse box	3-4	3-48
Light	console	3-2	
ASH TRAY			
Fuse 7	fuse box	3-4	3-48
Light switch	dash		

240D

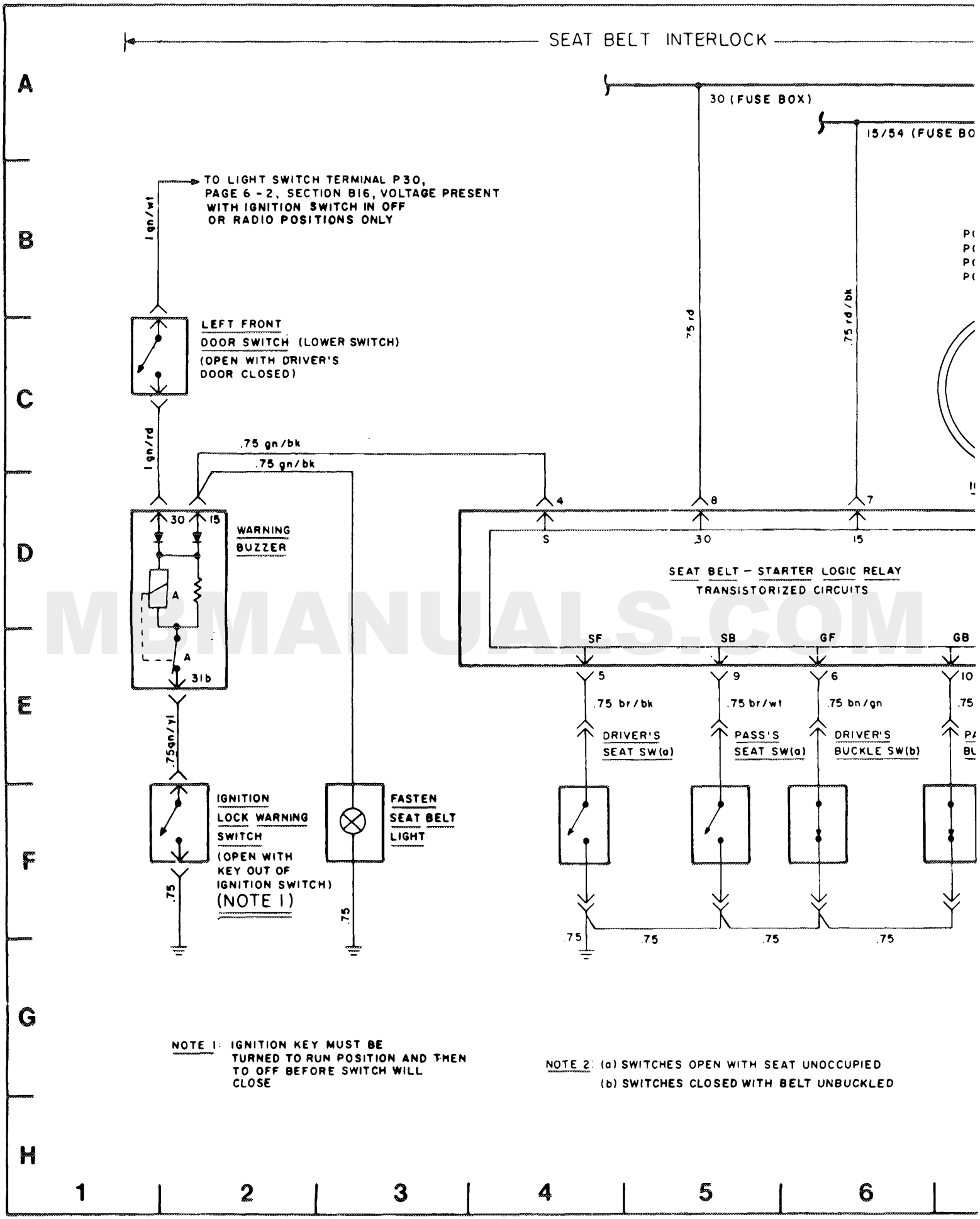
COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
BACKUP			
Fuse 5	fuse box	3-4	3-48
Lights	rear light assemblies		
Switch	left side transmission		
C 101	lower center console		
C 104	under dash—drivers side	3-15	
BRAKE SYSTEM WARNING			
Fluid switches	fluid reservoir	3-4	
Fuse 5	fuse box	3-4	3-48
Parking switch	top, parking brake		
Reservoir & parking brake light	inst. cluster	3-10	
DOME (FRONT)			
Front left door switch	door post		
Front right door switch	door post		
Fuse 1	fuse box	3-4	3-48
C 109	console		
DOME (REAR)			
Fuse 1	fuse box	3-4	3-48
Switch	dash	3-20	
FOG (PERIMETER)			
Fuse 11	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
Pass/dim switch	steering column	3-20	
C 106	under dash—drivers side	3-15	3-35
GLOVE BOX			
Fuse 5	fuse box	3-4	3-48
Switch	glove box		
HEAD			
Fuse 9	fuse box	3-4	3-48
Fuse 10	fuse box	3-4	3-48
Fuse 11	fuse box	3-4	3-48
Fuse 12	fuse box	3-4	3-48

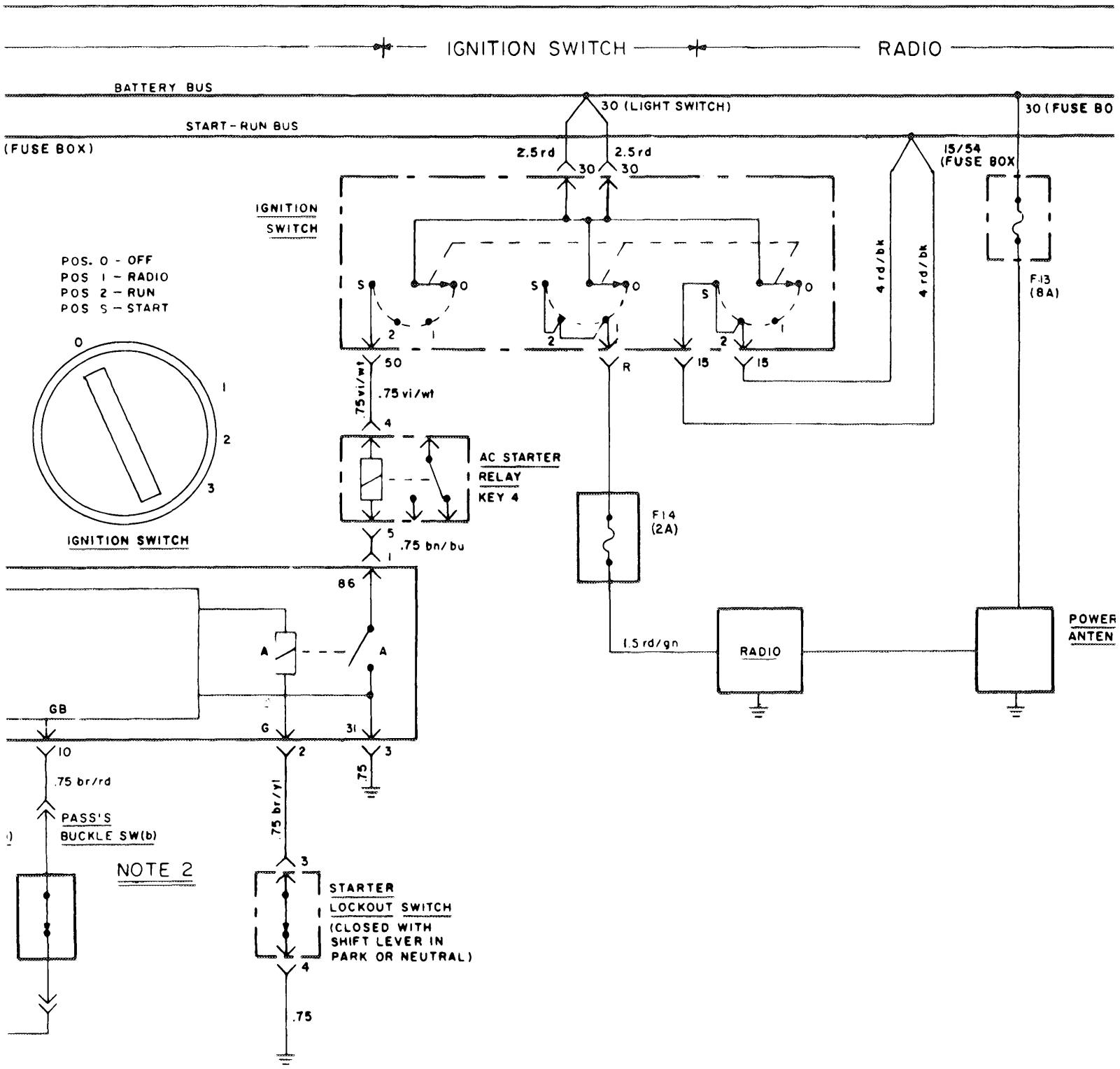
COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
High beam indicator	inst. cluster	3-10	
Light switch	dash	3-20	3-43
Pass/dim switch	steering column	3-20	
C 106	under dash—drivers side	3-16	3-35
INSTRUMENT CLUSTER			
Fuse 7	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
Rheostat	inst. cluster	3-10	
LOW FUEL WARNING			
Fuse 5	fuse box	3-4	3-48
Sender unit	below trunk floor	3-14	
C 104	under dash—drivers side	3-15	
Light	inst. cluster	3-10	
MARKER			
Fuse 7	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
C 104	under dash—drivers side	3-15	
STANDING			
Fuse 1	fuse box	3-4	3-48
Fuse 7	fuse box	3-4	3-48
Fuse 8	fuse box	3-4	3-48
Ignition Switch	dash		
Light switch	dash	3-25	3-43
STOP			
Fuse 5	fuse box	3-4	3-48
Switch	above brake pedal		
C 104	under dash—drivers side	3-15	
TAIL			
Fuse 1	fuse box	3-4	3-48
Fuse 7	fuse box	3-4	3-48
fuse 8	fuse box	3-4	3-48
Ignition	dash		
Switch	dash	3-20	3-43
C 104	under dash—drivers side	3-15	

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
TRUNK			
Fuse 1	fuse box	3-4	3-48
C 104	under dash—drivers side	3-15	
RADIO			
Antenna			
Fuse 13 (power antenna)	left fender		
Ignition switch	dash		
Radio	console		
Fuse 14 (radio)	left fender		
SEAT BELT INTERLOCK			
A/C starter relay, key 4	rt. firewall—under fuse bracket		3-37
Door switch	left front door—lower		
Driver's buckle switch	buckle		
Driver's seat switch	seat		
Fasten seat belt light	dash	3-2	
Ignition switch	dash		
Ignition warning switch	ignition switch		3-42
Logic relay	under dash—drivers side	3-15	3-39
Passenger buckle switch	buckle		
Passenger seat switch	seat		
Starter lockout switch	left side transmission		
Warning buzzer	under dash—drivers side	3-15	3-45
C 101	lower center console		
SLIDING ROOF			
Fuse 19			
Motor	behind spare tire		
Switch	console	3-2	
START			
A/C starter relay, key 4	rt. firewall—under fuse bracket		3-37
Battery			
Motor			
TEMPERATURE GAUGE			
Fuse 5	fuse box	3-4	3-48
Sensor	engine—left side	3-22	

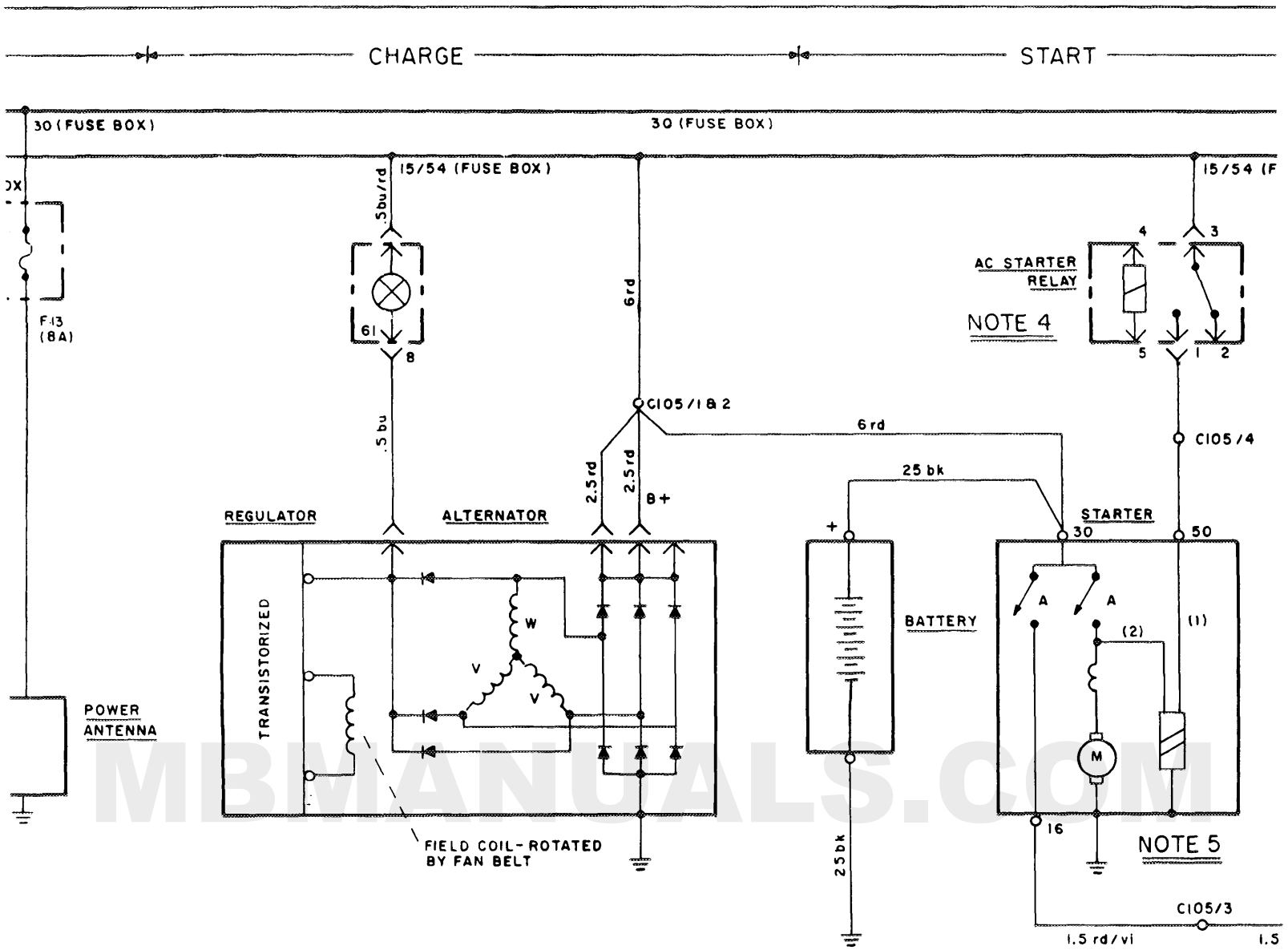
COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
TURN SIGNAL AND FLASHER			
Flasher relay	under dash—drivers side	3-15	
Flasher switch	console	3-2	3-46
Fuse 1	fuse box	3-4	3-48
Fuse 4	fuse box	3-4	3-48
Turn signal switch	steering column	3-20	
C 104	under dash—drivers side	3-15	
C 106	under dash—drivers side	3-15	
WINDOWS			
Fuse F4	fuse box	3-4	3-48
Fuse F17 (FL/RR)	firewall—right side		
Fuse F18 (FR/RL)	firewall—right side		
Left front motor	door		
Left rear motor	door		
Left rear switch	side panel		
Left side switch group	console		3-38
Relay key 10	rt. firewall—under fuseholder		3-47
Right front motor	door		
Right rear motor	door		
Right rear switch	side panel		
Right side switch group	console		3-38
C 107	console		
C 108	console		
WINDSHIELD WIPER/WASHER			
Combination switch	steering column	3-20	
Foot pump switch	left floor	3-5	
Fuse 2	fuse box	3-4	3-48
Interval wipe timer	under dash—drivers side	3-15	3-40
Motor	firewall—left side	3-4	
C 106	under dash—drivers side	3-15	3-35

MODEL 280/280C





GENERAL NOTE: SOLID BROWN WIRE INSULATION ALWAYS INDICATES GROUND. COMPONENT TERMINAL 31 IS ALWAYS GROUND



NOTE 3: FOR NORMAL OPERATION REGULATOR SHOULD BE SET TO PRODUCE BATTERY BUS VOLTAGE BETWEEN 13.9V AND 14.8V @ 2200 RPM

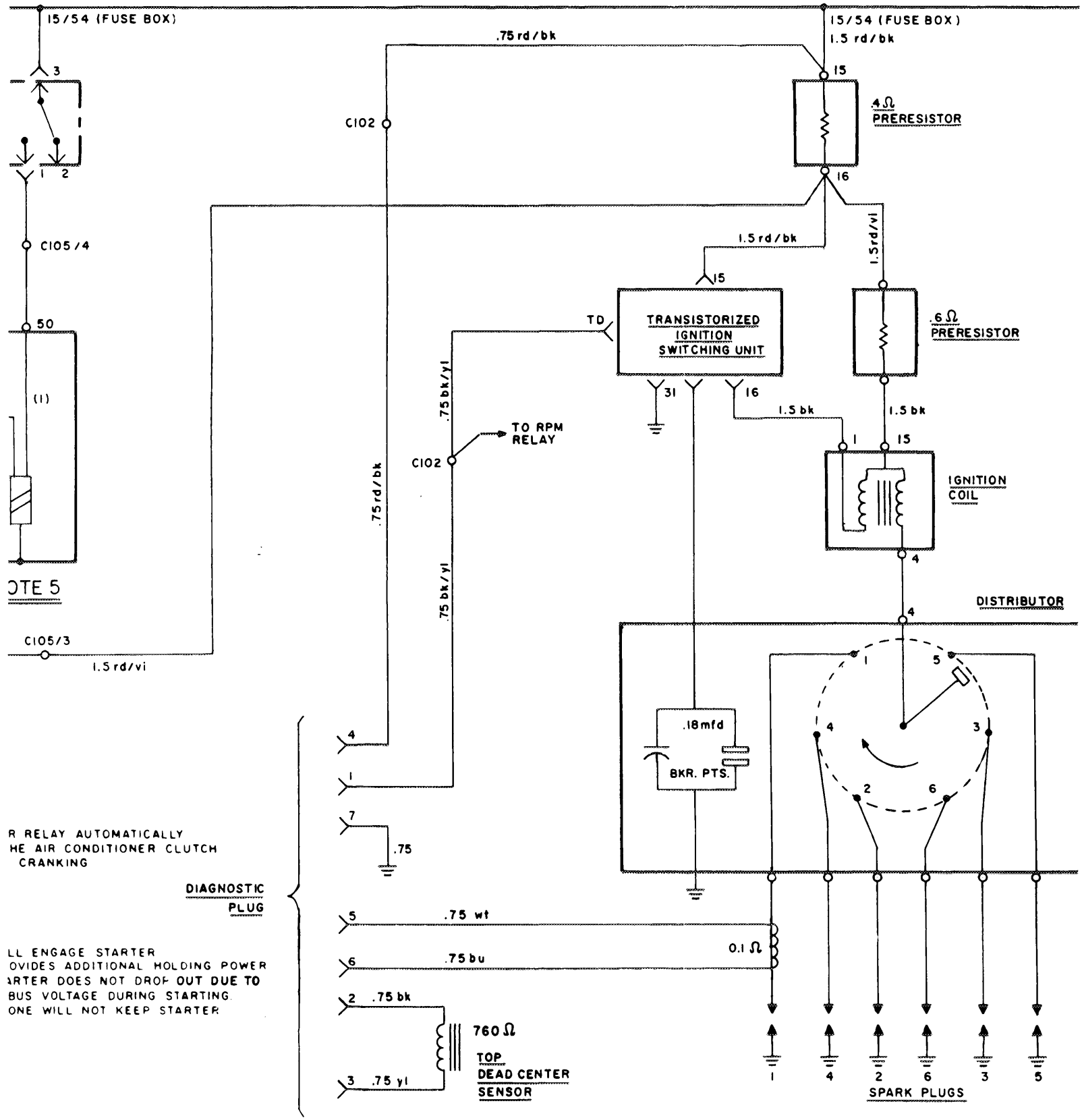
POS 1 — ENGINE OFF/BATTERY UNDERCHARGED
POS 2 — NORMAL OPERATION
POS 3 — BATTERY OVERCHARGED

NOTE 4: THE AC/STARTER RELAY AUTOI DISCONNECTS THE AIR CONDIT DURING ENGINE CRANKING

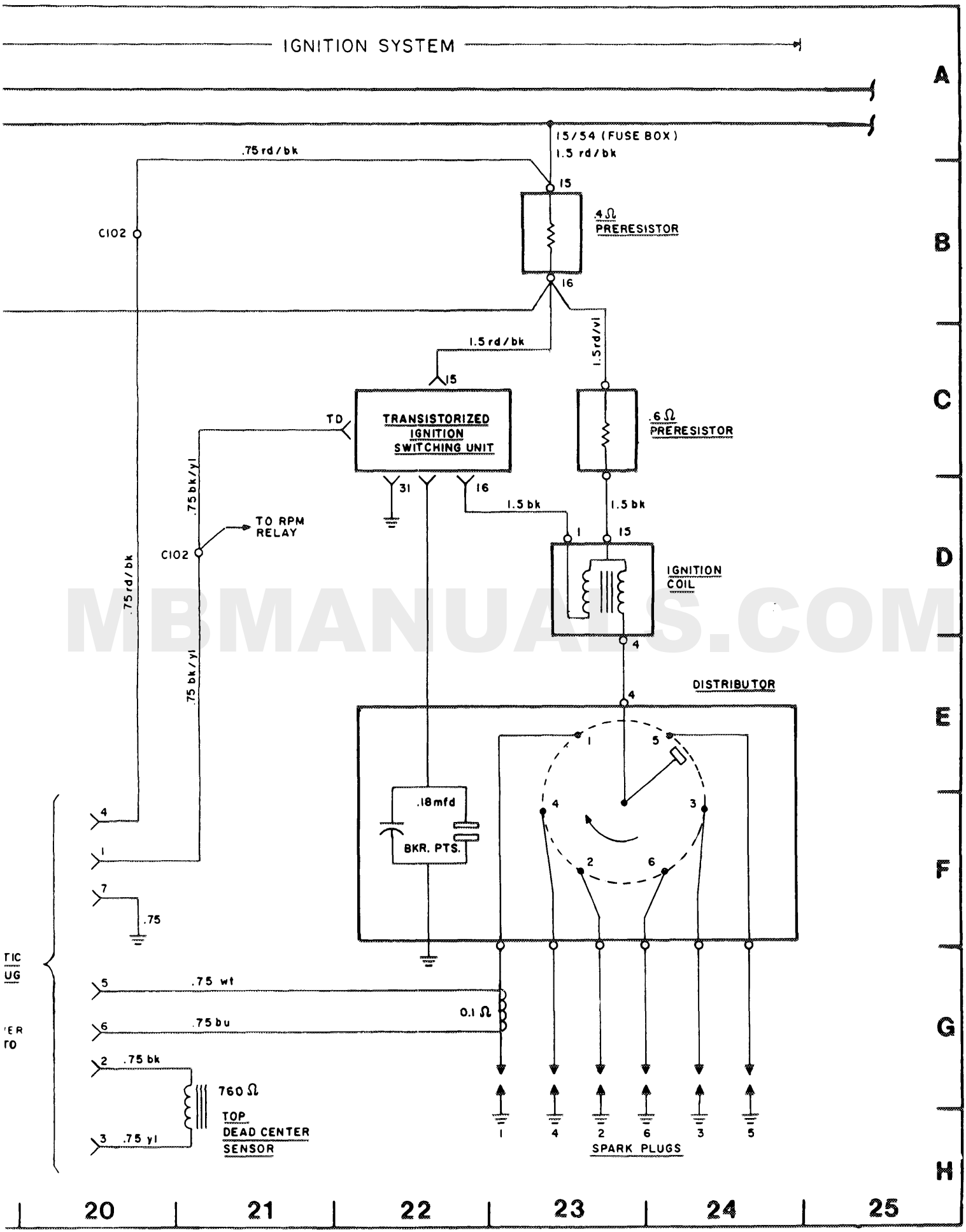
NOTE 5: WINDING (1) WILL ENGAGE STA WINDING (2) PROVIDES ADDITIC TO ASSURE STARTER DOES NO LOW BATTERY BUS VOLTAGE D WINDING (2) ALONE WILL NOT ENGAGED

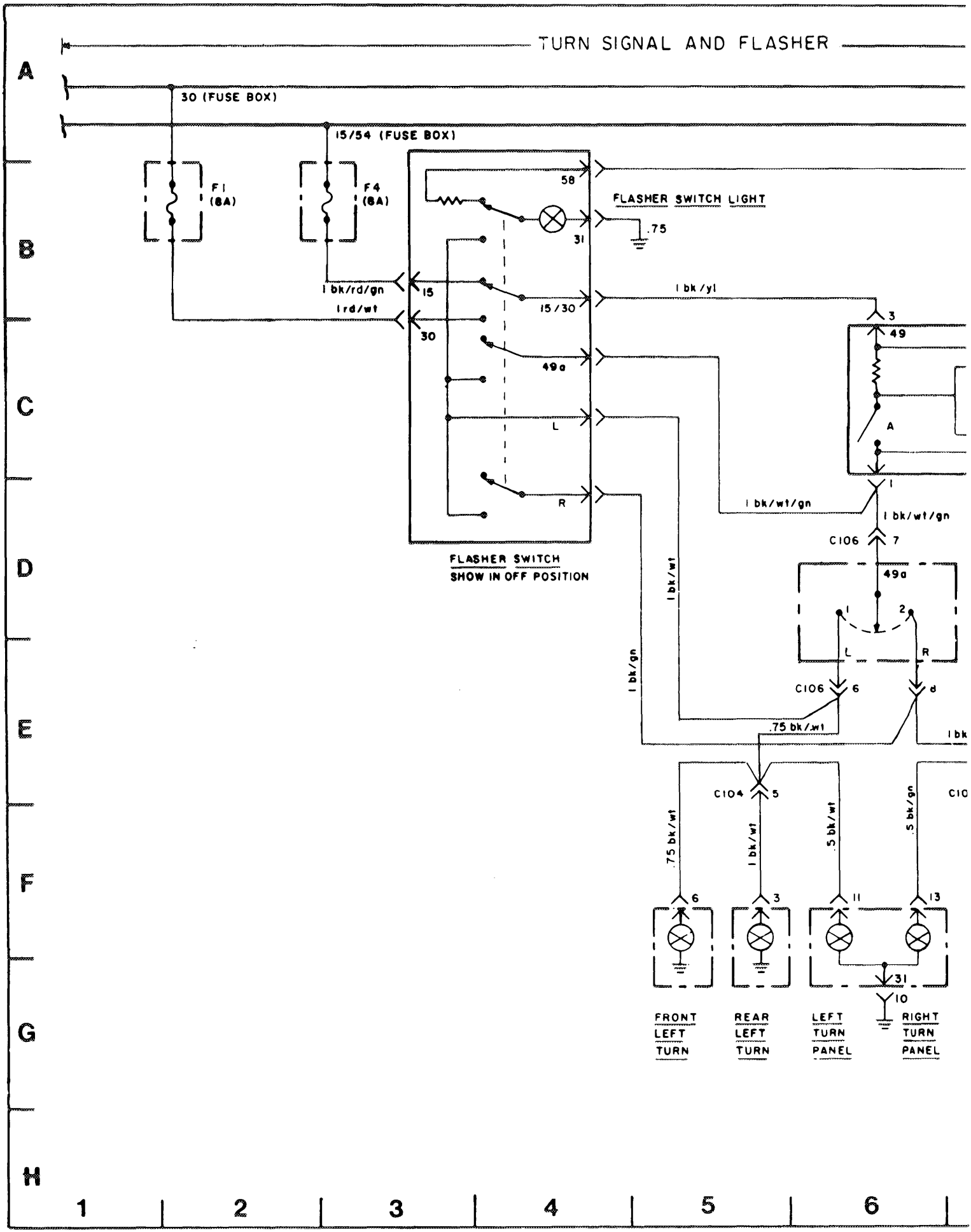
, INDICATES
ALWAYS GROUNDED

13 | 14 | 15 | 16 | 17 | 18

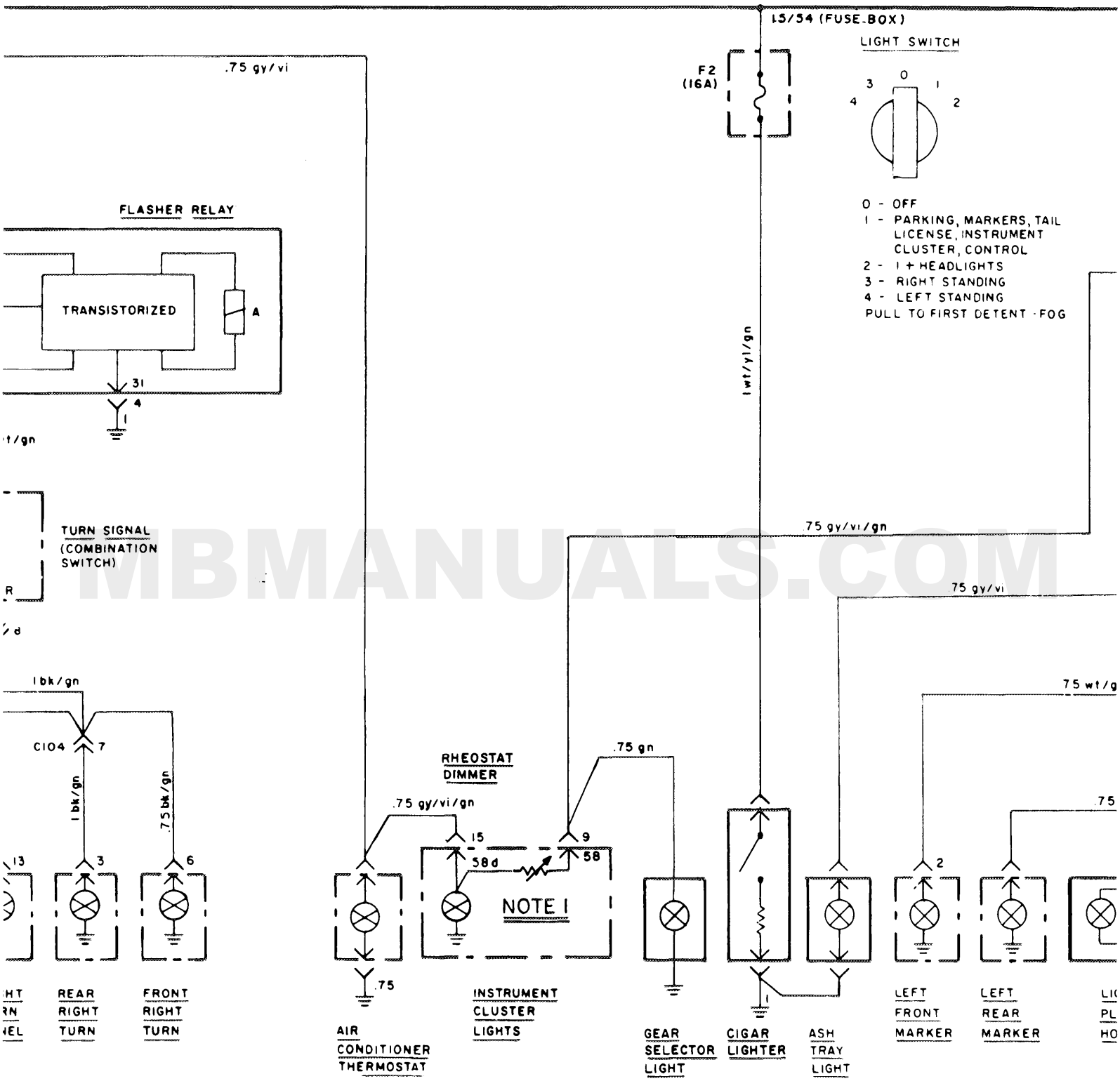


18 | 19 | 20 | 21 | 22 | 23 | 24

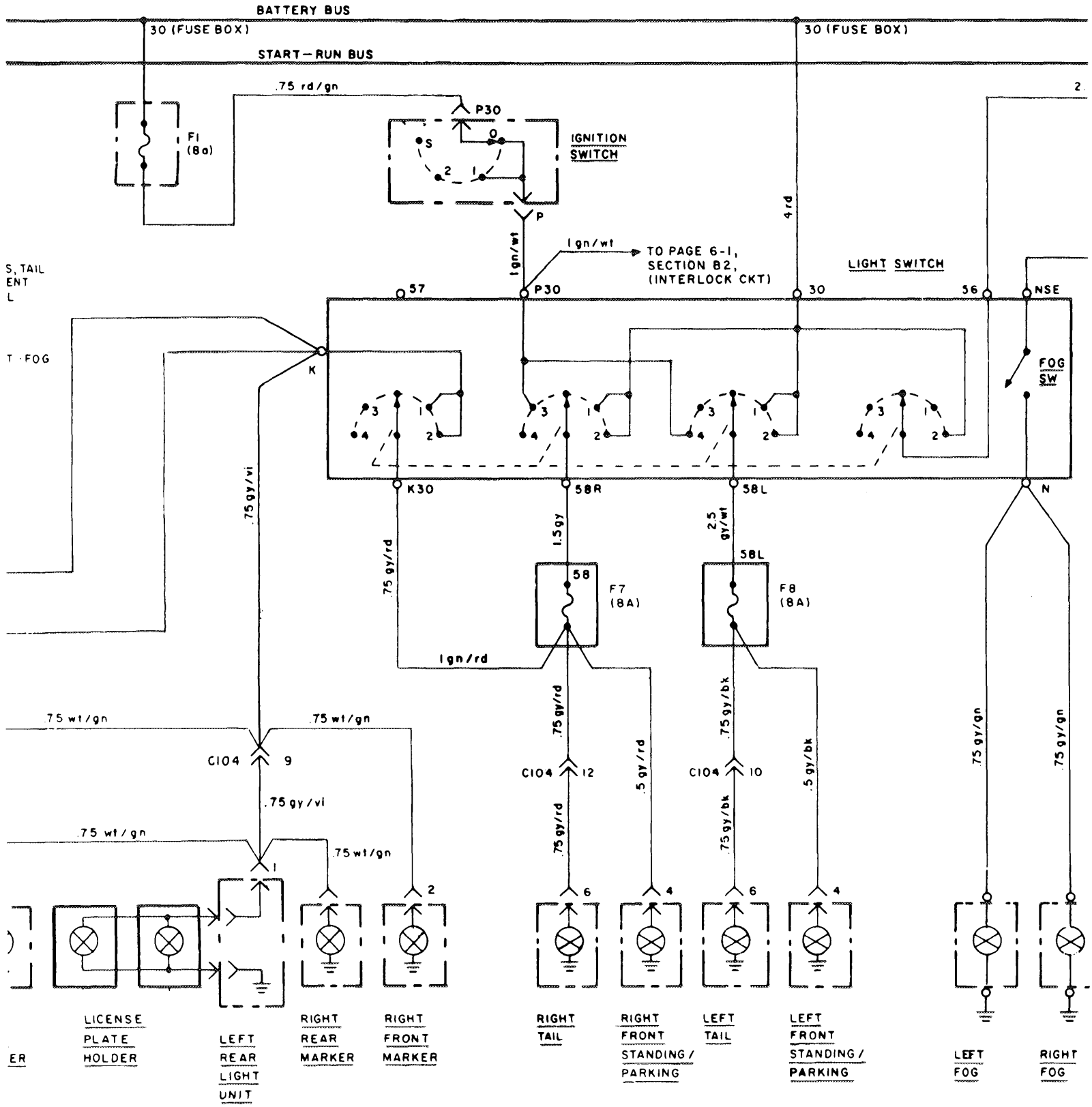



TURN SIGNAL AND FLASHER
30 (FUSE BOX)
15/54 (FUSE BOX)
F1 (8A)
F4 (8A)
58
FLASHER SWITCH LIGHT
.75
31
1 bk/rd/gn
1 rd/wt
15
30
15/30
49a
L
R
1 bk/yl
3
49
A
1
1 bk/wt/gn
1 bk/wt/gn
C106
7
49a
1
2
L
R
1 bk/wt
1 bk/gn
C106
6
8
.75 bk/wt
1 bk
FLASHER SWITCH
SHOW IN OFF POSITION
C104
5
.75 bk/wt
1 bk/wt
.5 bk/wt
.5 bk/gn
6
3
11
13
31
10
FRONT LEFT TURN
REAR LEFT TURN
LEFT TURN PANEL
RIGHT TURN PANEL
A
B
C
D
E
F
G
H
1
2
3
4
5
6

AC/INST. CLUSTER/ASH TRAY LIGHTS

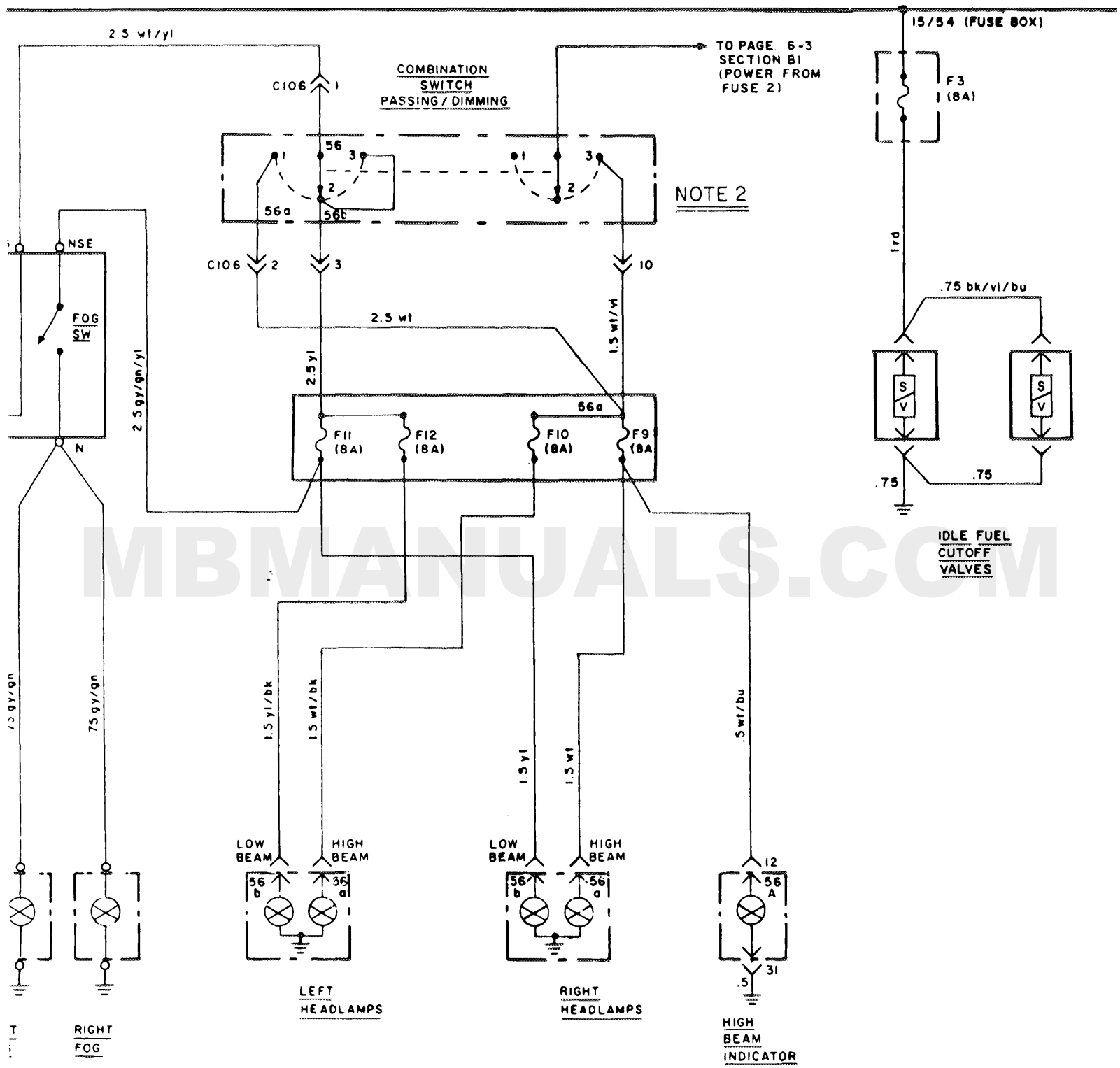


NOTE 1: THERE ARE 5 INSTRUMENT CLUSTER BULBS IN PARALLEL

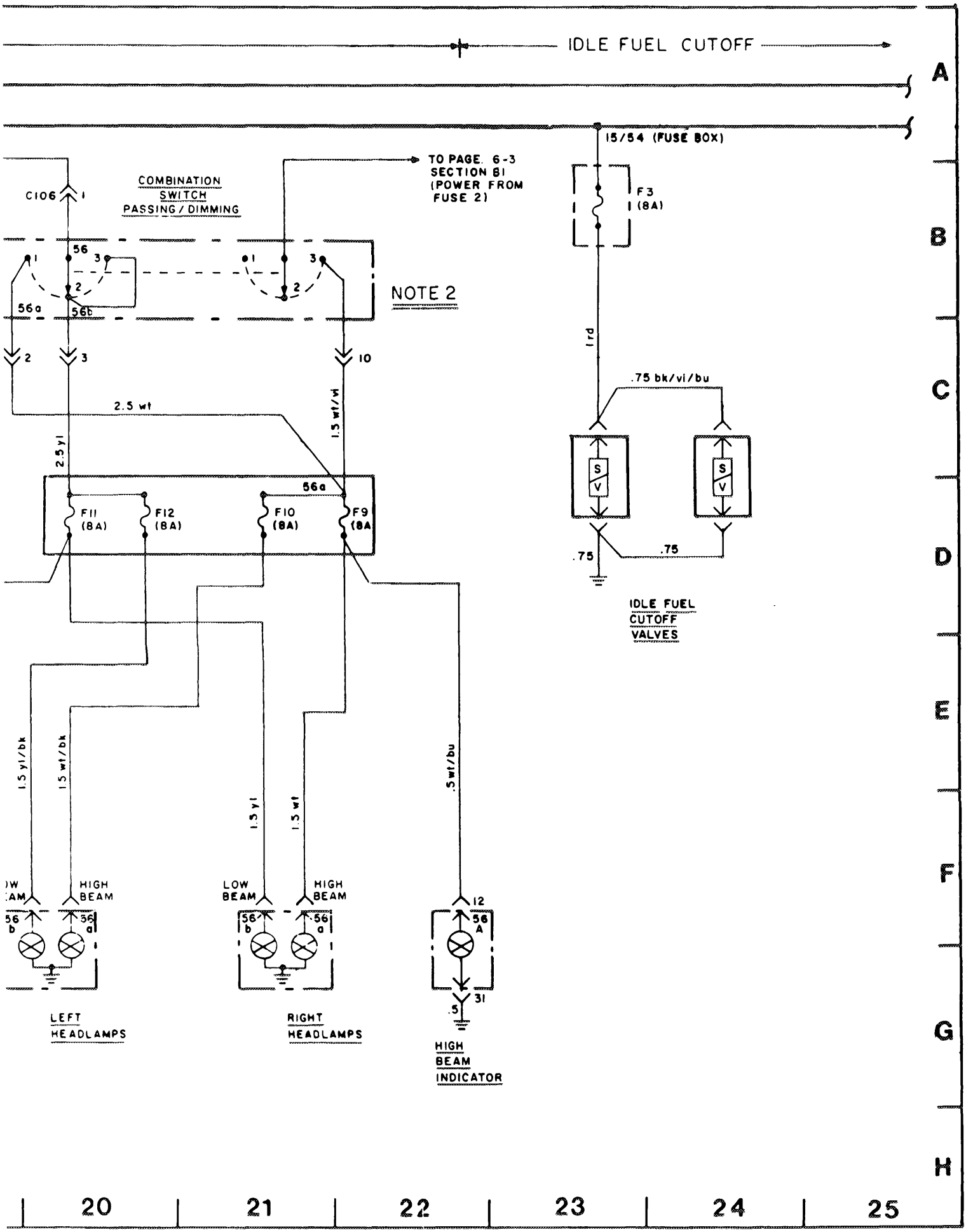


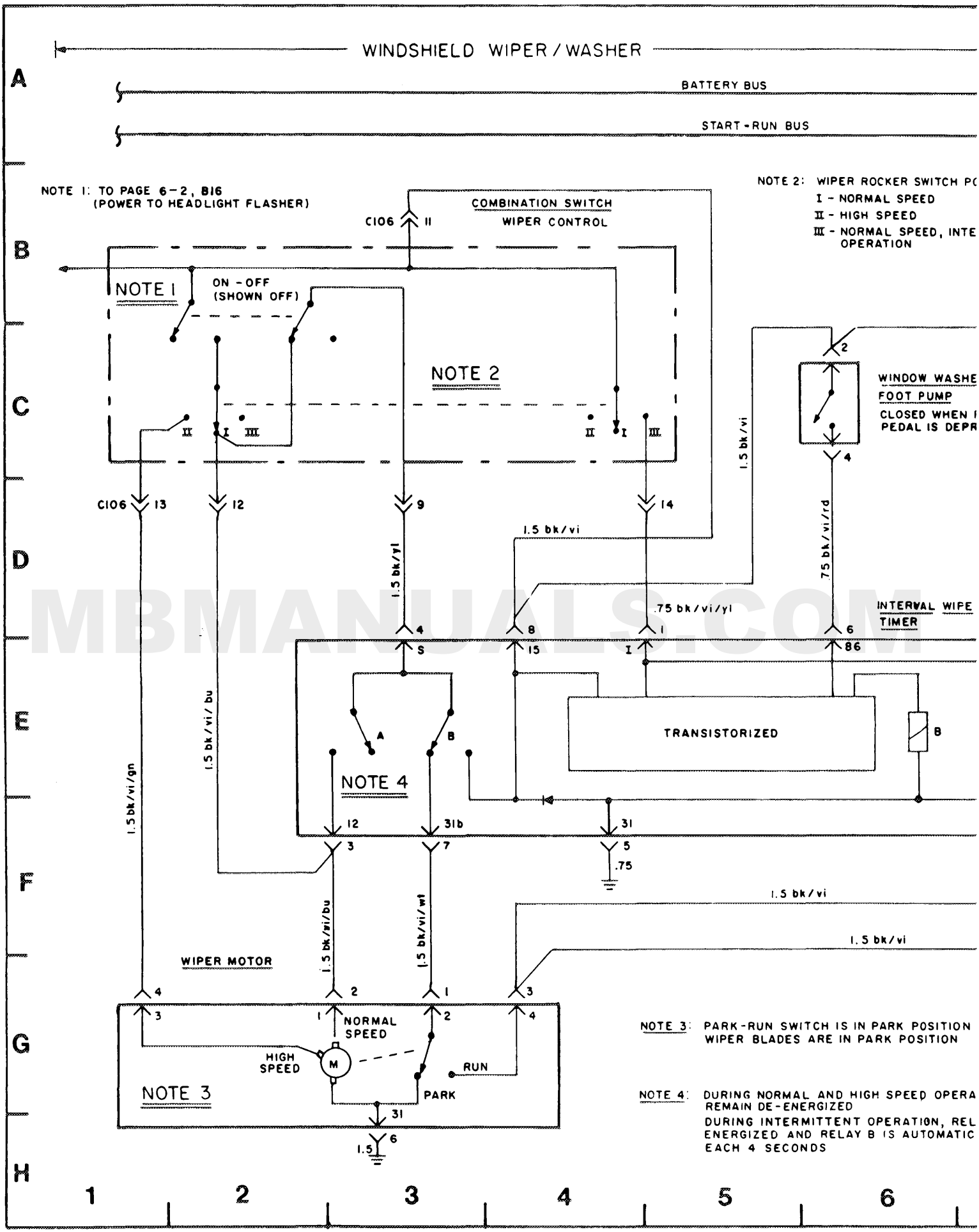
NOTE 2: POSITION 1 - HIG
POSITION 2 - LC
POSITION 3 - HI

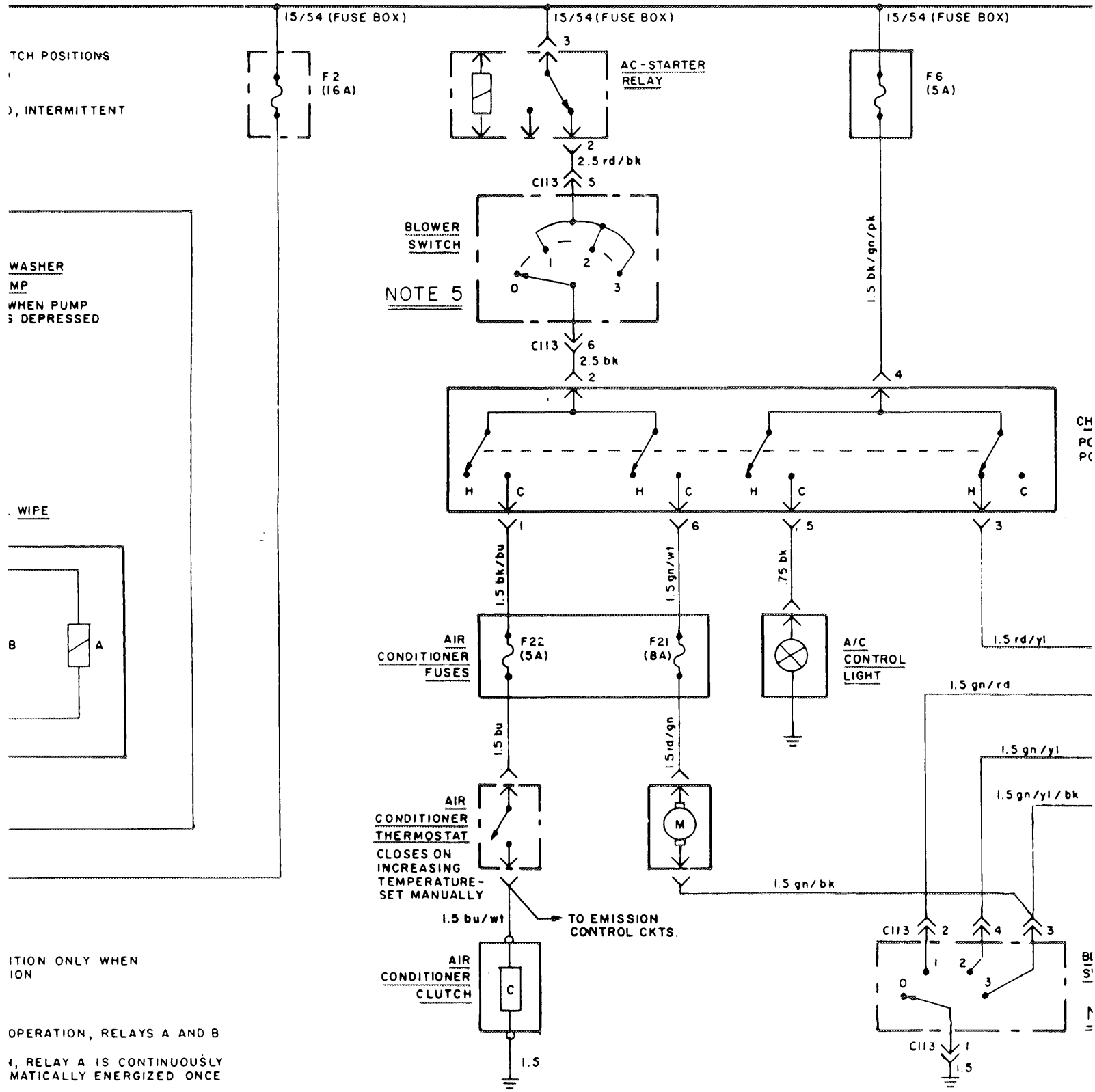
13 | 14 | 15 | 16 | 17 | 18

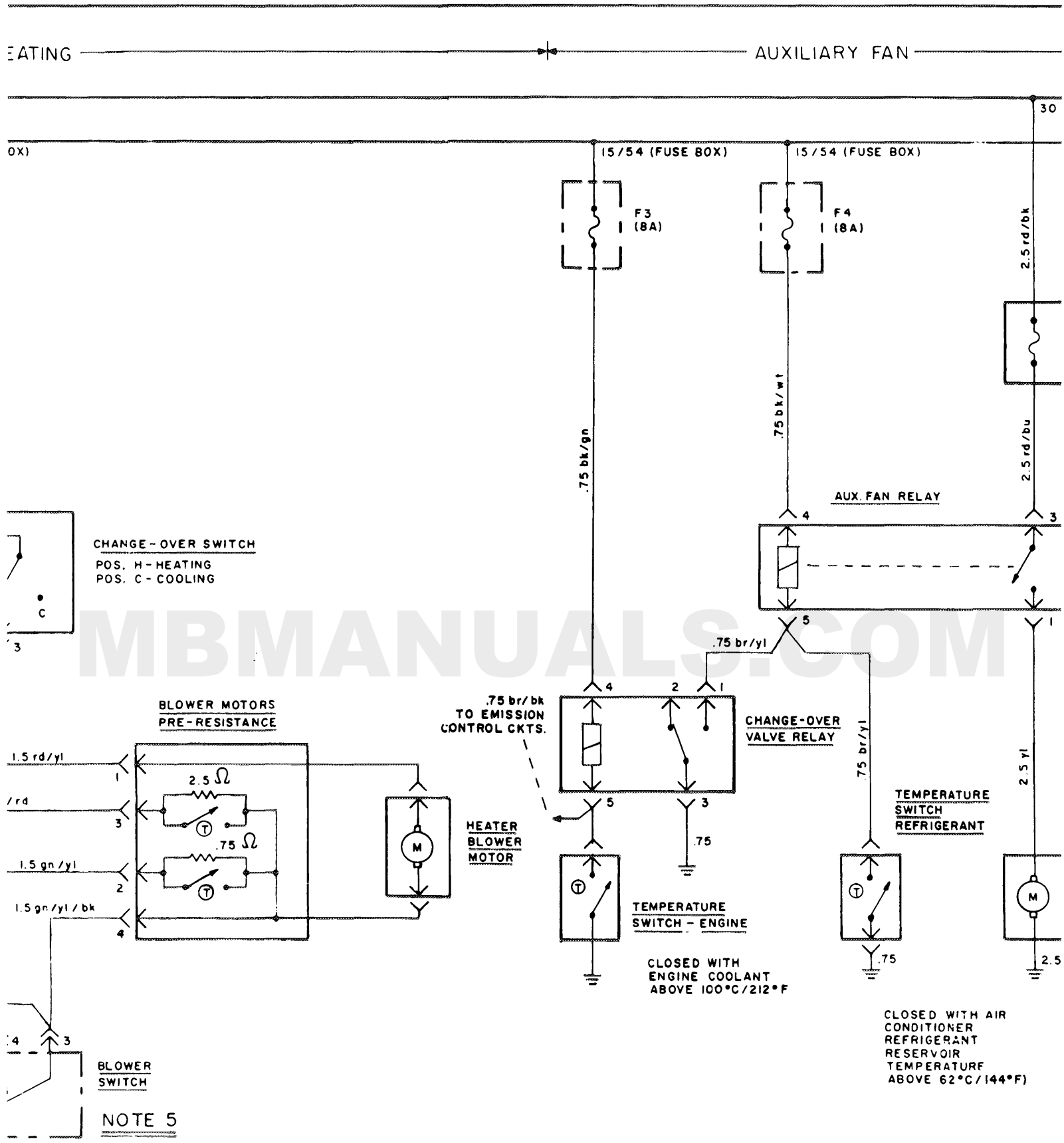


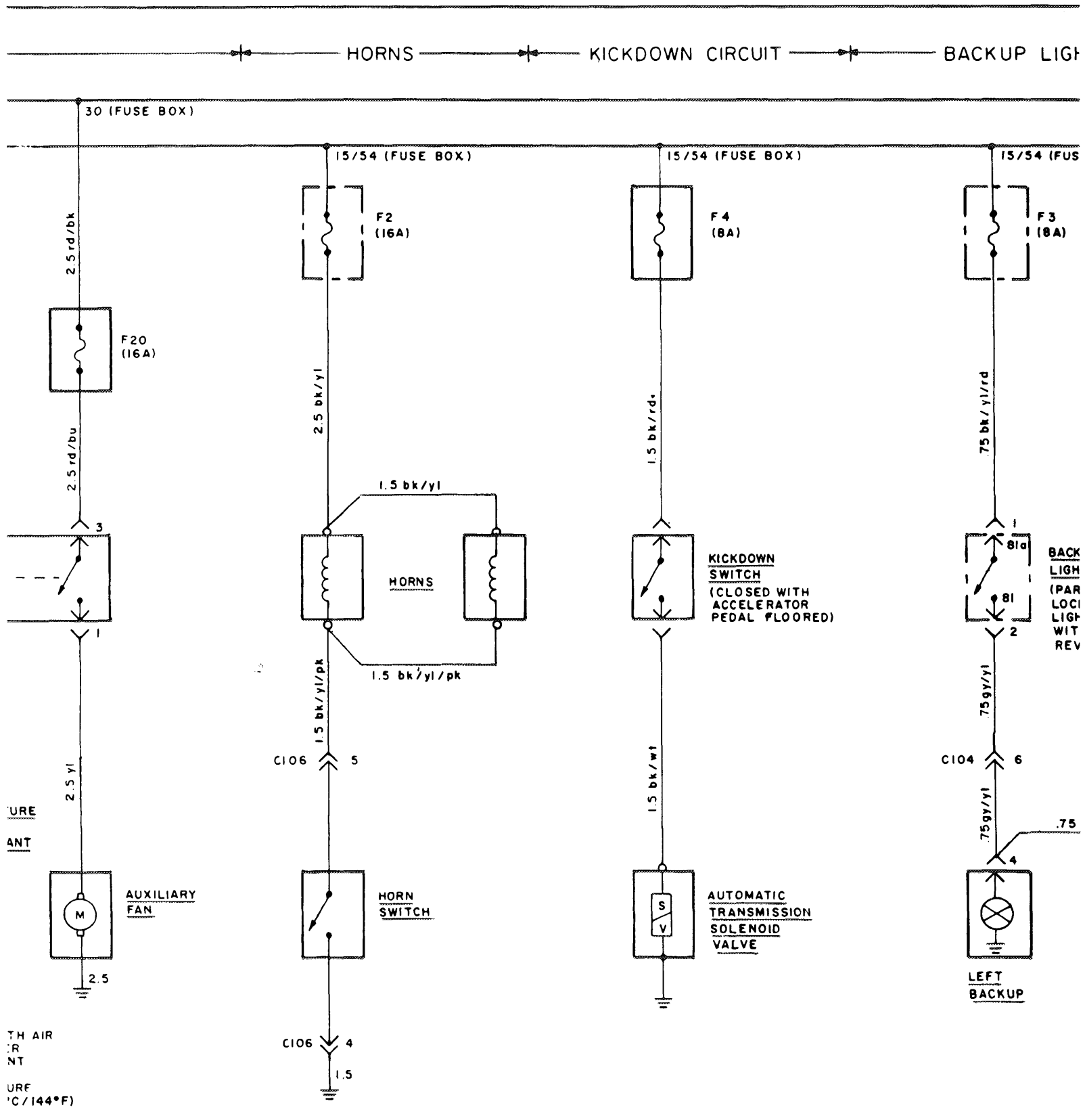
POSITION 1 - HIGH BEAM
POSITION 2 - LOW BEAM
POSITION 3 - HIGH BEAM FLASH

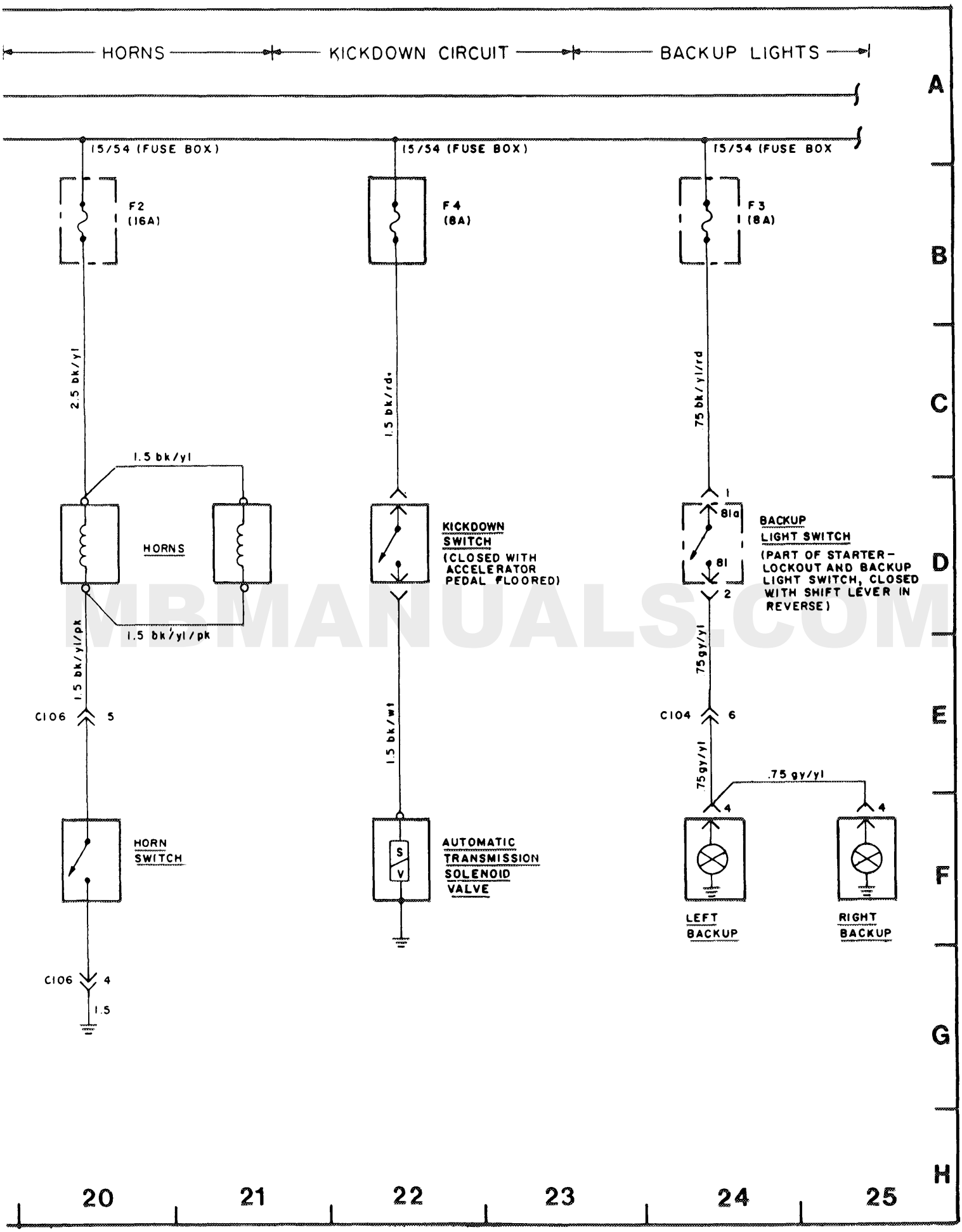

IDLE FUEL CUTOFF
15/54 (FUSE BOX)
TO PAGE 6-3 SECTION B1 (POWER FROM FUSE 2)
COMBINATION SWITCH PASSING / DIMMING
C106
NOTE 2
56
56a
56b
2.5 wt
2.5 yl
1.5 wt/wt
F11 (8A)
F12 (8A)
F10 (8A)
F9 (8A)
F3 (8A)
1 rd
.75 bk/vi/bu
.75
IDLE FUEL CUTOFF VALVES
1.5 yl/bk
1.5 wt/bk
1.5 yl
1.5 wt
.5 wt/bu
HIGH BEAM
LOW BEAM
LEFT HEADLAMPS
RIGHT HEADLAMPS
HIGH BEAM INDICATOR
A
B
C
D
E
F
G
H
20
21
22
23
24
25

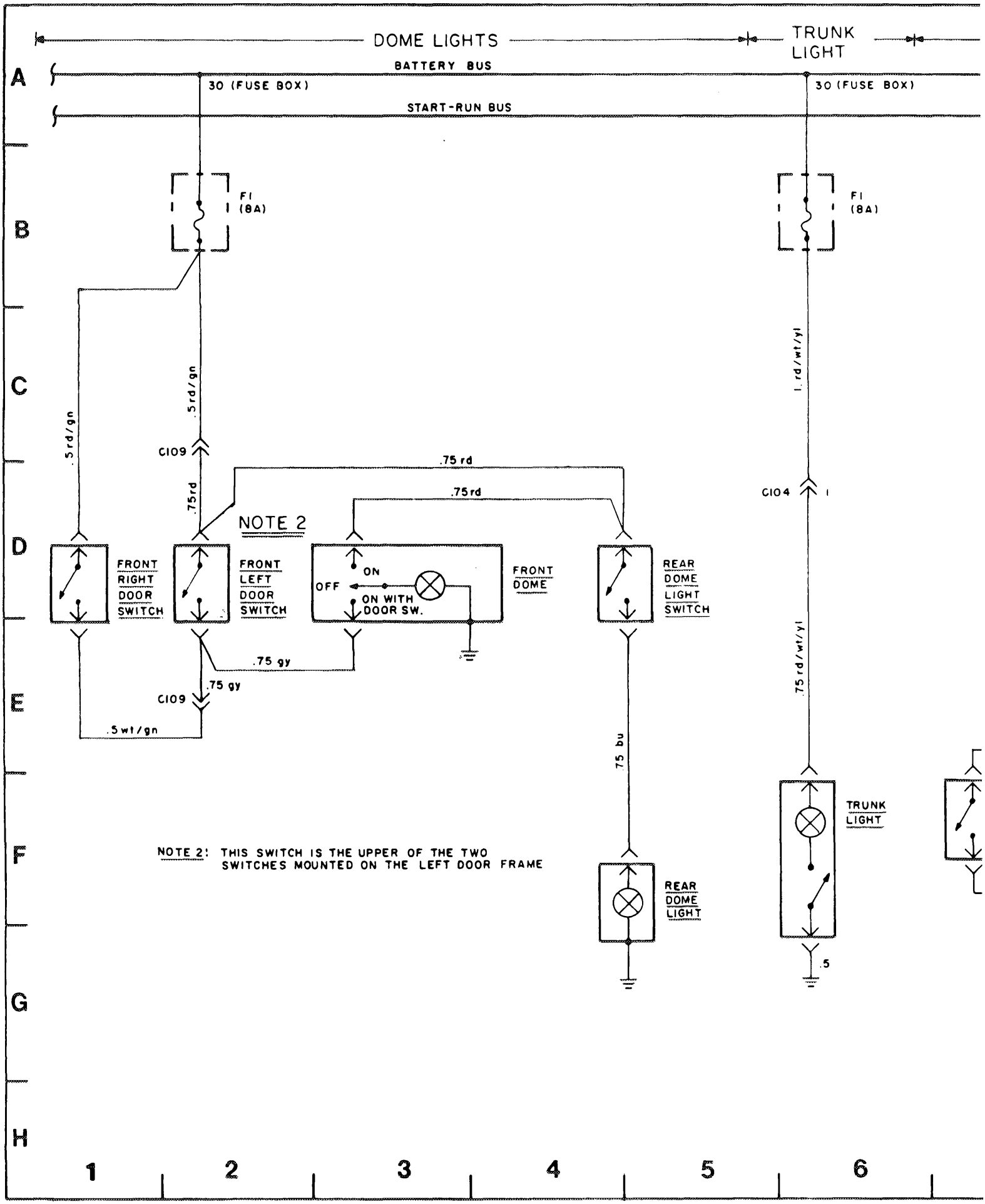


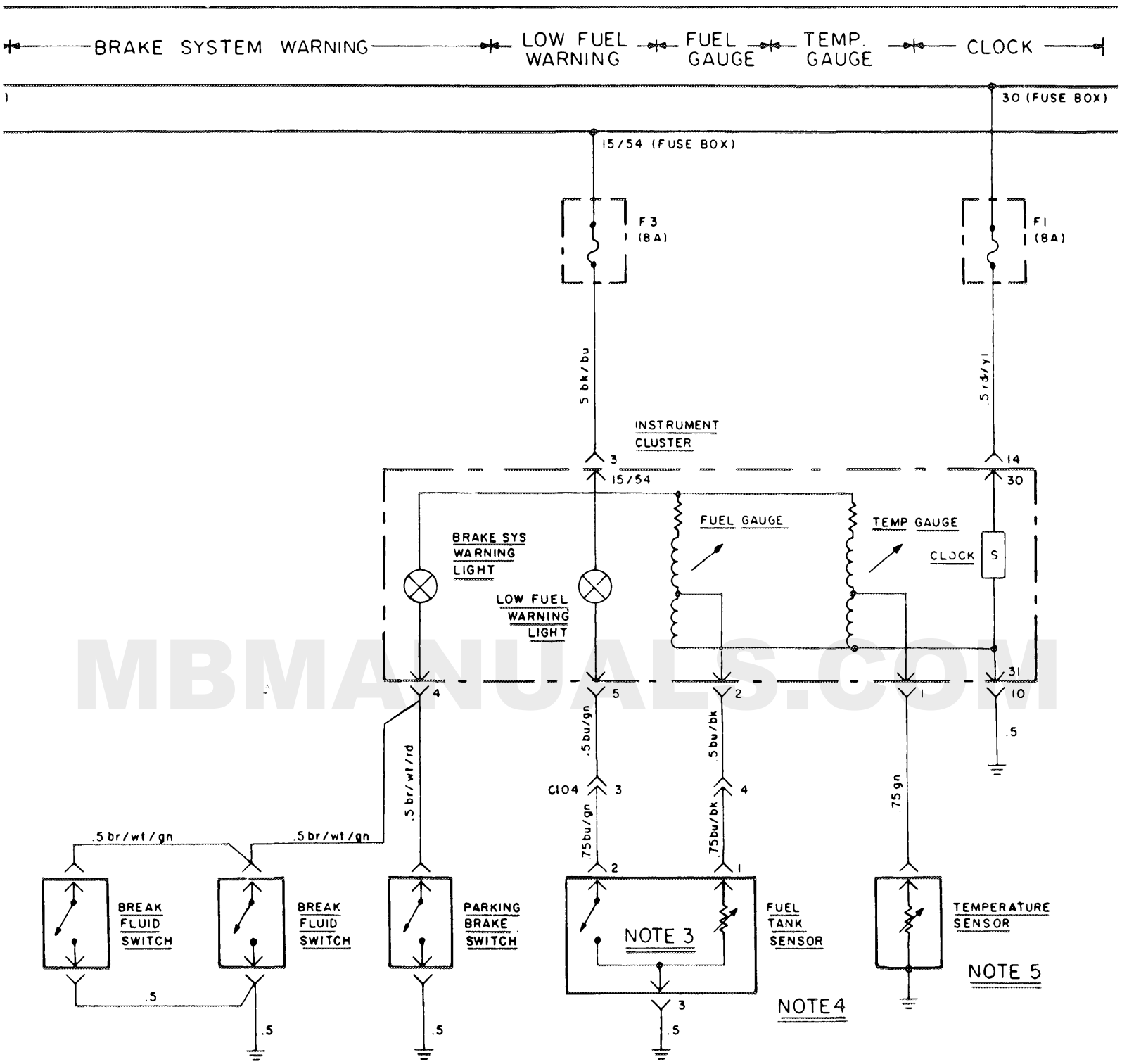

15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
TCH POSITIONS
), INTERMITTENT
F2 (16A)
AC-STARTER RELAY
F6 (5A)
2.5 rd/bk
C113
BLOWER SWITCH
NOTE 5
1.5 bk/gn/pk
C113
2.5 bk
WASHER
MP
WHEN PUMP
S DEPRESSED
WIPE
H
C
1.5 bk/bu
1.5 gn/wt
.75 bk
AIR CONDITIONER FUSES
F22 (5A)
F21 (8A)
A/C CONTROL LIGHT
1.5 rd/yl
1.5 gn/rd
1.5 bu
1.5 rd/gn
1.5 gn/yl
1.5 gn/yl/bk
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE-SET MANUALLY
1.5 gn/bk
1.5 bu/wt
TO EMISSION CONTROL CKTS.
AIR CONDITIONER CLUTCH
C113
ITION ONLY WHEN
ION
OPERATION, RELAYS A AND B
, RELAY A IS CONTINUOUSLY
MATICALLY ENERGIZED ONCE
7
8
9
10
11
12




HORNS
KICKDOWN CIRCUIT
BACKUP LIGH
30 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUSE BOX)
15/54 (FUS
F2 (16A)
F4 (8A)
F3 (8A)
F20 (16A)
2.5 rd/bk
2.5 rd/bu
2.5 bk/yl
1.5 bk/rd
.75 bk/yl/rd
1.5 bk/yl
HORNS
KICKDOWN SWITCH
(CLOSED WITH ACCELERATOR PEDAL FLOORED)
BACK LIGH
(PAR LOCI LIGH WIT REV
1.5 bk/yl/pk
1.5 bk/yl/pk
.75 gy/yl
C106
C104
1.5 bk/wt
.75 gy/yl
.75
2.5 yl
URE
ANT
AUXILIARY FAN
HORN SWITCH
AUTOMATIC TRANSMISSION SOLENOID VALVE
LEFT BACKUP
2.5
TH AIR
R
NT
URE
C/144°F)
C106
1.5
8
19
20
21
22
23
24



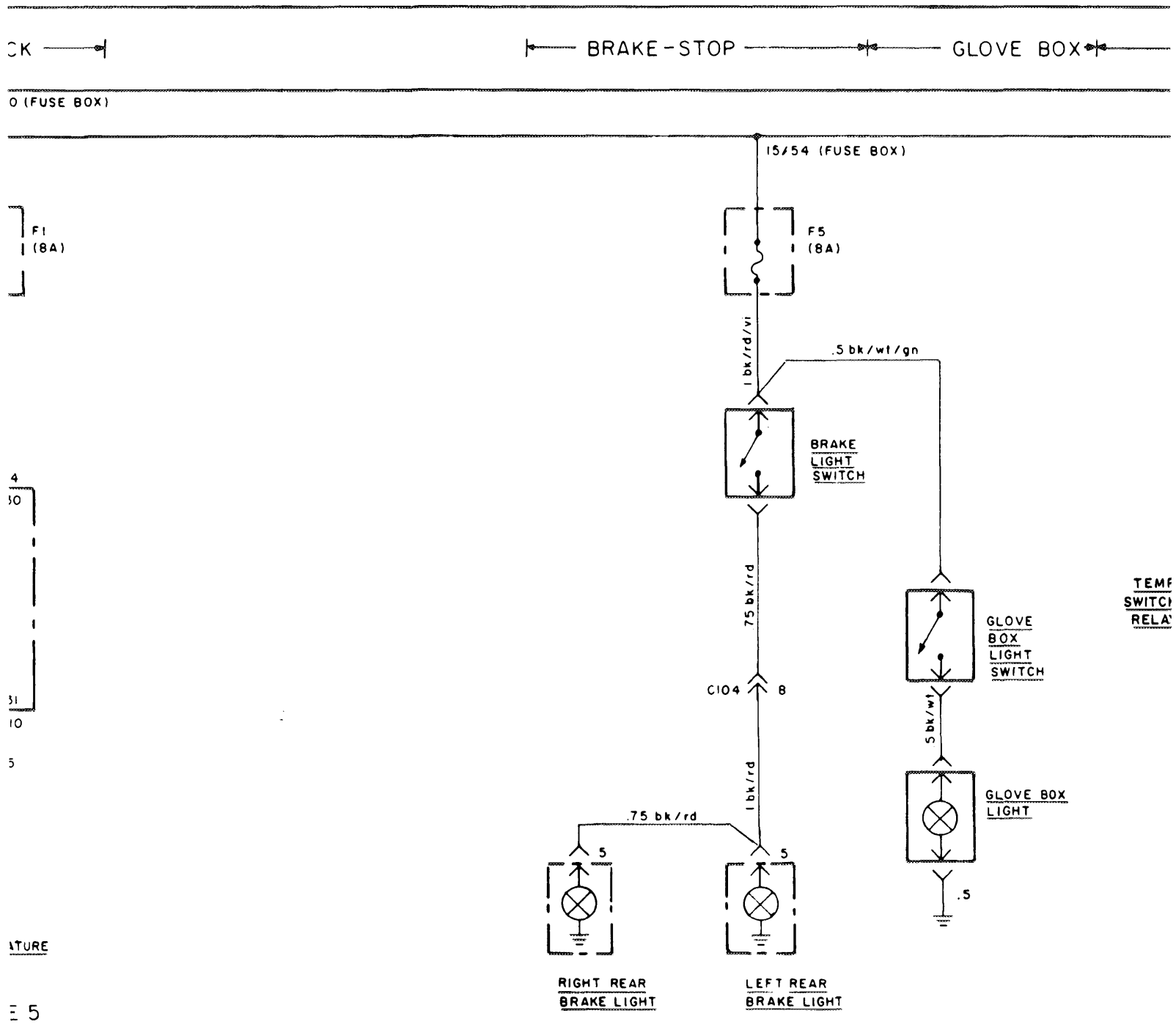

DOME LIGHTS
TRUNK LIGHT
BATTERY BUS
30 (FUSE BOX)
30 (FUSE BOX)
START-RUN BUS
F1 (8A)
F1 (8A)
.5 rd/gn
.5 rd/gn
C109
.75 rd
.75 rd
.75 rd
NOTE 2
C104
1
1 rd/wt/yl
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
ON
OFF
ON WITH DOOR SW.
FRONT DOME
REAR DOME LIGHT SWITCH
.75 gy
.75 gy
C109
.5 wt/gn
.75 rd/wt/yl
.75 bu
TRUNK LIGHT
REAR DOME LIGHT
.5
NOTE 2: THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME
A
B
C
D
E
F
G
H
1
2
3
4
5
6



NOTE 3: SWITCH CLOSED WITH APPROX. 5 GALLONS OR LESS FUEL IN TANK

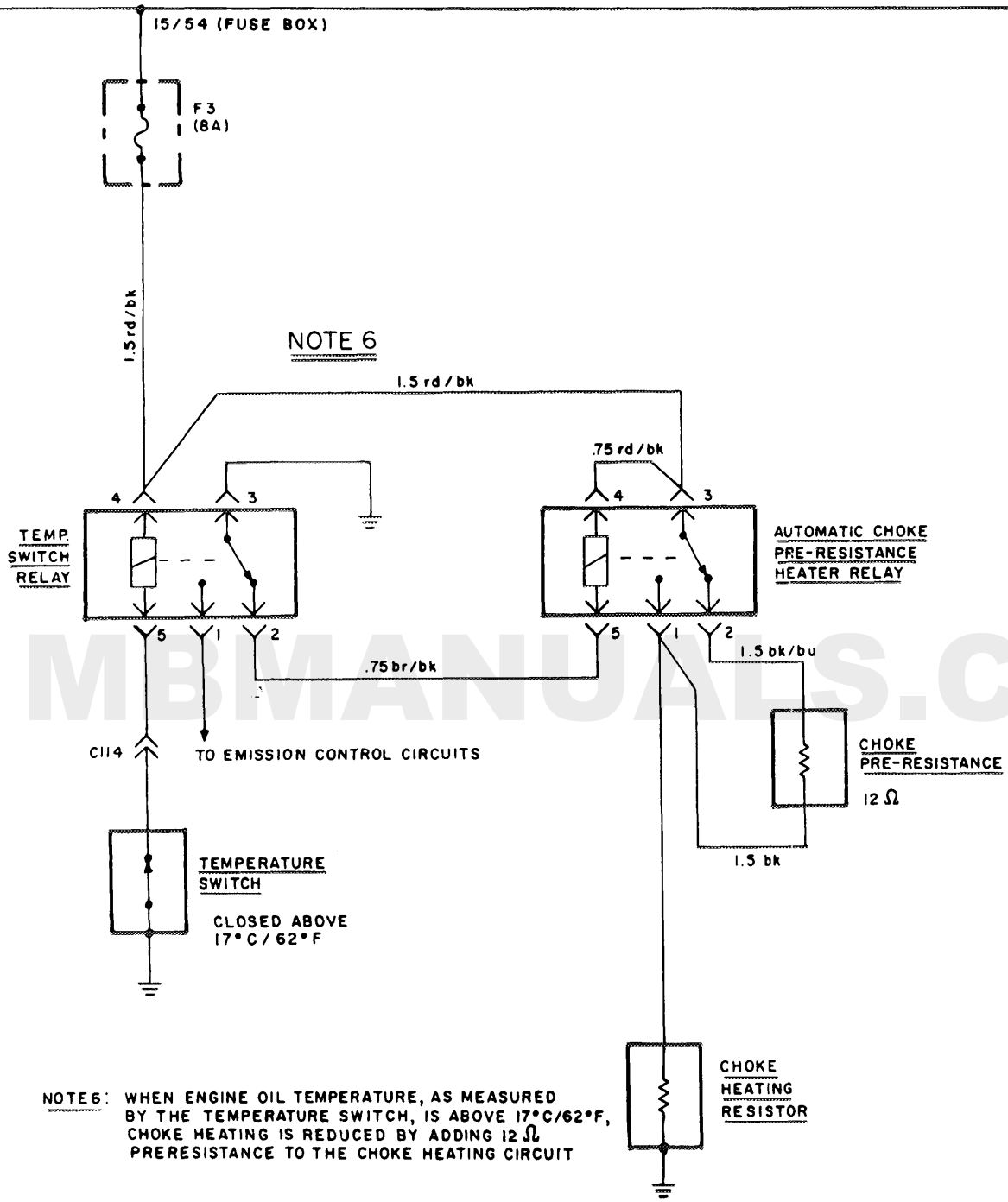
NOTE 4: RESISTANCE OF SENSOR
FULL TANK – 6 Ω
3/4 TANK – 10 Ω
1/2 TANK – 28 Ω
1/4 TANK – 54 Ω
R TANK — 62 Ω

NOTE 5: RESISTANCE
AND AT 180°

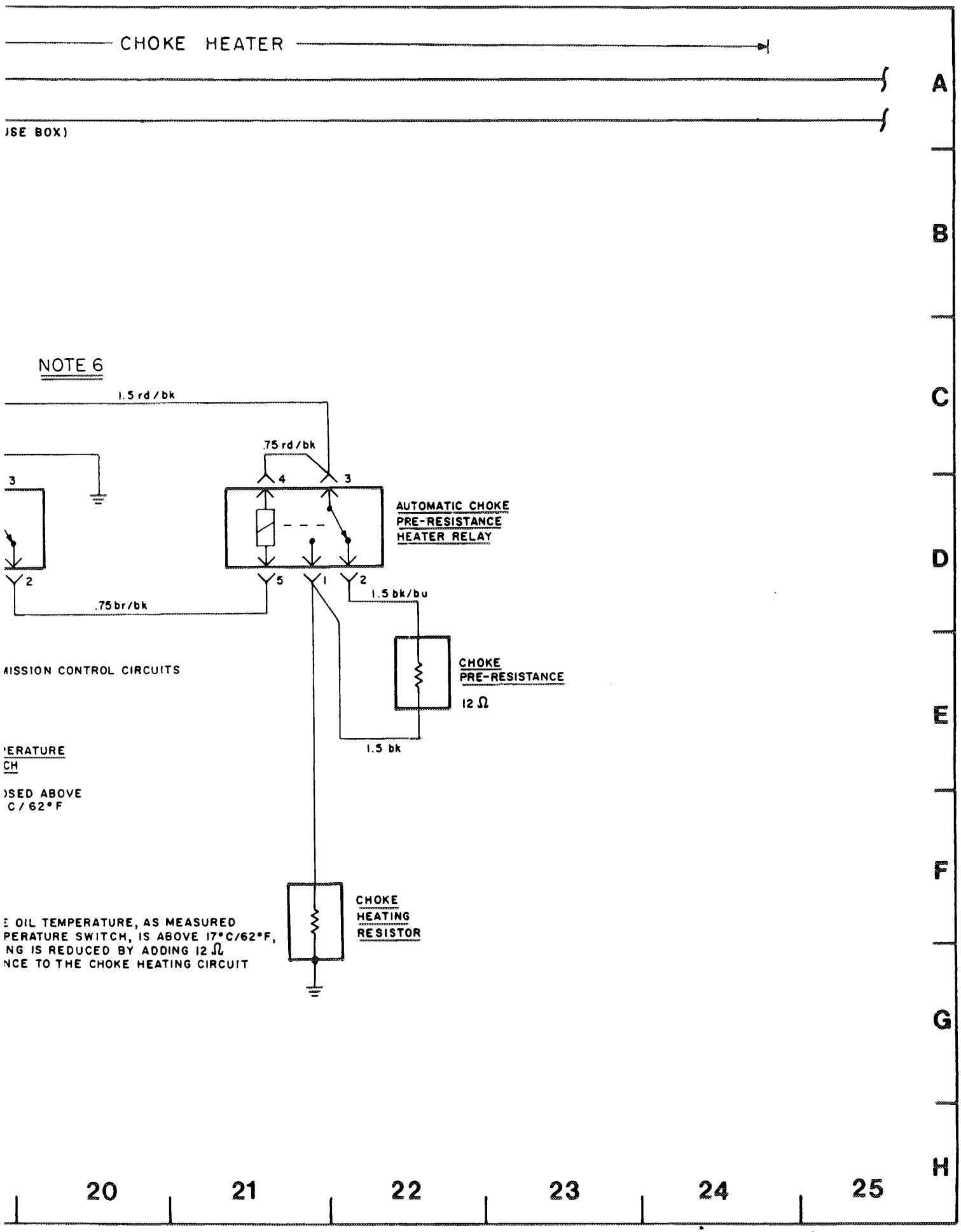


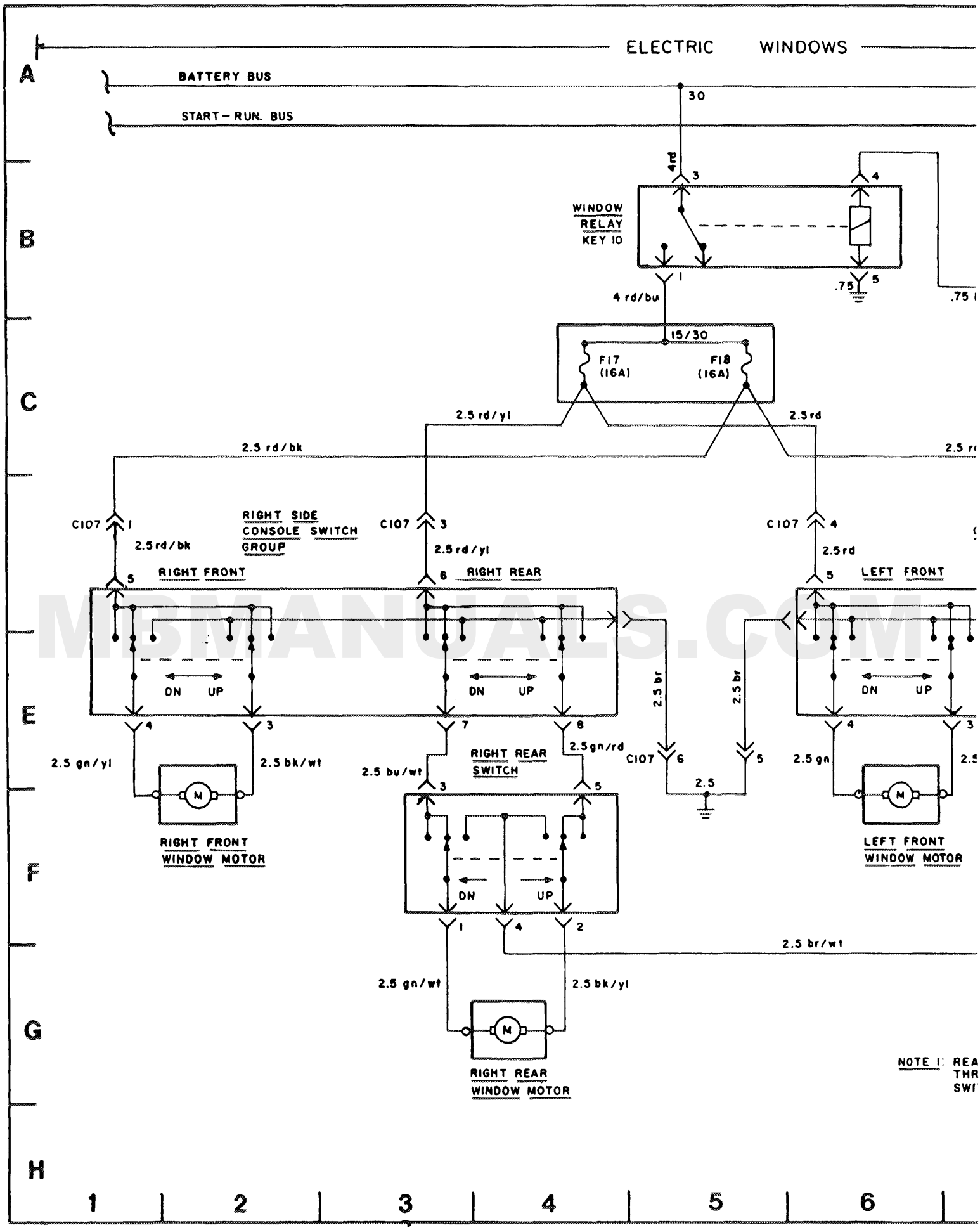
RESISTANCE AT 60° F – 420 Ω
AND AT 180° F – 65 Ω

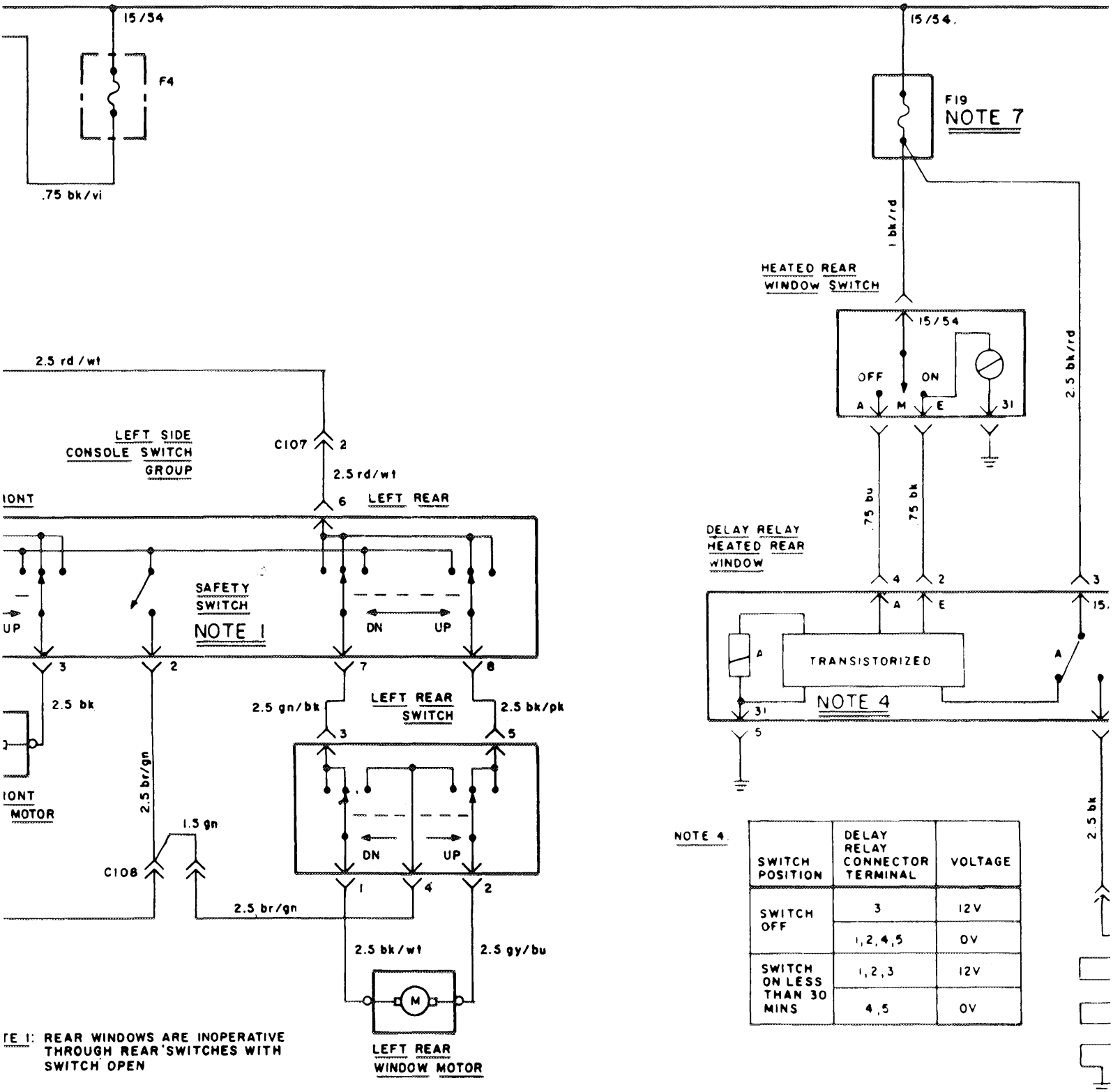
13 14 15 16 17 18



NOTE 6: WHEN ENGINE OIL TEMPERATURE, AS MEASURED BY THE TEMPERATURE SWITCH, IS ABOVE 17°C/62°F, CHOKE HEATING IS REDUCED BY ADDING 12 Ω PRERESISTANCE TO THE CHOKE HEATING CIRCUIT


CHOKE HEATER
USE BOX)
NOTE 6
1.5 rd/bk
.75 rd/bk
3
4
3
AUTOMATIC CHOKE
PRE-RESISTANCE
HEATER RELAY
2
5
1
2
.75 br/bk
1.5 bk/bu
MISSION CONTROL CIRCUITS
CHOKE
PRE-RESISTANCE
12 Ω
1.5 bk
ERATURE
CH
SED ABOVE
C/62°F
CHOKE
HEATING
RESISTOR
E OIL TEMPERATURE, AS MEASURED
PERATURE SWITCH, IS ABOVE 17°C/62°F,
NG IS REDUCED BY ADDING 12 Ω
NCE TO THE CHOKE HEATING CIRCUIT
A
B
C
D
E
F
G
H
20
21
22
23
24
25

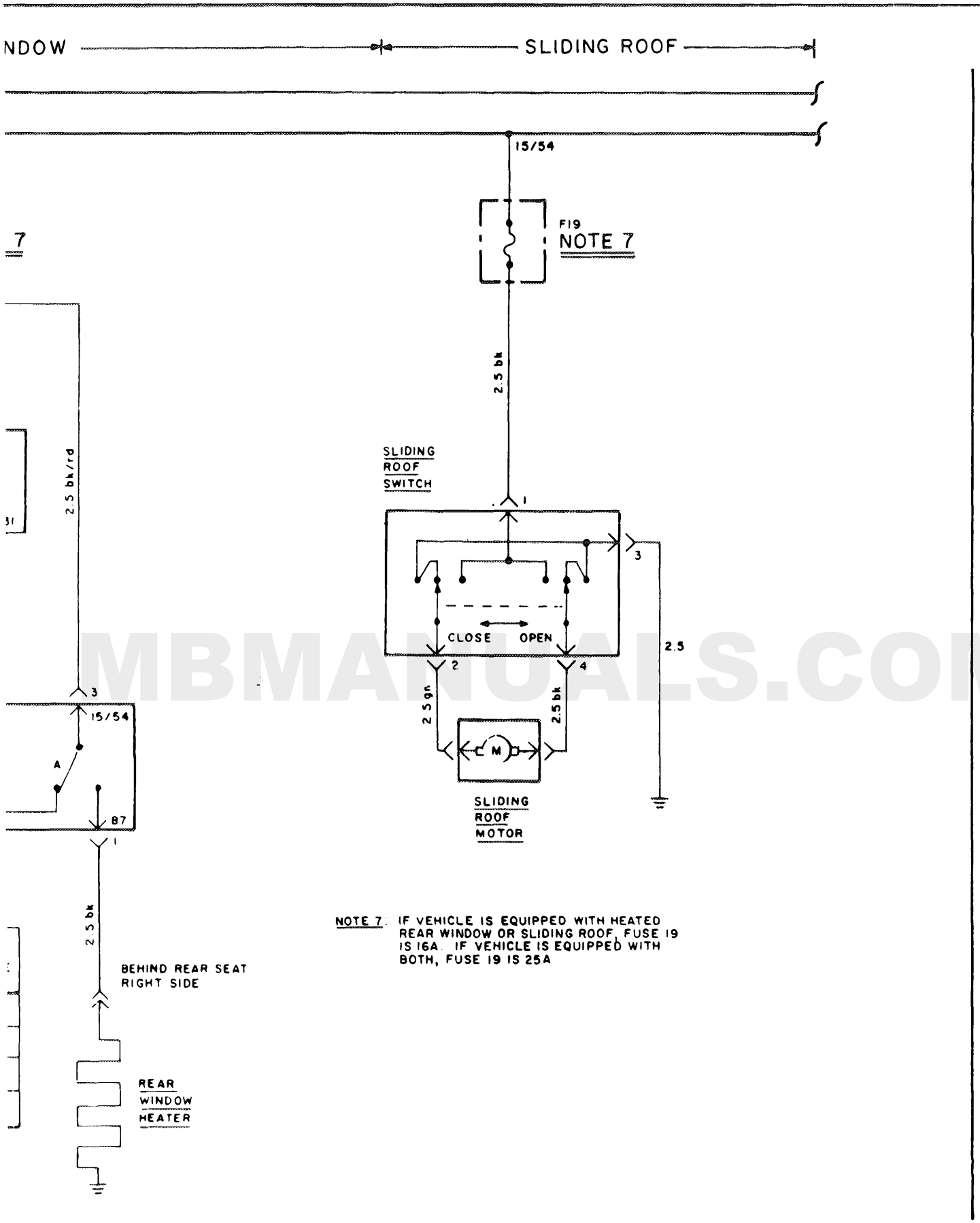




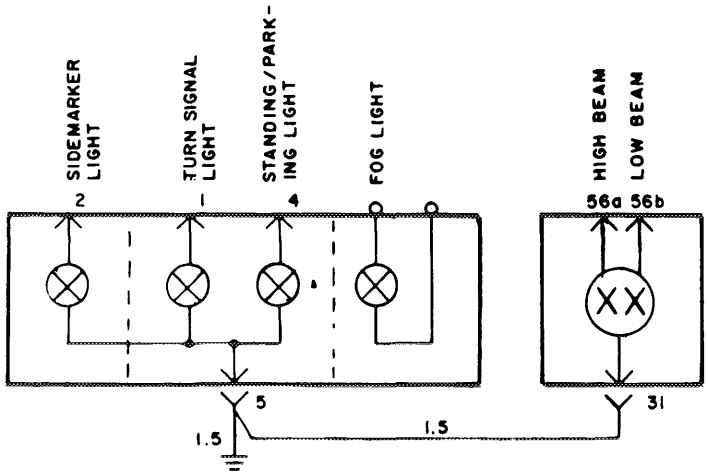
NOTE 4.

SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS	1,2,3	12V
	4,5	0V

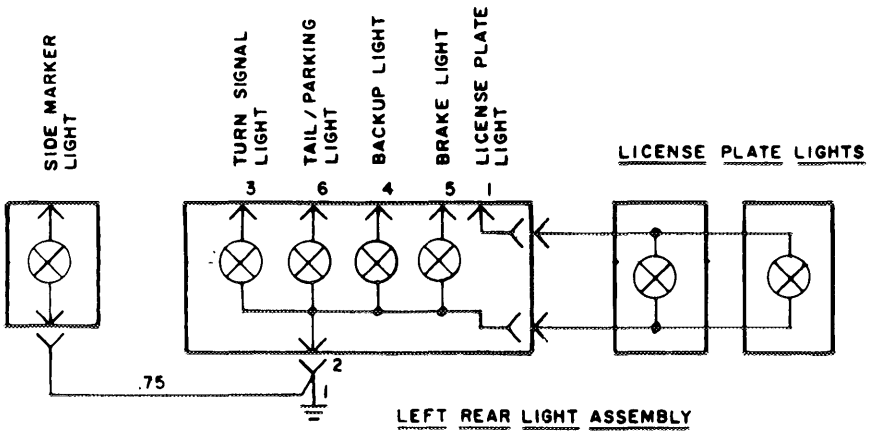
TE 1: REAR WINDOWS ARE INOPERATIVE THROUGH REAR SWITCHES WITH SWITCH OPEN



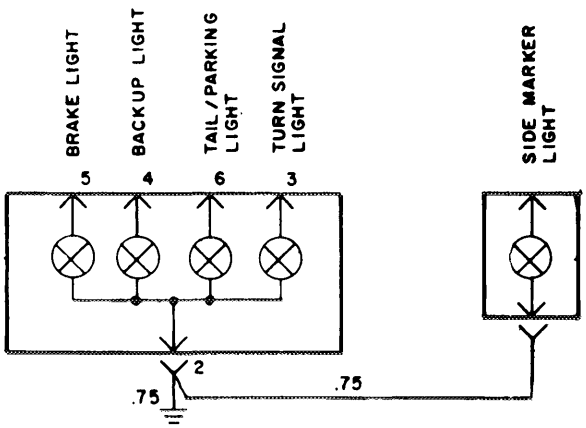
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES – RIGHT & LEFT



LEFT REAR LIGHT ASSEMBLY



RIGHT REAR LIGHT ASSEMBLY

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
AIR CONDITIONING/ HEATING			
A/C blower motor	center of console	3-1	
A/C clutch	front of compressor		
A/C control light	console	3-2	
A/C starter relay, key4	under dash—pass. side	3-3	3-37
A/C thermostat	console	3-2	
Blower switch	console	3-2	
Change-over switch	console, left side	3-27	
Fuse 6	fuse box	3-4	3-48
Fuse 21 (A/C blower)	firewall—right side		
Fuse 22 (clutch)	firewall—right side		
Heater blower motor	behind A/C blower		
Heater blower motor pre-resistor	left firewall	3-4	
C 113	mounted to heater control lever plate	3-6	3-32
AUXILIARY FAN			
Auxiliary fan	front of radiator	3-7	
Auxiliary fan relay, key 6	under dash—pass. side	3-3	3-37
Separation relay, key 8	under dash—pass. side	3-3	3-37
Fuse 3	fuse box	3-4	3-48
Fuse 4	fuse box	3-4	3-48
Fuse 20 (aux. fan)	firewall—right side		
Temp. sw.—engine (100°c/212°F)	engine block—right side	3-8	
Temp.sw.—refrigerant (65°c/144°F)	right firewall	3-9	
CHARGE			
Alternator	below A/C compressor		
Regulator	back of alt.	3-10	
Charge indicator light	inst. cluster		
CHOKE HEATING			
Automatic choke pre-resistance heater relay	front left fender	3-11	3-37
Choke heating resistor	carburetor	3-12	
Choke pre-resistance	front left fender	3-11	
Fuse 3	fuse box	3-4	3-48
Temperature switch	oil filter housing		
Temp. sw. (17°c/63°F)	front left fender	3-11	3-37
C 114	clipped to front left fender seam	3-13	
CIGAR LIGHTER			
Cigar lighter	console	3-2	
Fuse 2	fuse box	3-4	3-48

280/280C

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
CLOCK			
Clock	inst. cluster	3-10	
Fuse 1	fuse box	3-4	3-48
FUEL GAUGE			
Fuel gauge	inst. cluster	3-10	
Fuel tank sensor	below trunk floor	3-14	
Fuse 5	fuse box	3-4	3-48
C 104	under dash—driver's side	3-15	
HEATED REAR WINDOW			
Time delay relay	under dash—driver's side	3-15	3-44
Fuse 19 (window)	firewall—right side		
Heater	rear window		
Switch	console	3-2	
C 112	behind rear seat—right side	3-16	
HORNS			
Horn switch			
Horns			
Fuse 2	fuse box	3-4	3-48
C 106	under dash—driver's side	3-15	3-35
IDLE FUEL CUTOFF			
Cutoff valves	carburetor	3-17	
Fuse 3	fuse box	3-4	3-48
IGNITION SWITCH			
A/C starter relay, key 4	under dash—pass. side	3-3	3-37
Seat belt-starter logic	under dash—driver's side	3-15	3-39
Starter lockout switch	left side transmission		
Switch	dash		3-41
IGNITION SYSTEM			
Coil	front left fender	3-11	
Distributor	front left engine		
.4 ohm preresistor	front left fender	3-11	
.6 ohm preresistor	front left fender	3-11	
Transistorized ignition switching unit	front left fender	3-16	
Diagnostic test plug	engine, top, left front		
C 102 (dwell tach conn)	near coil	3-18	
C 105	right front fender	3-24	

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
KICKDOWN			
Fuse 4	fuse box	3-4	3-48
Solenoid	right side transmission		
Switch	below accelerator pedal	3-19	
LIGHT CIRCUITS			
A/C CONTROL			
Change-over switch	console	3-27	
Fuse 6	fuse box	3-4	3-48
Light	console	3-2	
ASH TRAY			
Fuse 7	fuse box	3-4	3-48
Light switch	dash		
BACKUP			
Fuse 3	fuse box	3-4	3-48
Lights	rear light assemblies		
Switch	left side transmission		
C 104	under dash—driver's side	3-15	
BRAKE SYSTEM WARNING			
Fluid switches	fluid reservoir	3-4	
Fuse 5	fuse box	3-4	3-48
Parking switch	top, parking brake		
Reservoir & park light	inst. cluster	3-10	
DOME (FRONT)			
Front left door switch	door post		
Front right door switch	door post		
Fuse 1	fuse box	3-4	3-48
C 109	console		
DOME (REAR)			
Fuse 1	fuse box	3-4	3-48
Switch	left dash	3-20	

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
FOG (PERIMETER)			
Fuse 11	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
Pass/dim switch	steering column	3-20	
C 106	under dash—drivers side	3-15	3-35
GEAR SELECTOR LIGHT			
Fuse 7	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
Light	console		
GLOVE BOX			
Fuse 5	fuse box	3-4	3-48
Switch	glove box		
HEAD			
Fuse 9	fuse box	3-4	3-48
Fuse 10	fuse box	3-4	3-48
Fuse 11	fuse box	3-4	3-48
Fuse 12	fuse box	3-4	3-48
High beam indicator	inst. cluster	3-10	
Light switch	dash	3-20	3-43
Pass/dim. switch	steering column	3-20	
C 106	under dash—drivers side	3-15	3-35
INSTRUMENT CLUSTER			
Fuse 7	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
Rheostat	inst. cluster	3-10	
LOW FUEL WARNING			
Fuse 5	fuse box	3-4	3-48
Sender unit	below trunk floor	3-14	
C 104	under dash—drivers side	3-15	3-48
Light	inst. cluster	3-10	
MARKER			
Fuse 7	fuse box	3-4	3-48
Light switch	dash	3-20	3-43
C 104	under dash—drivers side	3-15	

280/280C

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
STANDING			
Fuse 1	fuse box	3-4	3-48
Fuse 7	fuse box	3-4	3-48
Fuse 8	fuse box	3-4	3-48
Ignition switch	dash		
Light switch	dash	3-20	
STOP			
Fuse 3	fuse box	3-4	3-48
Switch	above brake pedal		
C 104	under dash—drivers side	3-15	
TAIL			
Fuse 1	fuse box	3-4	3-48
Fuse 7	fuse box	3-4	3-48
Fuse 8	fuse box	3-4	3-48
Ignition	dash		
Switch	dash	3-20	3-43
C 104	under dash—drivers side	3-15	
TRUNK			
Fuse 1	fuse box	3-4	3-48
C 104	under dash—drivers side	3-15	
RADIO			
Antenna			
Fuse 13 (power antenna)	left fender		
Ignition switch	dash		
Radio	console		
Fuse 14 (radio)	left fender		
SEAT BELT INTERLOCK			
A/C starter relay key 4	under dash—pass. side	3-3	3-37
Door switch	left front door—lower		
Driver's buckle switch	buckle		
Driver's seat switch	seat		
Fasten seat belt light	dash	3-2	
Ignition switch	dash		
Ignition warning switch	ignition switch		3-42
Logic relay	under dash—driver's side	3-15	3-39
Passenger buckle switch	buckle		
Passenger seat switch	seat		
Starter lockout switch	left side transmission		
Warning buzzer	under dash—drivers side	3-15	3-45

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
SLIDING ROOF			
Fuse 19			
Motor	behind spare tire		
Switch	console	3-2	
START			
A/C starter relay key 4	under dash—pass. side	3-3	3-37
Battery			
Motor			
TEMPERATURE GAUGE			
Fuse 5	fuse box	3-4	3-48
Sensor	right side engine	3-8	
TURN SIGNAL AND FLASHER			
Flasher relay	under dash—drivers side	3-15	
Flasher switch	console	3-2	3-46
Fuse 1	fuse box	3-4	3-48
Fuse 4	fuse box	3-4	3-48
Turn signal switch	steering column	3-20	
C 104	under dash—drivers side	3-15	
C 106	under dash—drivers side	3-15	3-35
WINDOWS			
Fuse 4	fuse box	3-4	3-48
Fuse 17 (FL/RR)	firewall—right side		
Fuse 18 (FR/RL)	firewall—right side		
Left front motor	door		
Left rear motor	door		
Left rear switch	side panel		
Left side switch group	console		3-38
Relay key 10	under dash—pass. side	3-3	3-37
Right front motor	door		
Right rear motor	door		
Right rear switch	side panel		
Right side switch group	console		3-38
C 107	console		
C 108	console		

COMPONENT	COMPONENT LOCATION ON VEHICLE	COMPONENT LOCATION PHOTOGRAPH	COMPONENT TERMINAL PHOTOGRAPH
WINDSHIELD WIPER/WASHER			
Combination switch	steering column	3-20	
Foot pump switch	left floor	3-5	
Fuse 2	fuse box	3-4	3-48
Interval wipe timer	under dash—drivers side	3-15	3-40
Motor	firewall—left side	3-4	
C 106	under dash—drivers side	3-15	3-35

SECTION III - COMPONENT LOCATION AND TERMINAL PHOTOGRAPHS

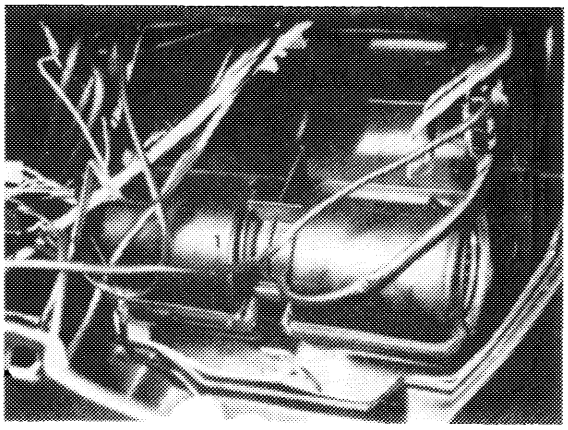


Fig. 3-1
1 — Blower motor

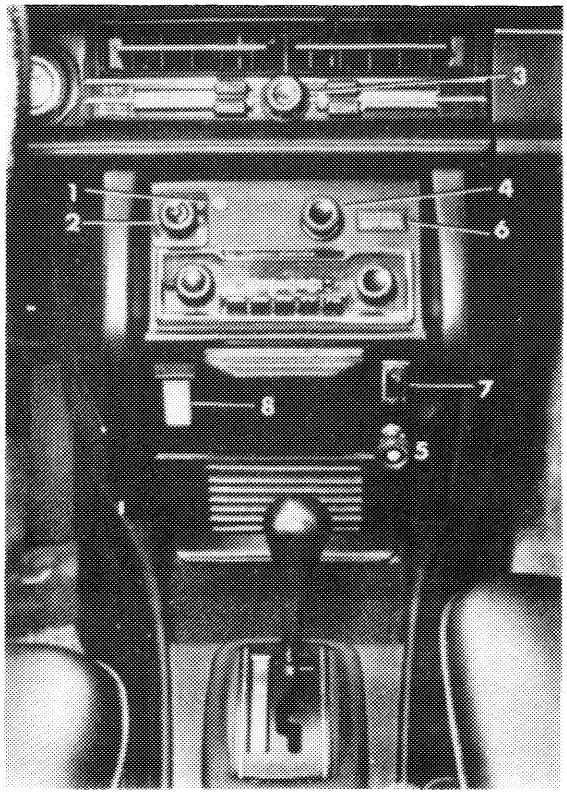


Fig. 3-2
1 — A/C control light
2 — A/C thermostat
3 — Blower switch
4 — Cigar lighter
5 — Heated rear window switch
6 — Fasten seat belt light
7 — Sliding roof switch
8 — Flasher switch

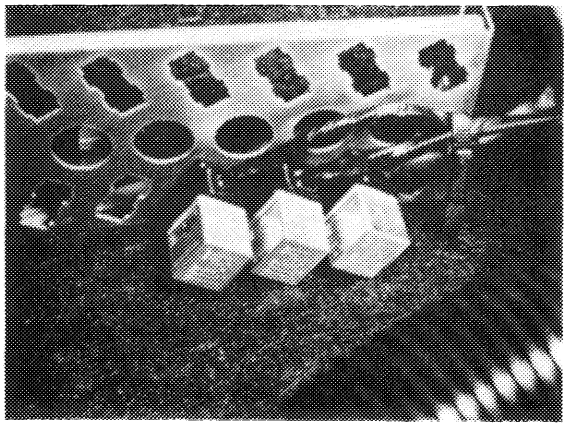


Fig 3-3
Relay location

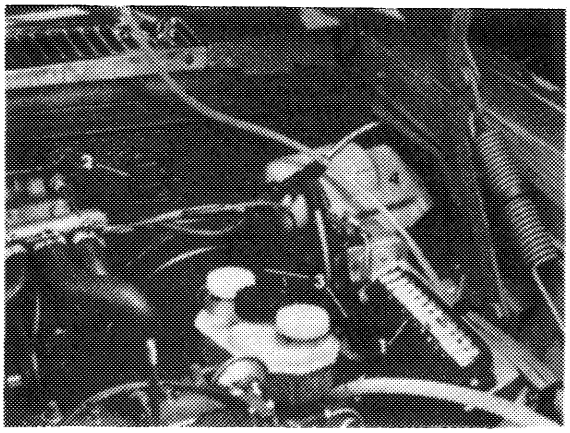


Fig 3-4
1 — Main fuse box
2 — Heater blower pre-resistors
3 — Brake fluid switches
4 — Wiper motor

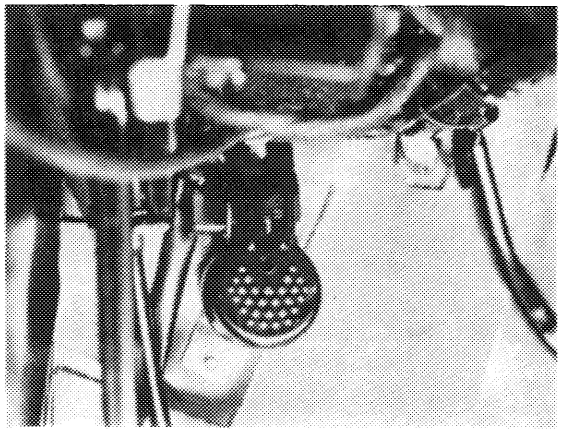


Fig. 3-5
1 — Foot pump switch

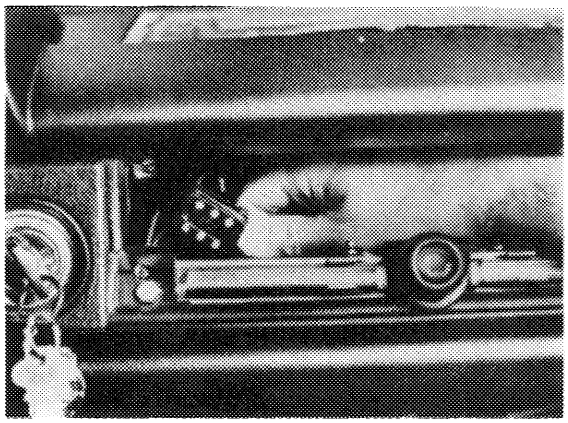


Fig. 3-6
1 – C 113

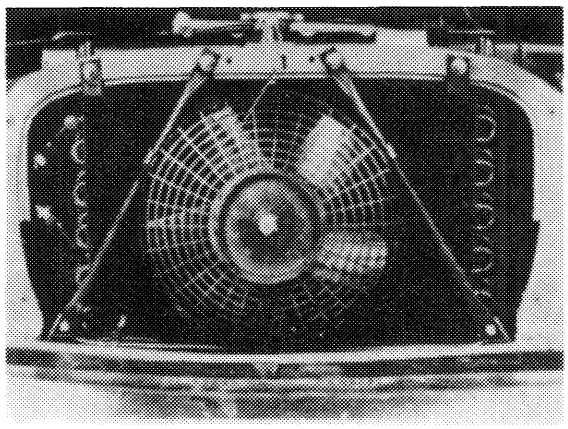


Fig. 3-7
1 – Auxiliary fan

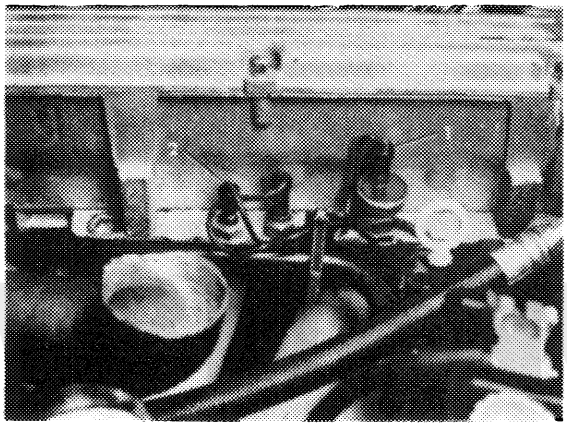


Fig. 3-8
1 – Temperature switch, engine
2 – Temperature gauge sensor

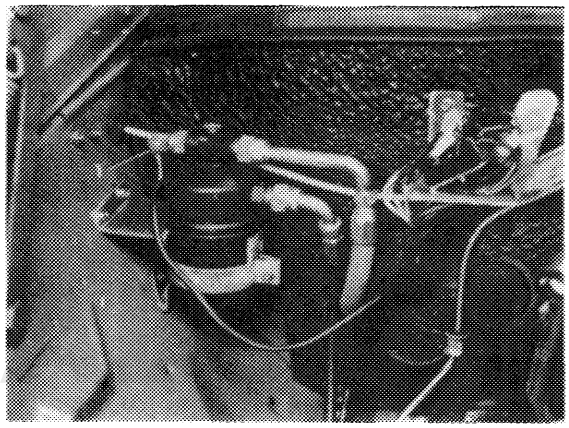


Fig. 3-9
1 – Temperature switch, refrigerant

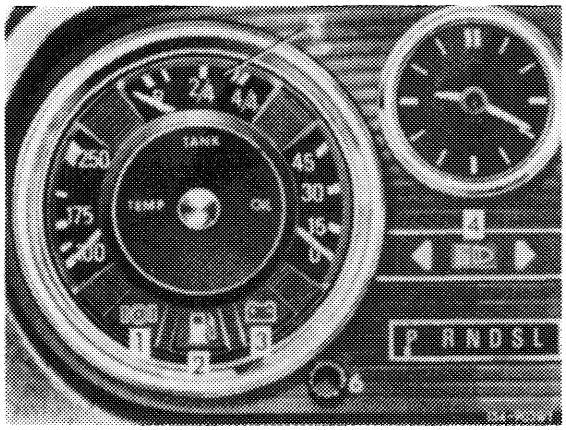


Fig. 3-10
1 – Reservoir and park brake light
2 – Low fuel warning light
3 – Charge indicator light
4 – High beam indicator
5 – Fuel gauge
6 – Instrument lights rheostat

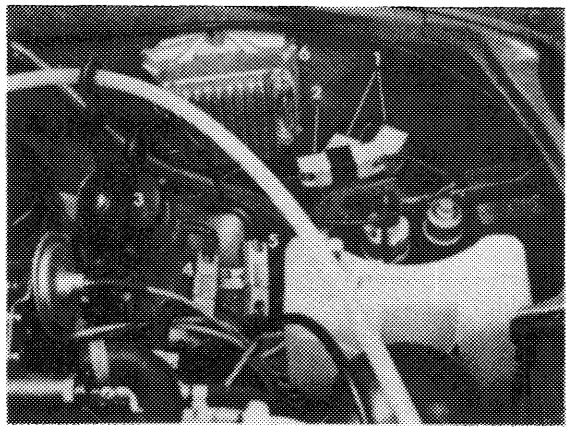


Fig. 3-11
1 – Automatic choke pre-resistance heater relay
(can be located in either position)
1 – Temperature switch relay
(can be located in either position)
2 – choke pre-resistance
3 – Coil
4 – 0.4 ohm pre-resistor
5 – 0.5 ohm pre-resistor
6 – Transistorized ignition switching unit

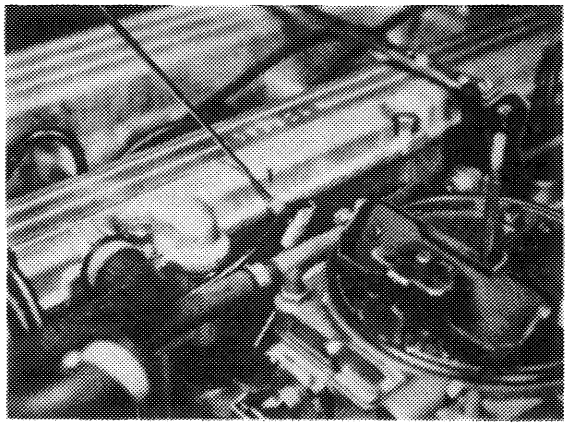


Fig. 3-12
1 – Choke heating resistance

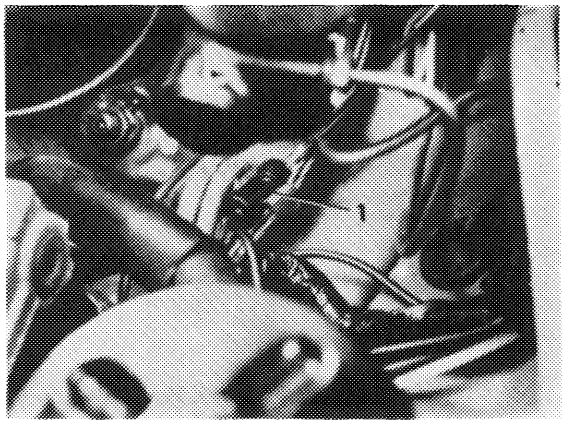


Fig. 3-13
1 – C 114

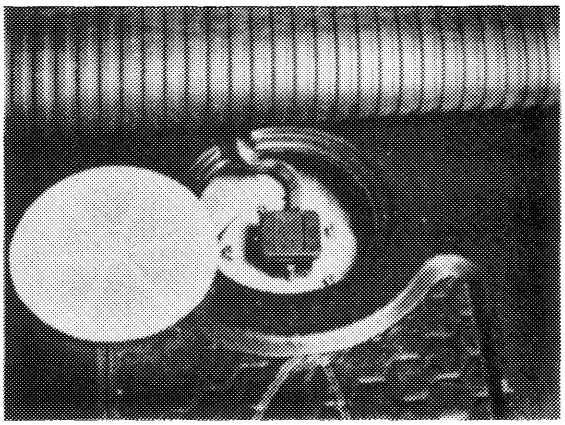


Fig. 3-14
Fuel tank sensor

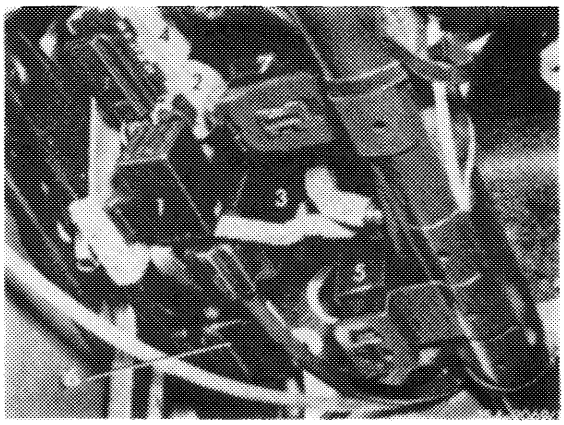


Fig. 3-15
1 – Flasher relay
2 – Warning buzzer
3 – Time delay relay, heated rear window
4 – Logic relay
5 – Interval wipe timer
6 – C 104
7 – C 106

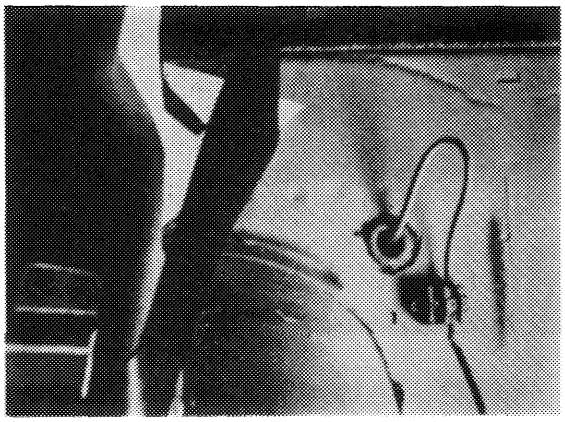


Fig. 3-16
1 – C 112

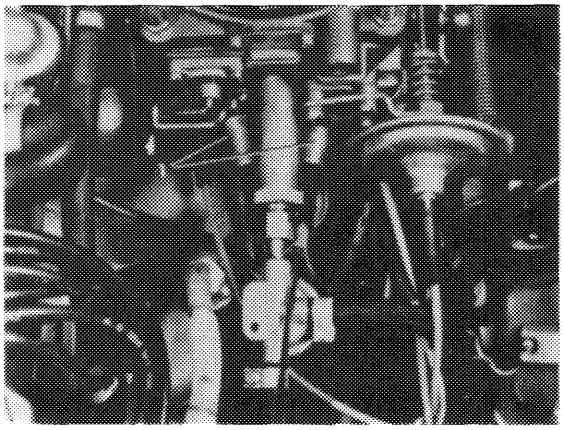


Fig. 3-17
1 — Idle fuel cut off valves

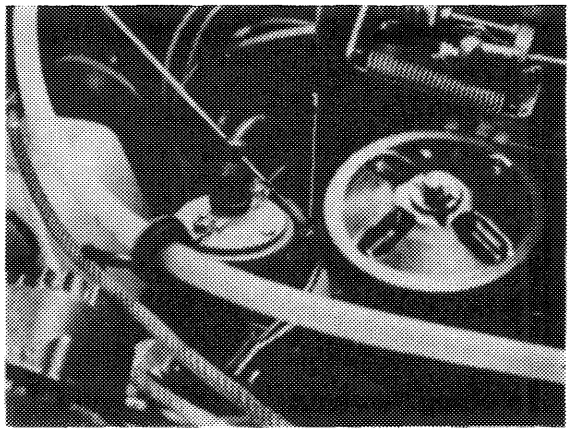


Fig. 3-18
1 — C 102

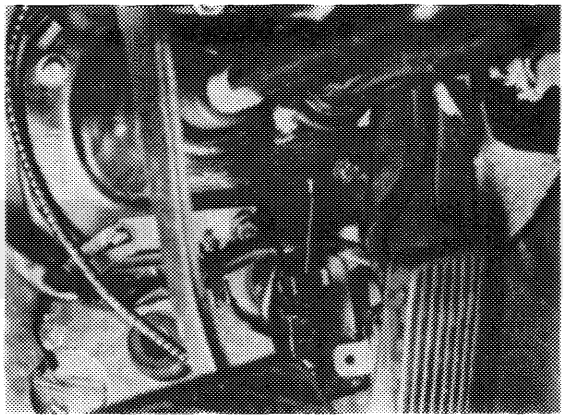


Fig. 3-19
1 — Kickdown switch

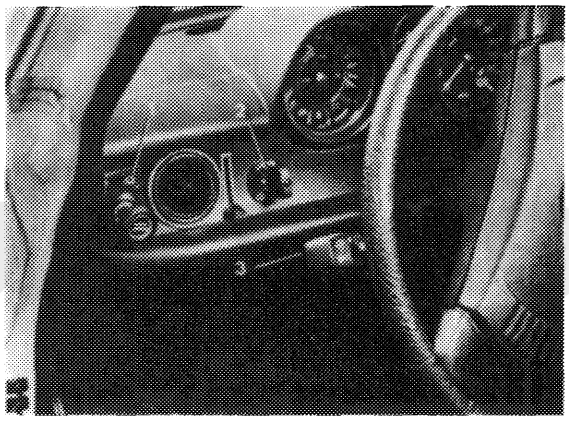


Fig. 3-20
1 — Rear dome light switch
2 — Light switch
3 — Combination switch

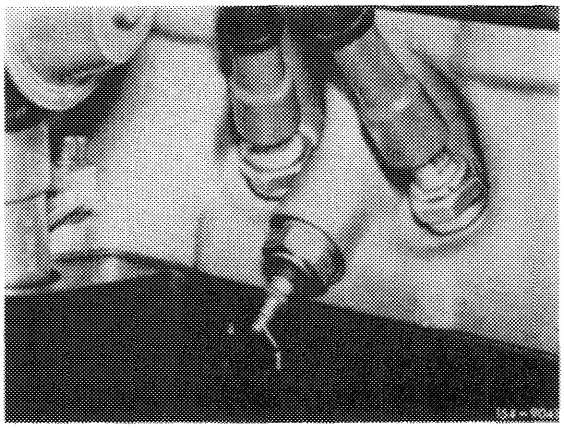


Fig. 3-21
1 — Engine temperature gauge sensor (230)

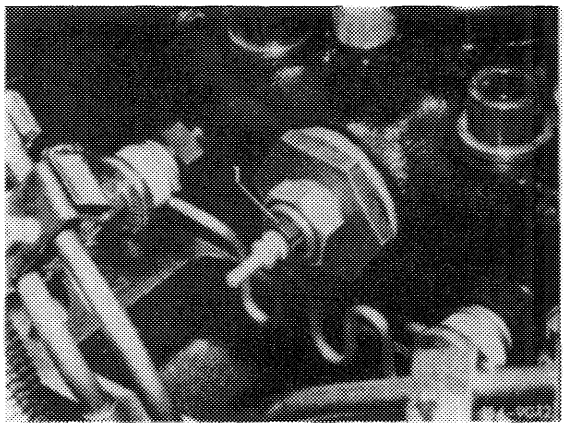


Fig. 3-22
1 — Engine temperature gauge sensor (240D)

NEXT

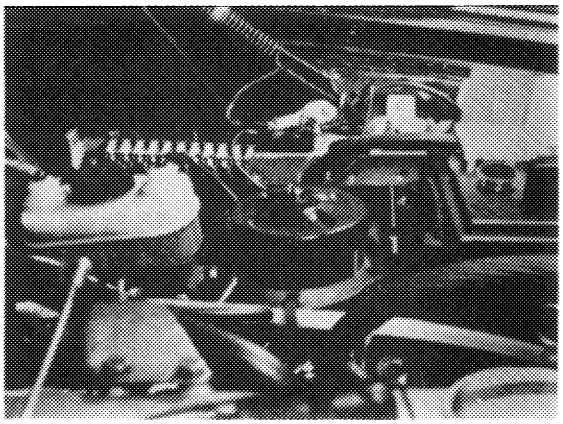


Fig. 3-23
1 — Auxiliary fan relay

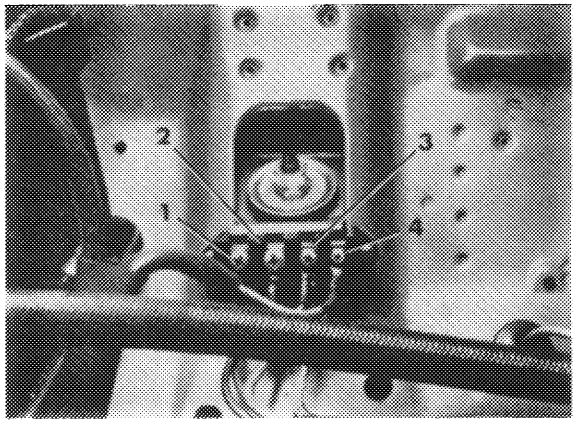


Fig. 3-24
1 — Terminal 1
2 — Terminal 2
3 — Terminal 3
4 — Terminal 4

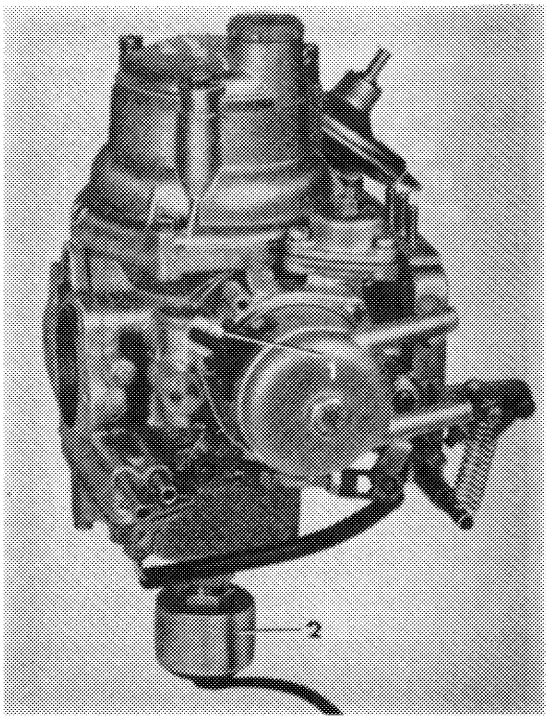


Fig. 3-25
1 — Choke heater
2 — Idle fuel cut off valve

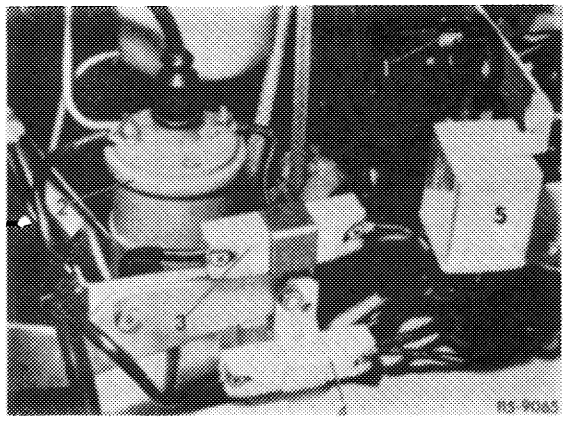


Fig. 3-26
1 — RPM test plug
2 — Ignition coil
3 — 0.4 ohm pre-resistor
4 — 0.6 ohm pre-resistor
5 — Delay relay

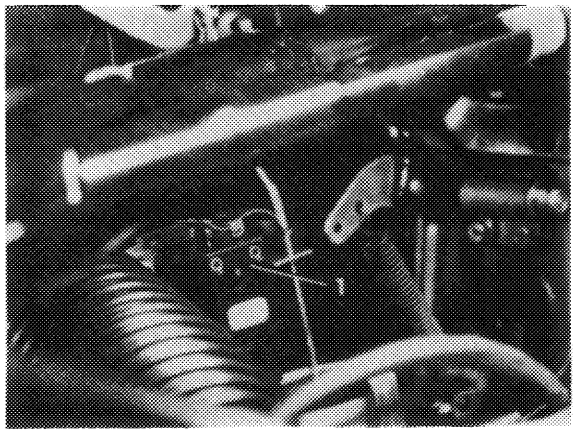


Fig. 3-27
1 — Change over switch

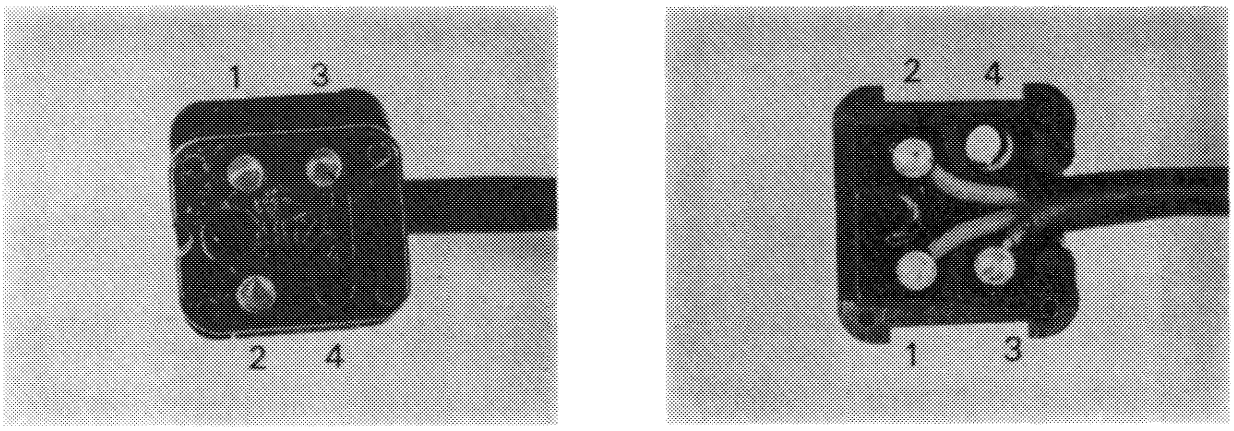


Fig. 3-31
Connector, 4 terminal

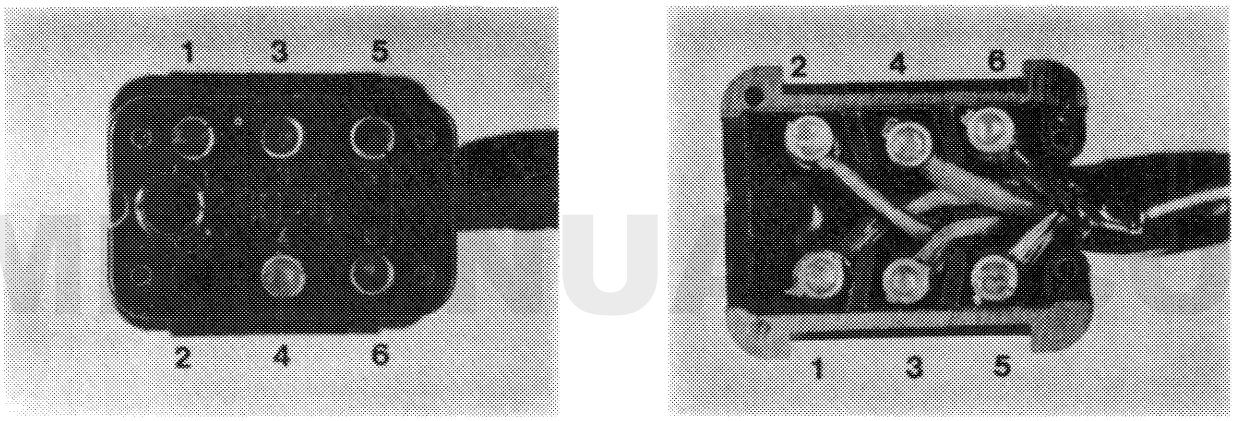


Fig. 3-32
Connector, 6 terminal

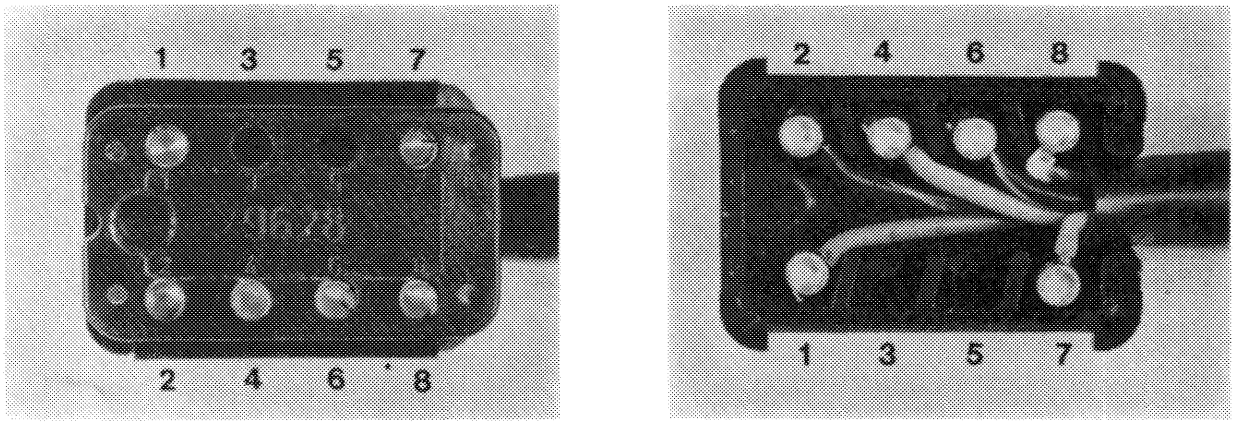


Fig. 3-33
Connector 8 terminal

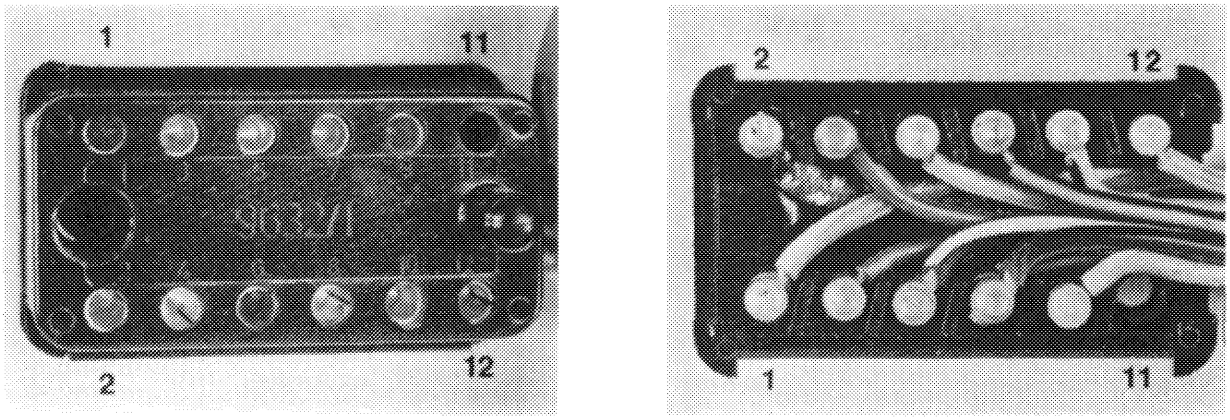


Fig. 3-34
Connector, 12 terminal

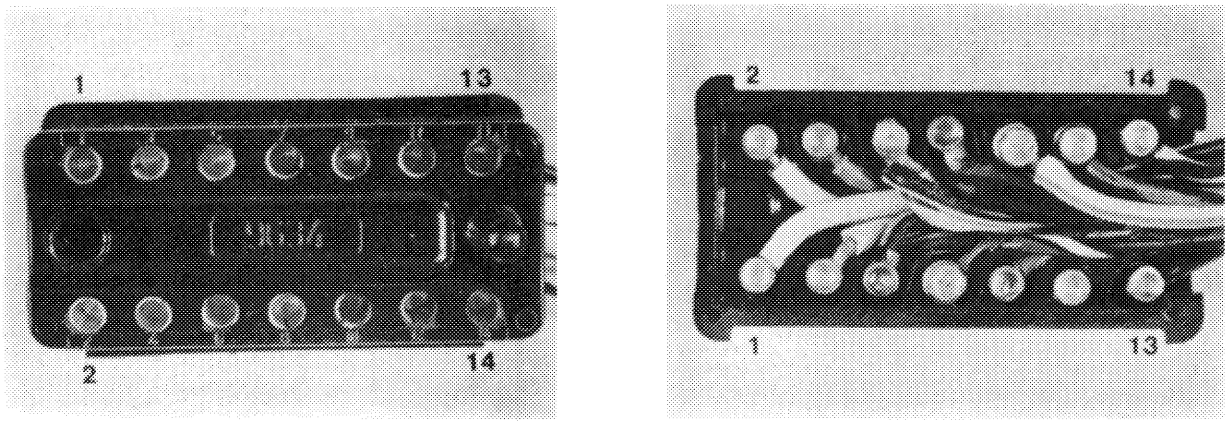


Fig. 3-35
Connector, 14 terminal

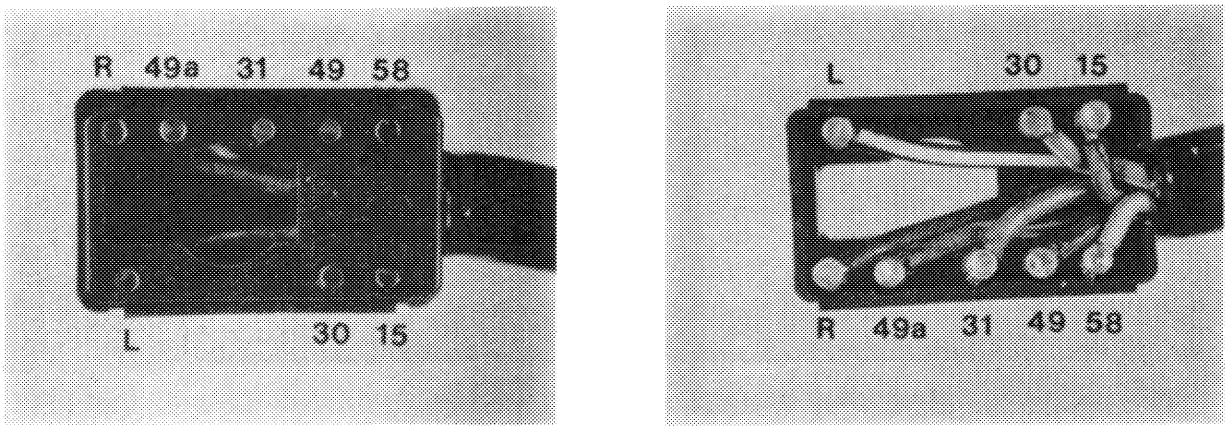


Fig. 3-36
Connector, flasher switch

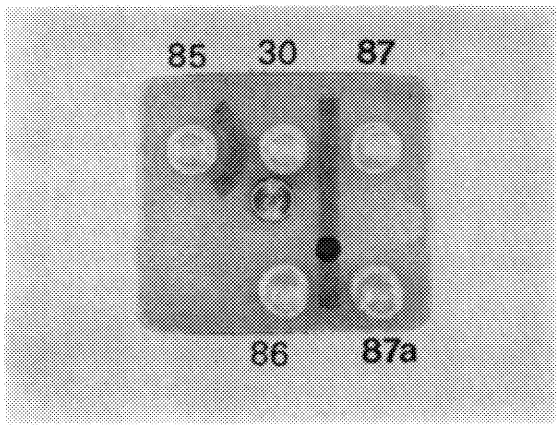


Fig. 3-37
Relay

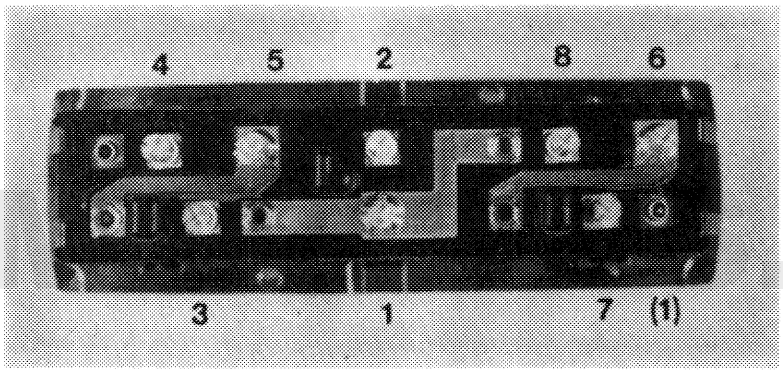


Fig. 3-38
Window switch group
(the 1 terminal has two alternate positions)

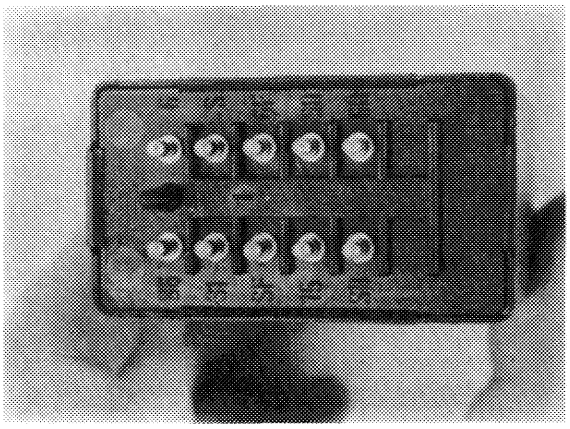


Fig. 3-39
Seat belt starter logic relay

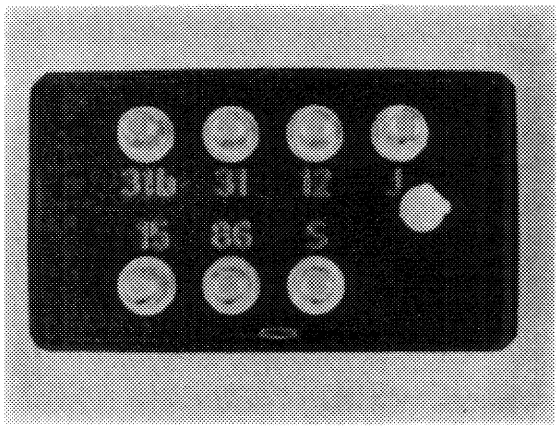


Fig. 3-40
Windshield wiper interval relay

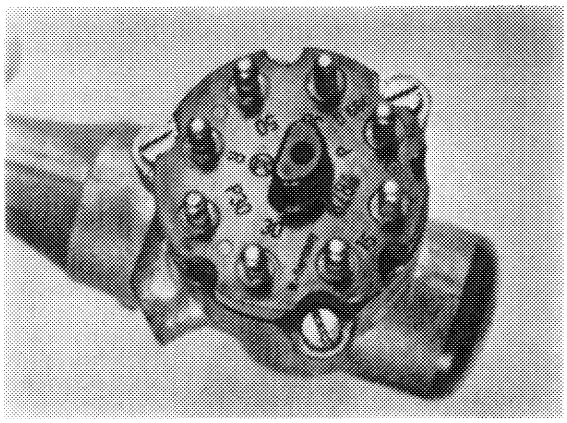


Fig. 3-41
Ignition switch

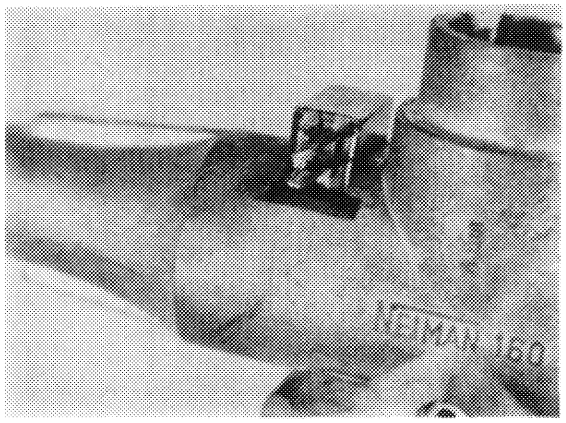


Fig. 3-42
Ignition lock warning switch

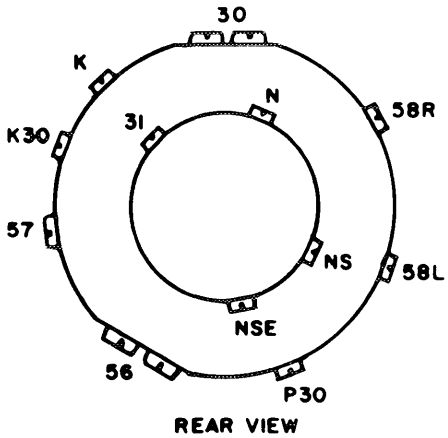


Fig. 3-43
Light switch

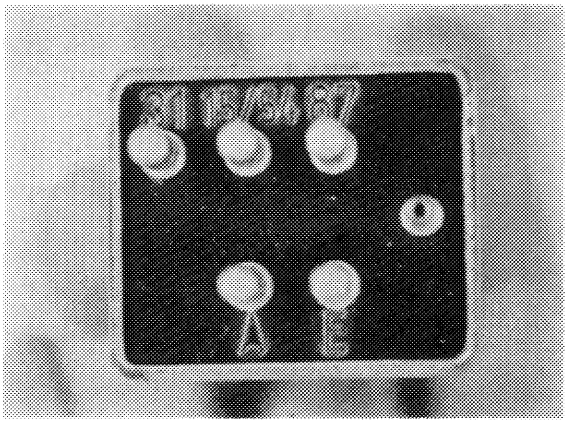


Fig. 3-44
Heated rear window delay relay

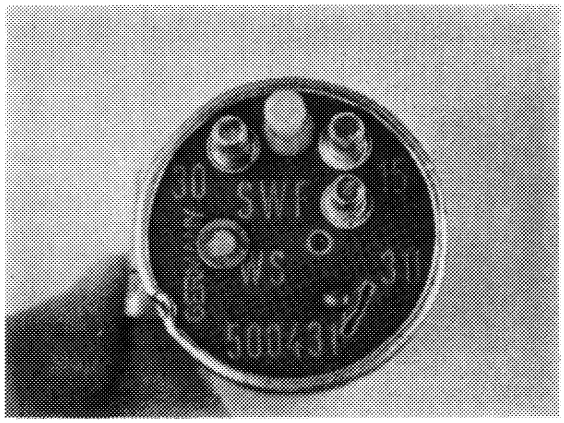


Fig. 3-45
Buzzer, warning

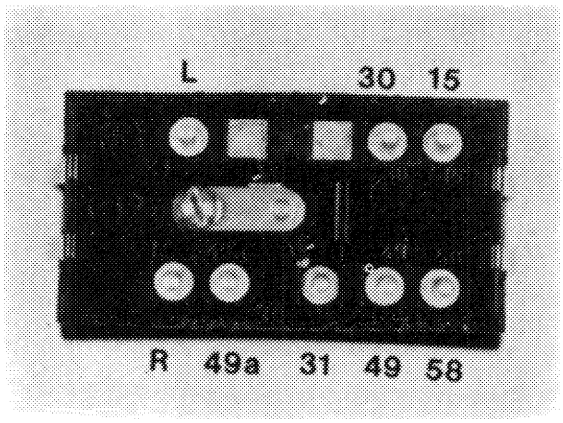


Fig. 3-46
Flasher switch

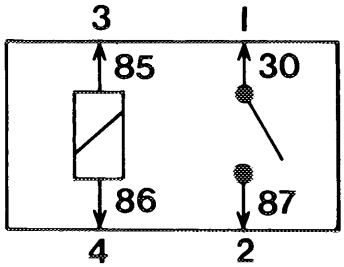


Fig. 3-47
Relay, normally open

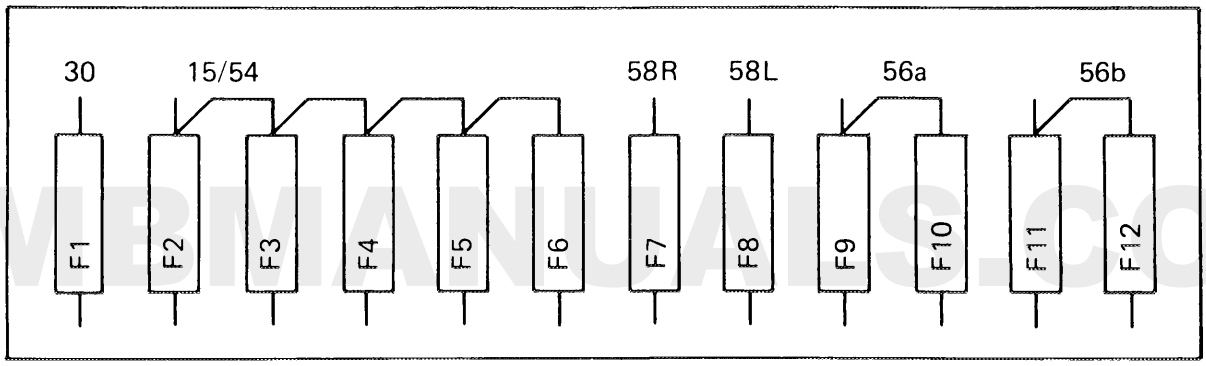


Fig. 3-48
Main fuse box

Mercedes-Benz

Service

Electrical Troubleshooting Manual (USA)

Models 230, 240D, 280/280C Model Year 1974

Mercedes-Benz of North America, Inc.

S-2415-115

Mercedes-Benz Canada, Inc.
Service and Parts Literature

Published by Mercedes-Benz of North America, Inc.

Printed in the U.S.A.

Order no.: **S-2415-115**

INDEX

Component Locations

The information contained within this manual is accurate to the best of our knowledge at the time of printing. All rights are reserved to make production, design and specification changes at any time without notice and without obligation to give notice. Any such changes will not be contained within this manual

It is a general assumption that the reader is familiar with basic mechanical and electrical repair procedures and Mercedes–Benz vehicles.

Mercedes–Benz of North America, Inc, assumes no liability for any damage to person or property caused by the utilization of this publication to effect maintenance or repair work on Mercedes–Benz automobiles.

Mercedes–Benz of North America, Inc
Service and Parts Literature

SECTION I - INTRODUCTION

This edition of the Mercedes Benz Electrical Troubleshooting Manual includes information for models 230, 240D, and 280/280C. It has been carefully designed and prepared to help the technician reduce the time needed to locate and correct electrical malfunctions.

The format has been changed somewhat from the first edition in response to field comments. Specifically, all photographs and diagrams are grouped together in section III. Section IV, V and VI contain an index of components and foldout schematic pages for the 230, 240D and 280/280C vehicles respectively. Sections I and II are essentially unchanged except for the addition of a table showing fuse number used by each circuit. As before, power buses are drawn at the top of the sheet and ground buses near the bottom. Care has been taken to arrange circuit components such that the operation of a circuit can be easily and correctly understood. Ample notes are included to assure understanding of the intended circuit operation.

Two power buses are used on the Schematic/Wiring Diagram. The "Battery Bus" is connected directly to the battery and is "hot" or energized at all times, regardless of position of the key switch. See page 6-1, section C18. Notice that the plus battery terminal is connected to the "Battery Bus" at terminal 30 in the fuse box and all other wires on the Schematic/Wiring Diagrams shown connected to the "Battery Bus" are therefore, also connected to the battery at all times. The second bus used is the "Start-Run Bus". This bus is "hot" only when the key switch is in the start or run positions. Refer to page 6-1, section B10 and trace power from the Battery Bus through the key switch to the Start-Run Bus.

All switches and other components are shown as they exist when the vehicle is "at rest." At rest means doors closed, seats unoccupied, engine off, shift lever in park or neutral, temperature stabilized at 20°C/59°F, key out of ignition, light switch off, etc. The manner in which each component operates is explained in notes on the Schematic/Wiring Diagram. Refer to page 6-4, section F16. If the oil temperature is above 17°C or 62°F the Temperature switch is closed.

When a component is shown in its entirety in one location on the Schematic/Wiring Diagram, it is outlined with a solid heavy line. When a component is used in more than one location, it is outlined with a dash-dot heavy line. For example, fuse 1 is shown with a dash-dot heavy line because it appears in several locations throughout the Diagram. On the other hand, fuse 6, page 6-3, is shown with a solid heavy line because it appears nowhere else.

All wiring between components is shown exactly as it actually exists on the vehicle. Wiring internal to complicated components (for example, the Ignition Switch or the Light Switch) has been modified to aid in understanding electrical operation. In these cases, multiple pole, multiple throw switches are shown. To properly use the Schematic/Wiring Diagram, mentally position all switch poles to the same position and then trace the current paths through the component. It is important to remember that the switches actually function precisely as shown when measured from the switch terminals. For example, the Ignition Switch (page 6-1 B10 and page 6-2 B15) is drawn as a four pole switch, each pole with four throws or positions, one each corresponding to the actual four Ignition Switch positions, Off, 1, 2, and Start. By mentally positioning all four poles to, say, Start, you see the only circuits through the Ignition Switch that are completed when the switch is actually in the Start position are terminal 30 to 50 and terminal 30 to R.

Circuits which involve transistorized parts require special troubleshooting procedures. For example, if the Safety Interlock Circuit (page 6-1, D5) does not function, first check all circuits external to the relay logic unit. Using a voltmeter, check for power at terminals 7 and 8. Ground terminal 1 and with the Ignition Key in the Start position, check that the AC/Starter Relay picks up. Using an ohmmeter, check that the Seat Switches, Buckle Switches and Starter Lockout Switch, terminals 2, 5, 6, 9, 10 on the Logic Relay connector, all show shorts to ground when the switches are operated. If all external circuits operate properly, the fault lies within the transistorized Logic Relay and it is replaced.

PROCEDURE FOR SYSTEMATIC TROUBLESHOOTING

Systematic troubleshooting should proceed through the following five steps:

1 VERIFY THE COMPLAINT

Check the complaint to be sure the problem is real. If the customer is available, ask him to demonstrate the problem to you. Road test the vehicle if necessary but in any case, get first hand knowledge of the complaint. If there are several symptoms, note them all and then look for one failure that could cause them all. It is rare for more than one failure to occur at a time.

For example, when verifying the complaint that a 280 engine overheats, you notice that 1) the auxiliary fan does not operate, 2) the kickdown solenoid does not operate, and 3) the turn signals do not operate.

2 LOCATE THE FAULT ON THE SCHEMATIC

Use the 280/280C index to locate the circuits you found inoperative on the Schematic. In this example, locate the auxiliary fan circuit on page 6-3, the kickdown circuit, also on page 6-3, and the turn signal circuit on page 6-2.

3 ANALYZE THE CIRCUIT

Analyzing the symptoms requires careful thought. No two cases are alike. In this example you might notice that all three faulty circuits are supplied through fuse 4.

4 CORRECT THE FAILURE

In this example, replace the fuse to correct the failure. In most cases, fuses fail because they have been overloaded, not from old age or some other reason. To correct the reason for the fuse failure, you must isolate and test each circuit which is fed through fuse 4. The fuse usage chart in the vehicle fuse box or the listing in Section II tells you that the auxiliary fan circuit, the kickdown solenoid, and the turn signal circuit are the only circuits supplied by fuse 4. Good procedure in this case calls for replacing the fuse and, if the engine is still hot after your test run, check that the auxiliary fan does run. If the engine is not hot, a check of the Schematic shows that if you disconnect the Engine Temperature Switch or the Refrigerant Temperature Switch and short the lead to ground, the fan will operate. If the fuse does not fail at this point you might next press the accelerator to the floor closing the kickdown switch. If the fuse is still OK, turn the Turn Signal on which will energize the remaining circuit supplied through fuse 4. Assume, in this example, that the fuse fails only when the combi switch is set for a right turn. A look at the schematic, page 6-2 tells you the short to ground which is drawing high current in between the combi switch R wire (connector C 106, terminal 8) and the front right and rear right turn lights or perhaps involves the black and green wire which goes to terminal R on the Flasher Switch. Good procedure is to split a circuit in half if practical, to isolate a fault. Assume you disconnect C 104, replace the fuse again and this time the fuse does not fail. Notice the circuit index lists C 104 under Turn Signal and Flasher. The Component Location column describes C 104's location as "under dash—driver's side" and refers to photograph 3-15 for precise location.

You know the short is between C 104, terminal 7, and the rear right turn signal light. Your next step could be to reconnect C 104 and disconnect the connector which plugs into the rear right light unit. The fuse again does not fail. You know now the short is within the rear right light unit. Assume upon taking the unit apart a short is found and removed.

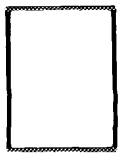
5 CHECK FOR PROPER CIRCUIT OPERATION

Good practice requires that you check all parts of the circuit you have tested. Check not only the turn signal circuit, but the auxilliary fan and kickdown switch for proper operation.

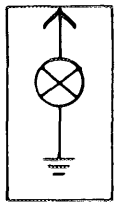
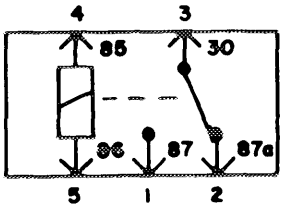
SECTION II - STANDARD SYMBOLS AND DEFINITIONS

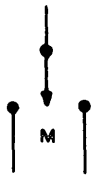
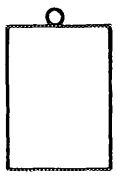
1. STANDARD SYMBOLS

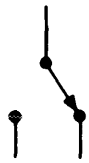
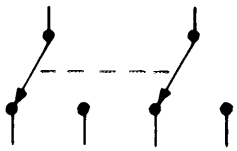
The following electrical symbols are used in the Electrical Trouble-shooting Manual.

Temperature switch	
Capacitor	
Clutch, electric	
Coil	
Component, shown complete in one position on Diagram	

Component, shown in more than one position on Diagram	
Connector	FEMALE MALE
Diode	
Fuse	
Electric gauge	
Ground or chassis	

Ground shown elsewhere	
Light bulb	
Motor, permanent magnet	
Motor, series field	
Spark gap	
Relay (contacts as shown with no voltage applied to coil)	

Relay coil, time delay	
Relay coil, two windings	
Switch, momentary (Returns to center off position when released)	
Resistor, fixed value	
Resistor, variable value	
Screw terminal	

Solenoid valve	
Switch, normally closed	
Switch normally open	
Switch, one pole, two positions	
Switch, two poles, two positions (Dashed line indicates the two poles move together)	
Transistor	

2. WIRE SIZE AND COLOR

Wire size and insulation color is shown on the Schematic/Wiring Diagram as an aid in locating specific wires. Wire size, (crossection area) is shown in millimeters square, 0.5, 0.75, 1.0, 1.5, 2.5, 4.0, 6.0, 10, 25 and 35. The first color shown on the Diagram is the base or overall insulation color. Second and third colors, if any, designate striping. Solid brown insulation is used exclusively for wires that are grounded.

The color code used in this Manual is somewhat different from the code used in Mercedes Benz documents prepared in Germany. All color codes used in the Manual are two letter, selected to closely relate to the English word they represent. Notice that lower case letters are used.

COLOR	CODE USED IN ETM	GERMAN EQUIVALENT
White	wt	ws
Green	gn	gn
Brown	br	br
Yellow	yl	ge
Gray	gy	gr
Pink	pk	rs
Blue	bu	bl
Red	rd	rt
Black	bk	sw
Ivory	iv	el
Natural	nt	nf
Violet	vi	vi

Example:

Wire designation: 1.5 gy/rd
Wire size: 1.5 mm^2
Insulation base color: gray
Insulation strip color: red

3. FUSE DATA

The maximum current carrying capacity of fuses is coded according to the color of the porcelain fuse body as follows:

yellow – 5 amperes
white – 8 amperes
red – 16 amperes
blue – 25 amperes

The exact position of those fuses mounted outside the main fuse box varies from vehicle to vehicle due to manufacturing convenience. The component Location List, Sections IV, V and VI, specifies the general location of a particular fuse, such as "left fender." To determine which fuse of several is the one you require, identify it by the color of the wires leading to its terminals.

Notice that the radio and power antenna fuses are usually housed in the same fuse box. This fuse box can be identified by a screw lid rather than a snap-on lid.

Proper fuse sizes are as follows:

1	– 8a	12	– 8a
2	– 16a	13	– 8a
3	– 8a	14	– 8a (3)
4	– 8a	15	– --
5	– 8a (1)	16	– --
6	– 5a	17	– 16a
7	– 8a	18	– 16a
8	– 8a	19	– 16a (2)
9	– 8a	20	– 16a
10	– 8a	21	– 8a
11	– 8a	22	– 8a

(1) This position not used on 280/280C

(2) If vehicle equipment includes both heated rear window and electric roof, this fuse is 25 amperes.

(3) 2 amperes on 280/280C

The following table lists the fuse number used by various circuits on each vehicle.

	Fuse Number		
	230	240D	280/ 280C
Air Conditioning			
A/C blower motor	F21	F21	F21
A/C clutch	F22	F22	F22
Heater blower motor	F 6	F 6	F 6
Auxiliary Fan	F4/F20	F20	F4/F20
Choke Heating	F 4	—	F 3
Cigar Lighter	F 2	F 2	F 2
Clock	F 1	F 1	F 1
Fuel Gauge	F 5	F 5	F 3
Heated Rear Window	F19	F19	F19
Horns	F 2	F 2	F 2
Idle Fuel Cutoff	F1/F4		F 3
Kickdown	F 3	F 3	F 4
Light Circuits			
A/C Control light	F 6	F 6	F 6
Ash tray	F 7	F 7	F 7
Backup	F 5	F 5	F 3
Brake system warning	F 5	F 5	F 3
Dome, front	F 1	F 1	F 1
Dome, rear	F 1	F 1	F 1
Fog (Perimeter)	F11	F11	F11
Gear selector	F 7	F 7	F 7
Glove box	F 5	F 5	F 3
Head	F9/F10/ F11/F12	F9/F10/ F11/F12	F9/F10/ F11/F12
Instrument cluster	F 7	F 7	F 7
Low Fuel warning	F 5	F 5	F 3
Marker	F7/F8	F7/F8	F7/F8
Standing	F1/F7/ F8	F1/F7/ F8	F1/F7/ F8
Stop	F 5	F 5	F 3
Tail	F7/F8	F7/F8	F7/F8
Trunk	F 1	F 1	F 1
Radio	F14	F14	F14
Antenna	F13	F13	F13
Sliding roof	F19	F19	F19
Turn signal/flasher	F1/F4	F1/F4	F1/F4
Windows	F4/F17/ F18	F4/F17/ F18	F4/F17/ F18
Windshield wiper/ washer	F 2	F 2	F 2

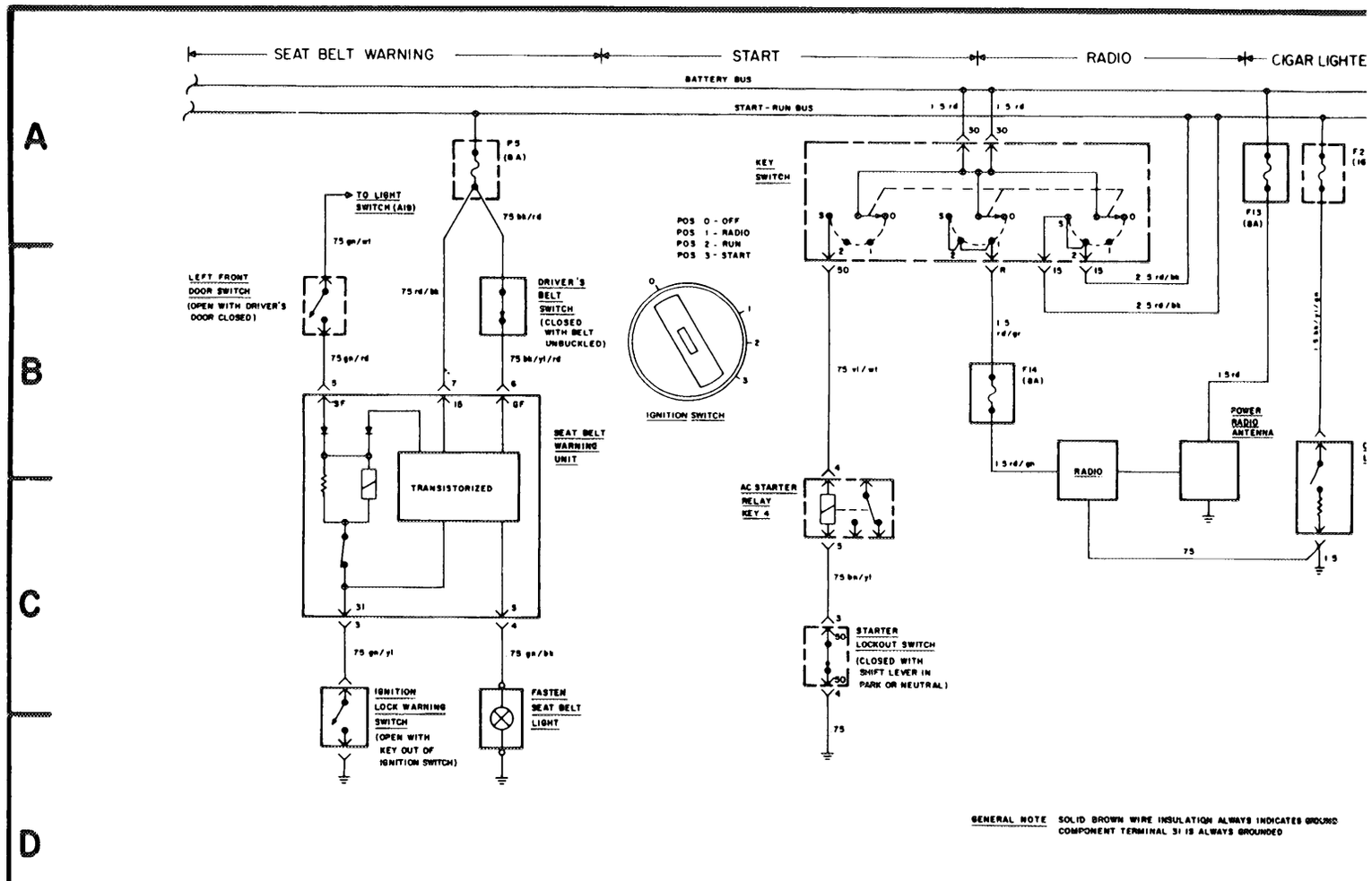
4. RELAY KEY CODE DESIGNATION

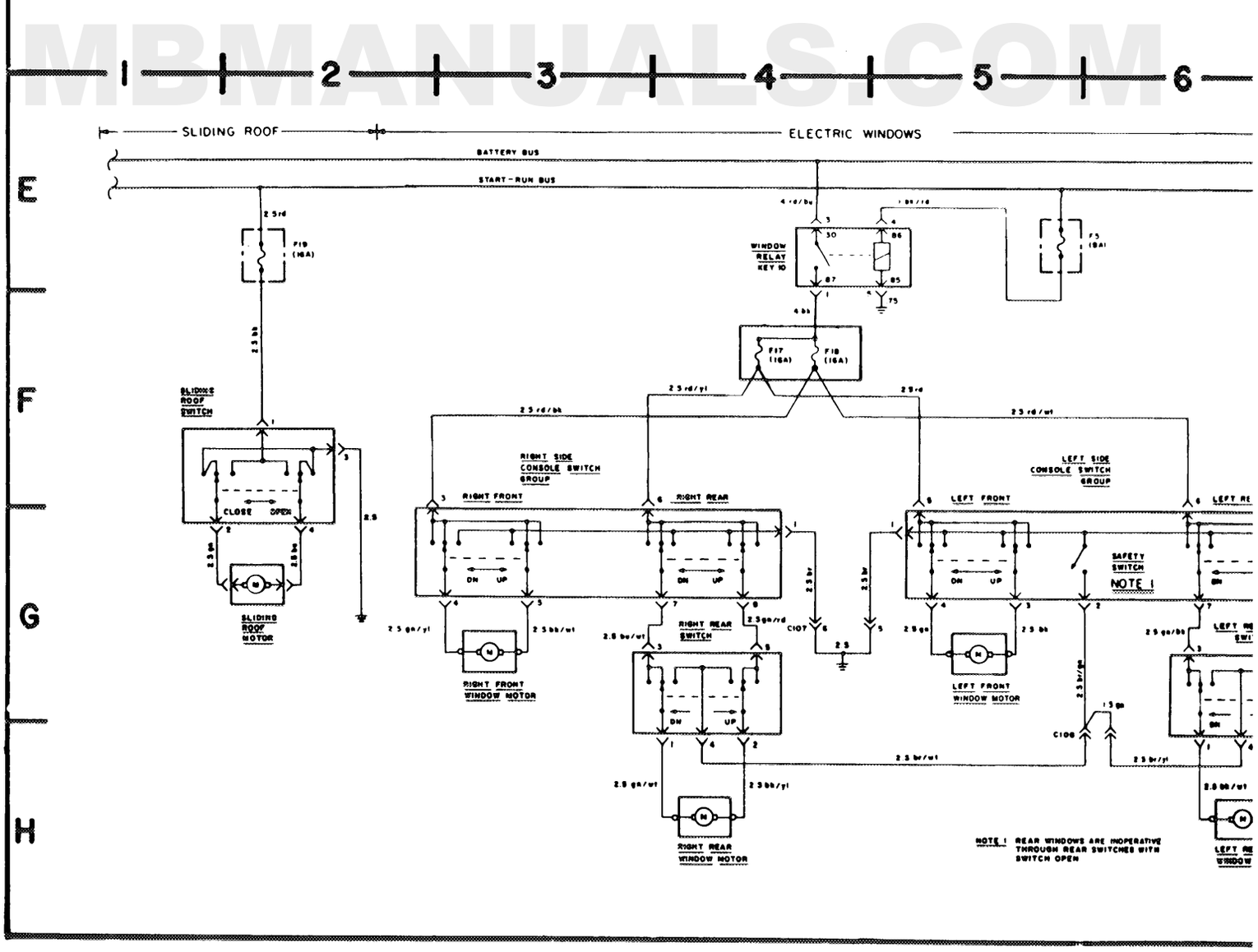
Since the exact position of relays varies due to manufacturing convenience, the harness leading to each relay is tagged as a means of identifying each relay. The following listing identifies the key numbering system.

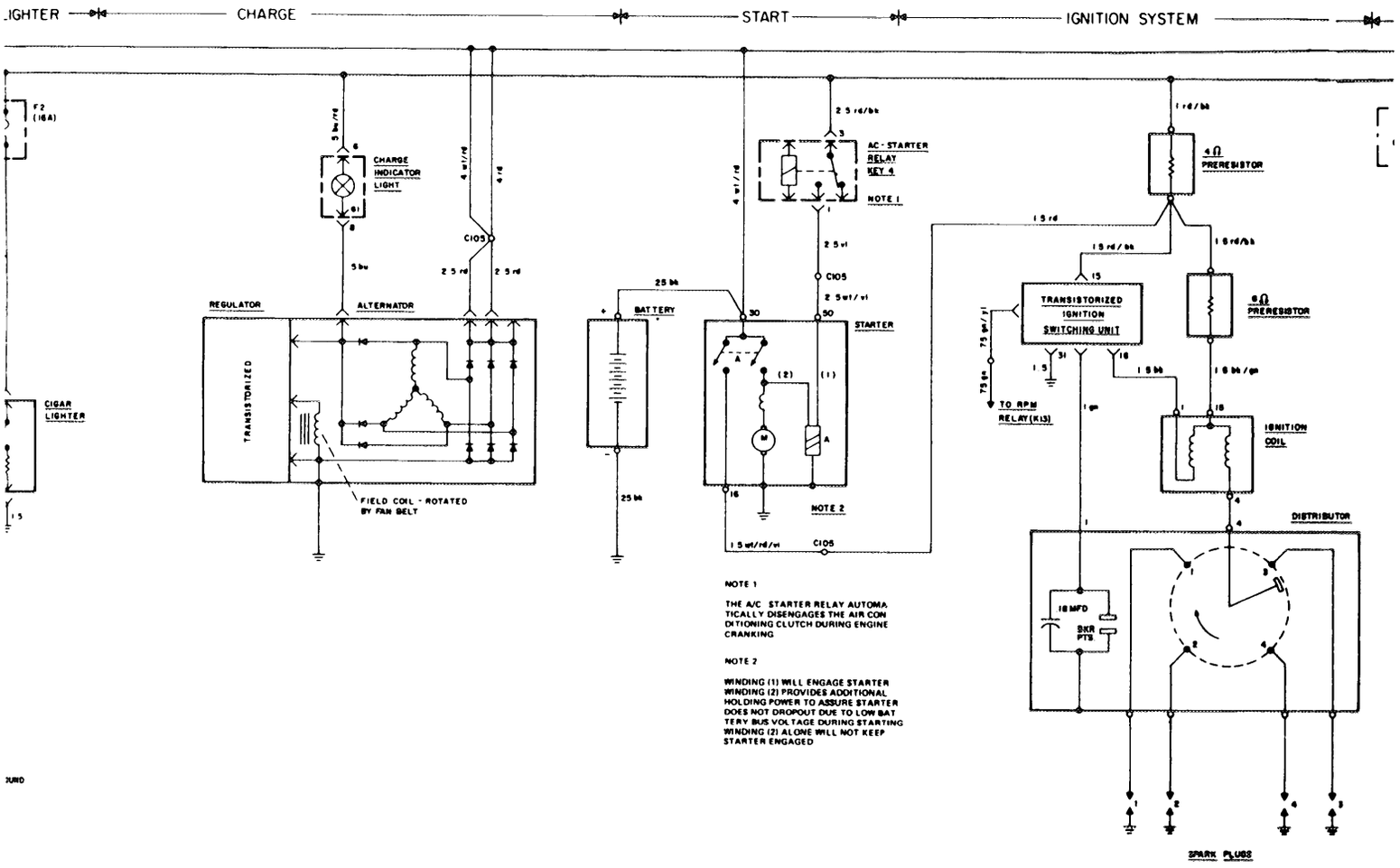
Key Number	Function
1	Fuel pump
2	Cold Start Valve
3	Fuel Injection
4	A/C Starter
5	Change-over Valve
6	Auxiliary fan
7	
8	Aux. Fan Cutout
9	
10	Windows Hot start Temperature Switch (Choke Heating) Choke Pre-resistance

5. CONNECTOR LIST

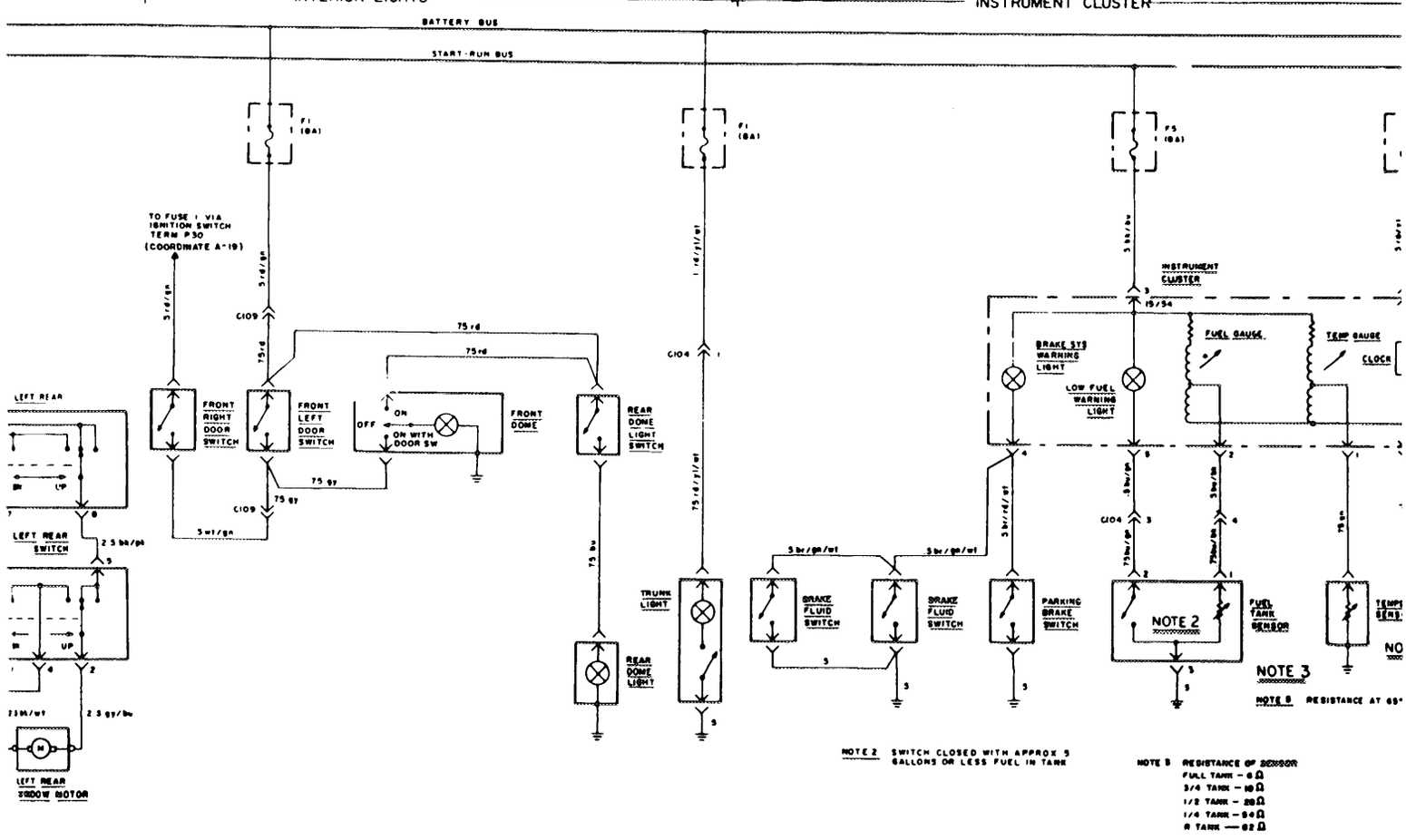
C101 Backup lights/kickdown switch
C102 Impulse trigger (Trigger points)
C103 Fuel injection circuit
C104 Rear harness circuits
C105 Charge-start circuit (3 or 4 terminal)
C106 Combination switch
C107 Electric window circuit
C108 Electric window circuit
C109 Reading light
C110 Rear dome light
C111 Hot start circuit
C112 Wiper motor
C113 Blower switch
C114 Choke Heater

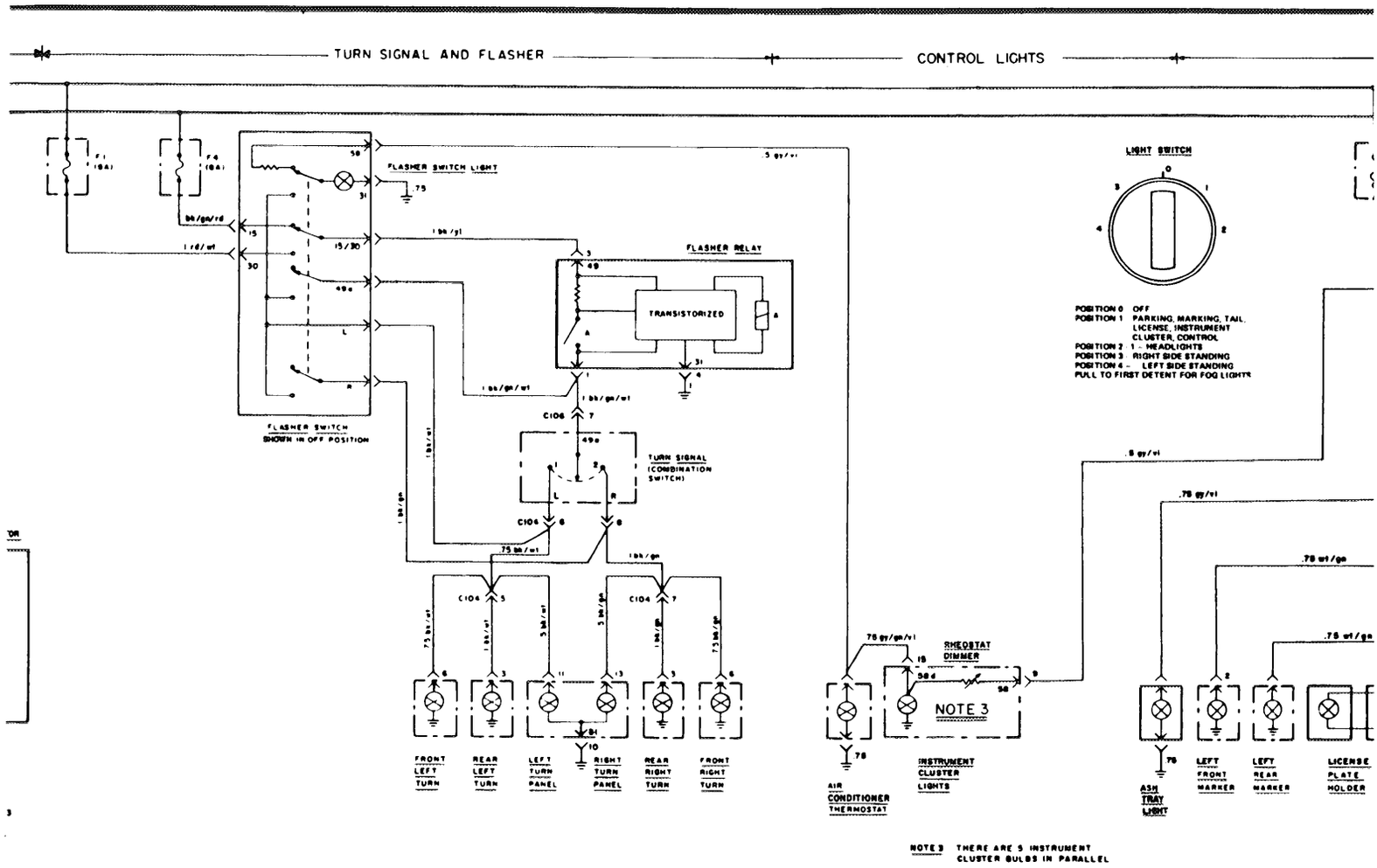




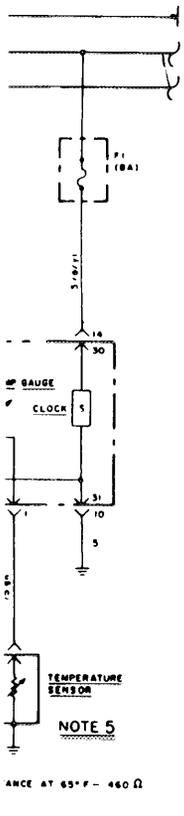

LIGHTER
CHARGE
START
IGNITION SYSTEM
F2 (16A)
CIGAR LIGHTER
CHARGE INDICATOR LIGHT
REGULATOR
TRANSISTORIZED
ALTERNATOR
FIELD COIL - ROTATED BY FAN BELT
BATTERY
AC-STARTER RELAY KEY 4
NOTE 1
STARTER
NOTE 2
4Ω PRERESISTOR
TRANSISTORIZED IGNITION SWITCHING UNIT
TO RPM RELAY (K13)
IGNITION COIL
DISTRIBUTOR
18 MFD
SKR PTS
SPARK PLUGS
NOTE 1
THE A/C STARTER RELAY AUTOMATICALLY DISENGAGES THE AIR CONDITIONING CLUTCH DURING ENGINE CRANKING
NOTE 2
WINDING (1) WILL ENGAGE STARTER WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROPOUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED

7 8 9 10 11 12


INTERIOR LIGHTS
INSTRUMENT CLUSTER
BATTERY BUS
START-RUN BUS
F1 (8A)
F5 (8A)
TO FUSE 1 VIA IGNITION SWITCH TERM P30 (COORDINATE A-19)
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
FRONT DOME
ON WITH DOOR SW
REAR DOME LIGHT SWITCH
REAR DOME LIGHT
LEFT REAR
LEFT REAR SWITCH
LEFT REAR WINDOW MOTOR
TRUNK LIGHT
BRAKE FLUID SWITCH
PARKING BRAKE SWITCH
INSTRUMENT CLUSTER
BRAKE SYS WARNING LIGHT
LOW FUEL WARNING LIGHT
FUEL GAUGE
TEMP GAUGE
CLOCK
FUEL TANK SENSOR
NOTE 2
NOTE 3
NOTE 2 SWITCH CLOSED WITH APPROX. 5 GALLONS OR LESS FUEL IN TANK
NOTE 3 RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 18Ω
1/2 TANK - 29Ω
1/4 TANK - 54Ω
E TANK - 92Ω



12 13 14 15 16 17



COMPONENT INDEX

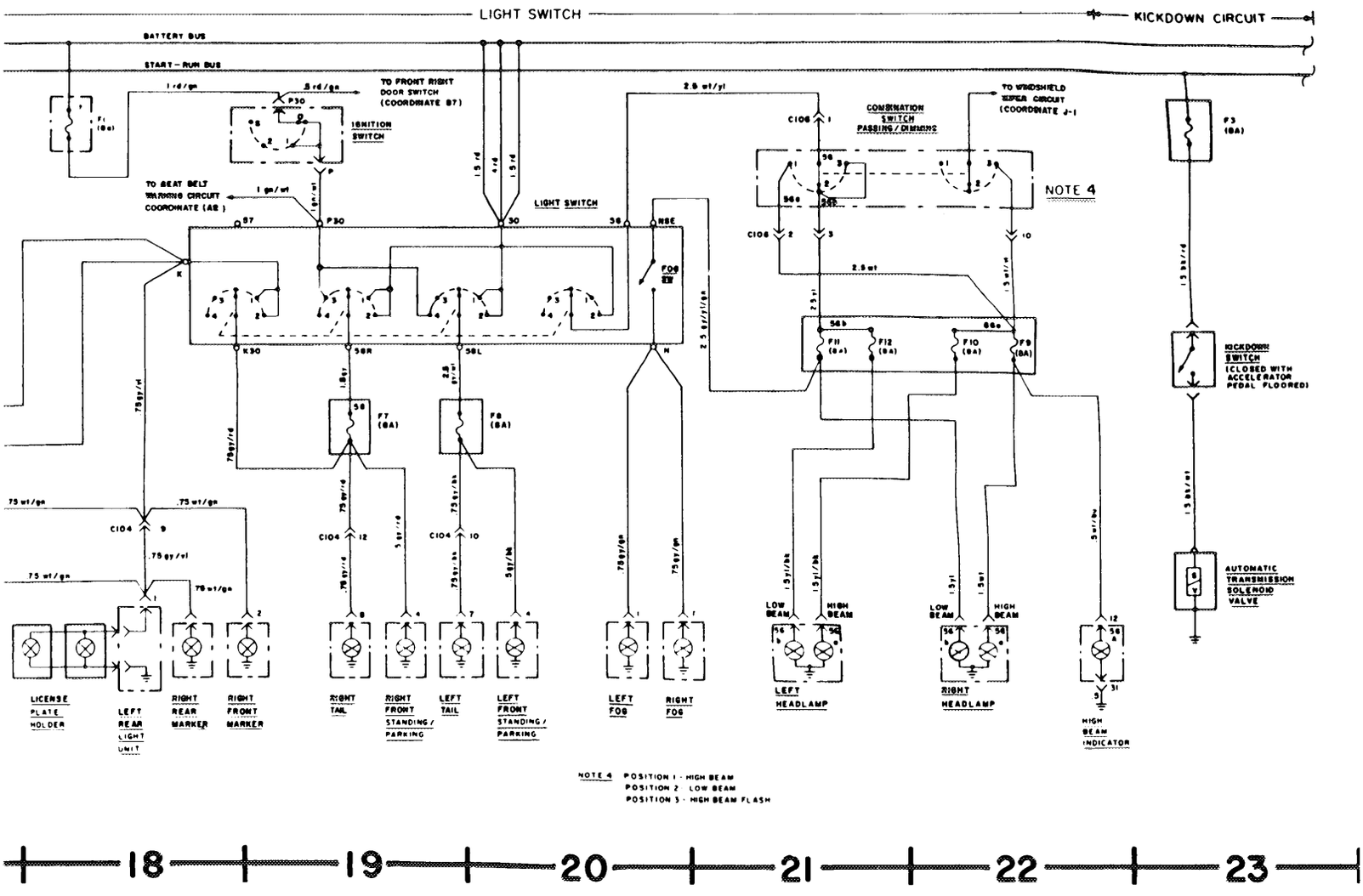
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
CHARGE			
Regulator	Alternator		
C 105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay — key 10	Right firewall under fuse bracket		T7
C 108	Console		
IGNITION SYSTEM			
Coil	Left front fender	8	
Distributor	Left front fender		
.4 Ohm preresistor	Left front fender	8	
.6 Ohm preresistor	Left front fender	8	
Transistorized ignition switching unit	Left front fender		
INSTRUMENT CLUSTER			
Brake fluid switches	Reservoir	3	
Coolant temp. sensor	Left front cylinder head	12	
Fuel tank sensor	Trunk	11	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side	6	T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	10	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning unit	Under dash, driver's side		
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right firewall, under fuse bracket		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
TRUNK LIGHT			
C 104 (12 pins)	Under dash, driver's side	6	T4
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T6
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5

1 — A/C Blo

1 — Change

1 — Main fu
2 — Heater b
3 — Brake fl
4 — Wiper m



LOCATION FIGURES

Fig. 1
1 – A/C Blower motor

Fig. 2
1 – Change over switch

Fig. 3
1 – Main fuse box
2 – Heater blower pre-resistors
3 – Brake fluid switches
4 – Wiper motor

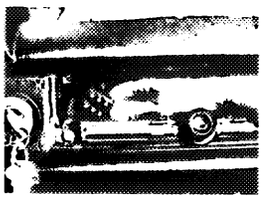


Fig. 4
1 – C 113

Fig. 5
1 – Temperature switch, refrigerant

Fig. 6
1 – Flasher relay
3 – Time delay relay, heated rear window
5 – Interval wiper timer
6 – C 104
7 – C 106

Fig. 7
1 – C 112

Fig. 8
1 – RPM test plug
2 – Ignition coil
3 – 0 4 ohm pre-resistor
4 – 0 6 ohm pre-resistor
5 – Time delay relay

Fig. 10
1 – Kickdown switch

Fig. 9
1 – Choke heater
2 – Idle fuel cut off valve

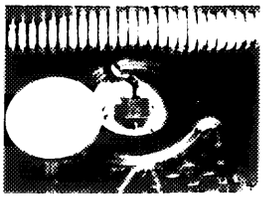
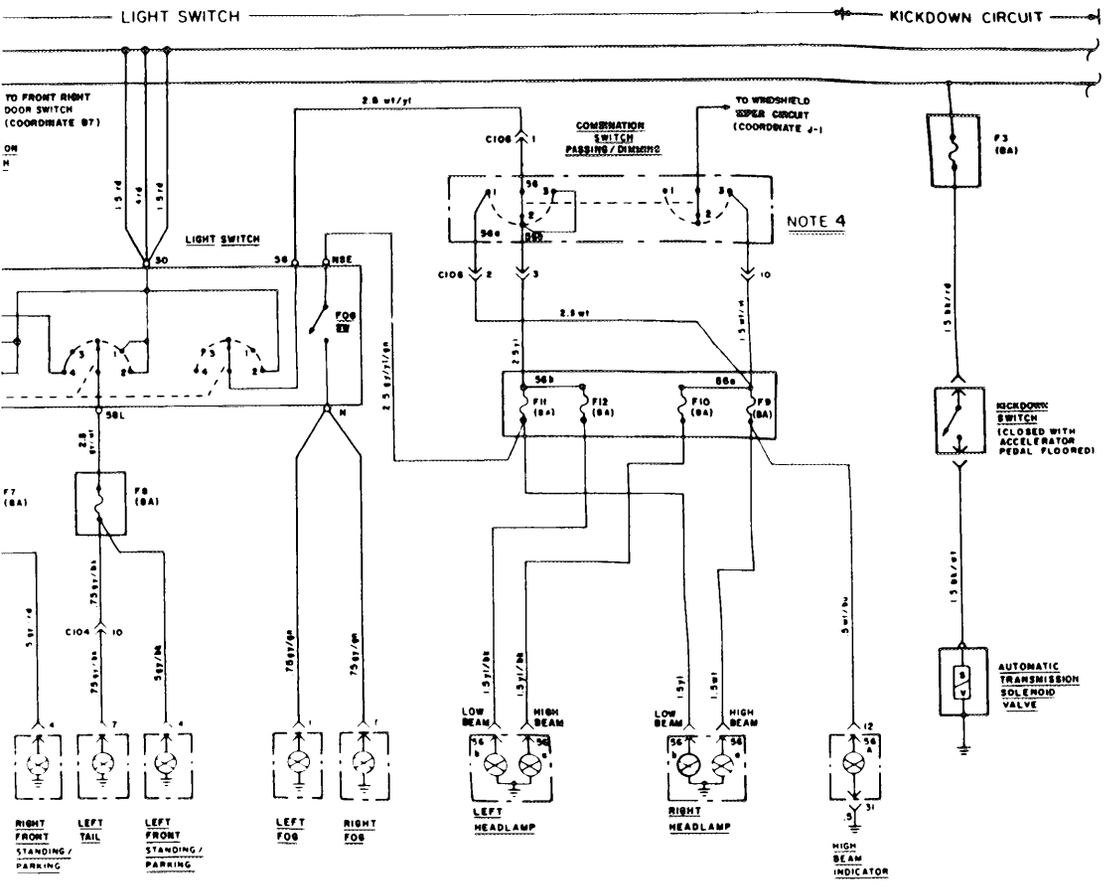


Fig. 11
Fuel tank sensor



A B C D

20 21 22 23 24

LOCATION FIGURES

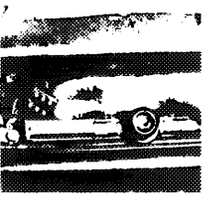


Fig. 4

Fig. 5
perature switch, refrigerant

Fig. 6
her relay
delay relay, heated rear windo
rval wiper timer
04
06

Fig. 7
1 — C 112

Fig. 8
1 — RPM test plug
2 — Ignition coil
3 — 0.4 ohm pre-resistor
4 — 0.6 ohm pre-resistor
5 — Time delay relay

Fig. 10
1 — Kickdown switch

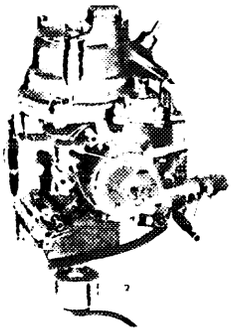


Fig. 9
1 — Choke heater
2 — Idle fuel cut off valve

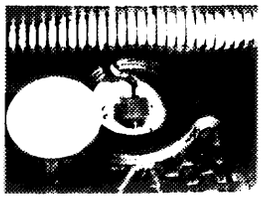
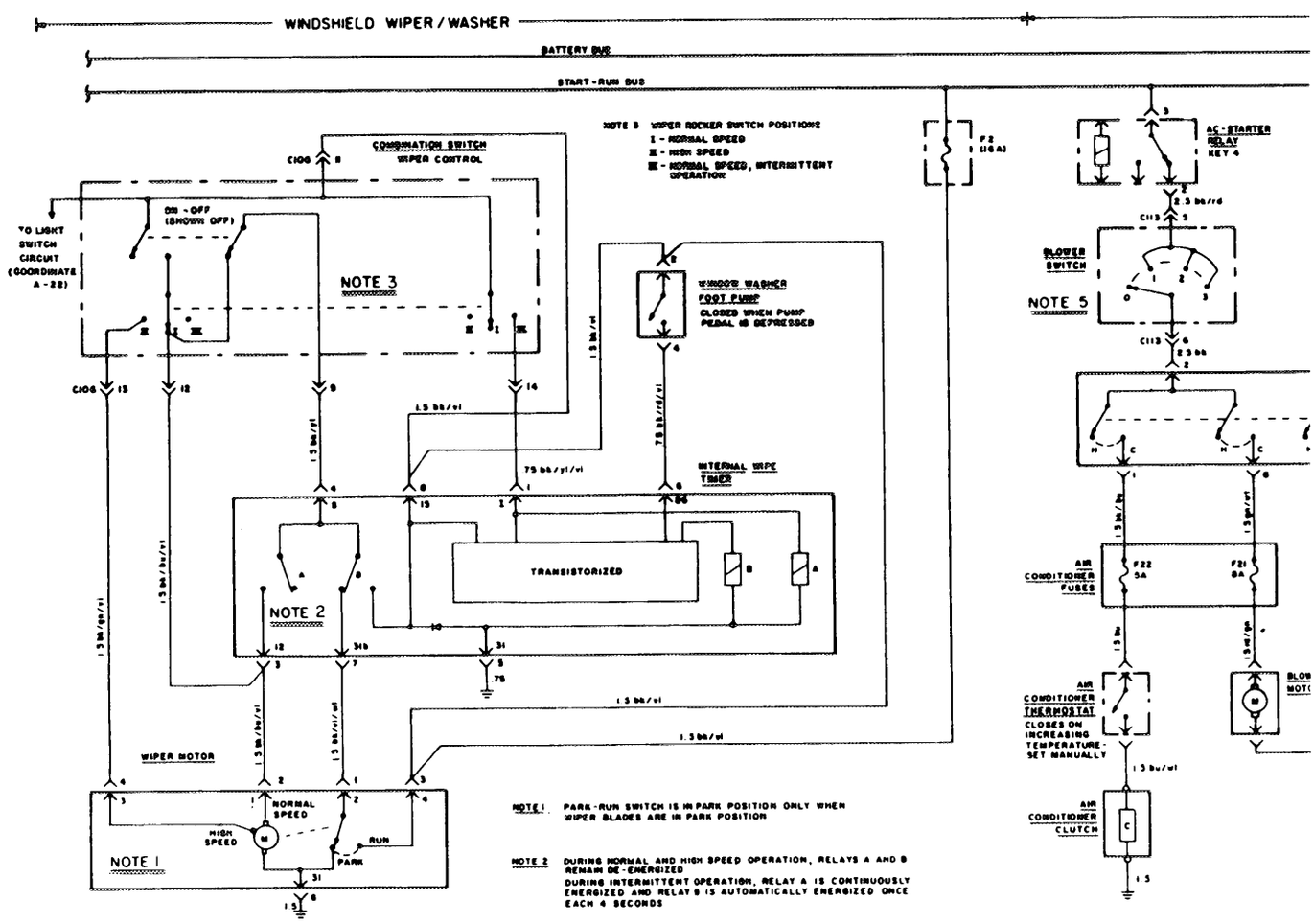


Fig. 11
Fuel tank sensor

1975 230

MBNA/MBC ETM1401
Printed in U.S.A.



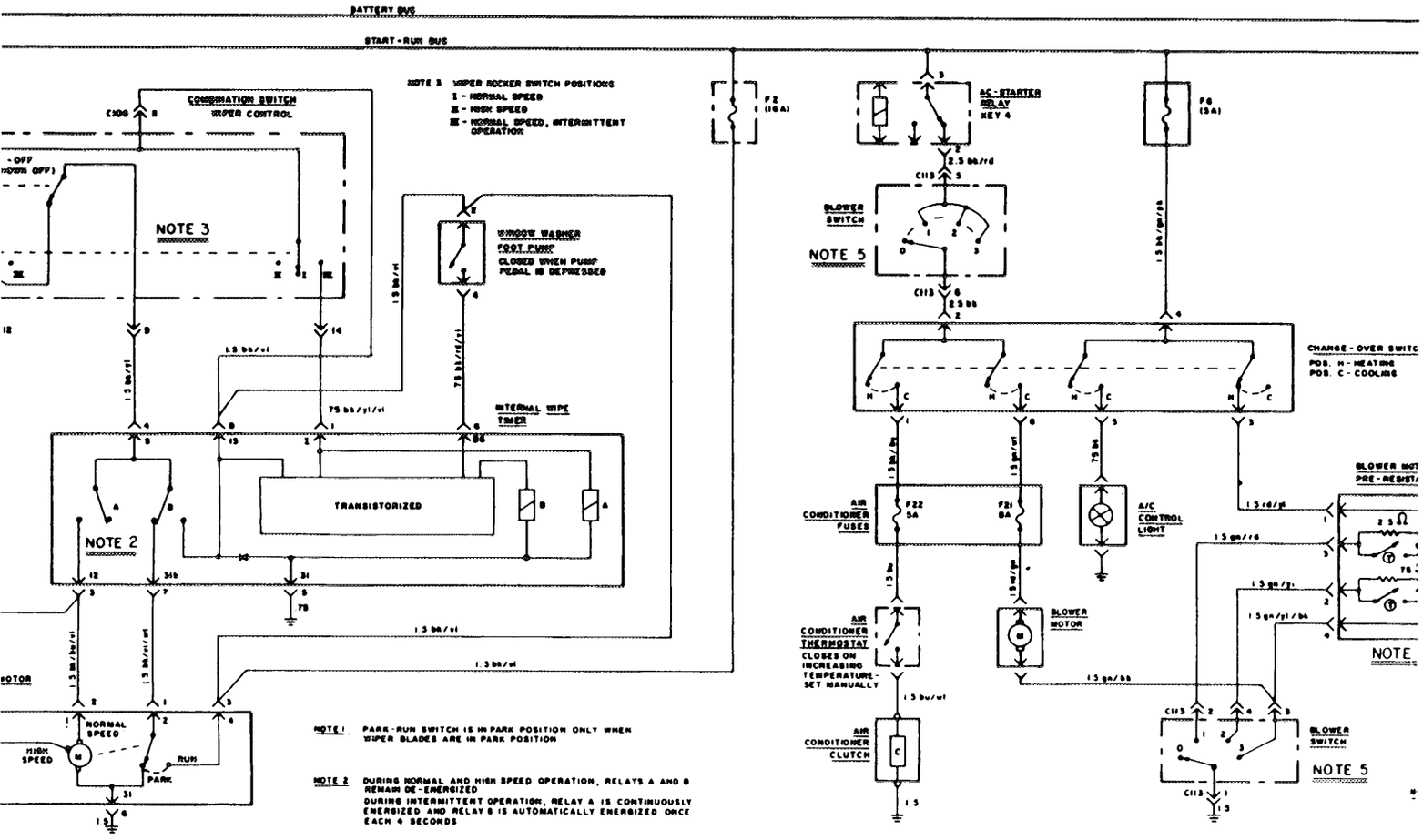
COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
AIR CONDITIONING/HEATING			
AC blower motor	Center of console	1	
AC/Starter relay, key 4	Right firewall under fuse bracket		T7
Change-over switch	Console, left side	2	
Fuse 21 (AC blower)	Right firewall — aux. box		
Fuse 22 (AC clutch)	Right firewall — aux. box		
Heater blower motor preresistor	Forward of AC blower	3	
C 113 (6 pins)	Mounted to heater control lever plate	4	T2
AUTOMATIC CHOKE			
Automatic Choke Heater	Carburetor	13	
AUXILIARY FAN			
Aux. fan relay, key 6	Below radio fuse		
Fuse 20 (aux. fan)	Left fender — aux. box		
Temp. switch — engine	Thermostat housing		
Temp. switch — refrigerant	Right firewall	5	
BACKUP			
C 104 (12 pins)	Under dash — driver's side	6	T4
BRAKE LIGHTS			
Switch	Above brake pedal		
C 104 (12 pins)	Under dash — driver's side	6	T4
CATALYST INDICATOR			
Catalyst switch	Speedometer cable under dash		
ENGINE EMISSION CONTROL			
Air injection switch-over valve (blue)	Right fender skirt		
EGR switch-over valve (red)	Right fender skirt		
Ignition switch-over valve	Right fender skirt		
Relay box	Left fender		
RPM relay	Left fender		
Temperature switch	Oil filter mount		
Throttle valve lift	Right fender skirt		
HEATED REAR WINDOW			
Time delay relay	Under dash — driver's side	6	T14
Fuse 19 (window)	Left fender — aux. box		
C 112	Behind rear seat — right side	7	

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
HORNS			
C 106 (14 pins)	Under dash — driver's side	6	T5
IDLE FUEL CUTOFF			
Time delay relay	Beside fuse box	8	
Solenoid	Carburetor	9	
WINDSHIELD WIPER/WASHER			
Interval wipe timer	Under dash — driver's side	6	T10
Motor	Firewall — left side	3	
C 106 (14 pins)	Under dash — driver's side	6	T5

Fig. 12
1 — Coolant temperature sensor

Fig. 13
1 — Choke heating resistance



COMPONENT INDEX

LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
Center of console	1	
Right firewall under fuse bracket		T7
Console, left side	2	
Right firewall — aux. box		
Right firewall — aux. box		
Forward of AC blower	3	
Mounted to heater control lever plate	4	T2
Carburetor	13	
Below radio fuse		
Left fender — aux. box		
Thermostat housing		
Right firewall	5	
Under dash — driver's side	6	T4
Above brake pedal		
Under dash — driver's side	6	T4
Speedometer cable under dash		
Right fender skirt		
Right fender skirt		
Right fender skirt		
Left fender		
Left fender		
Oil filter mount		
Right fender skirt		
Under dash — driver's side	6	T14
Left fender — aux. box		
Behind rear seat — right side	7	

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
HORNS			
C 106 (14 pins)	Under dash — driver's side	6	T5
IDLE FUEL CUTOFF			
Time delay relay	Beside fuse box	8	
Solenoid	Carburetor	9	
WINDSHIELD WIPER/WASHER			
Interval wipe timer	Under dash — driver's side	6	T10
Motor	Firewall — left side	3	
C 106 (14 pins)	Under dash — driver's side	6	T5

LOCAT

Fig. 12
1 — Coolant temperature sensor

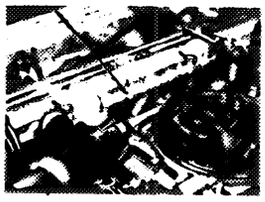
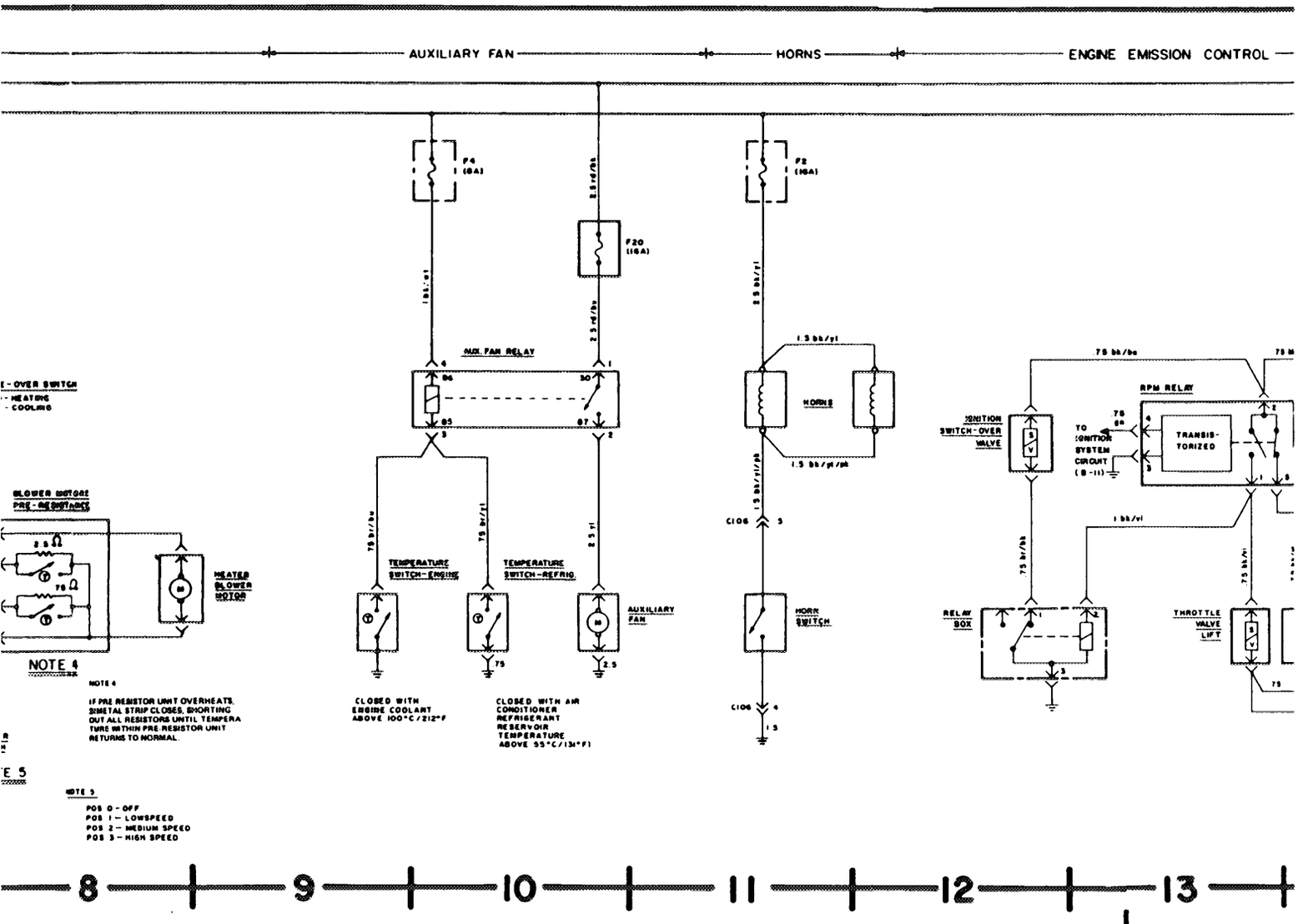


Fig. 13
1 — Choke heating resistance



LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Idle fuel cut-off solenoid
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Horns
Windshield wiper/washer

Fuse 3 (8 amps)
Kickdown solenoid

Fuse 4 (8 amps)
Air injection valve
Automatic choke
Auxiliary fan relay
EGR valve
Idle fuel cut-off delay relay
Throttle valve lift
Turn signal

Fuse 5 (8 amps)
Backup lights
Brake lights
Catalyst light
Glove box light
Instruments
Seat belt warning
Window control

Fuse 6 (5 amps)
A/C control light
Heater blower motor

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing parking (right)
Instrument cluster lights
Left and right markers
License plate light
Tail light (right)

Fuse 8 (8 amps)
Front standing parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Radio antenna

Fuse 14 (8 amps)
Radio

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right front window

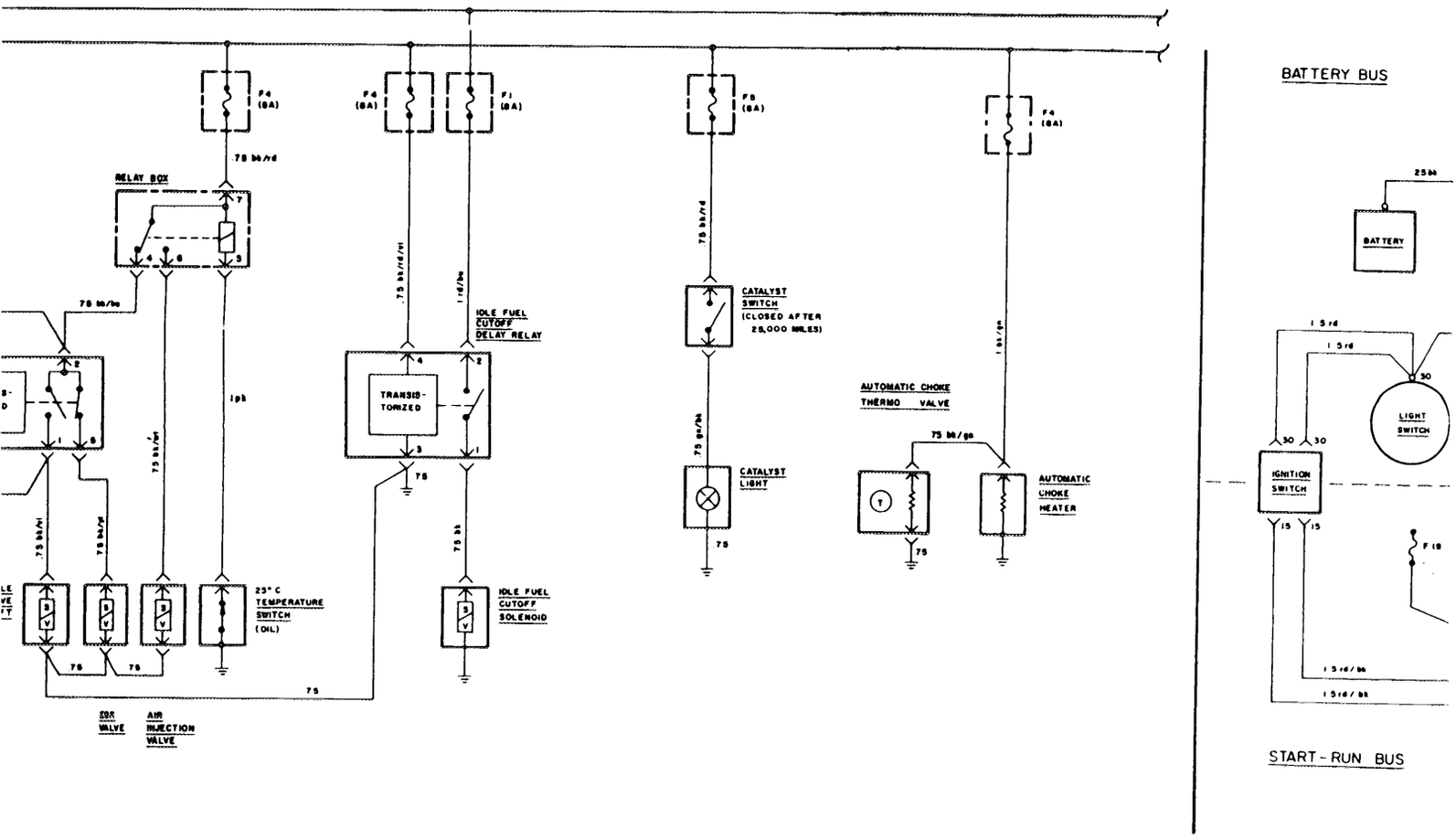
Fuse 19 (16 amps)
Sliding roof

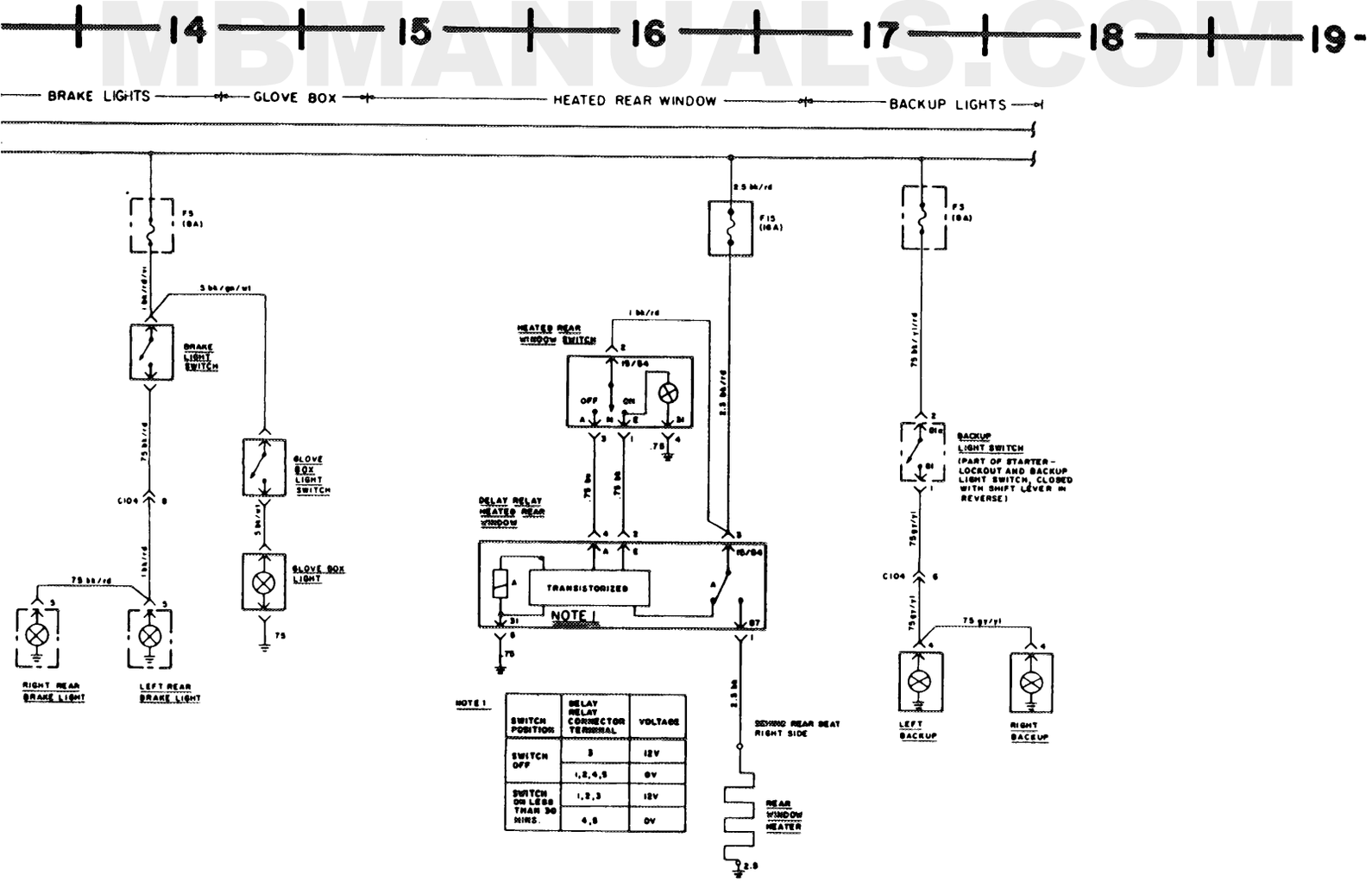
Fuse 20 (16 amps)
Auxiliary fan motor

Fuse 21 (8 amps)
A/C Blower motor

Fuse 22 (5 amps)
Air Conditioner clutch

1975 230



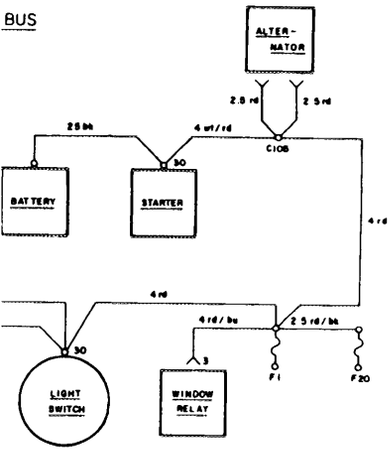


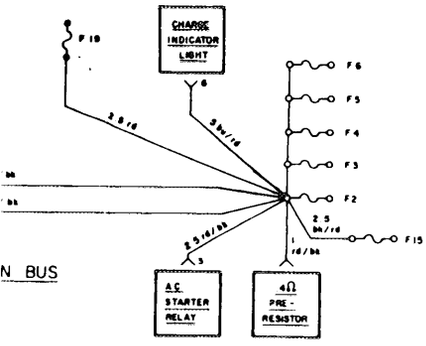
NOTE 1

SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS.	1,2,3	12V
	4,5	0V

POWER BUS DETAIL

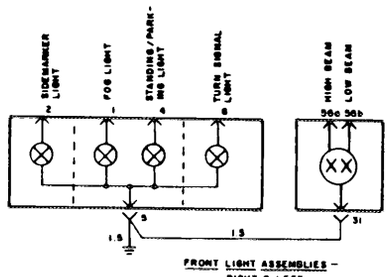
BUS



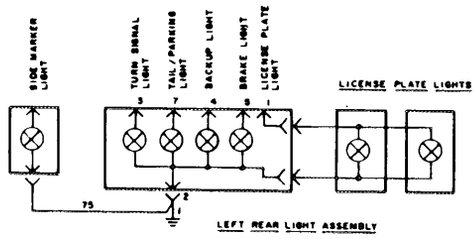


N BUS

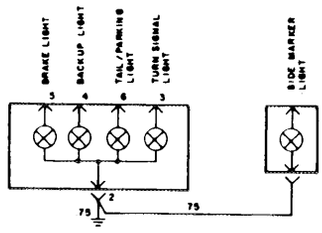
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES -
RIGHT & LEFT



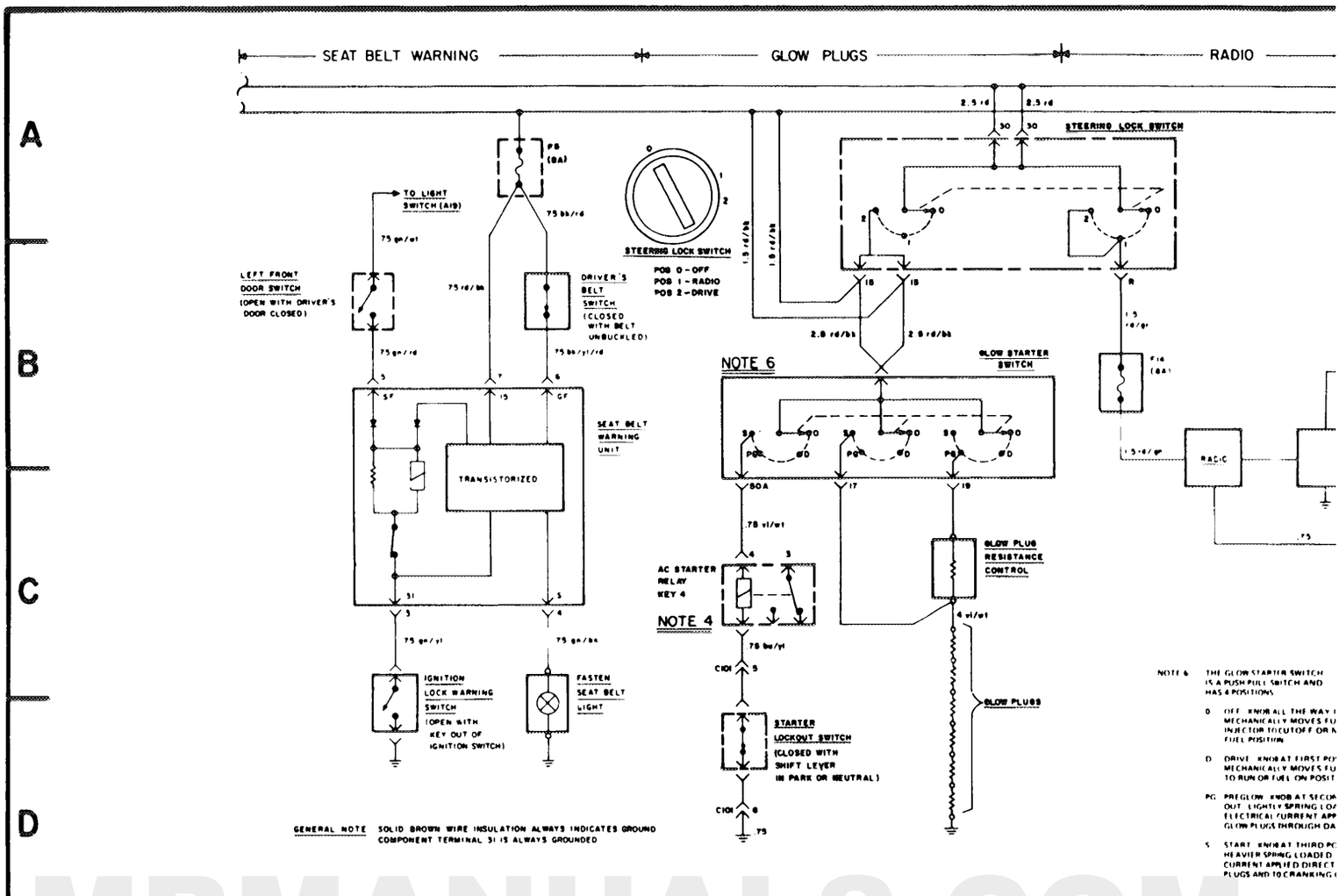
LEFT REAR LIGHT ASSEMBLY

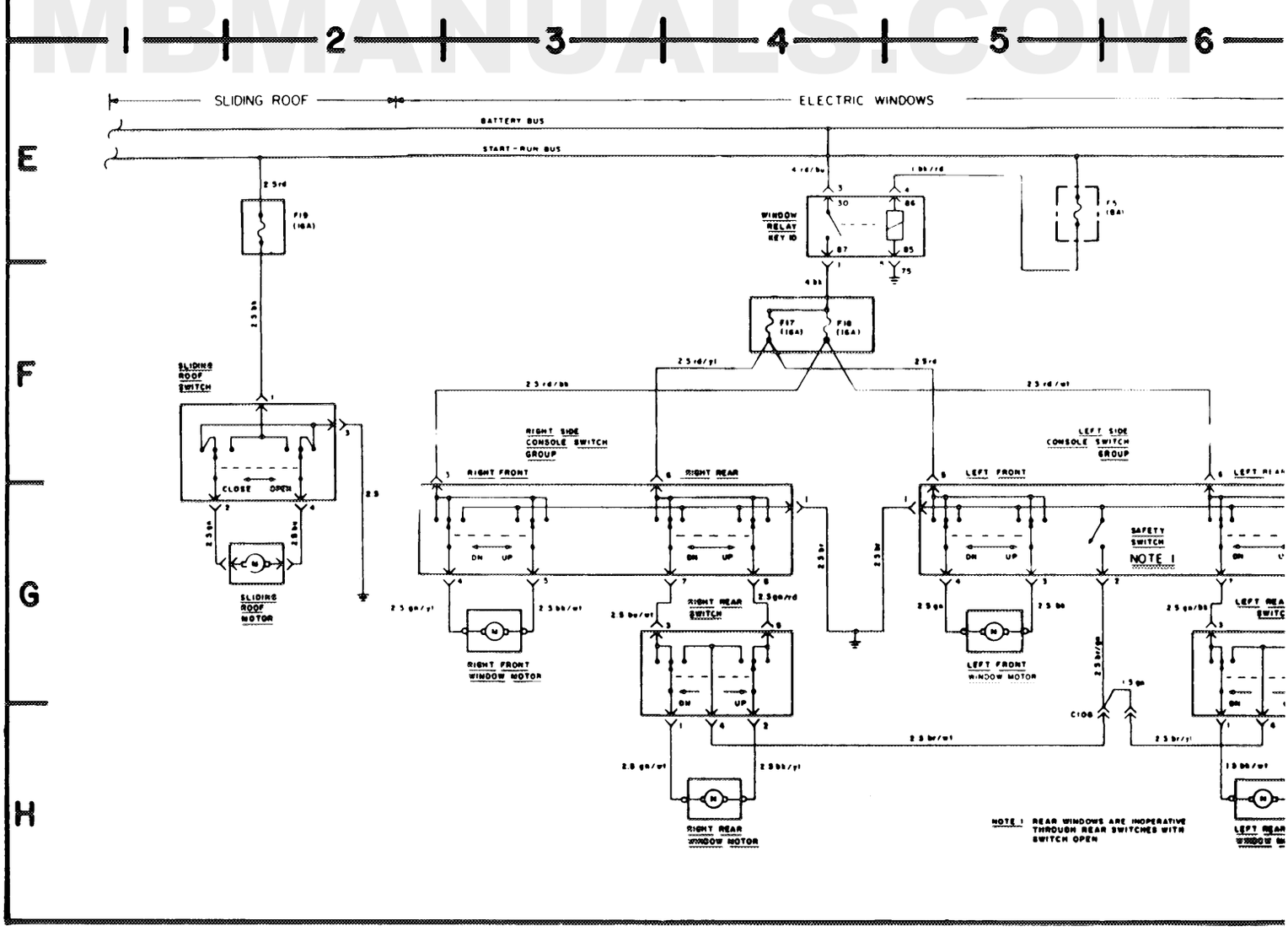


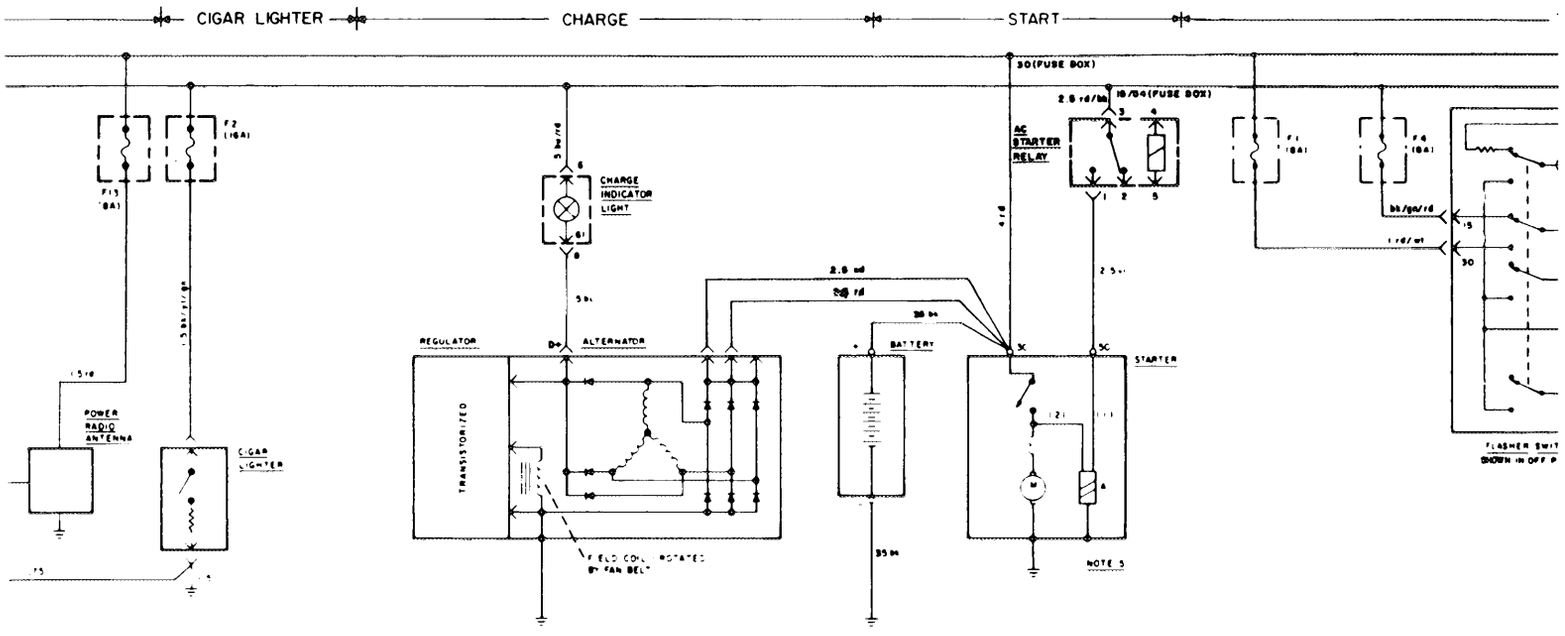
RIGHT REAR LIGHT ASSEMBLY

J K L M

19 20 21 22 23 24







NOTE 4 THE AC STARTER RELAY AUTOMATICALLY DISCONNECTS THE AIR CONDITIONER CLUTCH DURING ENGINE CRANKING

NOTE 5 WINDING (1) WILL ENGAGE STARTER WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROP OUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED

R SWITCH
ITCH AND

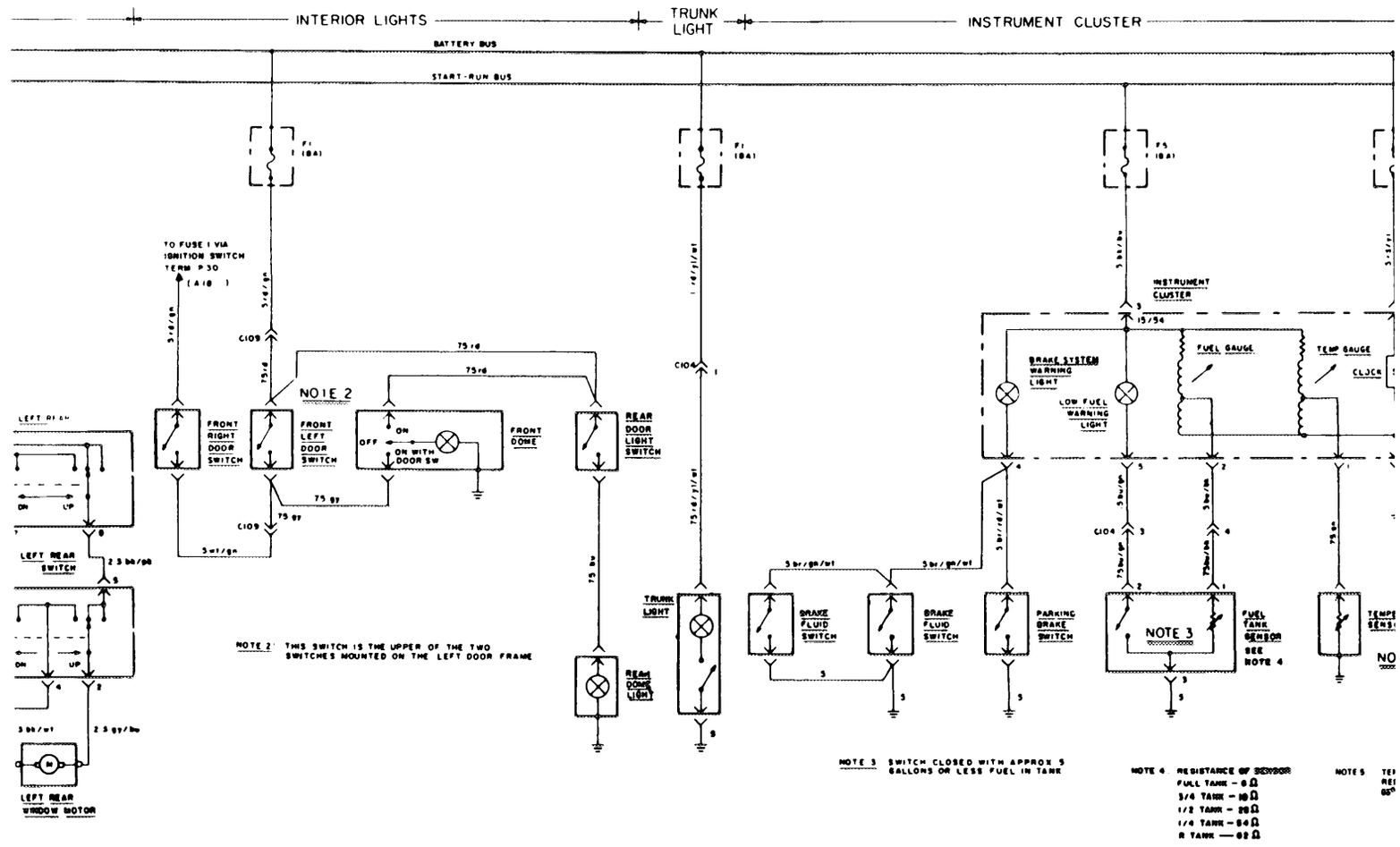
E THE WAY IN
Y MOVES FUEL
UTOFF OR NO
N

AT FIRST POSITION OUT
Y MOVES FUEL INJECTOR
EL ON POSITION

OB AT SECOND POSITION
Y SPRING LOADED
URRENT APPLIED TO
HROUGH DASH INDICATOR

AT THIRD POSITION OUT
NG LOADED ELECTRICAL
LIED DIRECTLY TO GLOW
CRANKING CIRCUITS

7 8 9 10 11 12

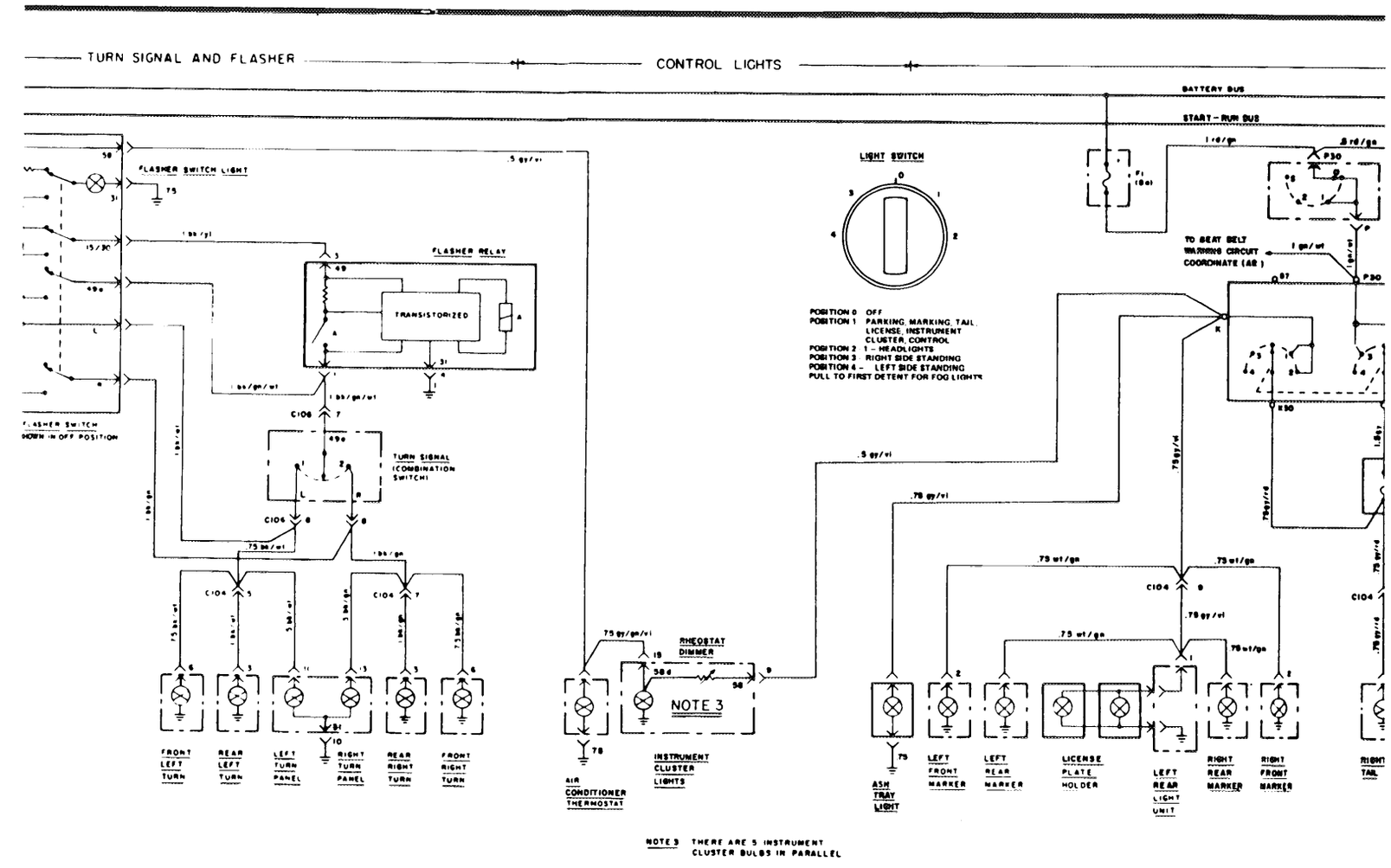


NOTE 2 THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME

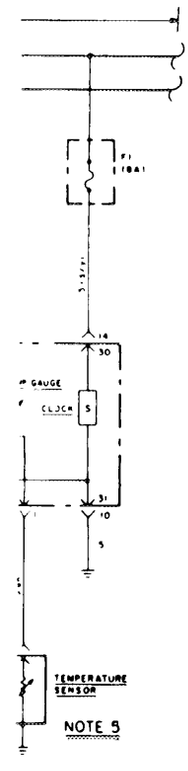
NOTE 3 SWITCH CLOSED WITH APPROX 5 GALLONS OR LESS FUEL IN TANK

NOTE 4 RESISTANCE OF SENSOR
FULL TANK – 0 Ω
3/4 TANK – 10 Ω
1/2 TANK – 20 Ω
1/4 TANK – 54 Ω
E TANK – 62 Ω

NOTE 5



12 13 14 15 16 17



NOTE 5 TEMPERATURE SENSOR RESISTANCE AT 85°F 15 460 Ω

COMPONENT INDEX

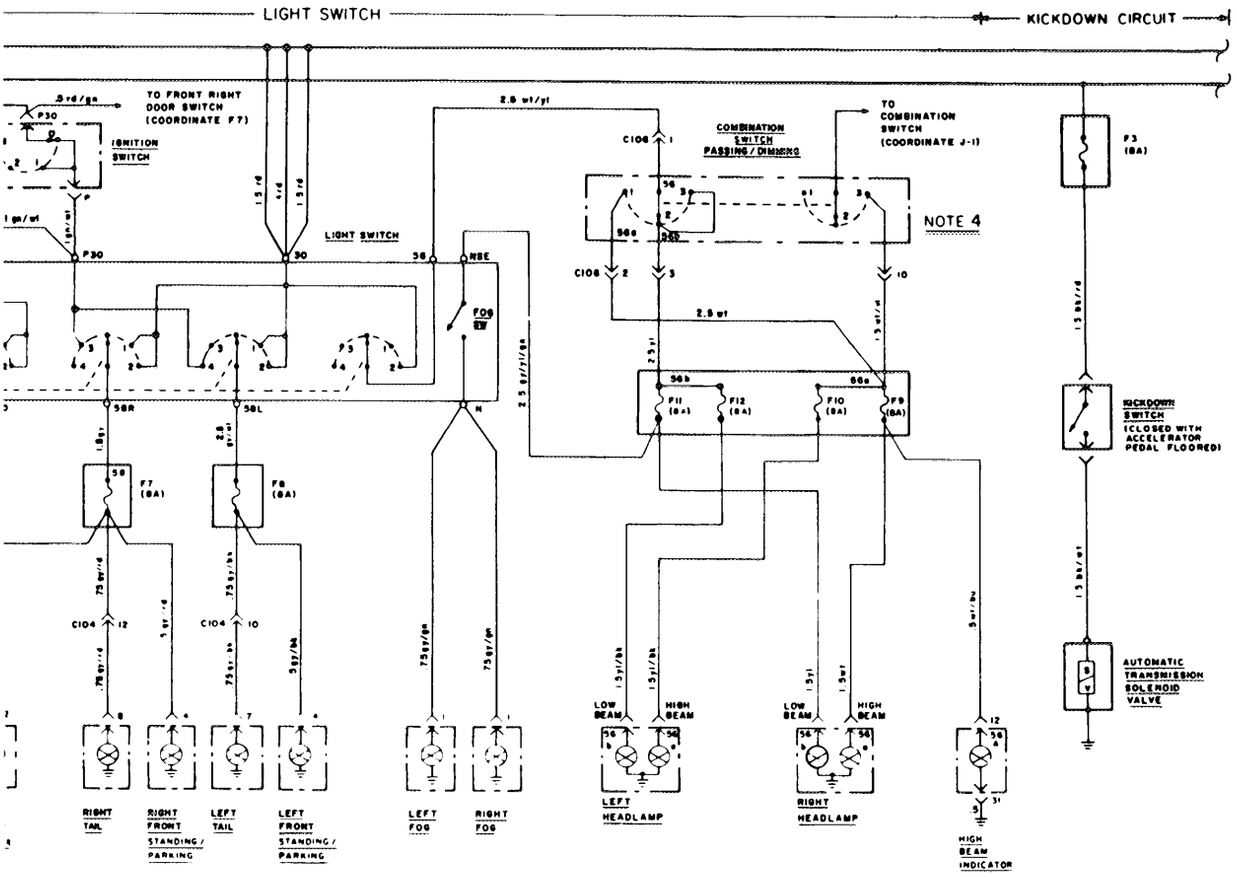
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
CHARGE			
Regulator	Alternator		
C105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay—key 10	Right firewall under fuse bracket		T7
C108	Console		
GLOW PLUGS			
A/C starter relay, key 4	rt. firewall—under fuse bracket		T7
Glow plug resistance control			
Glow starter switch	Dash		
Starter Lockout switch	L. side trans. (auto trans.) top of trans. (stand. trans.)		
C101	lower center console		
INSTRUMENT CLUSTER			
Brake fluid switches	Reservoir		
Coolant temp. sensor	Left front cylinder head		
Fuel tank sensor	Trunk	9	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side	6	T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	8	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning unit	Under dash, driver's side		
SLIDE ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right firewall, under fuse bracket		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
TRUNK LIGHT			
C 104 (12 pins)	Under dash, driver's side	6	T4
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T4
C 104 (12 pins)	Under dash, driver's side		
C 106 (14 pins)	Under dash, driver's side	6	T5

F
1 – A/C Blower mo

F
1 – Change over swi

Fig
1 – Main fuse box
2 – Heater blower p
3 – Brake fluid switc
4 – Wiper motor



NOTE 4 POSITION 1 - HIGH BEAM
POSITION 2 - LOW BEAM
POSITION 3 - HIGH BEAM FLASH

18 19 20 21 22 23

LOCATION FIGURES

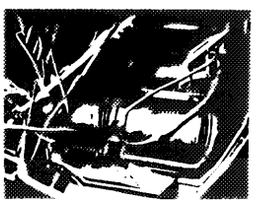


Fig. 1
1 - A/C Blower motor

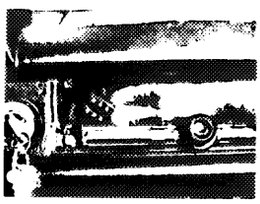


Fig. 4
1 - C 113

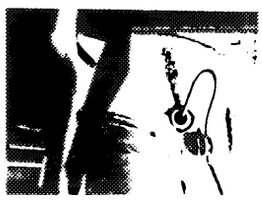


Fig. 7
1 - C 112

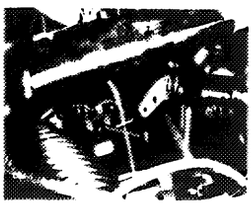


Fig. 2
1 - Change over switch

Fig. 5
1 - Temperature switch, refrigerant

Fig. 8
1 - Kickdown switch

Fig. 3
1 - Main fuse box
2 - Heater blower pre resistors
3 - Brake fluid switches
4 - Wiper motor

Fig. 6
1 - Flasher relay
3 - Time delay relay, heated rear window
5 - Interval wiper timer
6 - C 104
7 - C 106

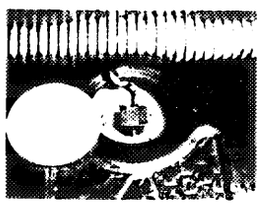
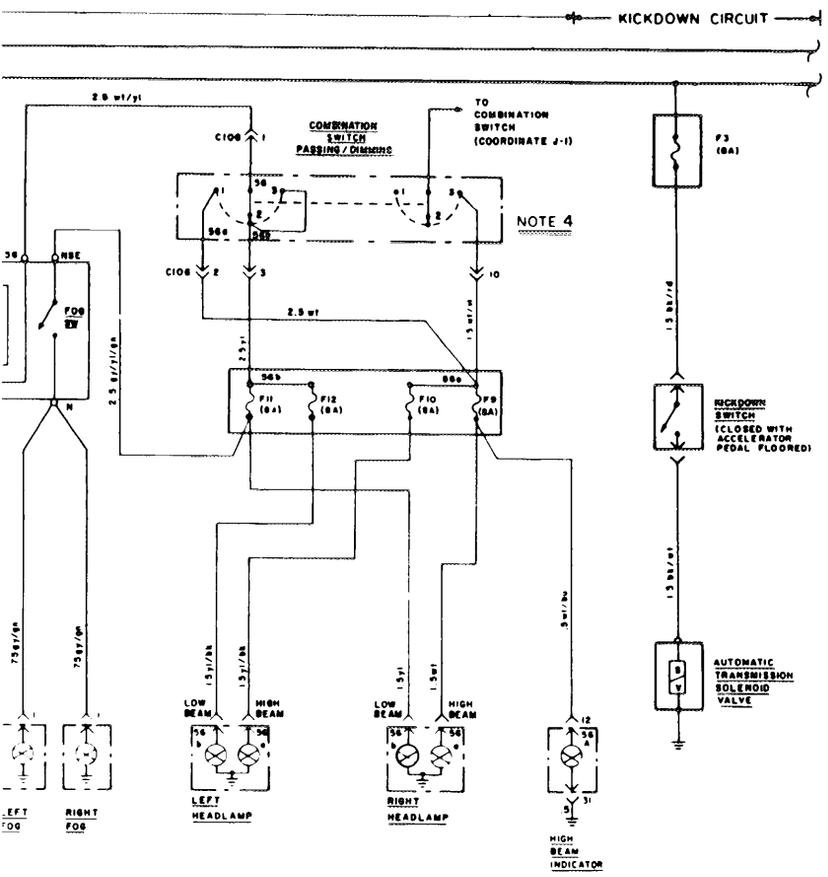


Fig. 9
Fuel tank sensor

1

AIR CONDITIO
AUXILIARY FA
BLOWER MOT
CHARGE
CIGAR LIGHTE
CLOCK
COOLANT TEM
FUEL GAUGE
GLOW PLUGS
HEATED REAR
HEATER CONT
HORNS
KICKDOWN
LIGHT CIRCUIT
AIR COND
BACKUP
BRAKE
BRAKE SY
CIGAR LIG
FOG
GLOVE BO
HEAD
INSTRUME
INTERIOR
LOW FUEL
MARKER
PARKING
STANDING
TAIL
TRUNK
RADIO
ANTENNA
SEAT BELT WA
SLIDING ROOF
START
TURN SIGNAL/
WINDOWS
WINDSHIELD W

POWER BUS DE
SPECIAL GROU



A B C D

9 20 21 22 23 24

LOCATION FIGURES

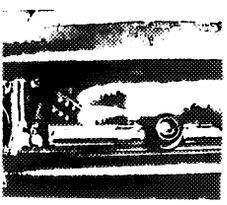


Fig. 4
113

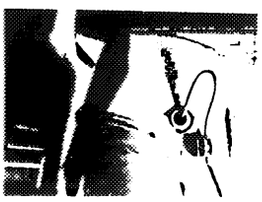


Fig. 7
1 – C 112

Fig. 5
mperature switch, refrigerant

Fig. 8
1 – Kickdown switch

Fig. 6
her relay
e delay relay, heated rear window
rval wiper timer
)4
)6

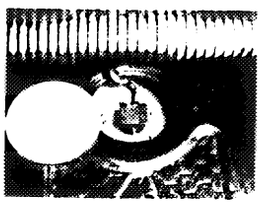
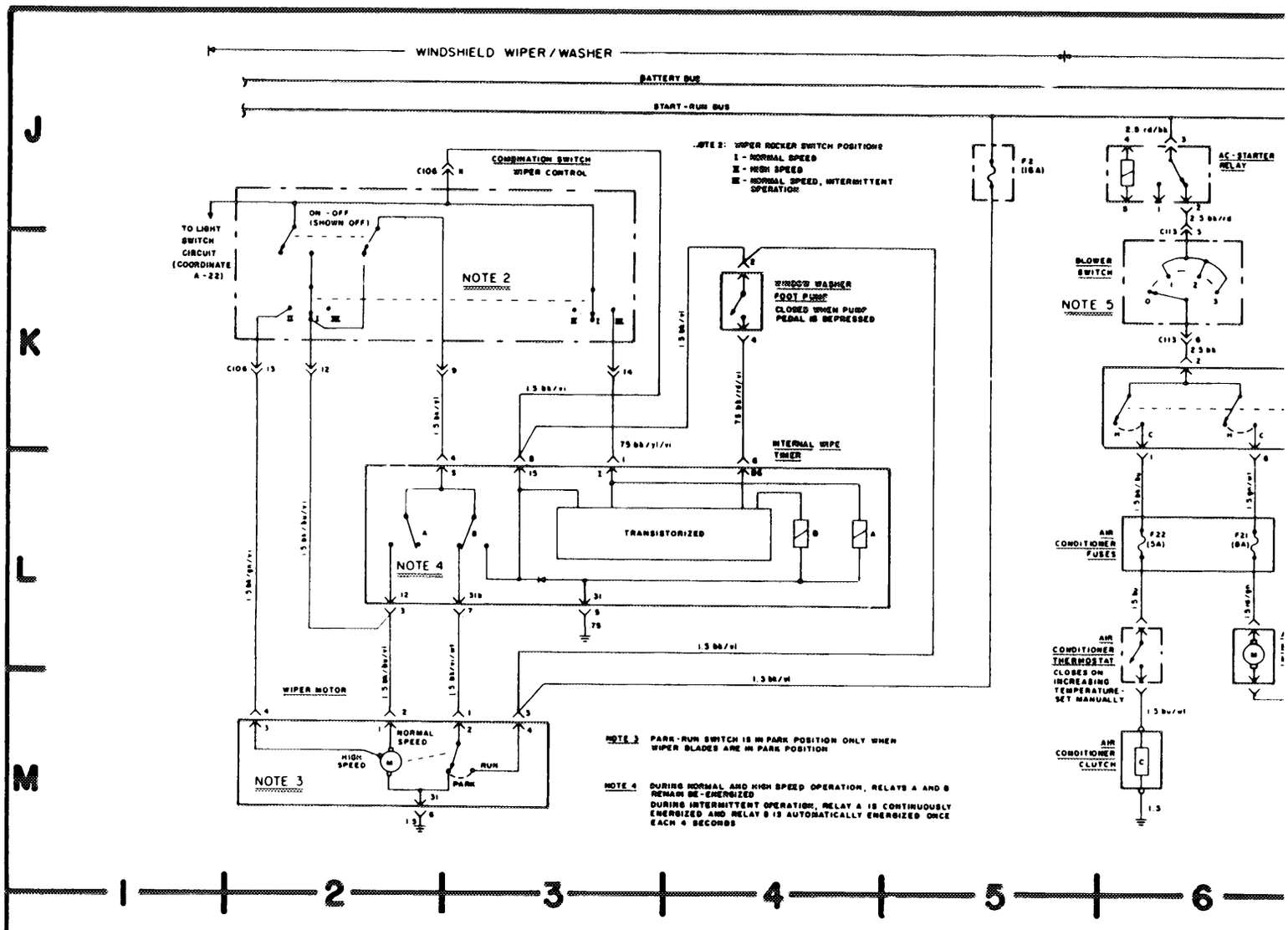


Fig. 9
Fuel tank sensor

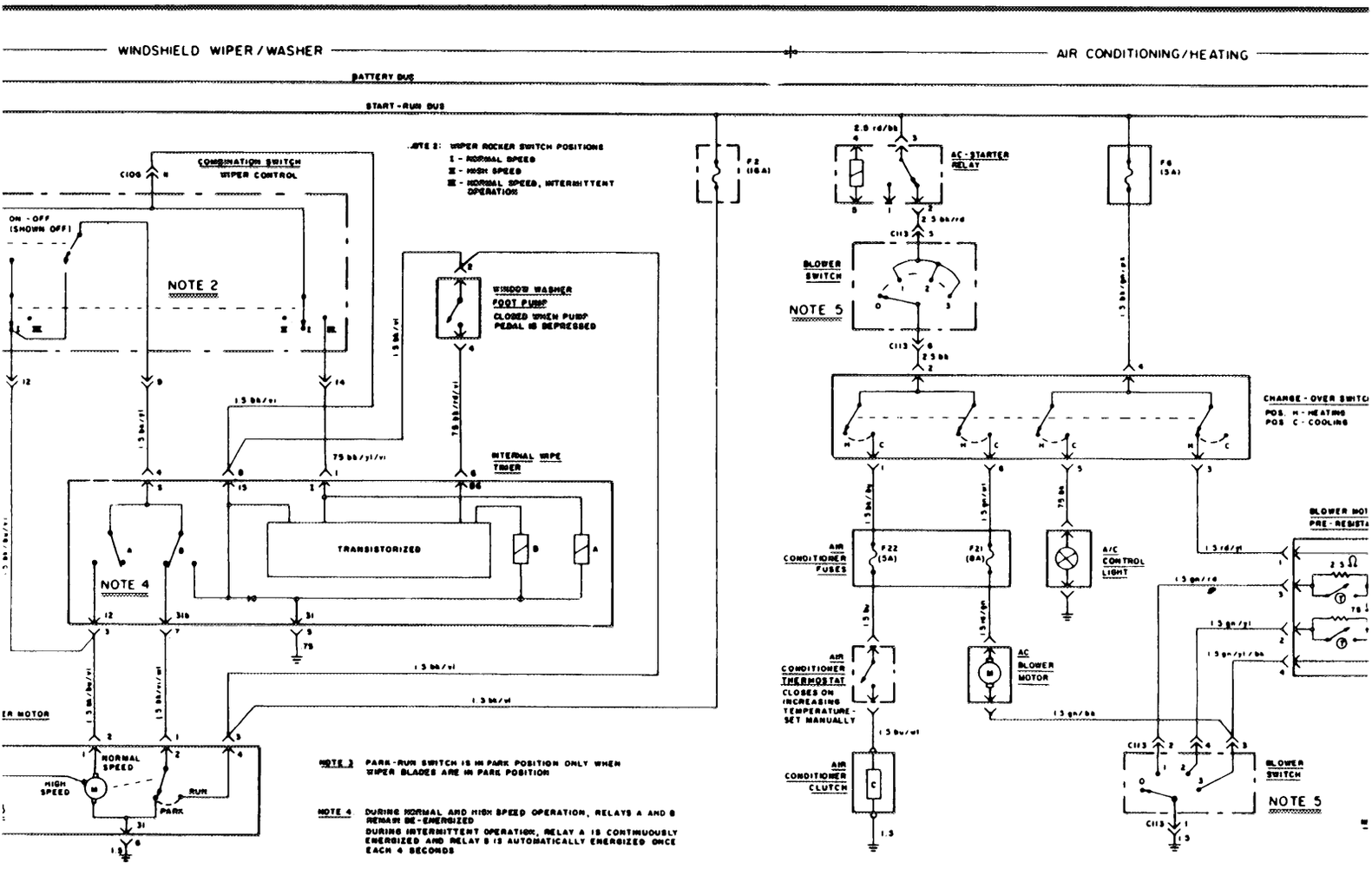
1975 240D

MBNA/MBC ETM1402
Printed in U.S.A.



COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO	SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
AIR CONDITIONING/HEATING							
AC blower motor	Center of console	1					
AC/Starter relay, key 4	Right firewall under fuse bracket		T7				
Change-over switch	Console, left side						
Fuse 21 (AC Blower)	Right firewall — aux box						
Fuse 22 (AC clutch)	Right firewall — aux box						
Heater blower motor preresistor	Forward of AC blower	3					
C 113	Mounted to heater control lever plate	4	T2				
AUXILIARY FAN							
Aux fan relay, key 6	Below radio fuse						
Fuse 20 (aux fan)	Left fender — aux box						
Temp switch — engine	Thermostat housing						
Temp switch — refrigerant	Right firewall	5					
BACKUP							
C 104 (12 pins)	Under dash — driver's side	6	T4				
BRAKE LIGHTS							
Switch	Above brake pedal						
C 104 (12 pins)	Under dash — driver's side	6	T4				
HEATED REAR WINDOW							
Time delay relay	Under dash — driver's side	6	T14				
Fuse 19 (window)	Left fender — aux box						
C 112	Behind rear seat — right side	7					
HORNS							
C 106 (14 pins)	Under dash — driver's side	6	T5				
WINDSHIELD WIPER/WASHER							
Interval wipe timer	Under dash — driver's side	6	T10				
Wiper motor	Firewall — left side	3					
C 106 (14 terminal)	Under dash — driver's side	6	T5				

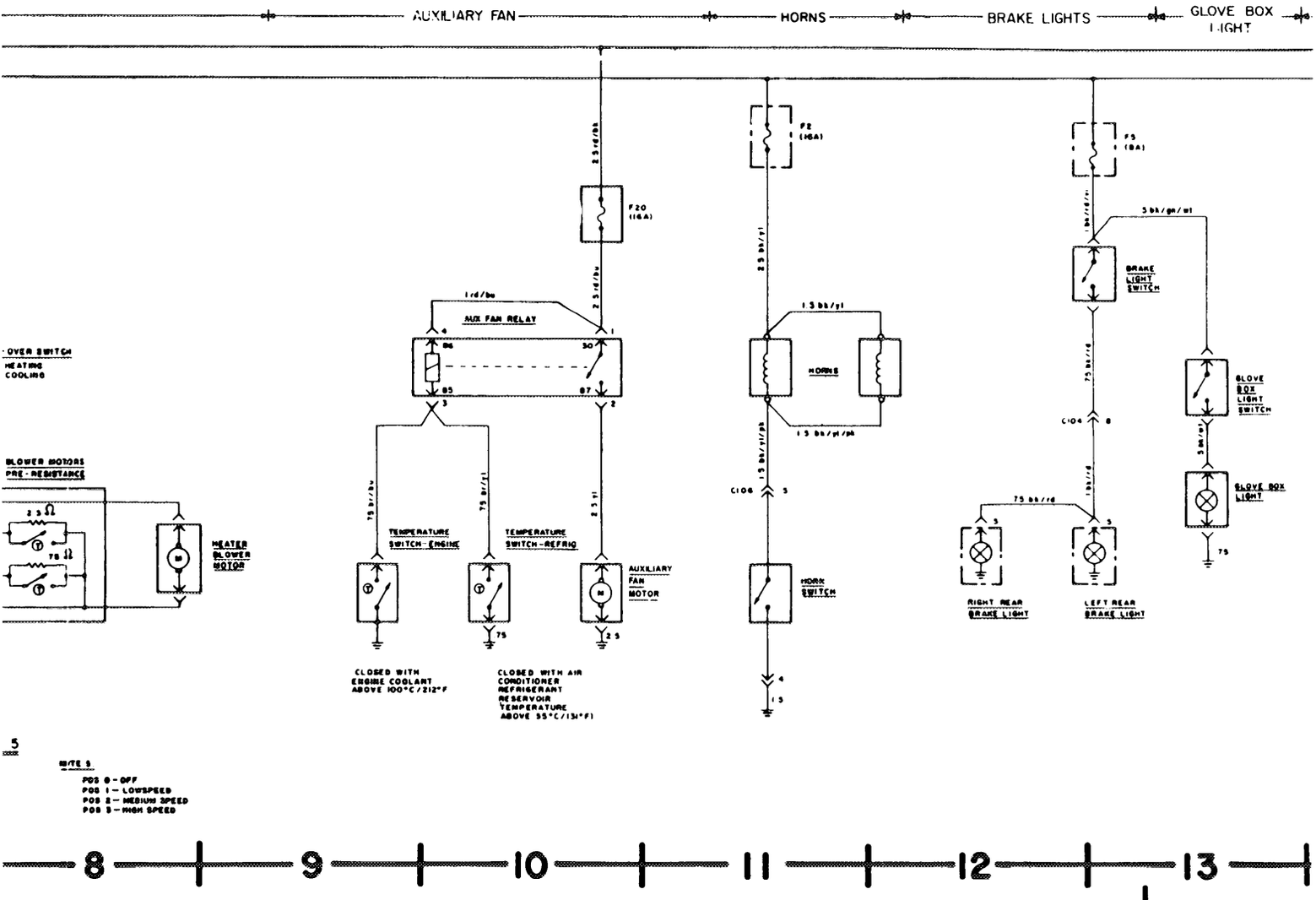


2 3 4 5 6 7

COMPONENT INDEX

LOCAT

	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO	SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
TING	Center of console	1					
	Right firewall under fuse bracket		T7				
	Console, left side						
	Right firewall — aux box						
	Right firewall — aux box						
	Forward of AC blower	3					
	Mounted to heater control lever plate	4	T2				
	Below radio fuse						
	Left fender — aux box						
	Thermostat housing						
	Right firewall	5					
	Under dash — driver's side	6	T4				
	Above brake pedal						
	Under dash — driver's side	6	T4				
	Under dash — driver's side	6	T14				
	Left fender — aux box						
	Behind rear seat — right side	7					
	Under dash — driver's side	6	T5				
HER							
	Under dash — driver's side	6	T10				
	Firewall — left side	3					
	Under dash — driver's side	6	T5				



LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Horns
Windshield wiper/washer

Fuse 3 (8 amps)
Kickdown switch
Auto transmission solenoid valve

Fuse 4 (8 amps)
Turn signal

Fuse 5 (8 amps)
Backup lights
Brake lights
Glove box light
Instrument cluster
Seat belt warning
Window control

Fuse 6 (5 amps)
A/C control light
Heater blower motor

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing/parking (right)
Instrument cluster lights
Left and right markers
License plate light
Tail light (right)
Ash tray light

Fuse 8 (8 amps)
Front standing/parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Radio antenna

Fuse 14 (8 amps)
Radio

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right front window

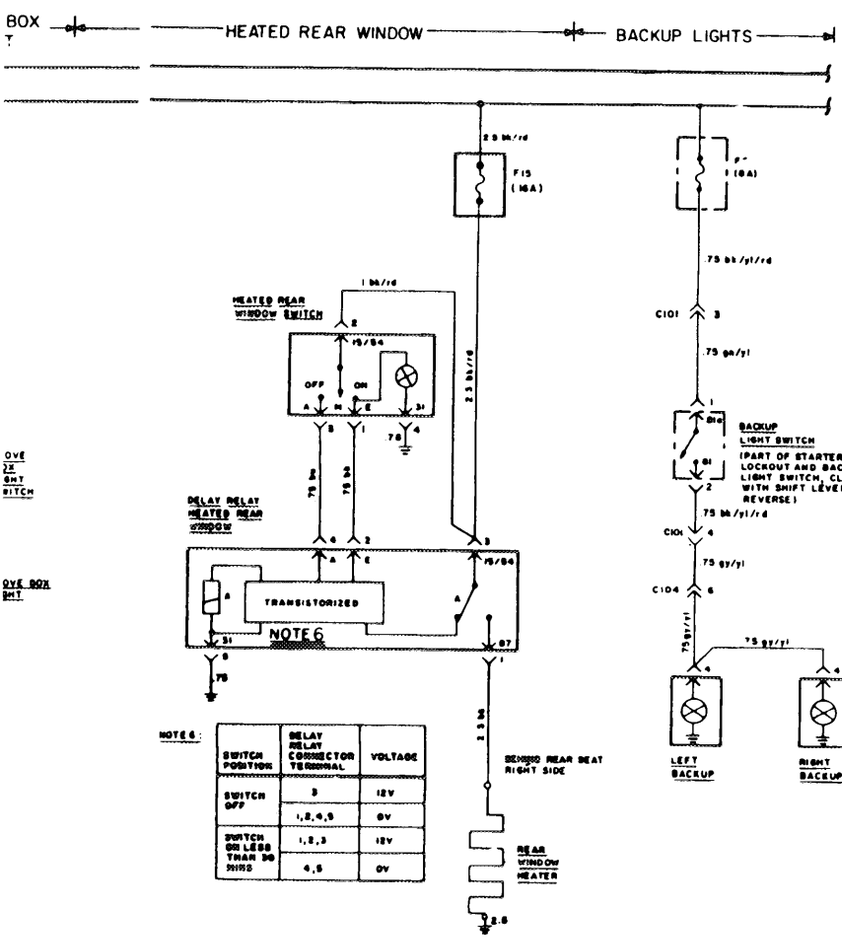
Fuse 19 (16 amps)
Sliding roof

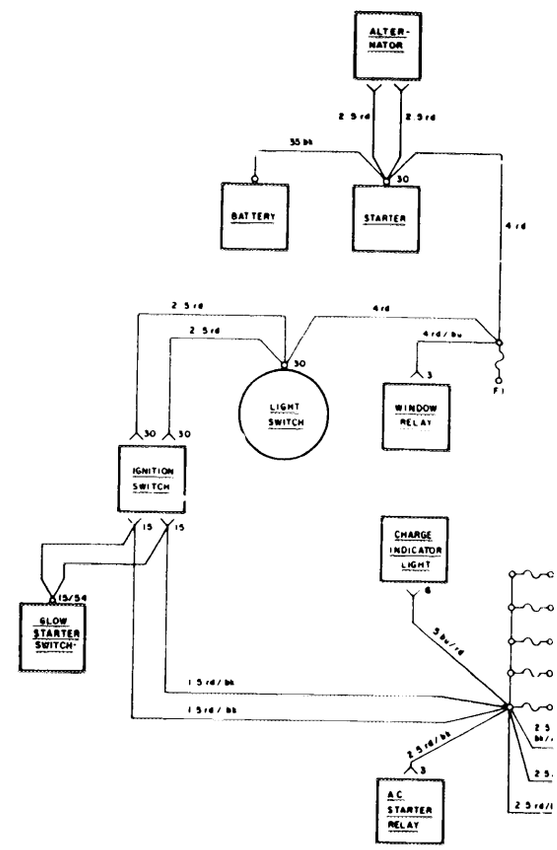
Fuse 20 (16 amps)
Auxiliary fan motor
Auxiliary fan relay

Fuse 21 (8 amps)
A/C Blower motor

Fuse 22 (5 amps)
Air conditioner clutch

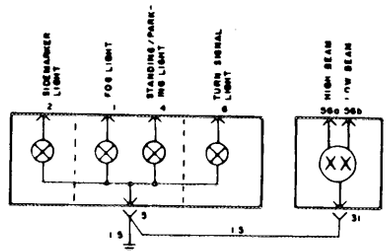
1975 240D



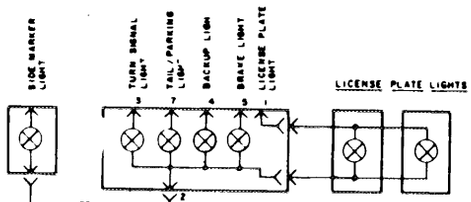


14 15 16 17 18 19

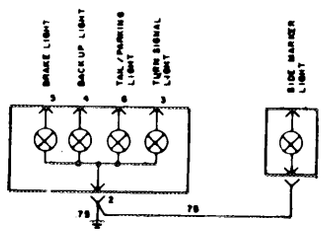
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES – RIGHT & LEFT



LEFT REAR LIGHT ASSEMBLY



RIGHT REAR LIGHT ASSEMBLY

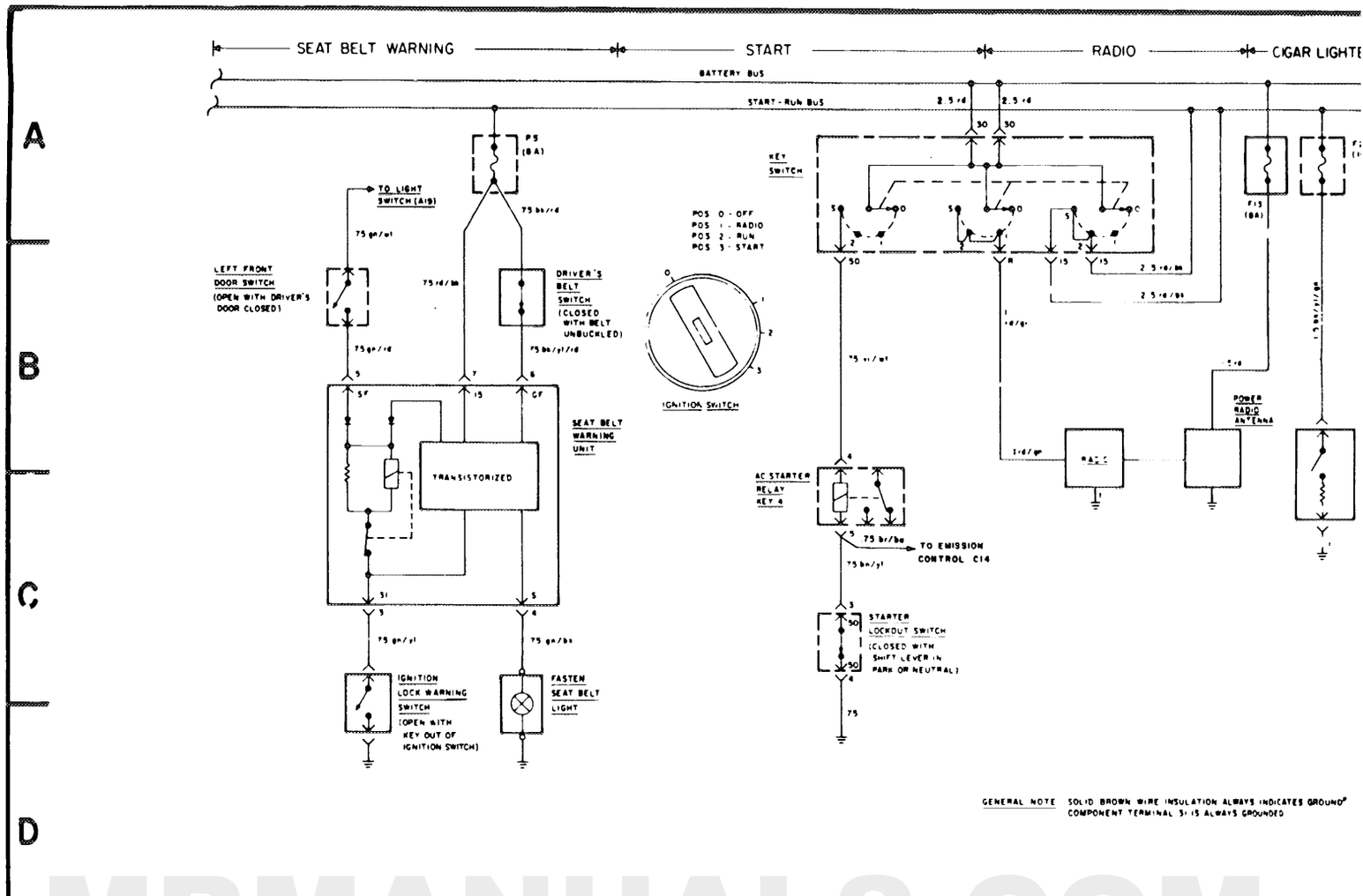
J

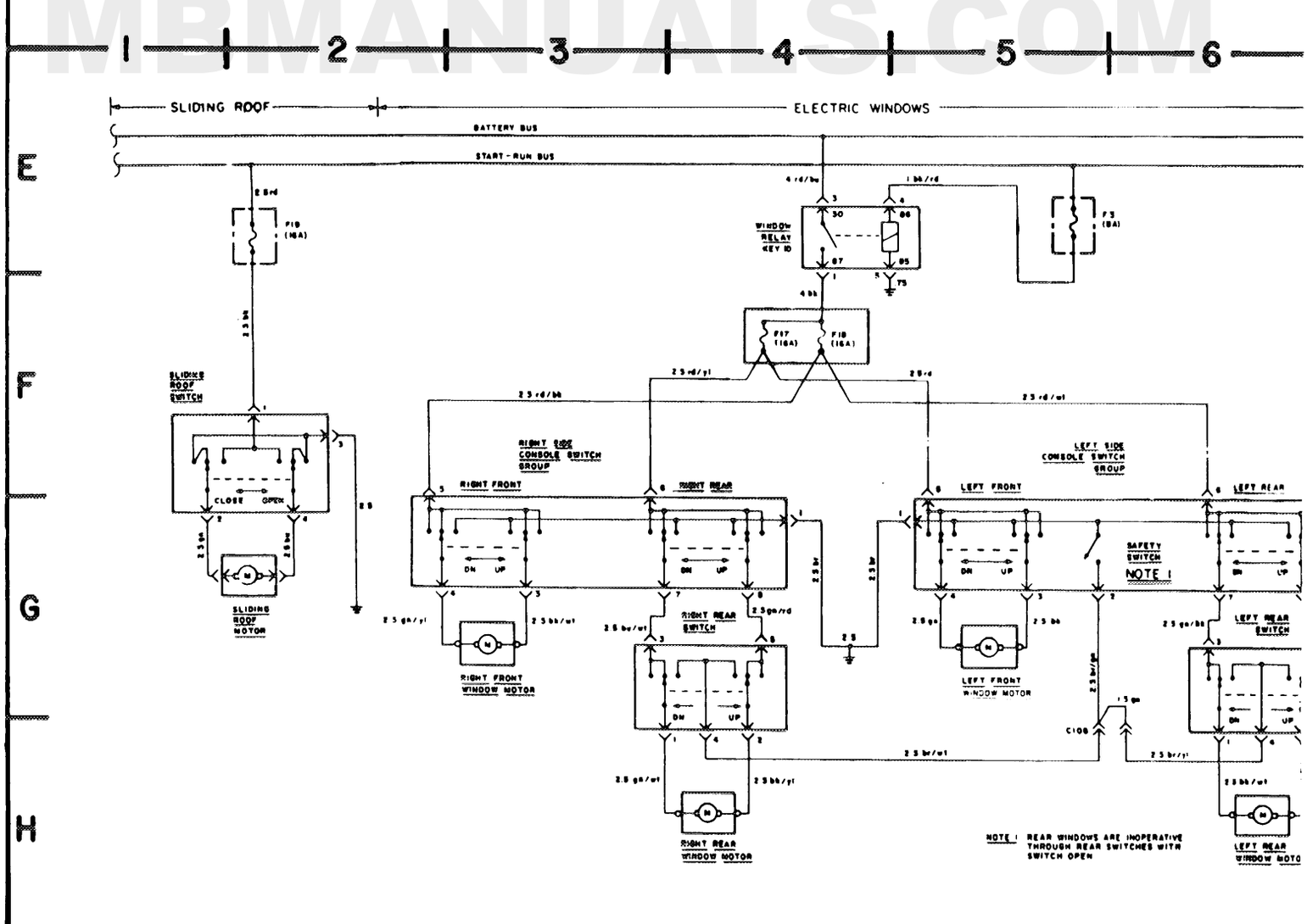
K

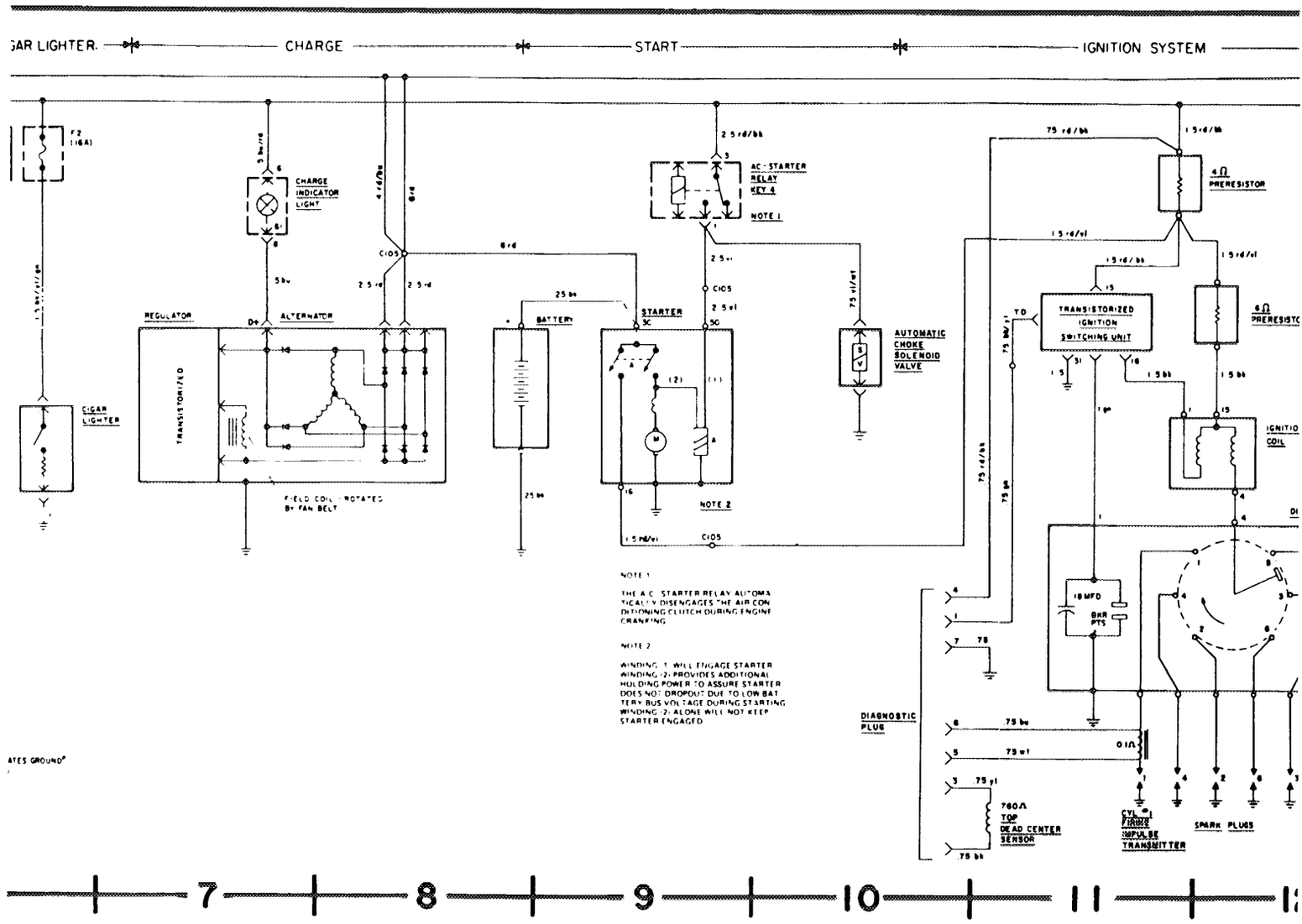
L

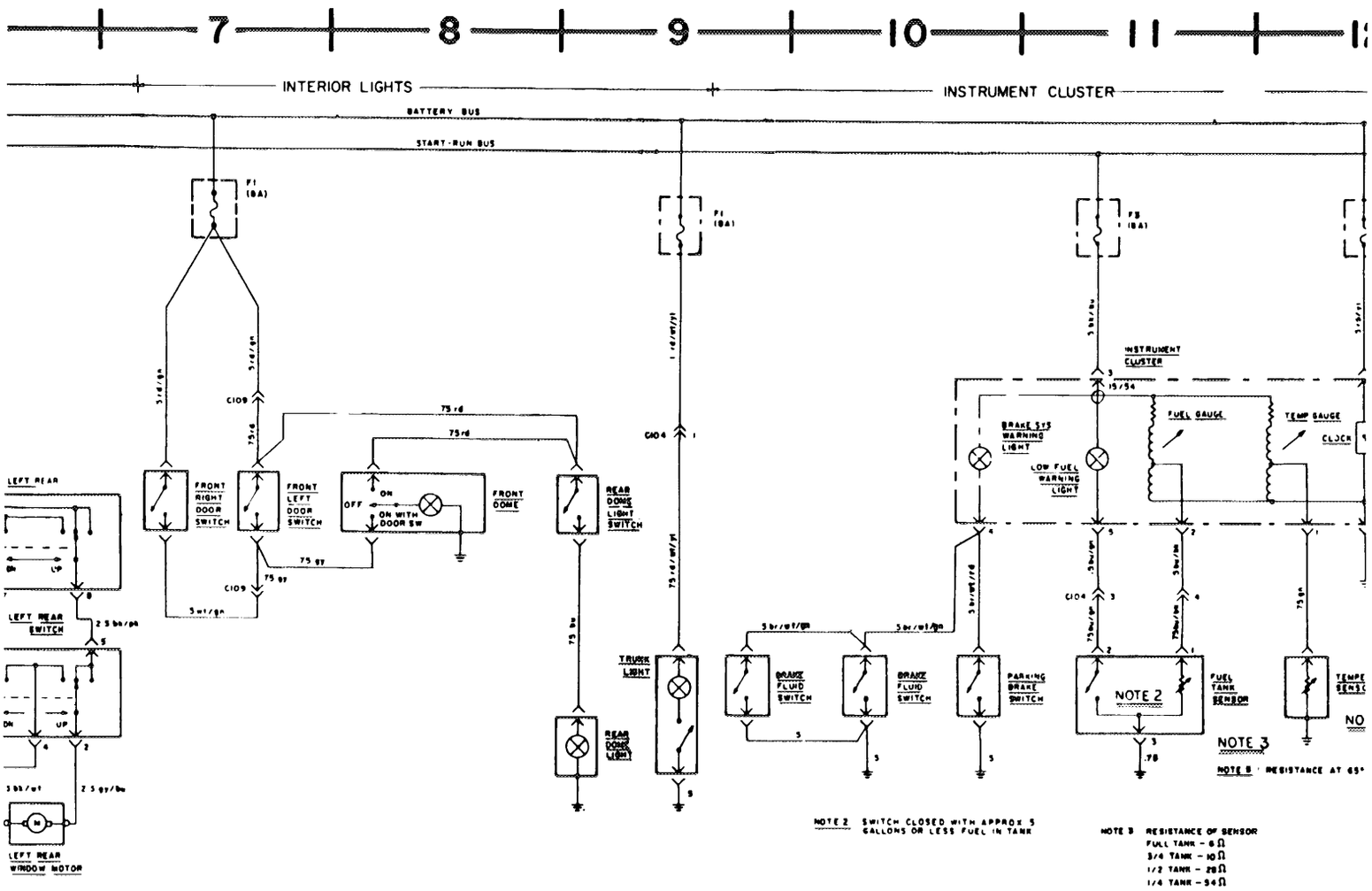
M

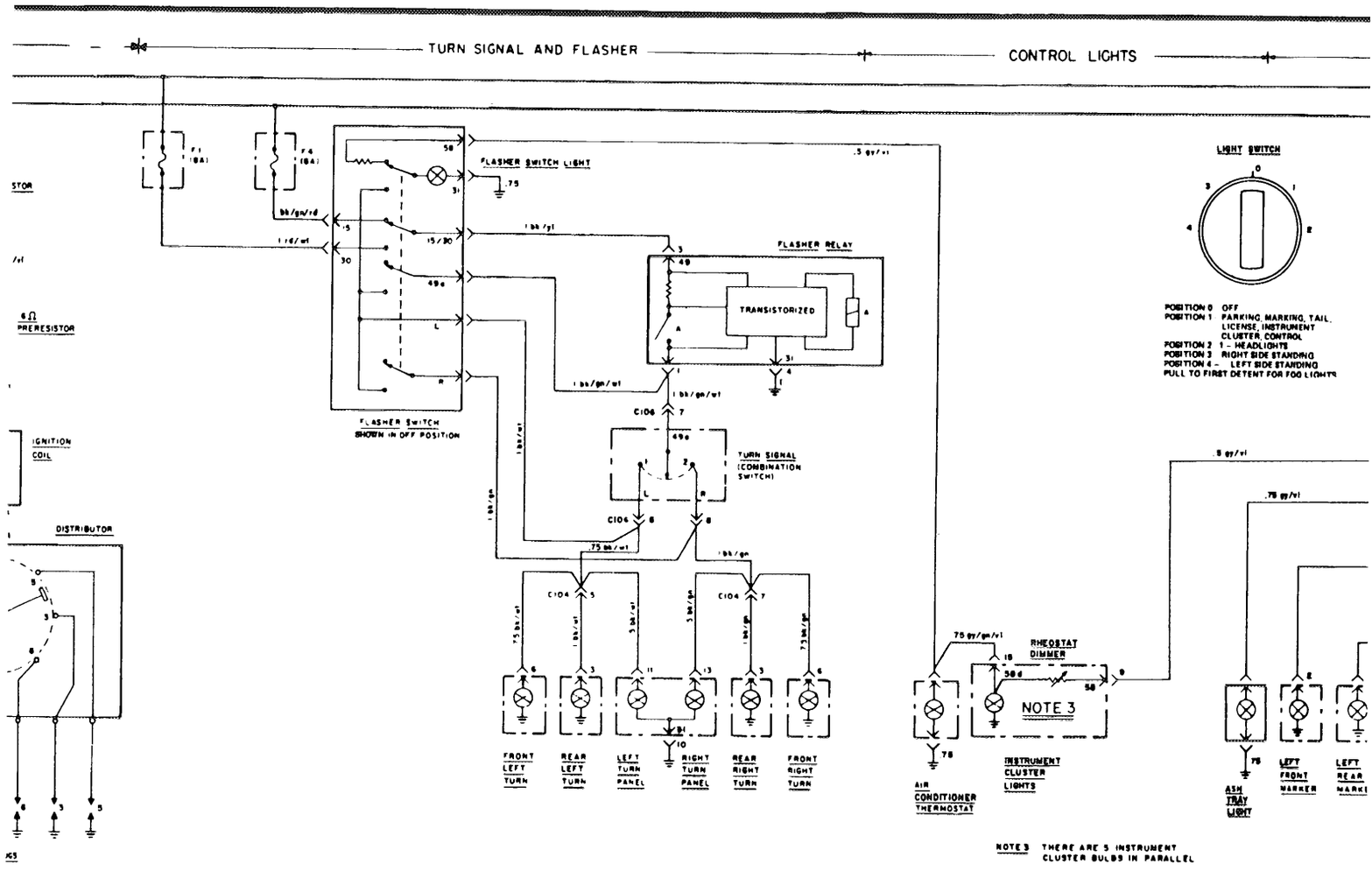
19 20 21 22 23 24



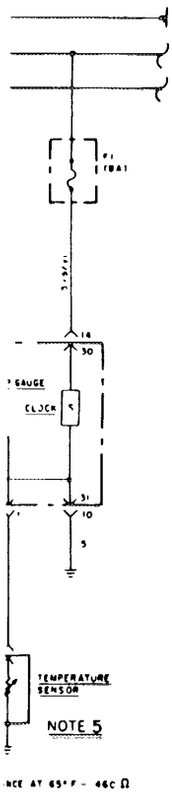



CIGAR LIGHTER
CHARGE
START
IGNITION SYSTEM
F2 (16A)
CIGAR LIGHTER
CHARGE INDICATOR LIGHT
REGULATOR
TRANSISTORIZED
ALTERNATOR
FIELD COIL ROTATES BY FAN BELT
BATTERY
STARTER
AC-STARTER RELAY KEY 4
NOTE 1
NOTE 2
AUTOMATIC CHOKE SOLENOID VALVE
4Ω PRERESISTOR
6Ω PRERESISTOR
TRANSISTORIZED IGNITION SWITCHING UNIT
IGNITION COIL
18 MFD
BHR PTS
DIAGNOSTIC PLUG
760Ω TOP DEAD CENTER SENSOR
CYL #1 FIRING IMPULSE TRANSMITTER
SPARK PLUGS
THE A.C. STARTER RELAY AUTOMATICALLY DISENGAGES THE AIR CONDITIONING CLUTCH DURING ENGINE CRANKING
WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROPOUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED


7
8
9
10
11
INTERIOR LIGHTS
INSTRUMENT CLUSTER
BATTERY BUS
START-RUN BUS
F1 (8A)
F3 (8A)
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
FRONT DOME
REAR DOME LIGHT SWITCH
REAR DOME LIGHT
LEFT REAR SWITCH
LEFT REAR WINDOW MOTOR
TRUNK LIGHT
INSTRUMENT CLUSTER
BRAKE SYS WARNING LIGHT
LOW FUEL WARNING LIGHT
FUEL GAUGE
TEMP GAUGE
CLOCK
BRAKE FLUID SWITCH
PARKING BRAKE SWITCH
FUEL TANK SENSOR
NOTE 2
NOTE 3
NOTE 2 SWITCH CLOSED WITH APPROX 5 GALLONS OR LESS FUEL IN TANK
NOTE 3 RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 10Ω
1/2 TANK - 28Ω
1/4 TANK - 54Ω



12 13 14 15 16 17



COMPONENT INDEX

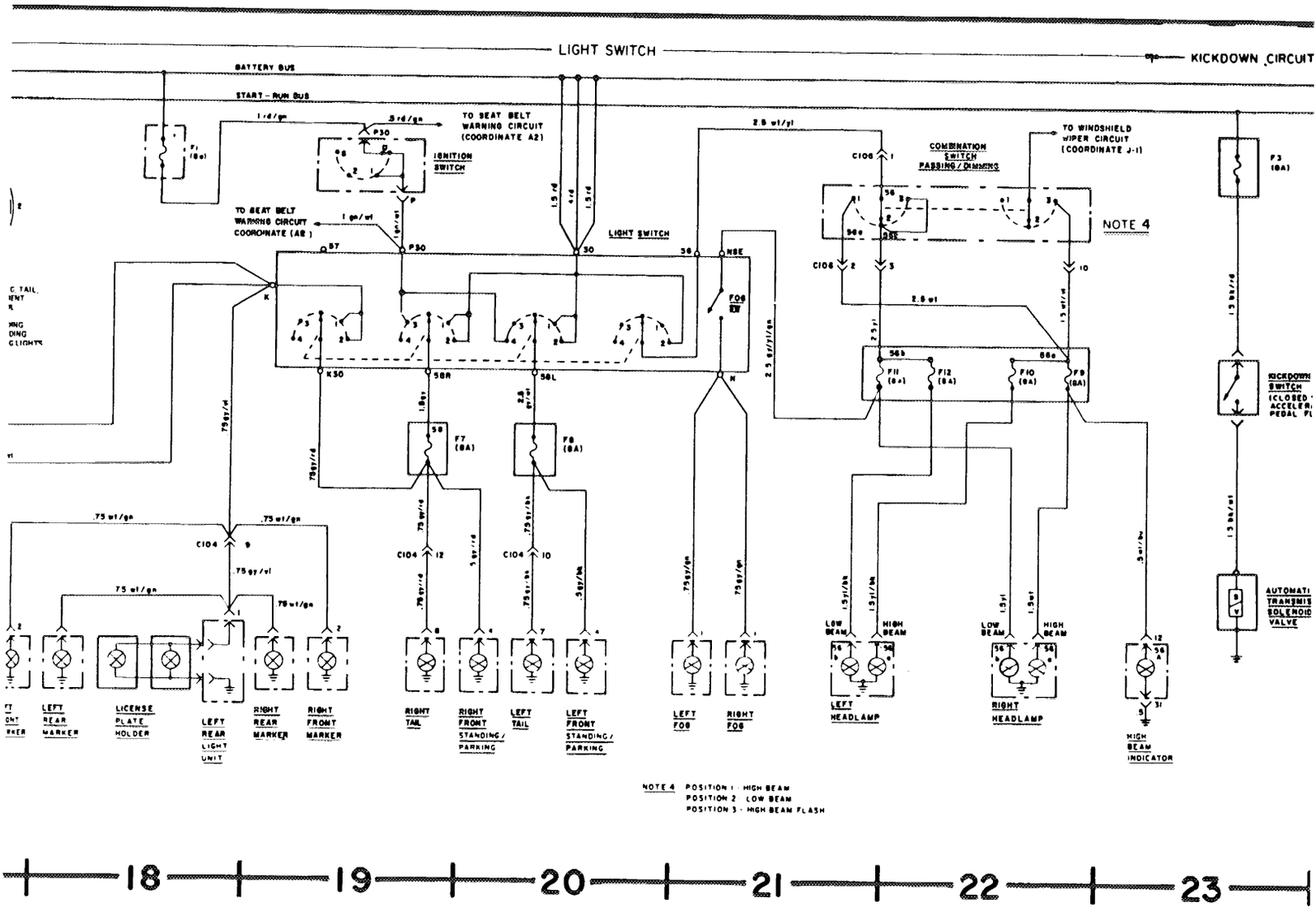
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
CHARGE			
Regulator	Alternator		
C 105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay — key 10	Right side under dash		T7
C 108	Console		
IGNITION SYSTEM			
Coil	Left front fender	8	
Distributor	Left front fender		
4 Ohm preresistor	Left front fender	8	
6 Ohm preresistor	Left front fender	8	
Transistorized ignition switching unit	Left front fender		
INSTRUMENT CLUSTER			
Brake fluid switches	Reservoir	3	
Coolant temp sensor	Right front cylinder head	11	
Fuel tank sensor	Trunk	9	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side		T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	10	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side		T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning unit	Under dash, driver's side		
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right side, under dash		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T6
C 104 (12 pins)	Under dash, driver's side		T4
C 106 (14 pins)	Under dash, driver's side	6	T5

1 — A/C Bl

1 — Change

1 — Main fu
2 — Heater t
3 — Brake fl
4 — Wiper m



LOCATION FIGURES

Fig 1
1 – A/C Blower motor

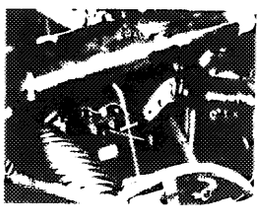


Fig 2
1 – Change over switch

Fig 3
1 – Main fuse box
2 – Heater blower pre resistors
3 – Brake fluid switches
4 – Wiper motor

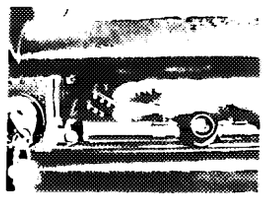


Fig 4
1 – C113

Fig 5
1 – Temperature switch, refrigerant

Fig 6
1 - Flasher relay
2 - Cruise control amplifier
6 - Interval wipe relay
8 - C 106 11 - C 119
10 - C 118 12 - C 120

Fig 7
1 – C112

Fig 8
1 – RPM test plug
2 – Ignition coil
3 – 0.4 ohm pre-resistor
4 – 0.6 ohm pre-resistor
5 – Time delay relay

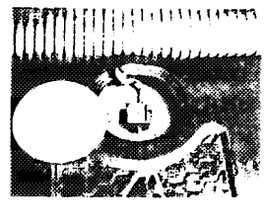
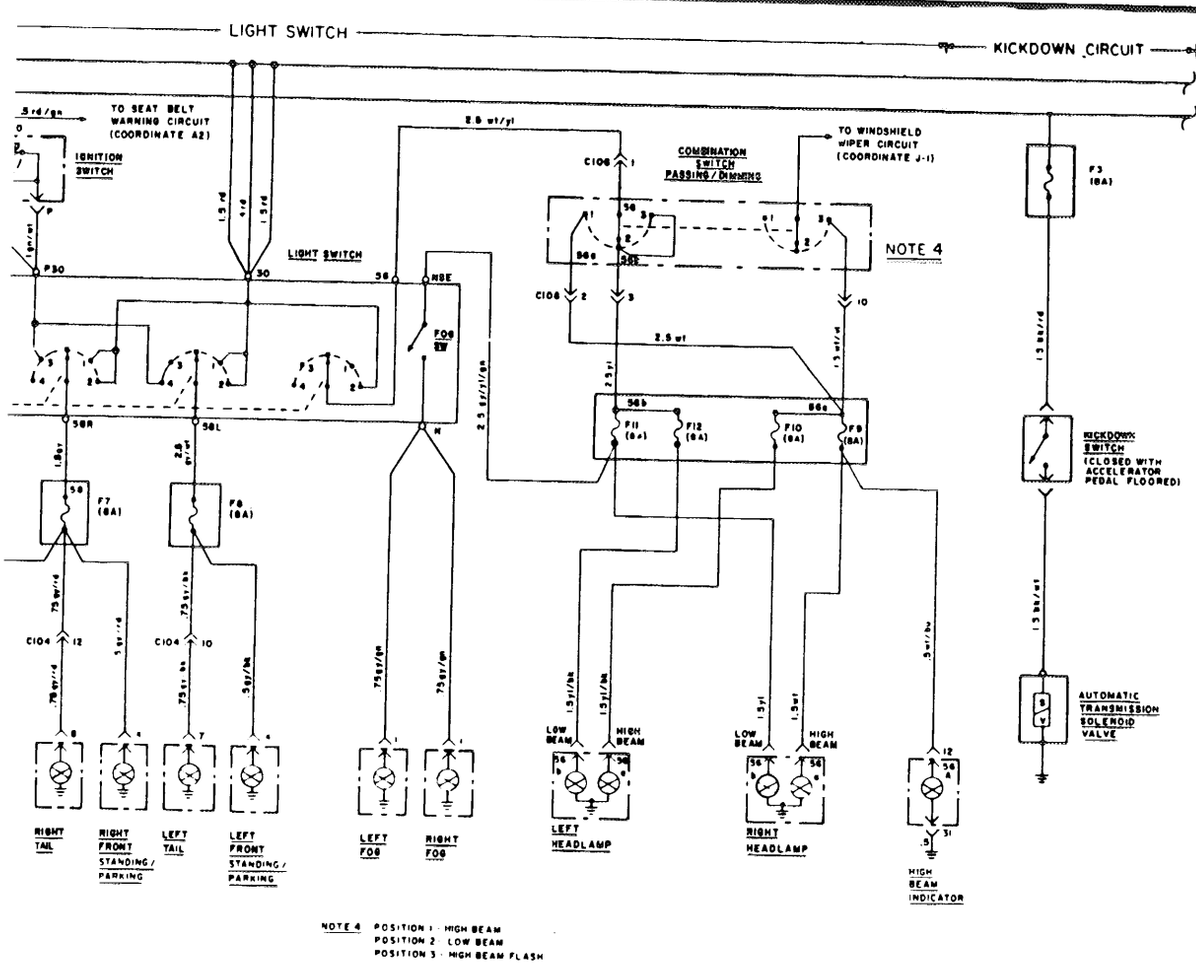


Fig 9
Fuel tank sensor

Fig 10
1 – Kickdown switch

1975



A B C D

20 21 22 23 24

LOCATION FIGURES

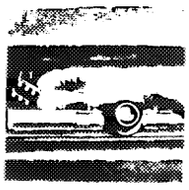


Fig. 4

Fig 7
1 — C112

Fig. 10
1 — Kickdown switch

Fig 5
rature switch, refrigerant

Fig 8
1 — RPM test plug
2 — Ignition coil
3 — 0 4 ohm pre-resistor
4 — 0 6 ohm pre-resistor
5 — Time delay relay

Fig 6
relay
control amplifier
wipe relay
11 - C 119
12 - C 120

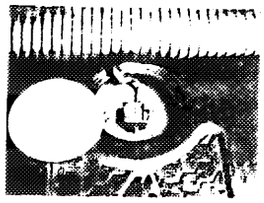
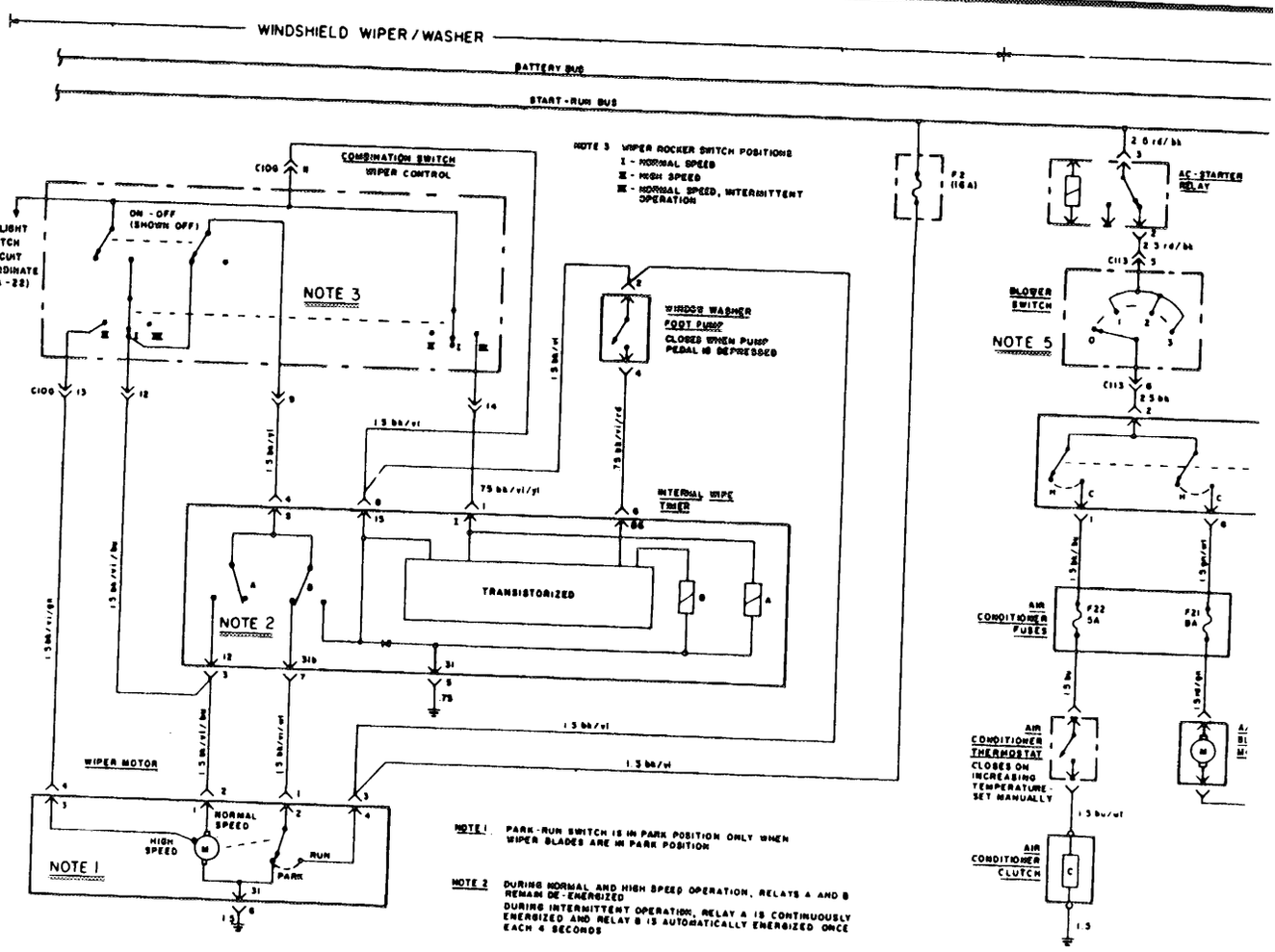


Fig 9
Fuel tank sensor

1975 280/280C

MBNA/MBC ETM1404
Printed in U.S.A.



COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
AIR CONDITIONING/HEATING			
AC blower motor	Center of console	1	
AC/Starter relay, key 4	Right side, under dash		T7
Change-over switch	Console, left side	2	
Fuse 21 (AC blower	Right firewall — aux. box		
Fuse 22 (AC clutch)	Right firewall — aux. box		
Heater blower motor preresister	Forward of AC blower	3	
C 113 (6 pins)	Mounted to heater control lever plate	4	T2
AUXILIARY FAN			
Aux. fan relay, key6	Right side, under dash		
Fuse 20 (aux. fan)	Left fender — AUX. BOX		
Temp. switch — engine (212 F)	Thermostat housing	11	
Temp. switch — refrigerant	Right firewall	5	
BACKUP			
C 104 (12 pins)	Under dash—driver's side		T4
BRAKE LIGHTS			
Switch	Above brake pedal		
C 104 (12 pins)	Under dash—driver's side		T4
CRUISE CONTROL			
Amplifier	Under dash, driver's side	6	
Speed sensor	Under dash, driver's side—speedometer cable		
Throttle actuator	Right fender, near hood spring		
C 118		6	
C 119		6	
C 120		6	
ENGINE EMISSION CONTROL			
Air injection switch-over valve	Right fender skirt	11	
EGR switch-over valve	Right fender skirt	11	
Ignition switch-over valve	Right fender skirt		
Relay box	Left fender		
RPM relay	Left fender		
Temperature switch	Oil filter mount		
Throttle lift switch-over valve	Right fender skirt		
HEATED REAR WINDOW			
Time delay relay	Under dash—driver's side		T14
Fuse 19 (window)	Left fender—aux. box		
C 112	Behind rear seat—right side	7	

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO	TERM. FIG NO
HORNS			
C 106 (14 pins)	Under dash—driver's side	6	T5
WINDSHIELD WIPER/WASHER			
Interval wipe relay	Under dash—driver's side	6	T10
Motor	Firewall—left side	3	
C 106 (14 pins)	Under dash—driver's side	6	T5

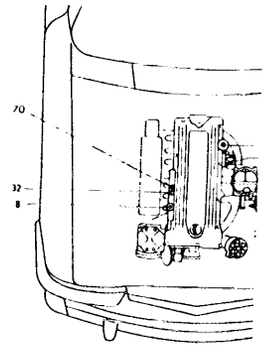
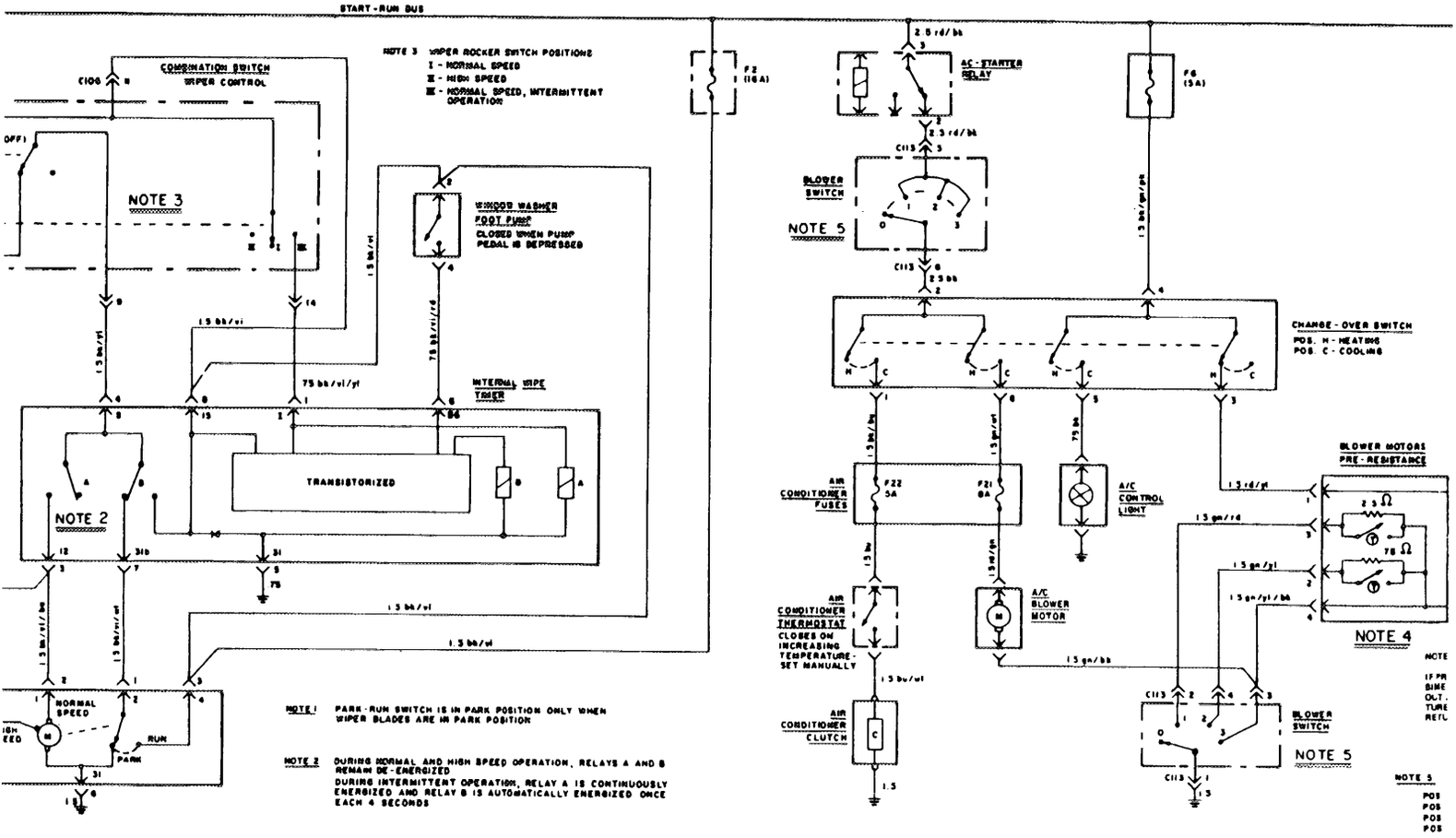


Fig. 11

5 - Relay box
7 - 62 F (17 C) temperat
8 - 212 F (100 C) tempe
12 - Switch-over valve, EC
31 - EGR valve
32 - 149 F (65 C) temper
33 - Switch-over valve, air
37 - Switch-over valve, fu control system (greer
39 - Charcoal canister
46 - Resistor, automatic
54 - Vacuum booster
60 - Venturi connection
70 - Coolant temp. senso



COMPONENT INDEX

LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
Center of console	1	
Right side, under dash		T7
Console, left side	2	
Right firewall — aux. box		
Right firewall — aux. box		
Forward of AC blower	3	
Mounted to heater control lever plate	4	T2
Right side, under dash		
Left fender — AUX. BOX		
Thermostat housing	11	
Right firewall	5	
Under dash—driver's side		T4
Above brake pedal		
Under dash—driver's side		T4
Under dash, driver's side	6	
Under dash, driver's side—speedometer cable		
Right fender, near hood spring		
	6	
	6	
	6	
Right fender skirt	11	
Right fender skirt	11	
Right fender skirt		
Left fender		
Left fender		
Oil filter mount		
Right fender skirt		
Under dash—driver's side		T14
Left fender—aux. box		
Behind rear seat—right side	7	

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM. FIG NO
HORNS			
C 106 (14 pins)	Under dash—driver's side	6	T5
WINDSHIELD WIPER/WASHER			
Interval wipe relay	Under dash—driver's side	6	T10
Motor	Firewall—left side	3	
C 106 (14 pins)	Under dash—driver's side	6	T5

LOCATI

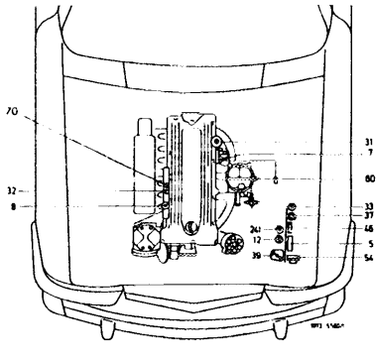
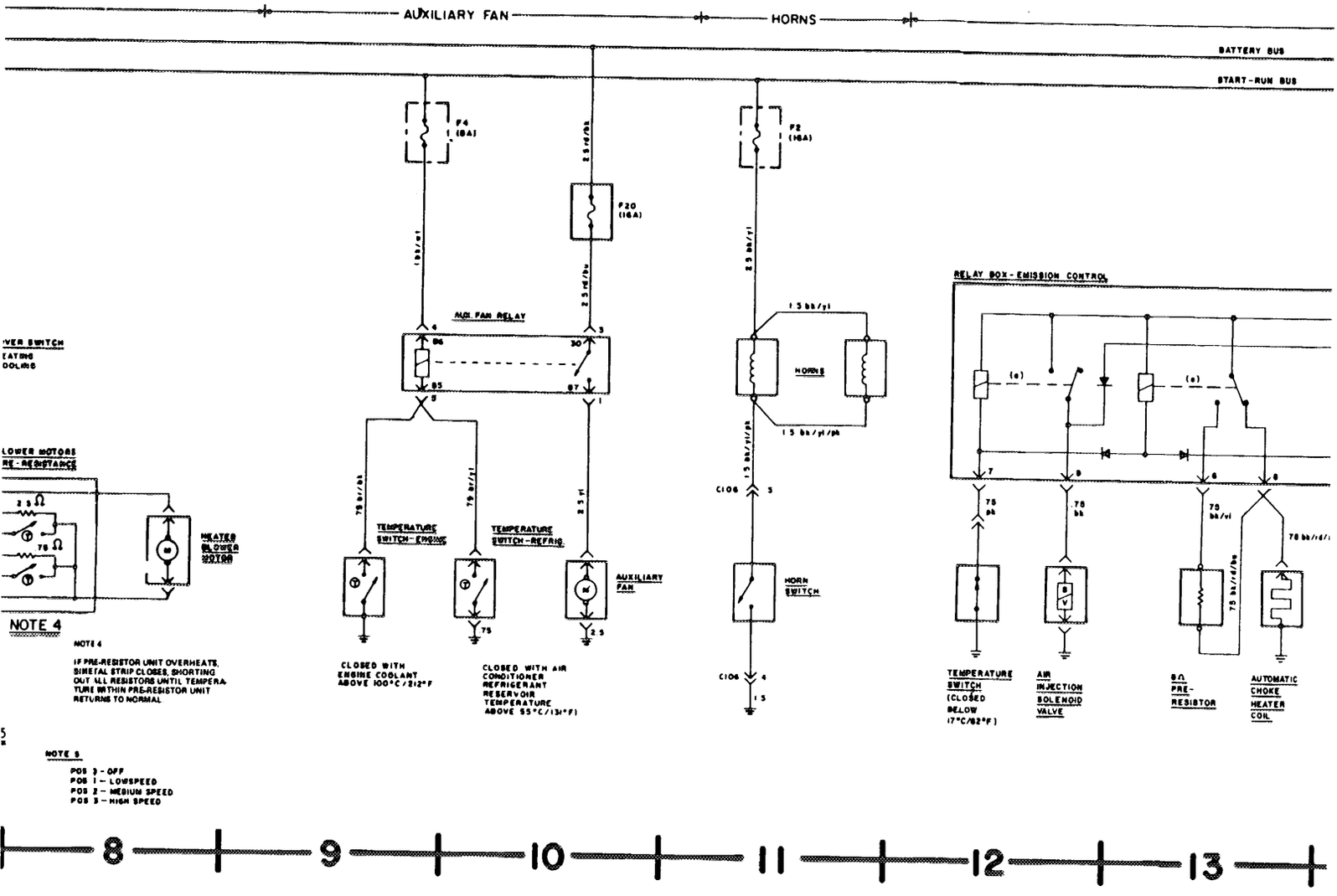


Fig 11

5 - Relay box
7 - 62 F (17 C) temperature switch
8 - 212 F (100 C) temperature switch
12 - Switch-over valve, EGR (brown)
31 - EGR valve
32 - 149 F (65 C) temperature switch
33 - Switch-over valve, air injection (blue)
37 - Switch-over valve, fuel evaporation control system (green)
39 - Charcoal canister
46 - Resistor, automatic choke cover
54 - Vacuum booster
60 - Venturi connection
70 - Coolant temp. sensor



LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Horns
Windshield wiper/ washer

Fuse 3 (8 amps)
Backup lights
Brake lights
Cruise control
Engine emission control
Glove box light
Instruments
Window control

Fuse 4 (8 amps)
Auxiliary fan
Kickdown solenoid

Fuse 5 (8 amps)
Seat belt warning

Fuse 6 (5 amps)
A/C control light
Heater blower motor

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing parking (right)
Instrument cluster lights
Left and right markers
License plate light
Tail light (right)

Fuse 8 (8 amps)
Front standing parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Radio antennal

Fuse 14

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right rear window

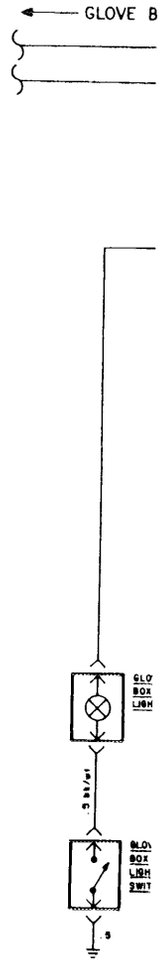
Fuse 19 (16 amps)
Sliding roof

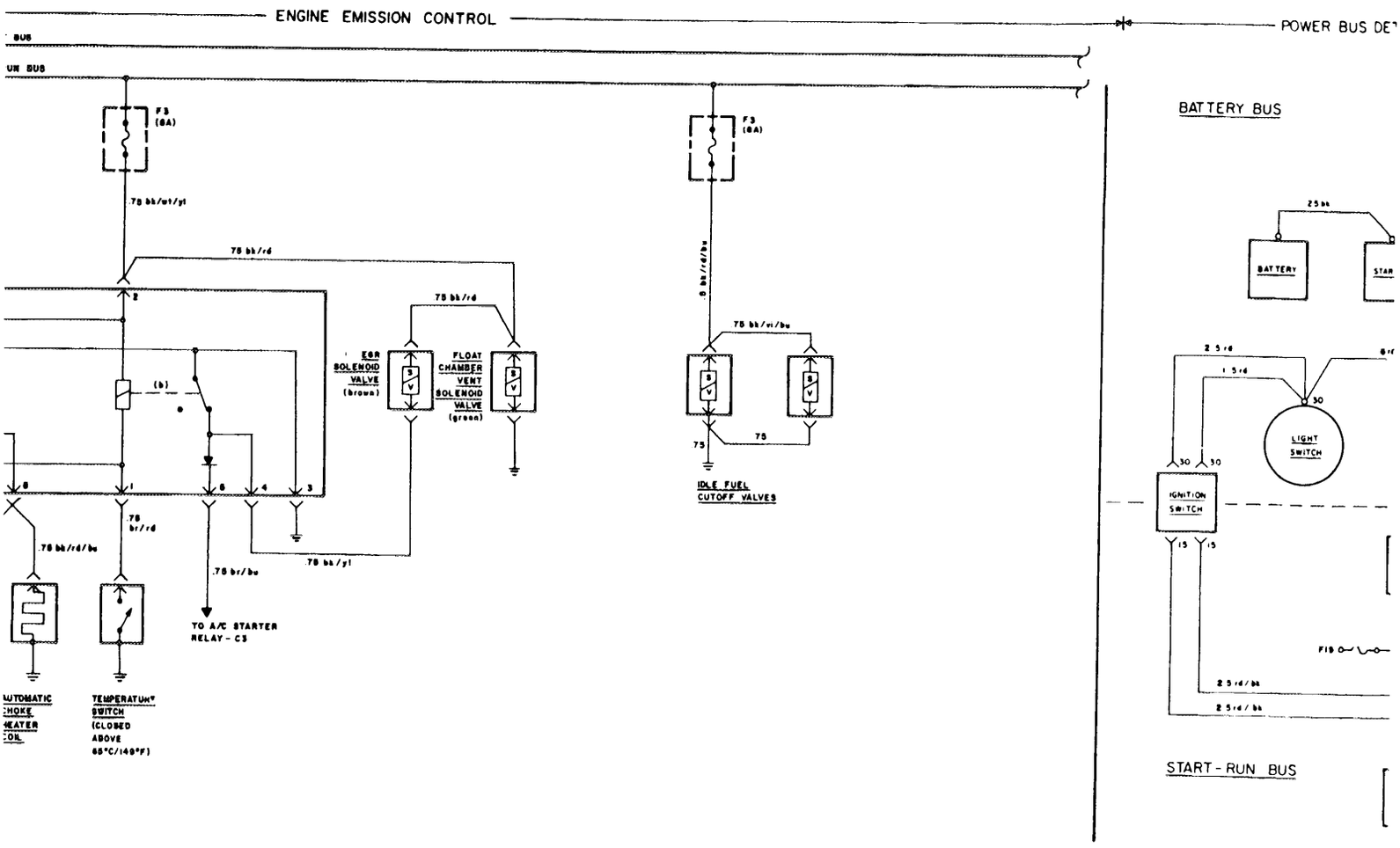
Fuse 20 (16 amps)
Auxiliary fan motor

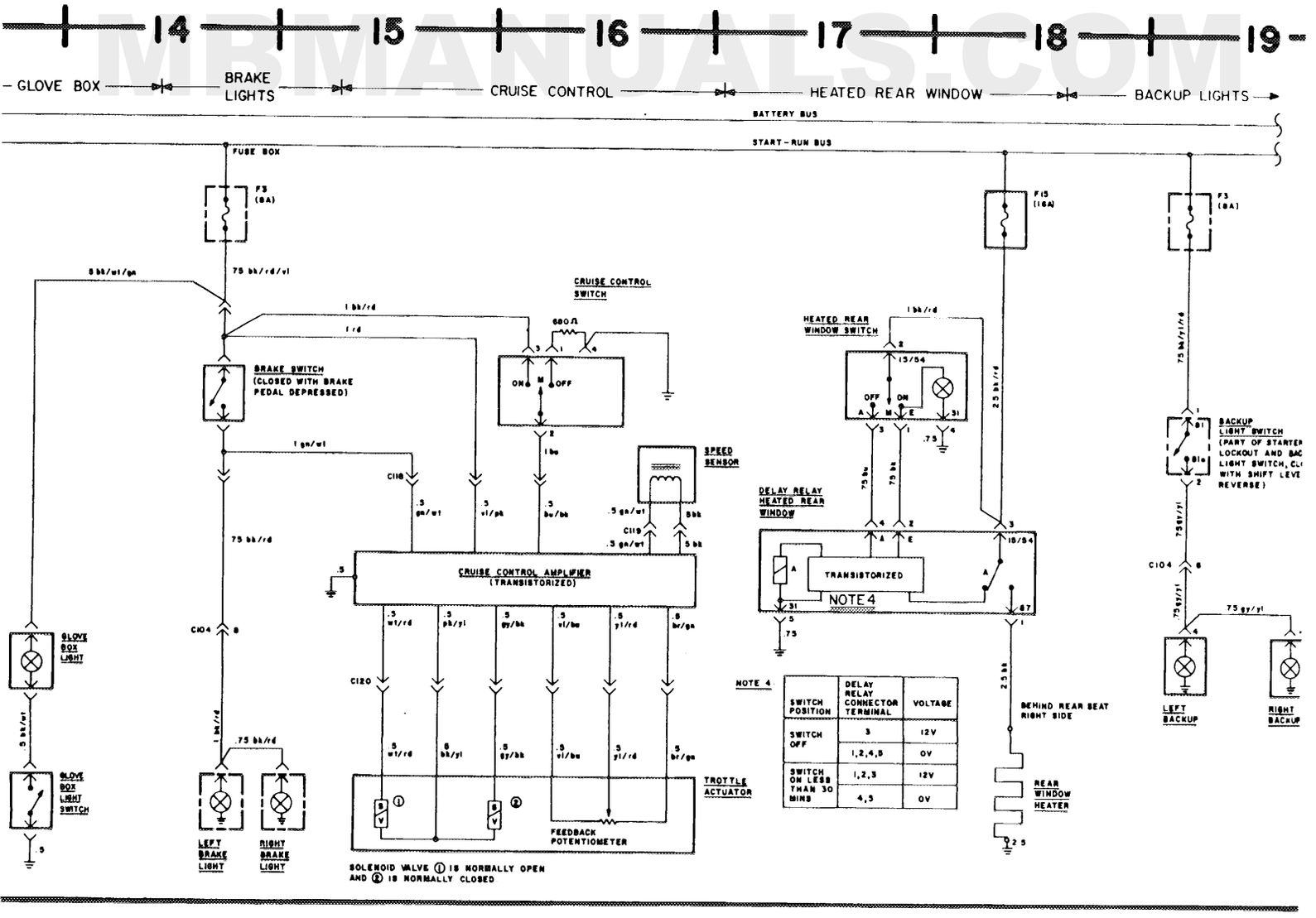
Fuse 21 (8 amps)
A/C Blower motor

Fuse 22 (5 amps)
Air Conditioner clutch

1975 280/280C



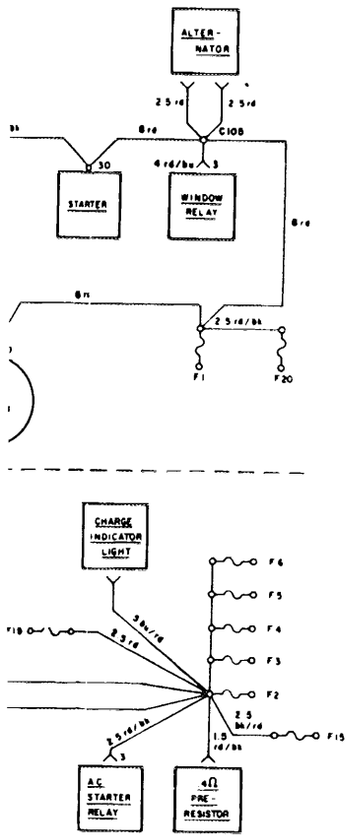




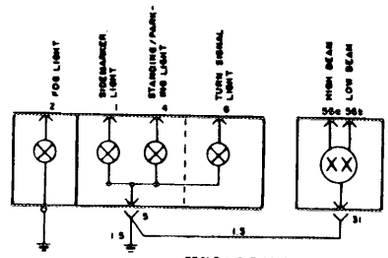
NOTE 4

SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS	1,2,3	12V
	4,5	0V

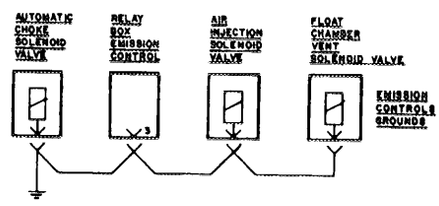
R BUS DETAIL →

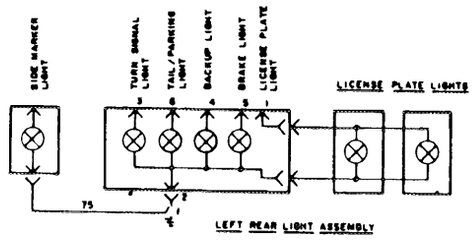


SPECIAL GROUNDING CIRCUITS

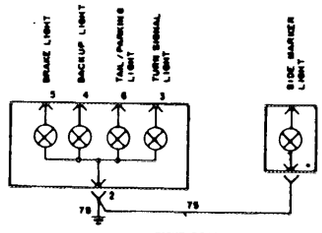


FRONT LIGHT ASSEMBLIES -
RIGHT & LEFT





LEFT REAR LIGHT ASSEMBLY



RIGHT REAR LIGHT ASSEMBLY

J

K

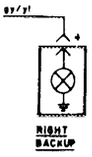
L

M

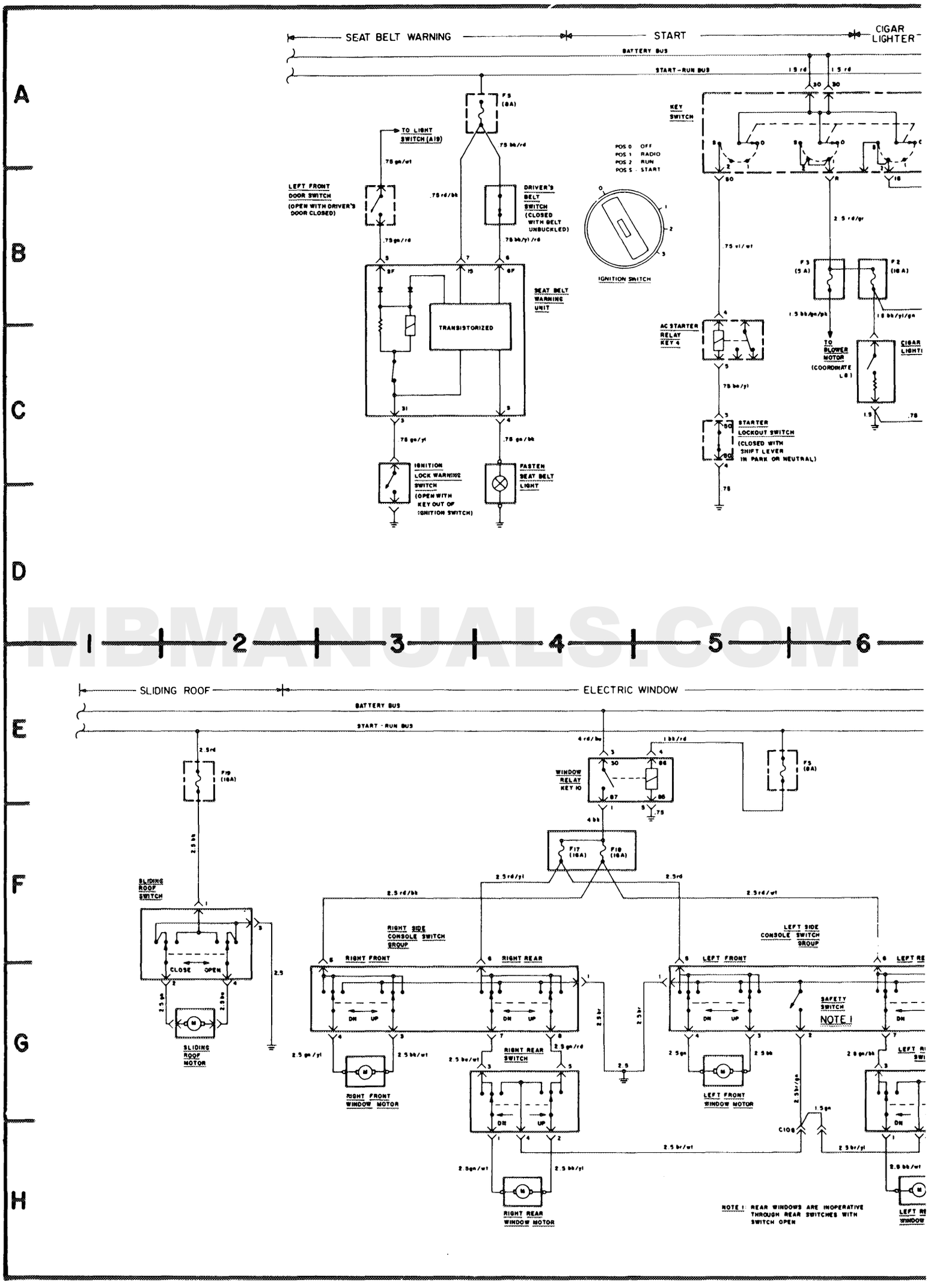
19 — 20 — 21 — 22 — 23 — 24

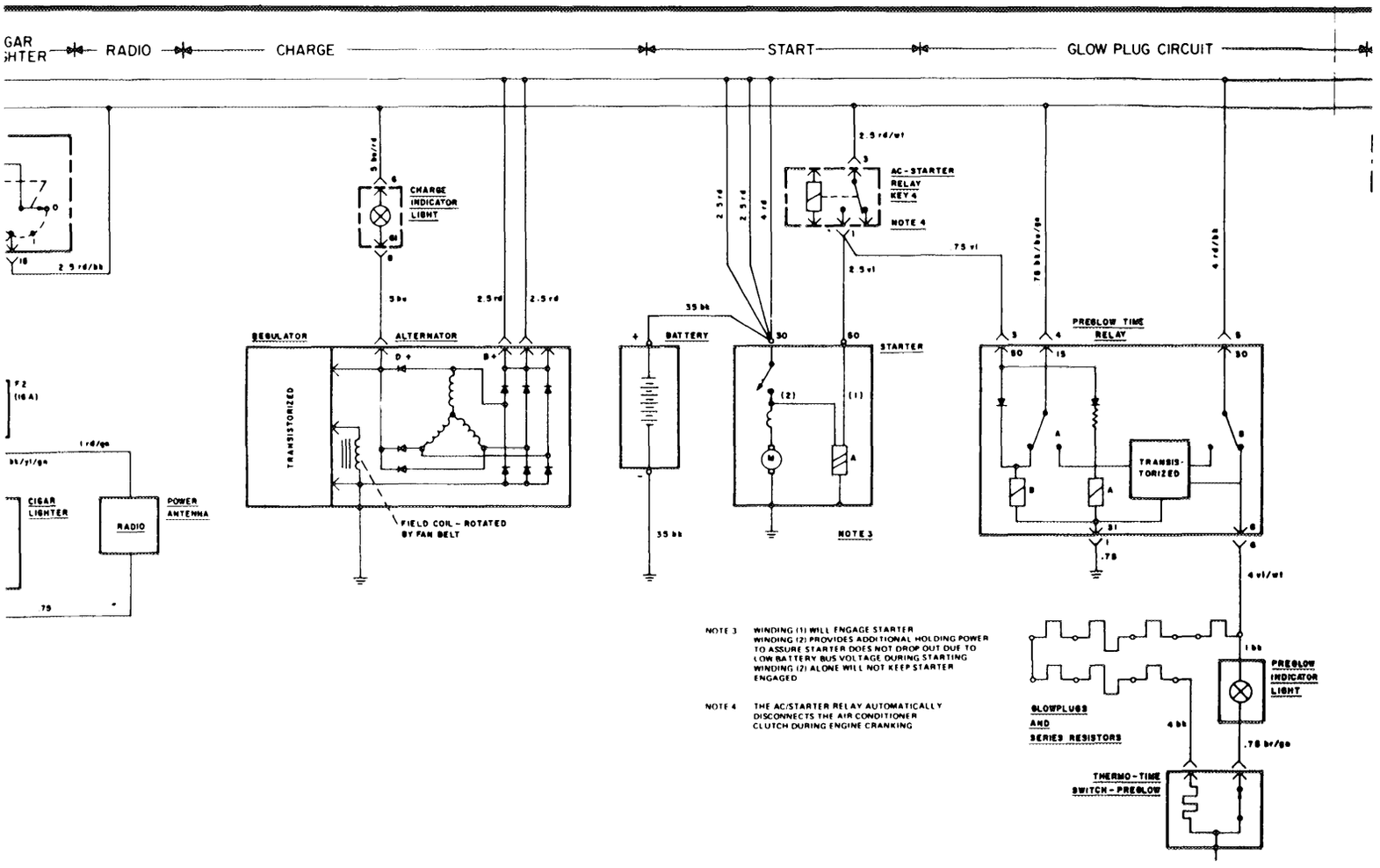
S →

UP
T SWITCH
T OF STARTER-
OUT AND BACKUP
T SWITCH, CLOSED
SHIFT LEVER IN
RSE)

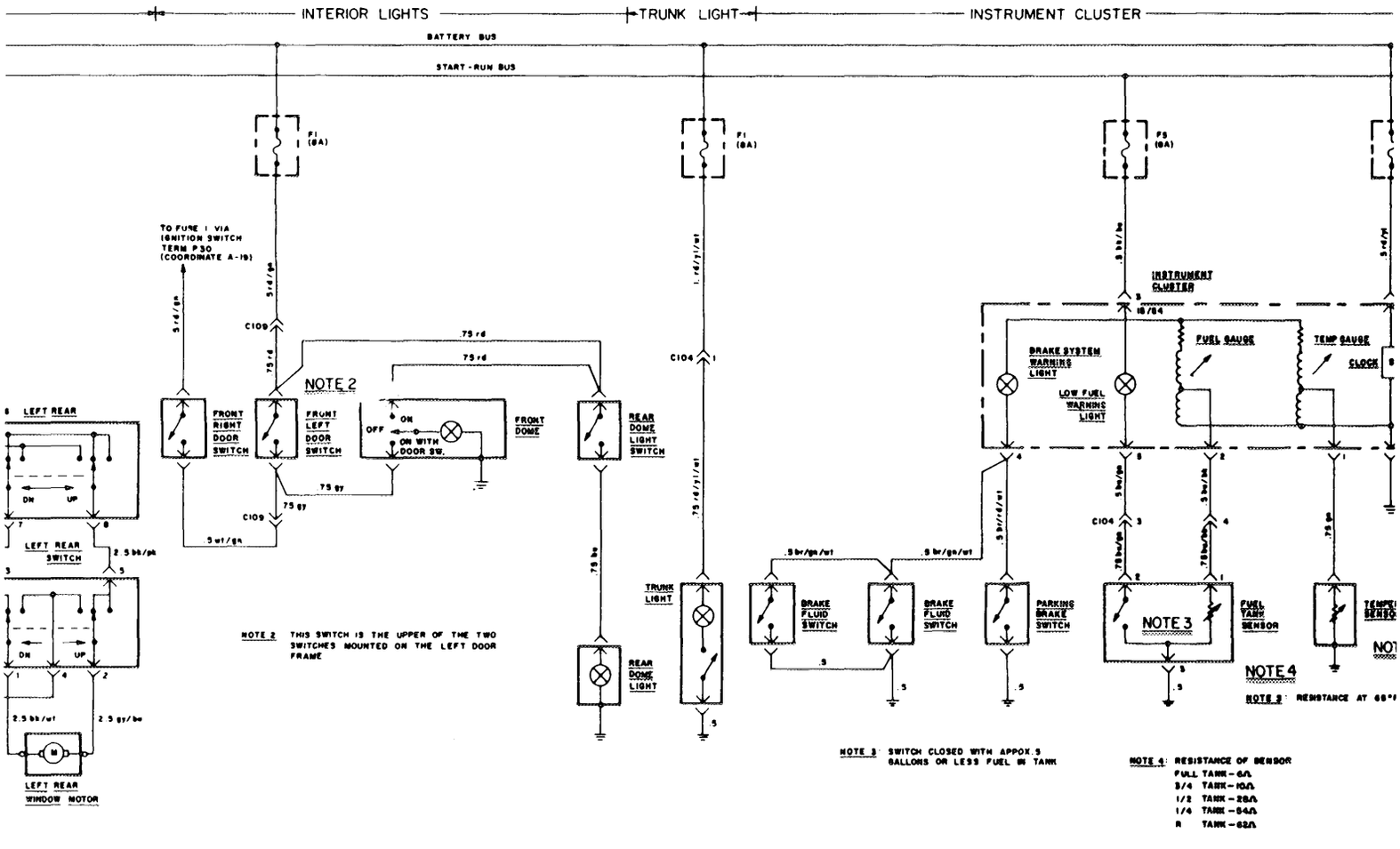


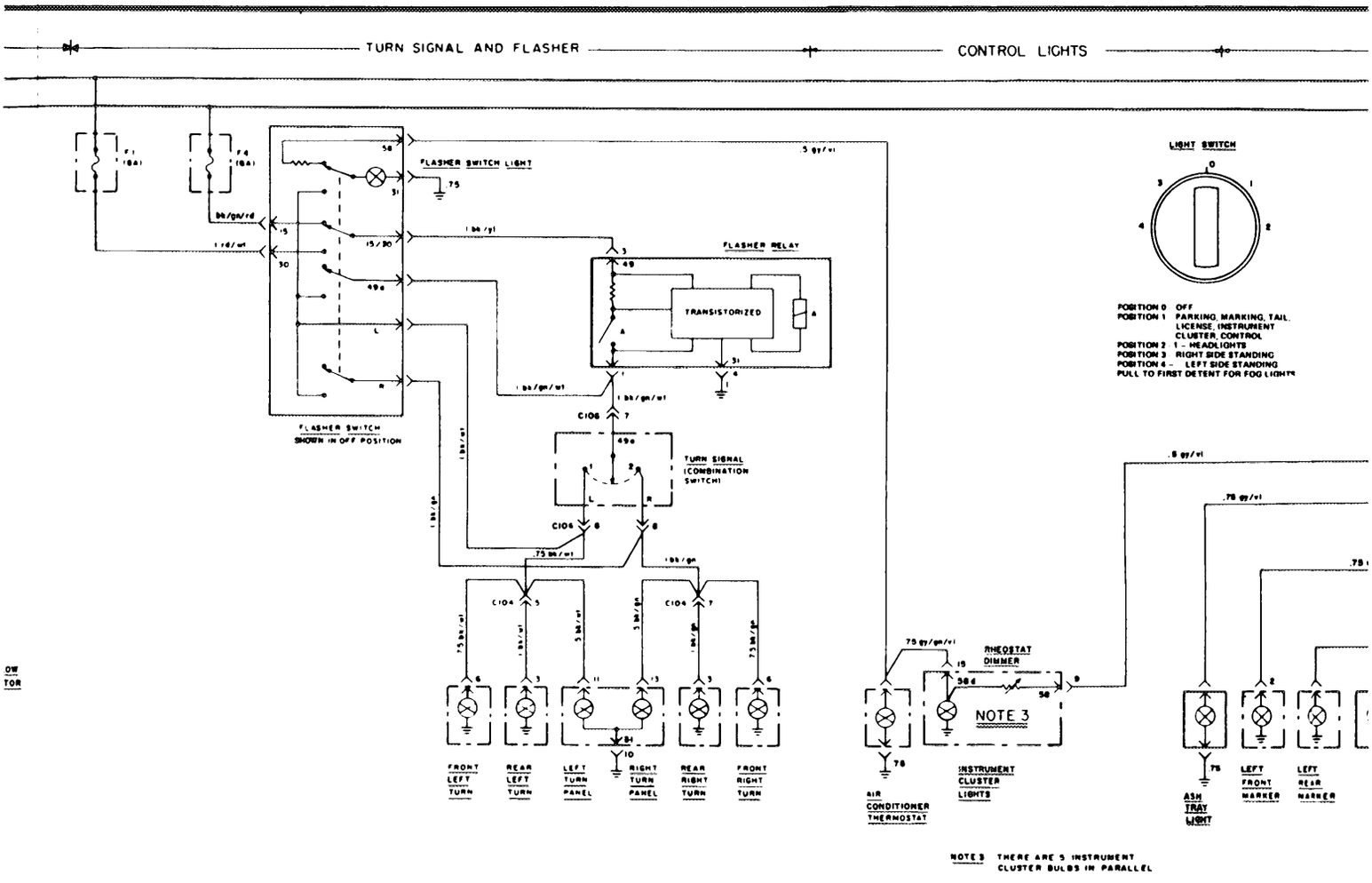
RIGHT
BACKUP



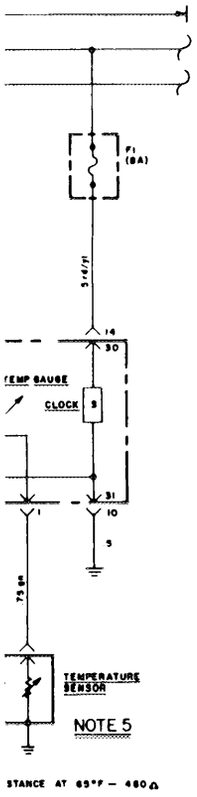

CIGAR LIGHTER
RADIO
CHARGE
START
GLOW PLUG CIRCUIT
CHARGE INDICATOR LIGHT
REGULATOR
ALTERNATOR
TRANSISTORIZED
FIELD COIL - ROTATED BY FAN BELT
BATTERY
STARTER
AC-STARTER RELAY KEY 4
NOTE 4
NOTE 3
PREGLOW TIME RELAY
TRANSIS-TORIZED
POWER ANTENNA
PREGLOW INDICATOR LIGHT
GLOWPLUGS AND SERIES RESISTORS
THERMO-TIME SWITCH-PREGLOW
NOTE 3 WINDING (1) WILL ENGAGE STARTER WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROP OUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED
NOTE 4 THE AC/STARTER RELAY AUTOMATICALLY DISCONNECTS THE AIR CONDITIONER CLUTCH DURING ENGINE CRANKING

7 8 9 10 11 12


INTERIOR LIGHTS
TRUNK LIGHT
INSTRUMENT CLUSTER
BATTERY BUS
START-RUN BUS
TO FUSE 1 VIA IGNITION SWITCH TERM P30 (COORDINATE A-19)
NOTE 2
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
FRONT DOME
REAR DOME LIGHT SWITCH
REAR DOME LIGHT
LEFT REAR
LEFT REAR SWITCH
LEFT REAR WINDOW MOTOR
TRUNK LIGHT
BRAKE FLUID SWITCH
PARKING BRAKE SWITCH
INSTRUMENT CLUSTER
BRAKE SYSTEM WARNING LIGHT
LOW FUEL WARNING LIGHT
FUEL GAUGE
TEMP GAUGE
CLOCK
FUEL TANK SENSOR
NOTE 3
NOTE 4
NOTE 2 THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME
NOTE 3 SWITCH CLOSED WITH APPOX. 5 GALLONS OR LESS FUEL IN TANK
NOTE 4 RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 10Ω
1/2 TANK - 28Ω
1/4 TANK - 54Ω
R TANK - 62Ω



12 13 14 15 16 17



COMPONENT INDEX

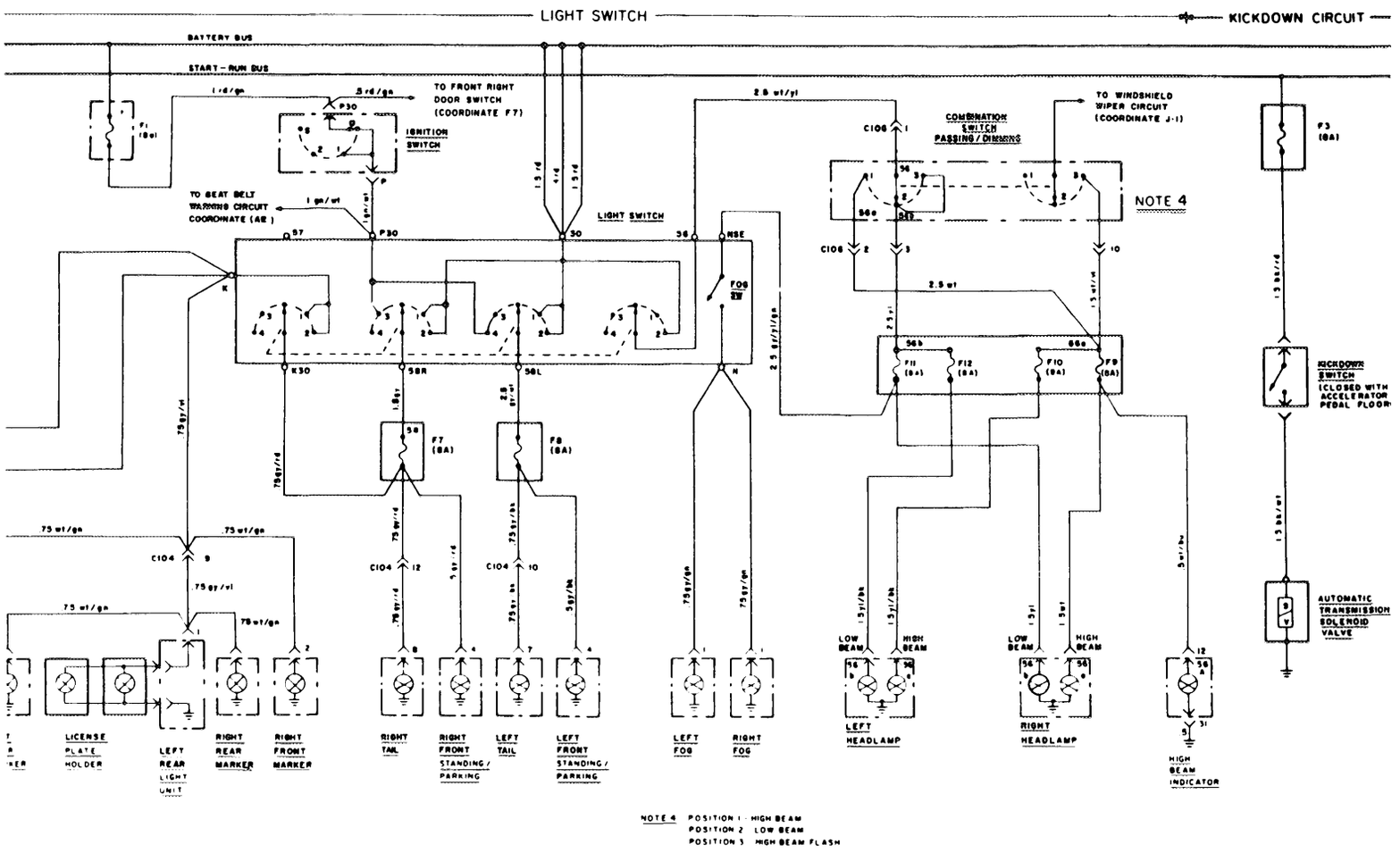
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
CHARGE			
Regulator	Alternator		
C 105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay — key 10	Right firewall under fuse bracket		T7
C 108	Console		
GLOW PLUG CIRCUIT			
Preglow time relay	Under dash, left side		
Thermo-time switch (preglow)	Engine block, left side		
AC-Starter Relay Key 4	Right firewall, under fuse bracket		T7
INSTRUMENT CLUSTER			
Brake fluid switches	Reservoir	3	
Coolant temp sensor	Left front cylinder head		
Fuel tank sensor	Trunk	9	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side	6	T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	8	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning unit	Under dash, driver's side		
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC-Starter relay, key 4	Right firewall under fuse bracket		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
TRUNK LIGHT			
C 104 (12 pins)	Under dash, driver's side	6	T4
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T6
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (13 pins)	Under dash, driver's side	6	T5

1 – A/C

1 – Chan

1 – Main
2 – Heat
3 – Brak
4 – Wipe



LOCATION FIGURES

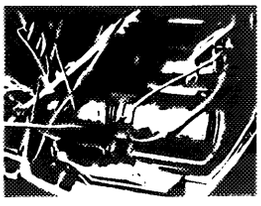


Fig. 1
1 - A/C Blower motor

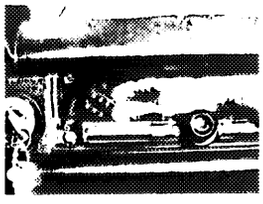


Fig. 4
1 - C 113

Fig. 7
1 - C112

Fig. 2
1 - Change over switch

Fig. 5
1 - Temperature switch, refrigerant

Fig. 8
1 - Kickdown switch

Fig. 3
1 - Main fuse box
2 - Heater blower pre resistors
3 - Brake fluid switches
4 - Wiper motor

Fig. 6
1 - Flasher relay
3 - Time delay relay, heated rear window
5 - Interval wiper timer
6 - C 104
7 - C 106

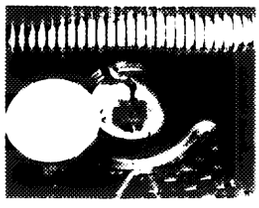
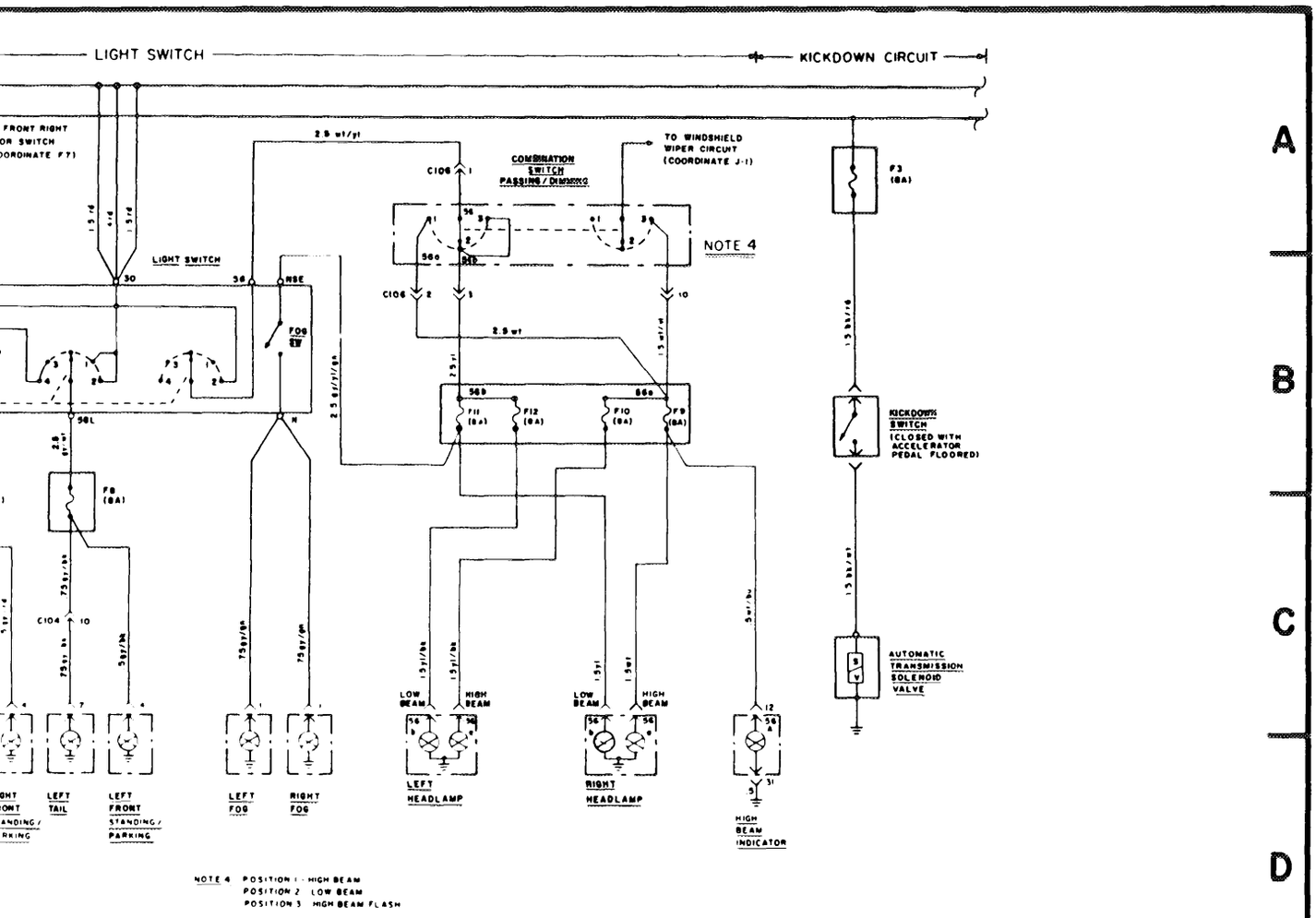


Fig. 9
Fuel tank sensor

AIR CONDITI
AUXILIARY F
BLOWER MO
CHARGE
CIGAR LIGH
CLOCK
COOLANT TE
FUEL GAUGE
HEATED REA
HEATER CO
HORNS
KICKDOWN
LIGHT CIRCU
AIR CON
BACKUP
BRAKE
BRAKE S
CIGAR L
FOG
GLOVE B
HEAD
INSTRU
INTERIO
LOW FU
MARKER
PARKIN
STANDI
TAIL
TRUNK
PREGLOW
RADIO
SEAT BELT W
SLIDING RO
START
TURN SIGNA
WINDOWS
WINDSHIELD

POWER BUS
SPECIAL GR



A

B

C

D

20 21 22 23 24

LOCATION FIGURES

) 4

: 5
tch, refrigerant

6
heated rear window
er

Fig. 7
1 - C112

Fig. 8
1 - Kickdown switch

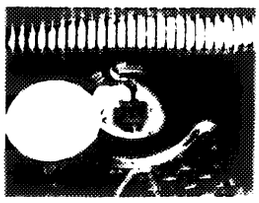
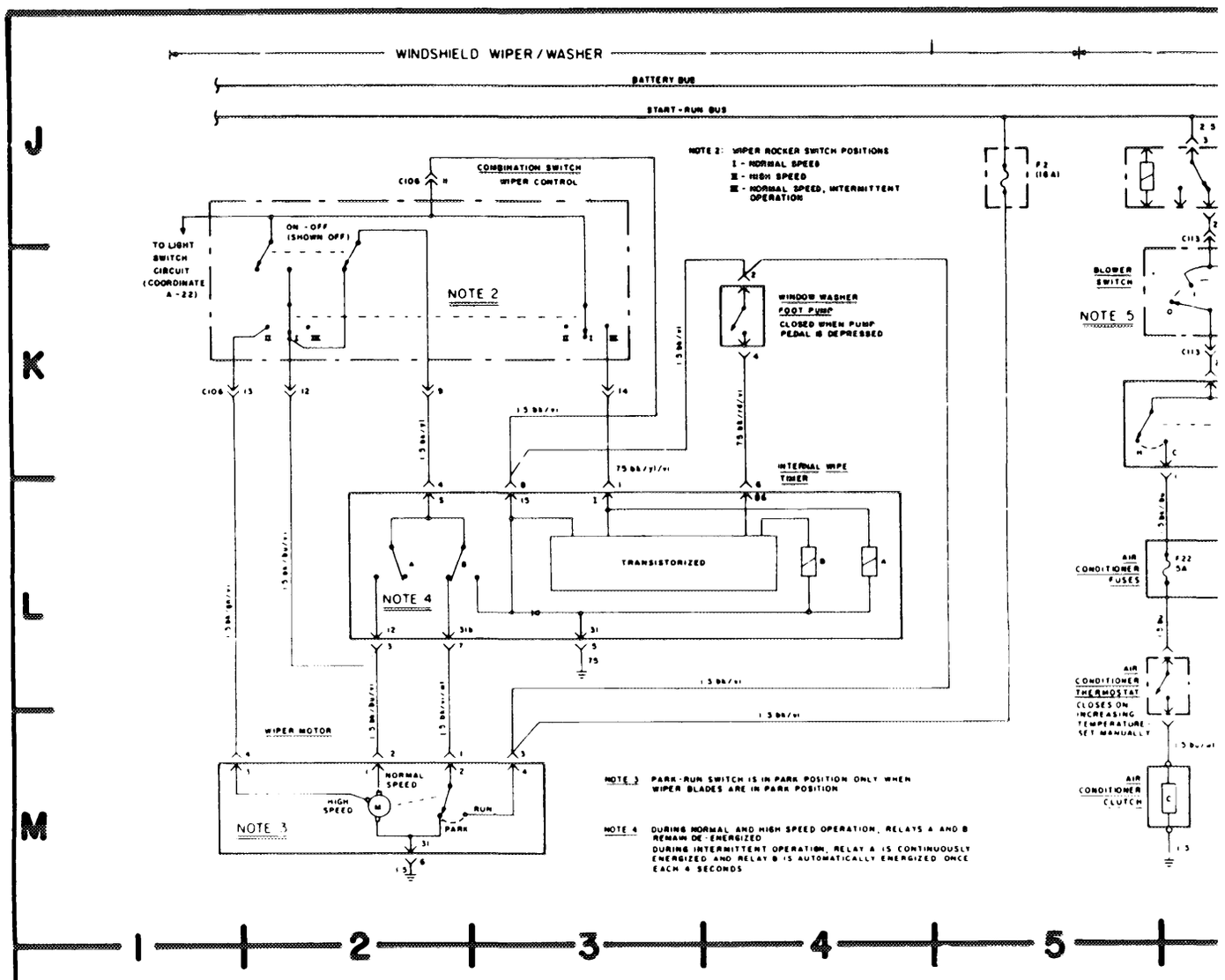


Fig. 9
Fuel tank sensor

1975 300D

AIR CONDITIONING CONTROL	L5
AUXILIARY FAN	L10
BLOWER MOTOR CONTROL	L6
CHARGE	B8
CIGAR LIGHTER	C6
CLOCK	F12
COOLANT TEMPERATURE GAUGE	F12
FUEL GAUGE	F11
HEATED REAR WINDOW	L15
HEATER CONTROL	L6
HORNS	K11
KICKDOWN	B23
LIGHT CIRCUITS	
AIR CONDITIONING THERMOSTAT	D16
BACKUP	L16
BRAKE	L12
BRAKE SYSTEM WARNING	F10
CIGAR LIGHTER	D17
FOG	D21
GLOVE BOX	L13
HEAD	D22
INSTRUMENT CLUSTER	D16
INTERIOR	F8
LOW FUEL WARNING	F11
MARKER	D17/D19
PARKING	D20
STANDING	D20
TAIL	D19
TRUNK	H9
PREGLOW	C11
RADIO	C7
SEAT BELT WARNING	B3
SLIDING ROOF	F2
START	B5/B9
TURN SIGNAL/FLASHER	B14
WINDOWS	F4
WINDSHIELD WIPER/WASHER	L3
POWER BUS DETAILS	L18
SPECIAL GROUNDING CIRCUITS	L20

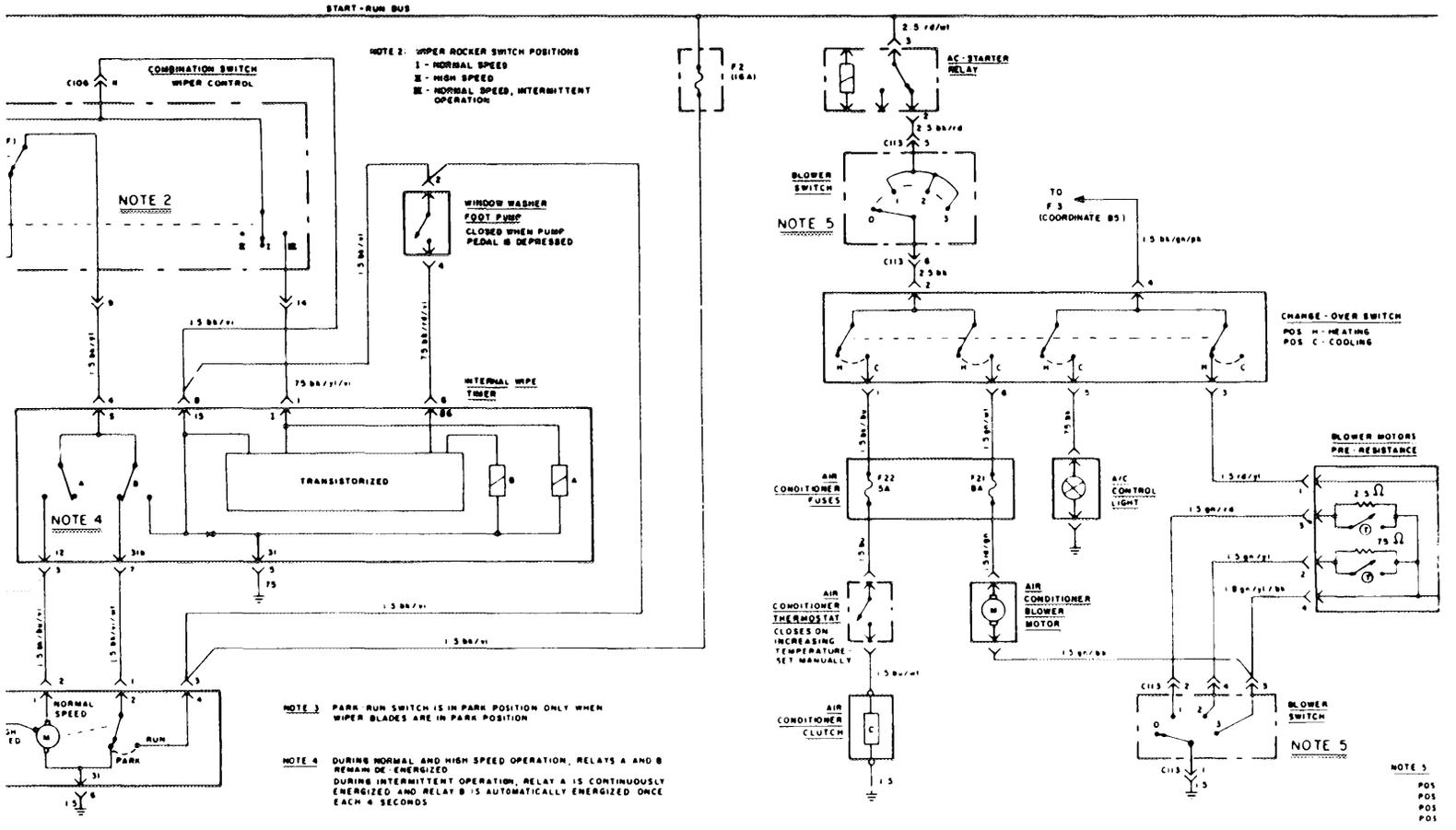
MBNA/MBC ETM1403
Printed in U.S.A.



COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO	SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
AIR CONDITIONING/HEATING							
AC Blower motor	Center of console	1					
AC/Starter relay key 4	Right firewall under fuse bracket		T7				
Change-over switch	Console, left side	2					
Fuse 21 (AC blower)	Right firewall — aux. box						
Fuse 22 (AC clutch)	Right firewall — aux. box						
Heater blower motor preresistor	Forward of AC blower	3					
C 113 (6 pins)	Mounted to heater control lever plate	4	T2				
AUXILIARY FAN							
Aux. fan relay, key 6	Below radio fuse						
Fuse 20 (aux. fan)	Left fender — aux. box						
Temp. switch — engine	Thermostat housing						
Temp. switch — refrigerant	Right firewall	5					
BACKUP							
C 104 (12 pins)	Under dash — driver's side	6	T4				
BRAKE LIGHTS							
Switch	Above brake pedal						
C 104 (12 pins)	Under dash — driver's side	6	T4				
HEATED REAR WINDOW							
Time delay relay	Under dash — driver's side	6	T14				
Fuse 19 (window)	Left fender — aux. box						
C 112	Behind rear seat — right side	7					
HORNS							
C 106 (14 pins)	Under dash — driver's side	6	T5				
WINDSHIELD WIPER/WASHER							
Interval wipe timer	Under dash — driver's side	6	T10				
Motor	Firewall — left side	3					
C 106 (14 pins)	Under dash — driver's side	6	T5				

N
P
R
S

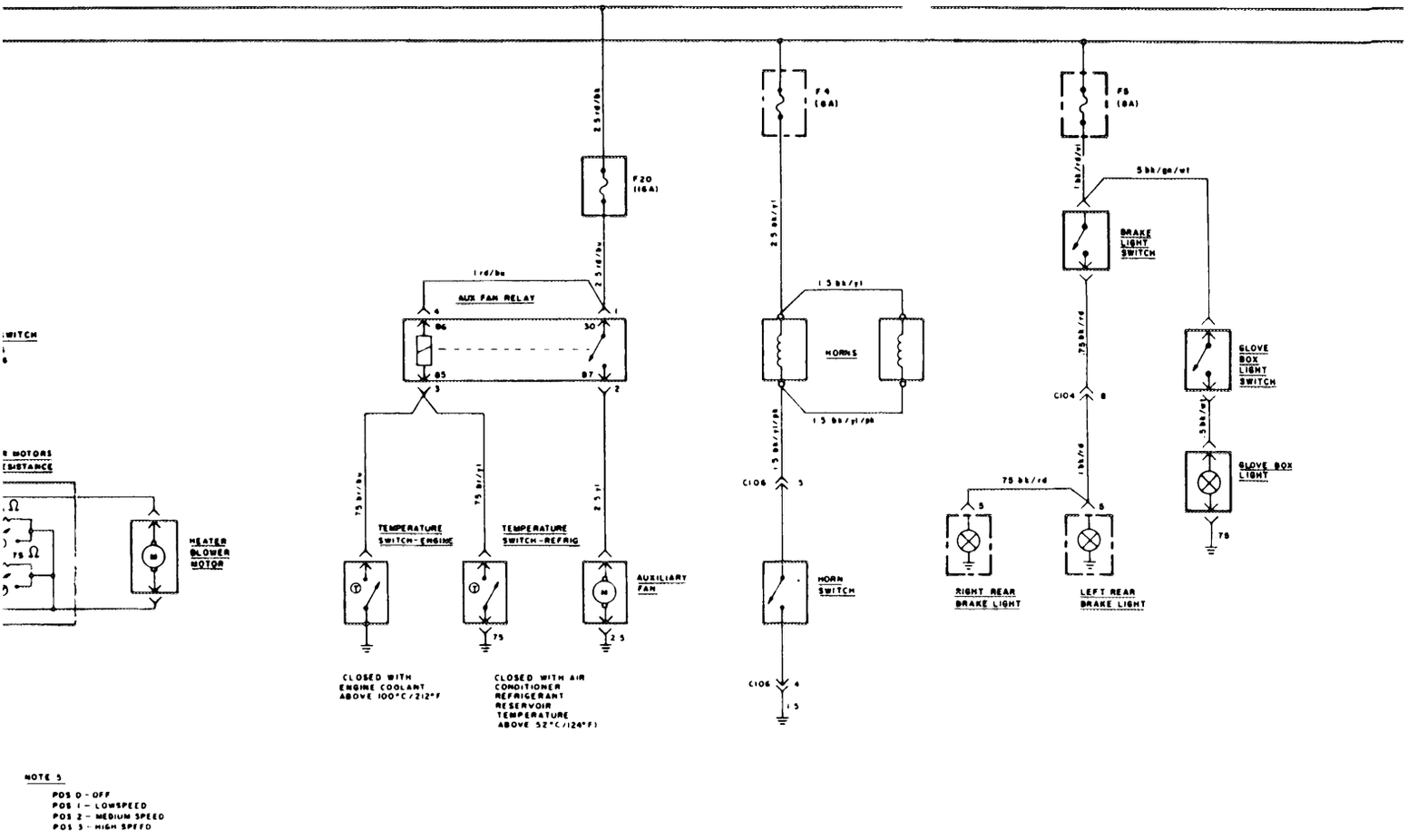


2 — 3 — 4 — 5 — 6 — 7

COMPONENT INDEX

LOCA

	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO	SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
NG	Center of console	1					
	Right firewall under fuse bracket		T7				
	Console, left side	2					
	Right firewall — aux. box						
	Right firewall — aux. box						
	Forward of AC blower	3					
	Mounted to heater control lever plate	4	T2				
	Below radio fuse						
	Left fender — aux. box						
	Thermostat housing						
	Right firewall	5					
	Under dash — driver's side	6	T4				
	Above brake pedal						
	Under dash — driver's side	6	T4				
	Under dash — driver's side	6	T14				
	Left fender — aux. box						
	Behind rear seat — right side	7					
	Under dash — driver's side	6	T5				
HER	Under dash — driver's side	6	T10				
	Firewall — left side	3					
	Under dash — driver's side	6	T5				



8 9 10 11 12 13

LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Windshield wiper/washer
Radio

Fuse 3 (5 amps)
Heater blower motor
A/C control light

Fuse 4 (8 amps)
Turn signal
Horns

Fuse 5 (8 amps)
Backup lights
Brake lights
Glove box light
Instrument cluster
Seat belt warning
Window control

Fuse 6 (8 amps)
Kickdown circuit

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing/parking (right)
Instrument cluster lights
Left and right marker lights
License plate light
Tail light (right)
Ash tray light

Fuse 8 (8 amps)
Front standing parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Not used

Fuse 14 (8 amps)
Not used

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right front window

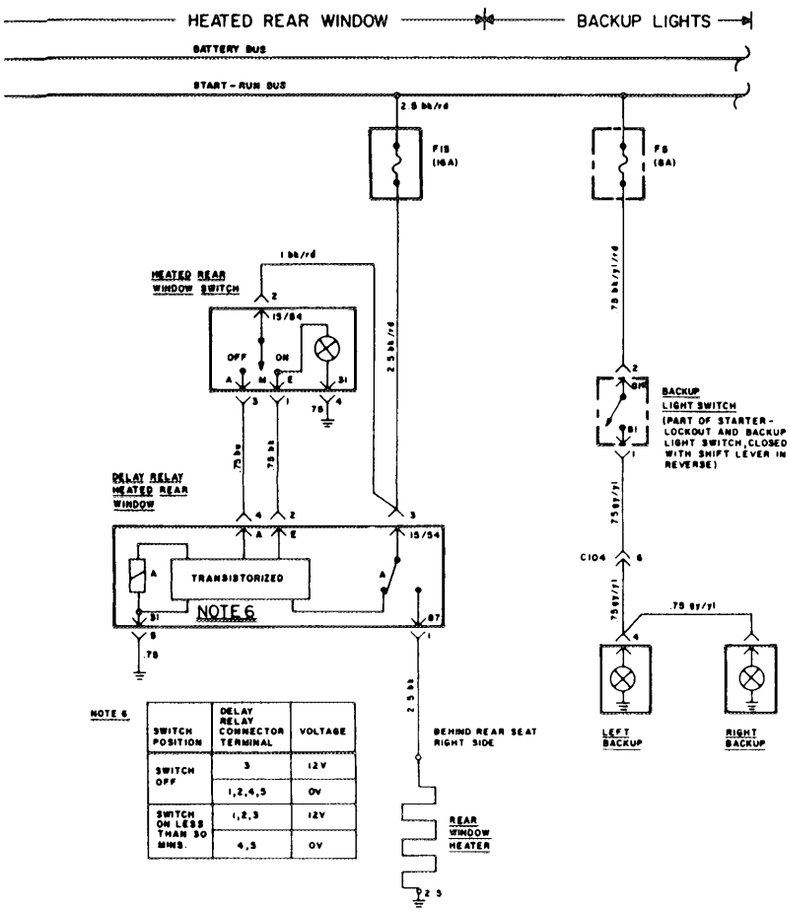
Fuse 19 (16 amps)
Sliding roof

Fuse 20 (16 amps)
Auxiliary fan motor
Auxiliary fan relay

Fuse 21 (8 amps)
A/C Blower motor

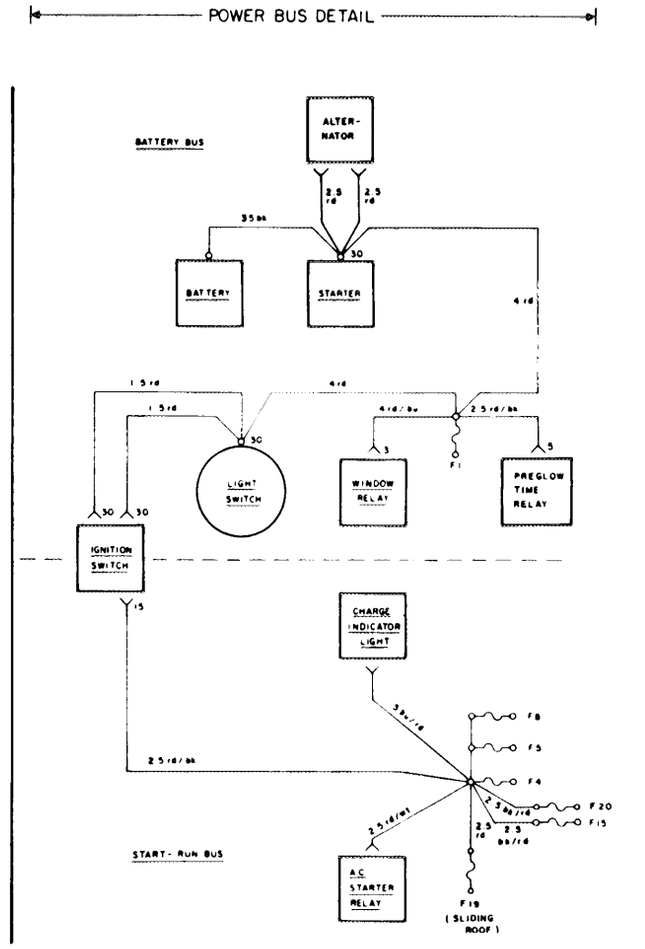
Fuse 22 (5 amps)
Air conditioner clutch

1975 300D



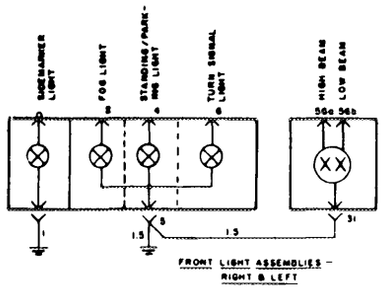
NOTE 6

SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS.	1,2,3	12V
	4,5	0V

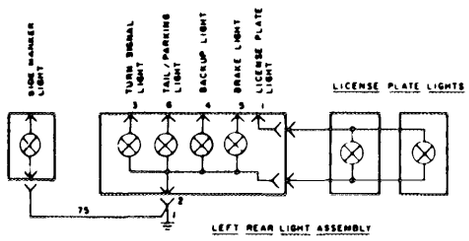


14 15 16 17 18 19

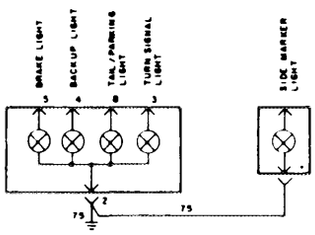
SPECIAL GROUNDING CIRCUITS



FRONT LIGHT ASSEMBLIES - RIGHT & LEFT



LEFT REAR LIGHT ASSEMBLY



RIGHT REAR LIGHT ASSEMBLY

J K L M

19 20 21 22 23 24

Mercedes-Benz

Electrical Troubleshooting Manual (USA)
Passenger Cars
Model Years 1975 – 1979

Mercedes-Benz of North America, Inc.

S-2379-000

Printed in the U.S.A.

Order No. **S-2379-000**

HOW TO USE THIS MANUAL

This manual contains electrical information needed to troubleshoot vehicles for Model Years 1975 to 1979.

How To Read Wiring Diagrams
The power buses (power sources) are drawn at the top of each diagram and ground buses near the bottom. The components of the circuits have been arranged such that the flow of the current can easily be traced. Notes are included on the diagrams to assist in understanding circuit operation.

The two power buses used in the diagrams are the "Battery Bus" and the "Start-Run Bus". The Battery Bus is connected directly to the battery and is "Hot" or energized at all times, regardless of the position of the ignition key switch. The Start-Run Bus is "Hot" only when the ignition key is switch is in the start or run positions. This enables the technician to determine when to expect voltage at various locations.

All switches, relays and other components are shown on the diagrams as they exist when the vehicle is at "rest". At rest means doors closed, seats unoccupied, engine off, shift lever in park or neutral, engine temperature stabilized at 68° F / 20° C, key out of ignition, lights switched off, etc. The operation of many of the components is explained in the notes, as in the case of Oil Temperature Switch which closes at 63° F / 17° C.

When a component is shown in only one location on the wiring diagrams, it is outlined with a solid black line. When it is necessary to show a component in more than one location, it is outlined with a dashed line. For example, fuses tend to be represented by dashed lines because they appear in several circuits.

All wiring between components is shown exactly as it exists on the vehicle. wiring inside complicated components, such as the Ignition Switch or the Light Switch has been simplified to aid in understanding its electrical operation. Multiple throw switches are shown side-by-side. When tracing current flow for a particular situation, mentally route all the switches to the same position.

How To Find The Circuit You Are Working On
At the bottom right corner of each wiring diagram (model year 1975 to 1977 vehicles only) is an index of the vehicles electrical circuits along with the respective location coordinates.

How To Find The Component On The Vehicle
The Component Index at the bottom right of each diagram (model year 1975 to 1977 vehicles only) verbally describes the location of various items which are difficult to find. The column labeled "LOC. FIG. NO." refers to photographs on the diagram which will further assist you in locating components.

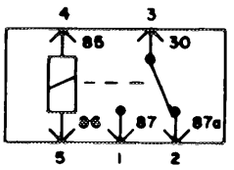
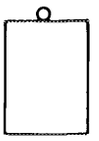
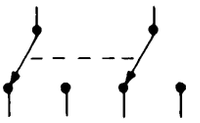
How To Identify Wire Terminals On Components
The terminals on all components are labeled on the wiring diagrams. To identify the terminals on the components, terminal photographs are provided in the front of the manual. The "TERM. FIG. NO." column of the Circuit Index refers to specific component terminal photographs.

How To Troubleshoot Electrical Problems
1. Verify the complaint.
2. Locate the faulty circuit on the schematic page.
3. Analyze the circuit.
4. Correct the failure.
5. Check for proper circuit operation.

Refer to the *"How To Use"* page in front of the 1978/1979 section for changes and additions to the instructions for those model year vehicles

SYMBOLS AND DEFINITIONS

Capacitor	Connector	Ground shown elsewhere
Clutch, electric	Diode	Light bulb
Coil	Fuse	Motor, permanent magnet
Component, shown complete in one position on Diagram	Electric gauge	Motor, series field
Component, shown in more than one position on Diagram	Ground on chassis	Spark gap

 Relay (contacts as shown with no voltage applied to coil)	 Resistor, variable value	 Switch, one pole, two positions
 Relay coil, time delay	 Screw terminal	 Switch, two poles, two positions (Dashed line indicates the two poles move together)
 Relay coil, two windings	 Solenoid valve	 Temperature switch
 Switch, momentary (Returns to center off position when released)	 Switch, normally closed	 Transistor
 Resistor, fixed value	 Switch normally open	

WIRE SIZE AND COLOR

Wire size and insulation color for each wire is shown on the Schematic/Wiring Diagrams to aid in locating specific wires. Wire size (crossectional area) is given in square millimeters, 0.5, 0.75, 1.0, 1.5, 2.5, 4.0, 6.0, 10, 25, 35. The first color given on the diagrams is the base or overall insulation color. Second and third colors, if any, designate stripes. Solid brown insulation is used only for ground wires.

The color code used in this Manual is somewhat different from the code used in Mercedes-Benz documents prepared in Germany. All color codes used in the Manual are two letter, selected to closely relate to the English word they represent. Notice that lower case letters are used.

COLOR	GERMAN EQUIVALENT	CODE USED IN ETM
White	ws	wt
Green	gn	gn
Brown	br	br
Yellow	ge	yl
Gray	gr	gy
Pink	rs	pk
Blue	bl	bu
Red	rt	rd
Black	sw	bk
Ivory	el	iv
Natural	nf	nt
Violet	vi	vi

Example:

Wire designation: 1.5 gy/rd
Wire size: 1.5 mm^2
Insulation base color: gray
Insulation strip color: red

The following table shows wire size in American Wire Gauge (AWG) to be used if metric sized wire is unavailable.

METRIC (Crossectional area in mm2)	AWG
.75	18
1	16
2.5	12
4	10
6	8
8	8
16	4

RELAY CODE DESIGNATION

Since the exact position of relays varies due to manufacturing convenience, the harness leading to each relay is tagged as a means of identifying each relay. The following listing identifies the code numbering system.

Code Number	Function
1	Fuel pump
2	Cold start valve
3	Fuel injection
4	A/C starter
5	Change-over valve
6	Auxiliary fan
7	Seat belt warning system
8	Change-over valve with additional fan
9	Window regulator
10	Window regulator
11	Starter terminal 50
12	Air conditioning system
13	Headlight cleansing equipment
16	Headlight flasher
17	Carburetor heater
19	EGR/ignition advance
20	Heater coil choke cover
21	Fuel Pump Relay

CONNECTOR LIST

C 101 Battery
C 102 Impulse trigger (trigger points)
C 103 Fuel injection circuit
C 104 Rear harness circuits
C 105 Charge/start circuit (3 or 4 pin)
C 106 Combination switch
C 107 Electric window circuit
C 108 Electric window circuit
C 109 Front dome light
C 110 Rear dome light
C 111 Hot start circuit
C 112 Windshield wiper/washer
C 116 Ignition points terminal block
C 117 Heater controls lights
C 118 Cruise control
C 119 Cruise control
C 120 Cruise control
C 121 Cruise control
C 122 Heater control valves
C 123 Heated rear window
C 131 Brake pad sensor
C 132 Brake pad sensor
C 133 Air conditioner
C 134 Heater circuit
C 135 Power antenna
C 140 Cruise control

TERMINAL PHOTOGRAPHS

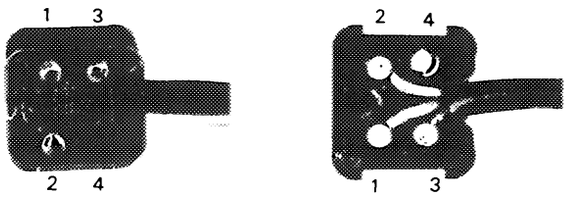


Fig. T1
Connector, 4 terminal

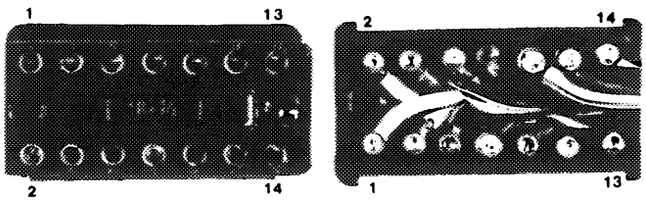


Fig. T5
Connector, 14 terminal

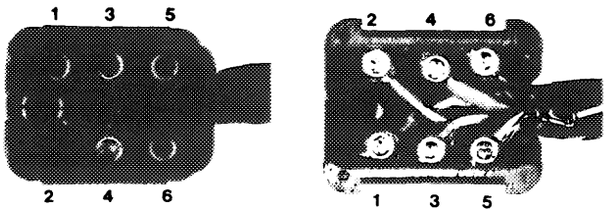


Fig. T2
Connector, 6 terminal

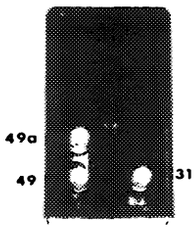


Fig. T6
Turn signal flasher relay

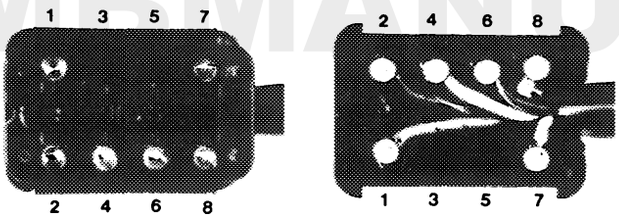


Fig. T3
Connector, 8 terminal

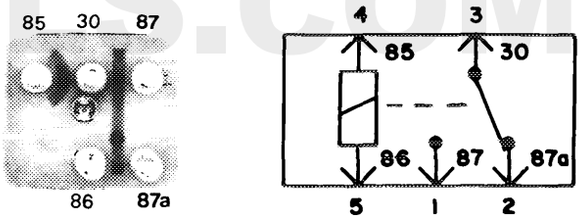


Fig. T7
Relay

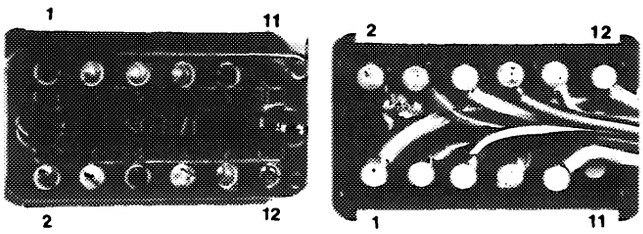


Fig. T4
Connector, 12 terminal

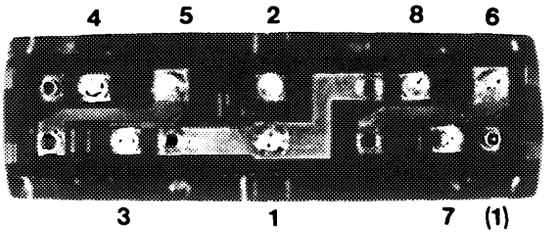


Fig. T8
Window switch group
(the 1 terminal has two alternate positions)

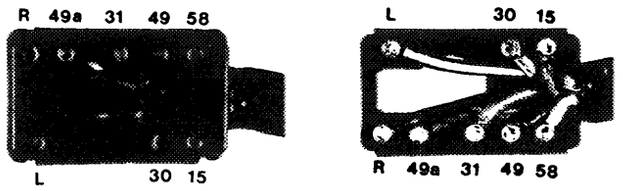


Fig. T9
Connector, flasher switch

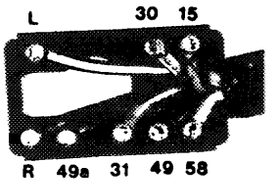


Fig. T16
Flasher switch

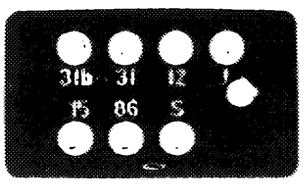


Fig. T10
Windshield wiper interval relay

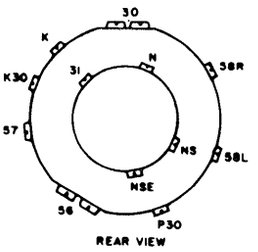


Fig. T13
Light switch

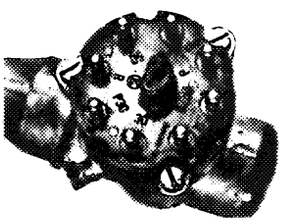


Fig. T11
Ignition switch

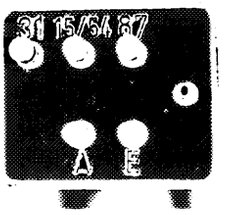


Fig. T14
Heated rear window delay relay

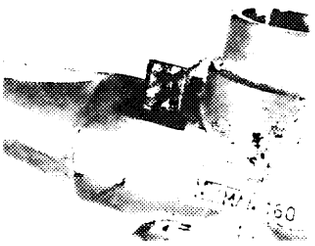


Fig. T12
Ignition lock warning switch

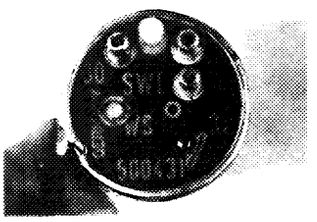
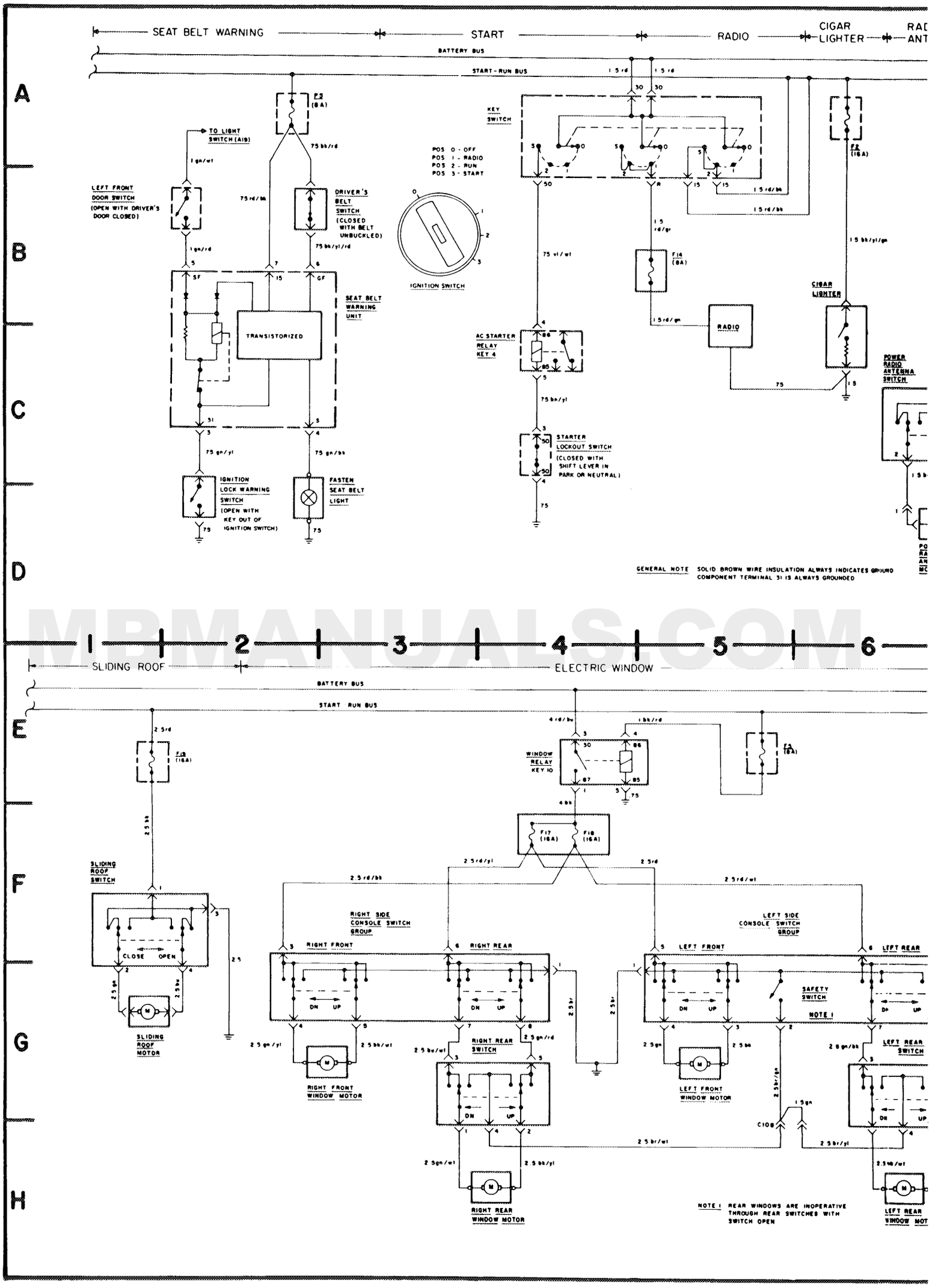
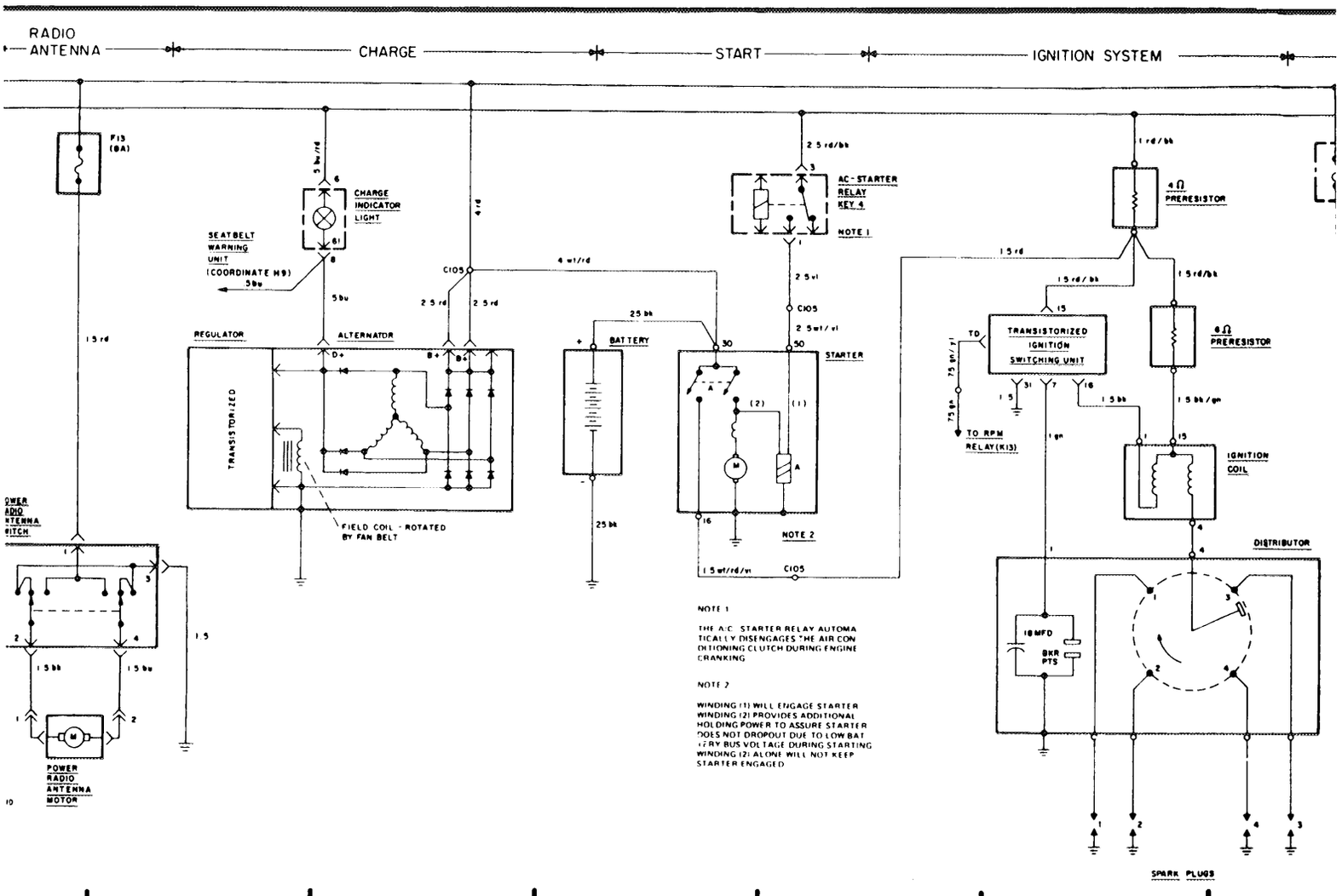
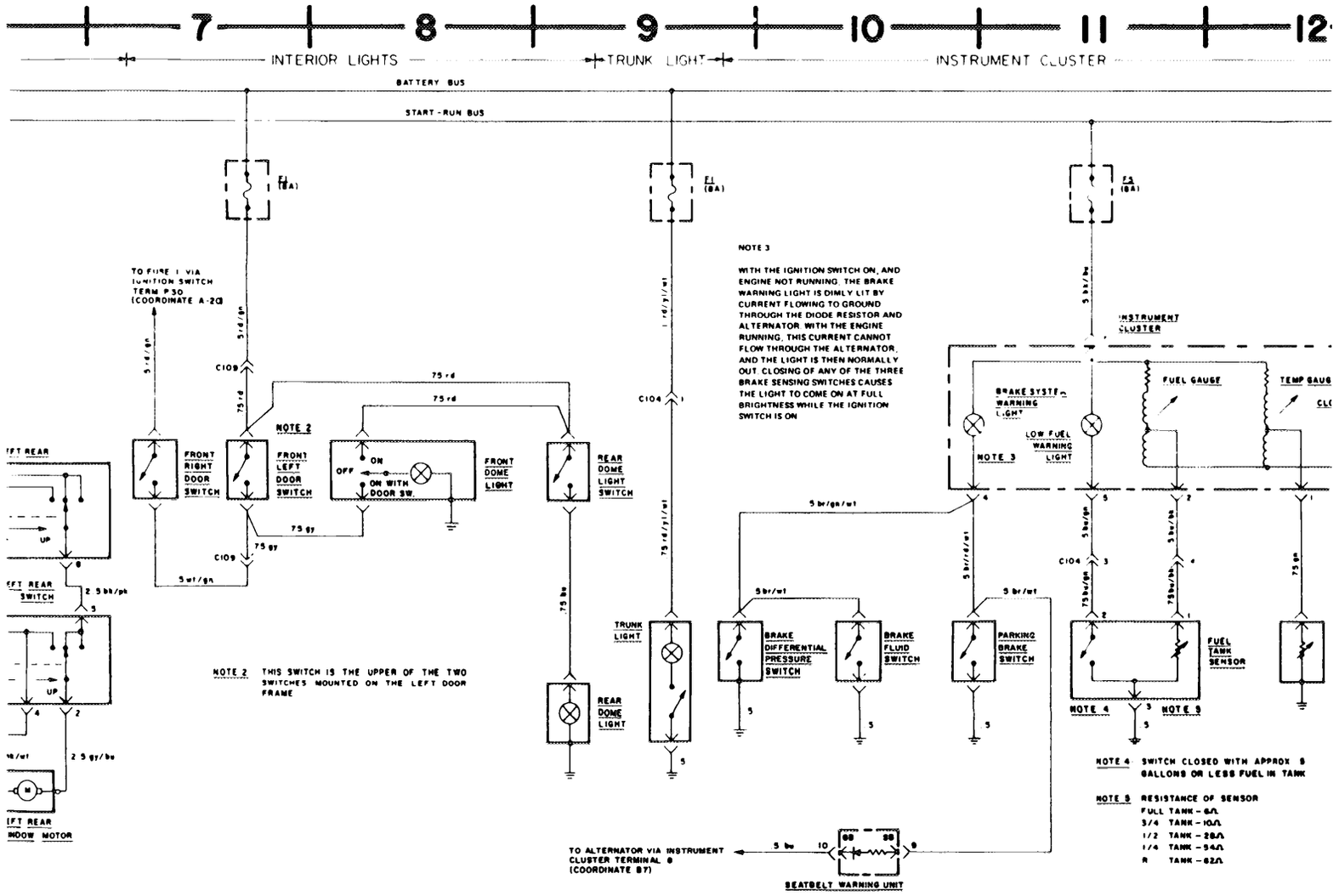
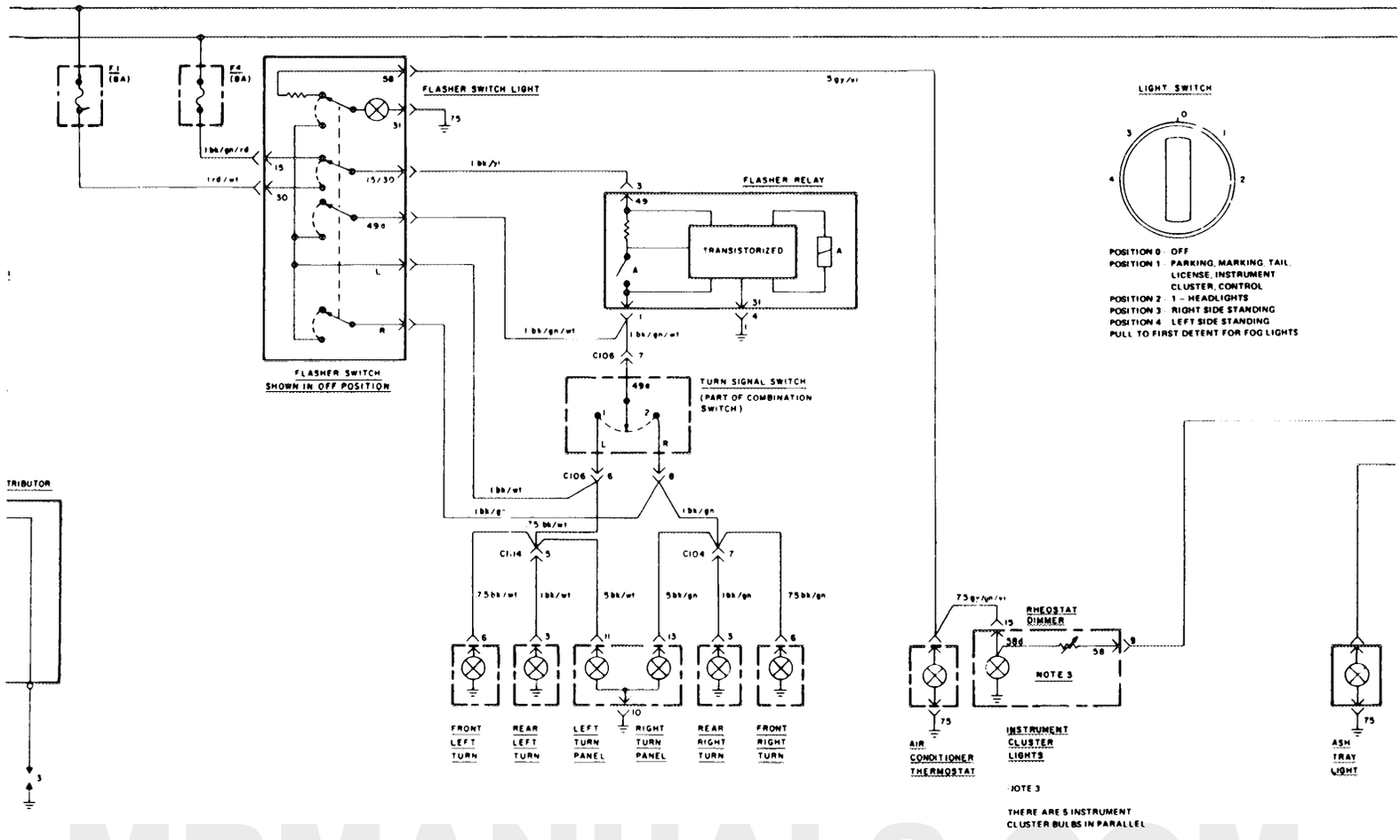


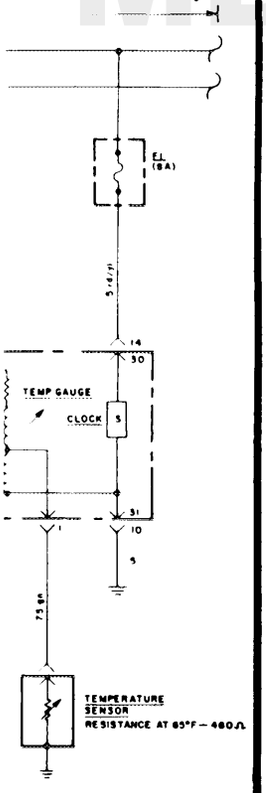
Fig. T15
Buzzer, warning




RADIO ANTENNA
CHARGE
START
IGNITION SYSTEM
F13 (8A)
CHARGE INDICATOR LIGHT
SEATBELT WARNING UNIT (COORDINATE H9)
REGULATOR
ALTERNATOR
TRANSISTORIZED
FIELD COIL - ROTATED BY FAN BELT
BATTERY
AC-STARTER RELAY KEY 4
NOTE 1
STARTER
NOTE 2
4Ω PRERESISTOR
6Ω PRERESISTOR
TRANSISTORIZED IGNITION SWITCHING UNIT
TO RPM RELAY (K13)
IGNITION COIL
DISTRIBUTOR
10 MFD
BKR PTS
SPARK PLUGS
POWER RADIO ANTENNA SWITCH
POWER RADIO ANTENNA MOTOR
NOTE 1
THE A/C STARTER RELAY AUTOMATICALLY DISENGAGES THE AIR CONDITIONING CLUTCH DURING ENGINE CRANKING
NOTE 2
WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROPOUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED


7
8
9
10
11
12
INTERIOR LIGHTS
TRUNK LIGHT
INSTRUMENT CLUSTER
BATTERY BUS
START-RUN BUS
F1 (8A)
F5 (8A)
TO FUSE 1 VIA IGNITION SWITCH TERM P30 (COORDINATE A-2)
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
NOTE 2
FRONT DOME LIGHT
REAR DOME LIGHT SWITCH
REAR DOME LIGHT
TRUNK LIGHT
NOTE 3
WITH THE IGNITION SWITCH ON, AND ENGINE NOT RUNNING, THE BRAKE WARNING LIGHT IS DIMLY LIT BY CURRENT FLOWING TO GROUND THROUGH THE DIODE RESISTOR AND ALTERNATOR. WITH THE ENGINE RUNNING, THIS CURRENT CANNOT FLOW THROUGH THE ALTERNATOR, AND THE LIGHT IS THEN NORMALLY OUT. CLOSING OF ANY OF THE THREE BRAKE SENSING SWITCHES CAUSES THE LIGHT TO COME ON AT FULL BRIGHTNESS WHILE THE IGNITION SWITCH IS ON
INSTRUMENT CLUSTER
BRAKE SYSTEM WARNING LIGHT
LOW FUEL WARNING LIGHT
FUEL GAUGE
TEMP GAUGE
BRAKE DIFFERENTIAL PRESSURE SWITCH
BRAKE FLUID SWITCH
PARKING BRAKE SWITCH
FUEL TANK SENSOR
NOTE 4
NOTE 5
NOTE 2 THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME
NOTE 4 SWITCH CLOSED WITH APPROX 9 GALLONS OR LESS FUEL IN TANK
NOTE 5 RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 10Ω
1/2 TANK - 28Ω
1/4 TANK - 54Ω
E TANK - 62Ω
TO ALTERNATOR VIA INSTRUMENT CLUSTER TERMINAL 8 (COORDINATE B7)
SEATBELT WARNING UNIT
LEFT REAR SWITCH
LEFT REAR WINDOW MOTOR





COMPONENT INDEX

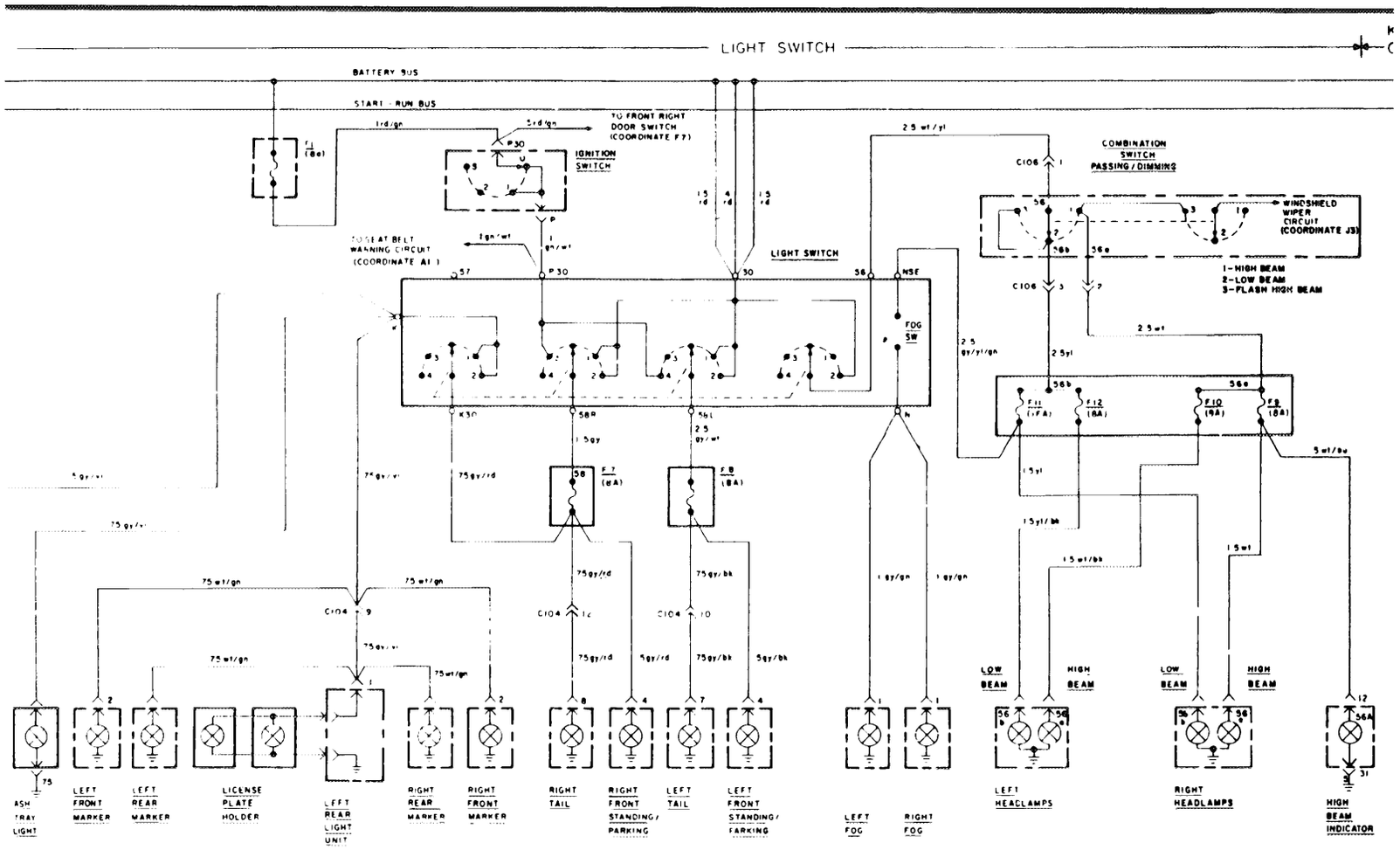
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO.	TERM. FIG. NO.
CHARGE			
Regulator	Alternator		
C 105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay — key 10	Right firewall under fuse bracket		T7
C 108	Console		
IGNITION SYSTEM			
Coil	Left front fender	8	
Distributor	Left front fender		
.4 Ohm preresistor	Left front fender	8	
.6 Ohm preresistor	Left front fender	8	
Transistorized ignition switching unit	Left front fender		
INSTRUMENT CLUSTER			
Brake Diff. Press. Switch	Master Cylinder	15	
Brake fluid switch	Reservoir		
Coolant temp. sensor	Left front cylinder head	12	
Fuel tank sensor	Trunk	11	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side	6	T4
INTERIOR LIGHTS			
C 109	Behind console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	10	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning unit	Under dash, driver's side		
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right firewall, under fuse bracket		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO.	TERM. FIG. NO.
TRUNK LIGHT			
C 104 (12 pins)	Under dash, driver's side	6	T4
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T6
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5

1 — A/C Blowe

1 — Change ov

1 — Main fuse
2 — Heater bl
4 — Wiper mo



LOCATION FIGURES

Fig. 1
– A/C Blower motor

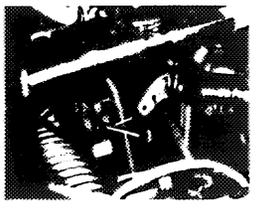


Fig. 2
– Change over switch

Fig. 3
– Main fuse box
– Heater blower pre-resistors
– Wiper motor

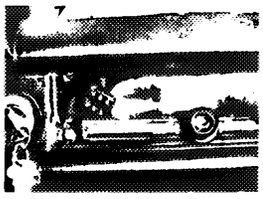


Fig. 4
1 — C 113

Fig. 5
1 — Temperature switch, refrigerant

Fig. 6
1 — Flasher relay
3 — Time delay relay, heated rear window
5 — Interval wiper timer
6 — C 104
7 — C 106

Fig. 7
1 — C 112

Fig. 8
2 — Ignition coil
3 — .4 ohms pre-resistor
4 — .6 ohms pre-resistor

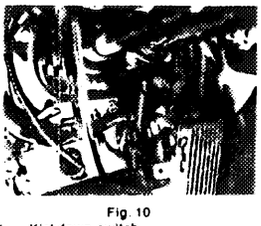


Fig. 10
1 — Kickdown switch

Fig. 9
1 — Choke heater
2 — Idle fuel cut off solenoid
3 — Automatic Choke Thermo Valve

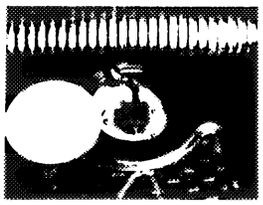
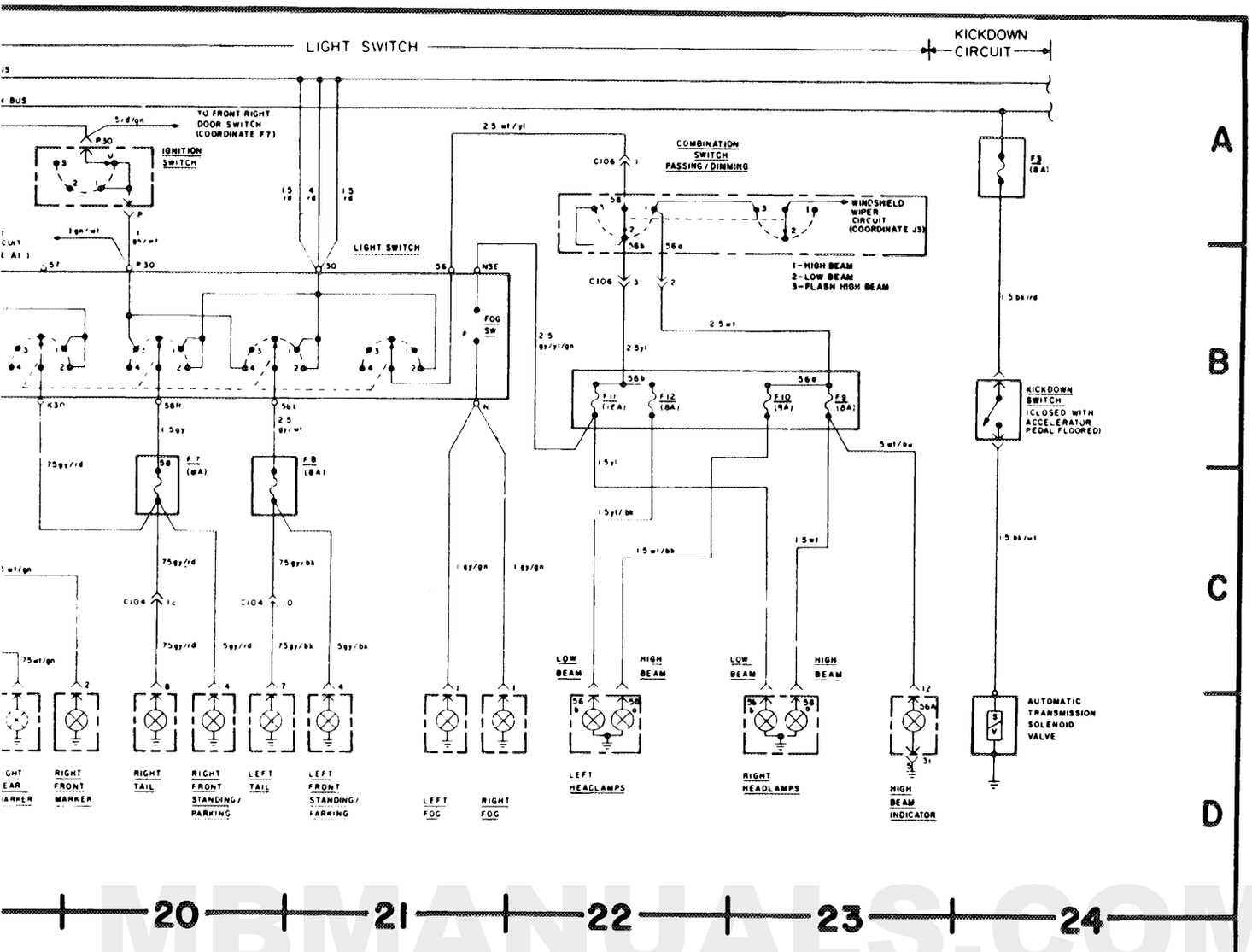


Fig. 11
Fuel tank sensor

19

AIR CONDITIONING
AUTOMATIC CHOK
AUXILIARY FAN
CHARGE
CIGAR LIGHTER
CLOCK
COOLANT TEMPER.
ENGINE EMISSION
FUEL GAUGE
HEATED REAR WIN
HEATER CONTROL
HORNS
IDLE FUEL CUTOF
IGNITION SYSTEM
KICKDOWN
LIGHT CIRCUITS
AIR CONDITIONI
BACKUP
BRAKE
BRAKE SYSTEM
CATALYST INDIC
CIGAR LIGHTER
FOG
GLOVE BOX
HEAD
INSTRUMENT CL
INTERIOR
LOW FUEL WARN
MARKER
PARKING
STANDING
TAIL
TRUNK
POWER ANTENNA
RADIO
SEAT BELT WARNI
SLIDING ROOF
START
TURN SIGNAL/FLA
WINDOWS
WINDSHIELD WIPER

POWER BUS DETAIL
SPECIAL GROUNDI



LOCATION FIGURES

Fig. 4

Fig. 5
switch, refrigerant

Fig. 6
ay, heated rear window
timer

Fig. 7
1 — C 112

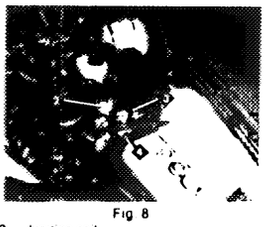


Fig. 8
2 — Ignition coil
3 — .4 ohms pre resistor
4 — .6 ohms pre-resistor

Fig. 10
1 — Kickdown switch

Fig. 9
1 — Choke heater
2 — Idle fuel cut off solenoid
3 — Automatic Choke Thermo Valve

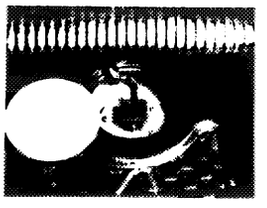
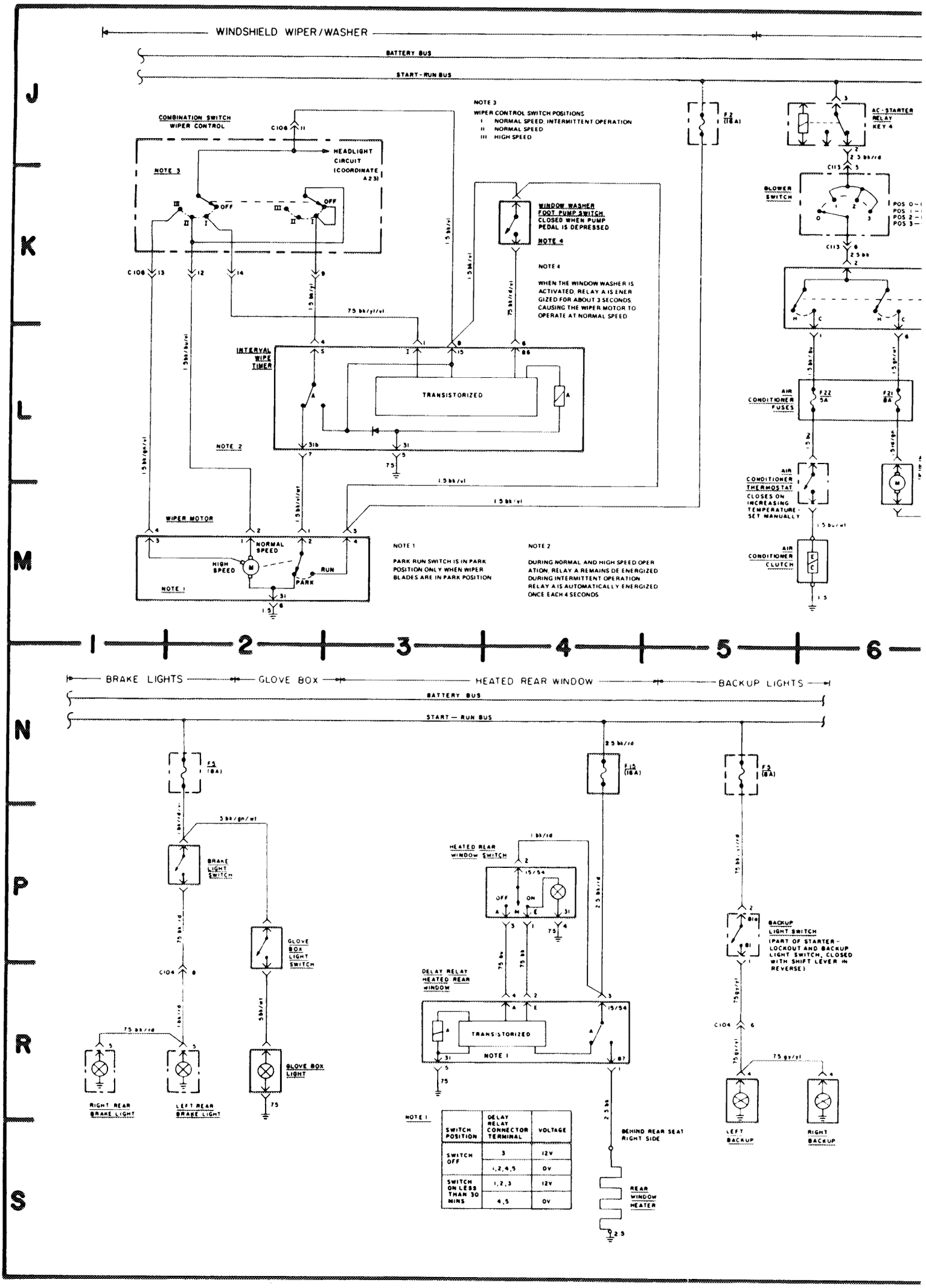
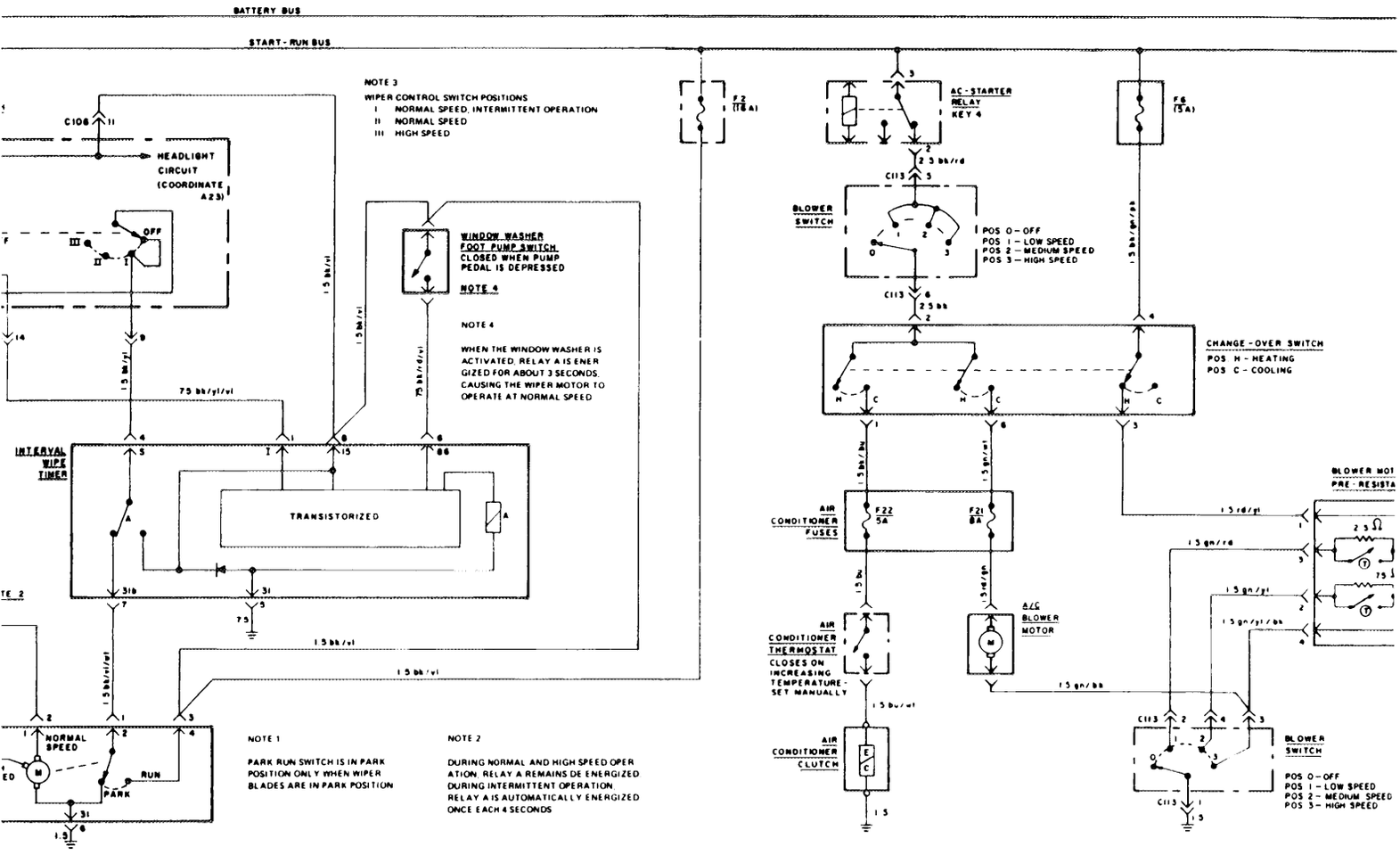


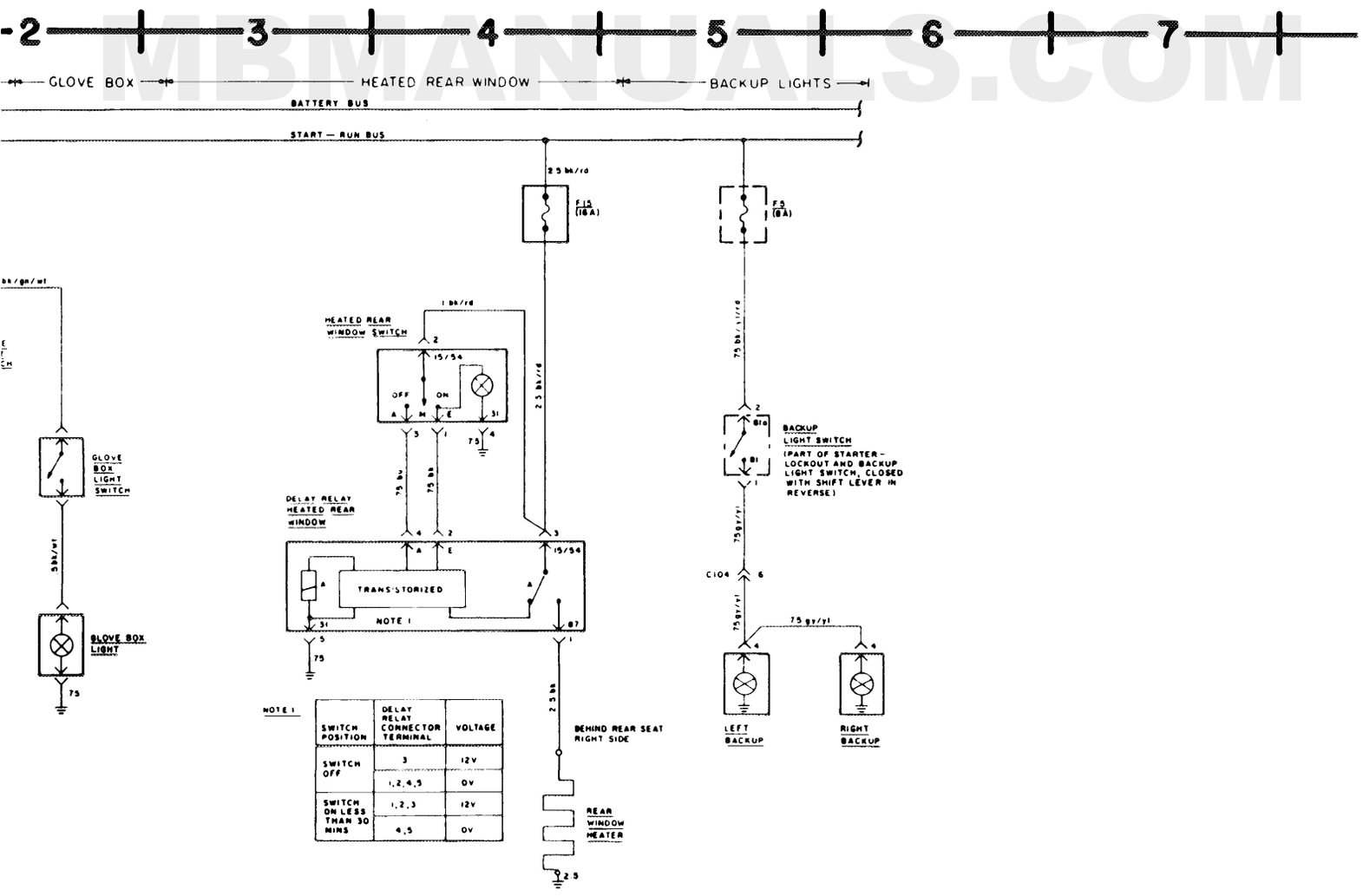
Fig. 11
Fuel tank sensor

1976 230

MBNA/MBC ETM 1408
Printed in U.S.A.

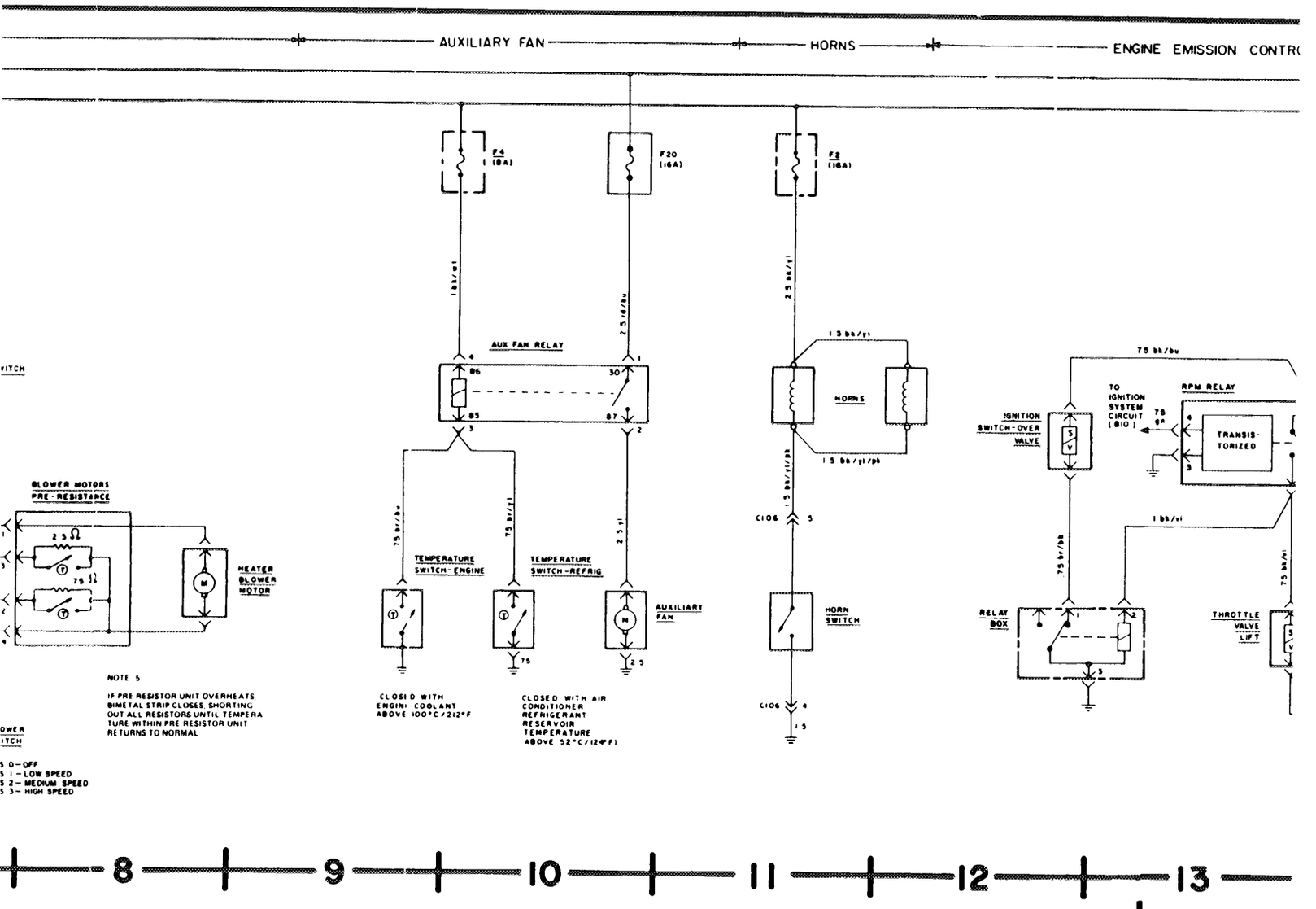

WINDSHIELD WIPER/WASHER
BATTERY BUS
START-RUN BUS
COMBINATION SWITCH WIPER CONTROL
NOTE 3
HEADLIGHT CIRCUIT (COORDINATE A23)
OFF
NOTE 3
WIPER CONTROL SWITCH POSITIONS
I NORMAL SPEED, INTERMITTENT OPERATION
II NORMAL SPEED
III HIGH SPEED
WINDOW WASHER FOOT PUMP SWITCH CLOSED WHEN PUMP PEDAL IS DEPRESSED
NOTE 4
NOTE 4
WHEN THE WINDOW WASHER IS ACTIVATED, RELAY A IS ENERGIZED FOR ABOUT 3 SECONDS, CAUSING THE WIPER MOTOR TO OPERATE AT NORMAL SPEED
INTERVAL WIPE TIMER
TRANSISTORIZED
NOTE 2
WIPER MOTOR
NORMAL SPEED
HIGH SPEED
RUN
PARK
NOTE 1
NOTE 1
PARK RUN SWITCH IS IN PARK POSITION ONLY WHEN WIPER BLADES ARE IN PARK POSITION
NOTE 2
DURING NORMAL AND HIGH SPEED OPERATION, RELAY A REMAINS DE ENERGIZED DURING INTERMITTENT OPERATION RELAY A IS AUTOMATICALLY ENERGIZED ONCE EACH 4 SECONDS
F2 (16A)
AC-STARTER RELAY KEY 4
BLOWER SWITCH
POS 0
POS 1
POS 2
POS 3
AIR CONDITIONER FUSES
F22 5A
F21 8A
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE - SET MANUALLY
AIR CONDITIONER CLUTCH
1
2
3
4
5
6
BRAKE LIGHTS
GLOVE BOX
HEATED REAR WINDOW
BACKUP LIGHTS
BATTERY BUS
START — RUN BUS
F5 (8A)
F13 (16A)
F3 (8A)
BRAKE LIGHT SWITCH
GLOVE BOX LIGHT SWITCH
HEATED REAR WINDOW SWITCH
OFF
ON
DELAY RELAY HEATED REAR WINDOW
TRANSISTORIZED
NOTE 1
BACKUP LIGHT SWITCH
(PART OF STARTER-LOCKOUT AND BACKUP LIGHT SWITCH, CLOSED WITH SHIFT LEVER IN REVERSE)
RIGHT REAR BRAKE LIGHT
LEFT REAR BRAKE LIGHT
GLOVE BOX LIGHT
BEHIND REAR SEAT RIGHT SIDE
REAR WINDOW HEATER
LEFT BACKUP
RIGHT BACKUP
NOTE 1
SWITCH POSITION
DELAY RELAY CONNECTOR TERMINAL
VOLTAGE
SWITCH OFF
3
12V
1,2,4,5
0V
SWITCH ON LESS THAN 30 MINS
1,2,3
12V
4,5
0V





NOTE 1

SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS	1,2,3	12V
	4,5	0V



8 9 10 11 12 13

S
CO

AIR CONDI
AC blower r
AC/Starter r

Change-ove
Fuse 21 (AC
Fuse 22 (AC
Heater blow
preresisto
C 113 (6 pi

AUTOMATI
Automatic C

AUXILIARY
Aux. fan rela
Fuse 20 (aux
Temp. switc
Temp switc

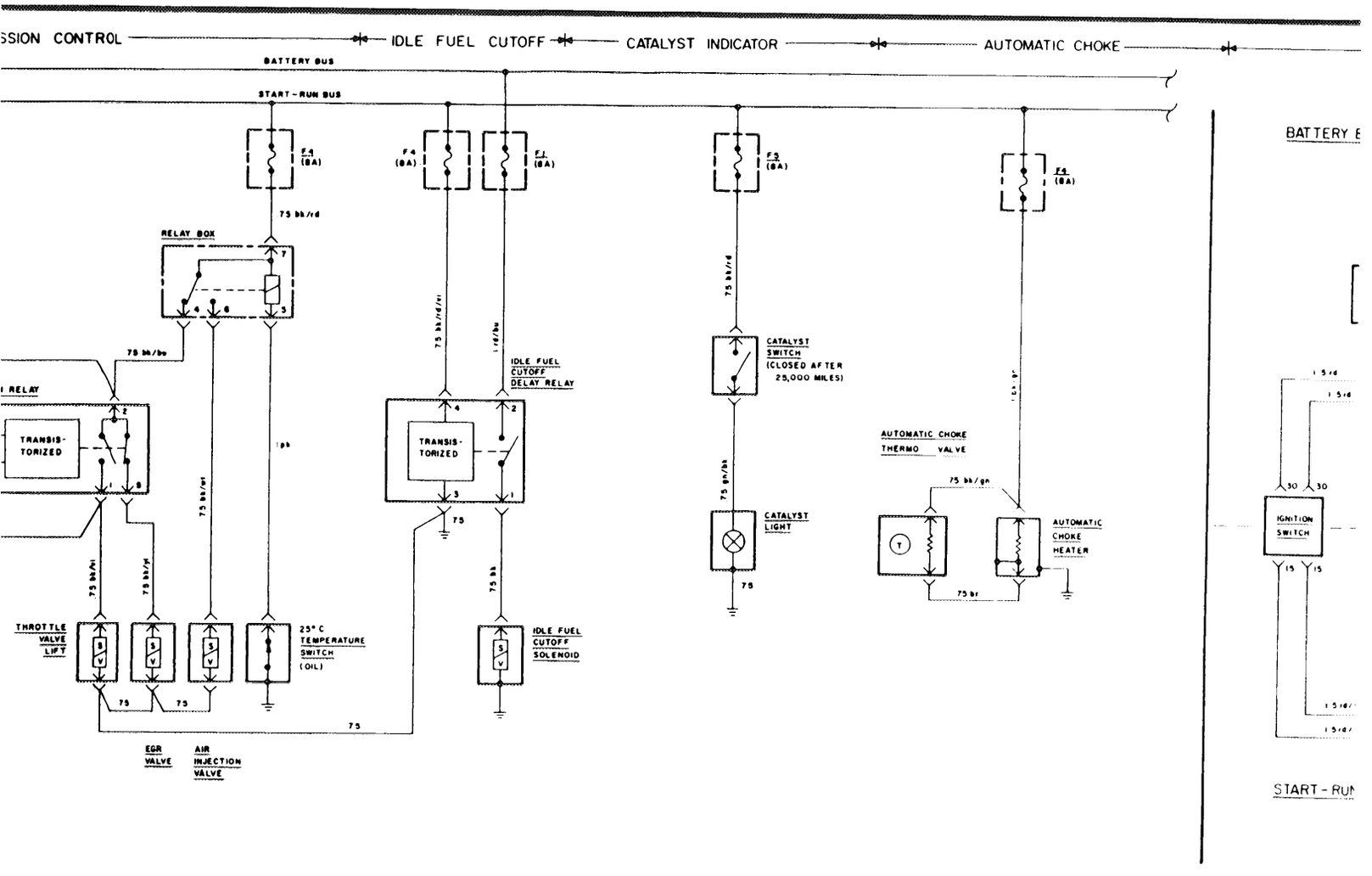
BACKUP
C 104 (12 pi

BRAKE LIGI
Switch
C 104 (12 pi

CATALYST I
Catalyst swi

ENGINE EM
Air injection
valve (blu
EGR switch-
Ignition swi
Relay box
RPM relay
Temperature
Throttle lift s

HEATED RE
Time delay r
Fuse 19 (win
C 112



COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
AIR CONDITIONING/HEATING			
AC blower motor	Center of console	1	
AC/Starter relay, key 4	Right firewall under fuse bracket	14	T7
Change-over switch	Console, left side	2	
Fuse 21 (AC blower)	Right firewall — aux. box		
Fuse 22 (AC clutch)	Right firewall — aux. box		
Heater blower motor preresistor	Forward of AC blower	3	
C 113 (6 pins)	Mounted to heater control lever plate	4	T2
AUTOMATIC CHOKE			
Automatic Choke Heater	Carburetor	9	
AUXILIARY FAN			
Aux. fan relay, key 6	Below radic fuse		
Fuse 20 (aux fan)	Left fender — aux. box		
Temp. switch — engine	Thermostat housing		
Temp. switch — refrigerant	Right firewall	5	
BACKUP			
C 104 (12 pins)	Under dash — driver's side	6	T4
BRAKE LIGHTS			
Switch	Above brake pedal		
C 104 (12 pins)	Under dash — driver's side	6	T4
CATALYST INDICATOR			
Catalyst switch	Speedometer cable under dash		
ENGINE EMISSION CONTROL			
Air injection switch-over valve (blue)	Right fender skirt	14	
EGR switch-over valve (red)	Right fender skirt	14	
Ignition switch-over valve	Right fender skirt	14	
Relay box	Left fender		
RPM relay	Left fender		
Temperature switch	Oil filter mount		
Throttle lift switch-over valve	Right fender skirt	14	
HEATED REAR WINDOW			
Time delay relay	Under dash — driver's side	6	T14
Fuse 19 (window)	Left fender — aux. box		
C 112	Behind rear seat — right side	7	

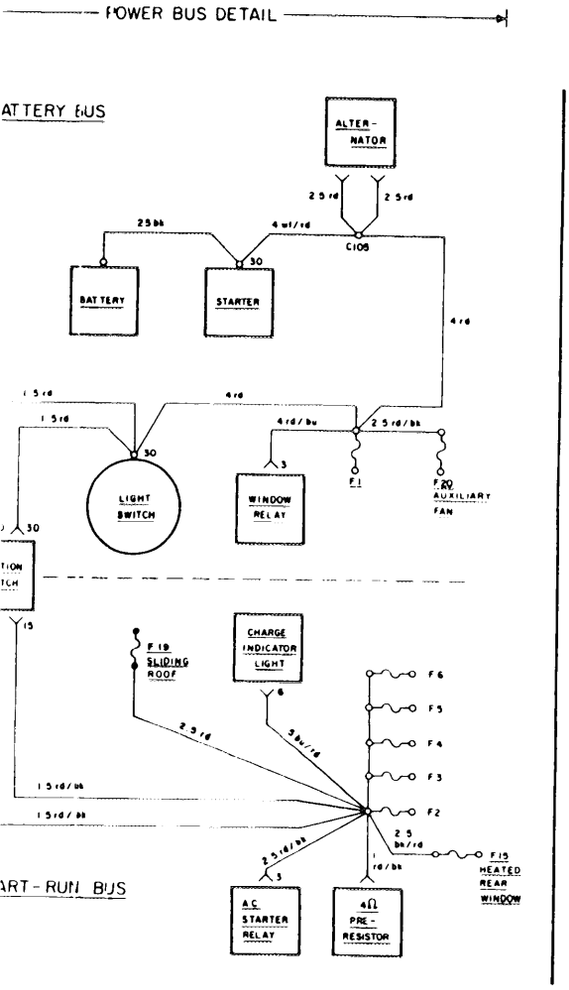
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
HORNS			
C 106 (14 pins)	Under dash — driver's side	6	T5
IDLE FUEL CUTOFF			
Time delay relay	Behind fuse box	13	
Solenoid	Carburetor	9	
WINDSHIELD WIPER/WASHER			
Interval wipe timer	Under dash — driver's side	6	T10
Motor	Firewall — left side	3	
C 106 (14 pins)	Under dash — driver's side	6	T5

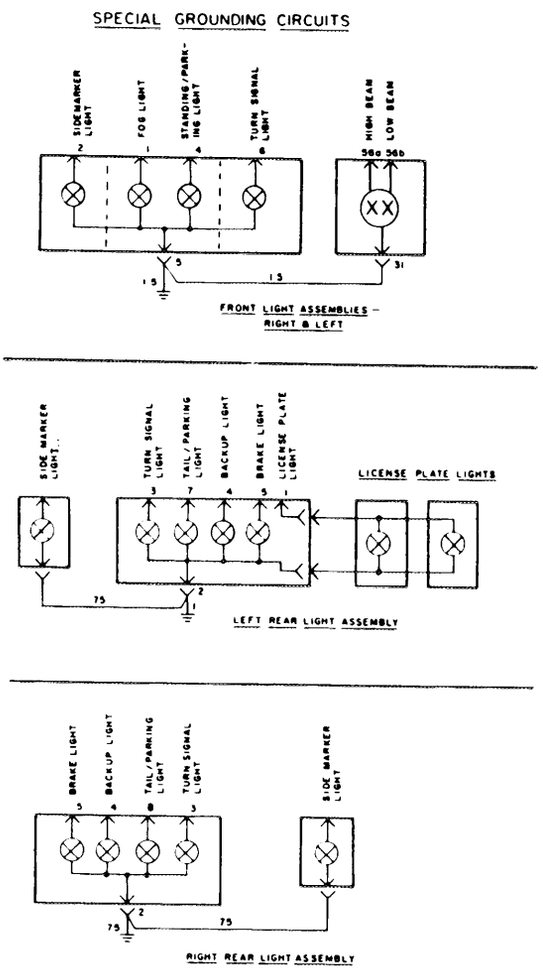
Fig. 12
1 — Coolant temperature sensor

Fig. 13
Time delay relay, idle fuel cutoff

Fig
1 — Air injection sw
2 — EGR switch ove
3 — Throttle lift sw
5 — Ignition change

Fig
1 — Brake Fluid Switc
2 — Brake Differential





J K L M

19 20 21 22 23 24

LOCATION FIGURES

Fig. 14

injection switch over valve
H switch over valve
ottle lift switch over valve
tion change over valve

Fig. 15

Fluid Switch
Differential Switch

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Idle fuel cut-off solenoid
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Horns
Windshield wiper/washer

Fuse 3 (8 amps)
Kickdown solenoid

Fuse 4 (8 amps)
Air injection valve
Automatic choke
Auxiliary fan relay
EGR valve
Idle fuel cut-off delay relay
Throttle valve lift
Turn signal

Fuse 5 (8 amps)
Backup lights
Brake lights
Catalyst light
Glove box light
Instruments
Seat belt warning
Window control

Fuse 6 (5 amps)
A/C control light
Heater blower motor

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing parking (right)
Instrument cluster lights
Left and right markers
License plate light
Tail light (right)

Fuse 8 (8 amps)
Front standing parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Radio antenna

Fuse 14 (8 amps)
Radio

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right front window

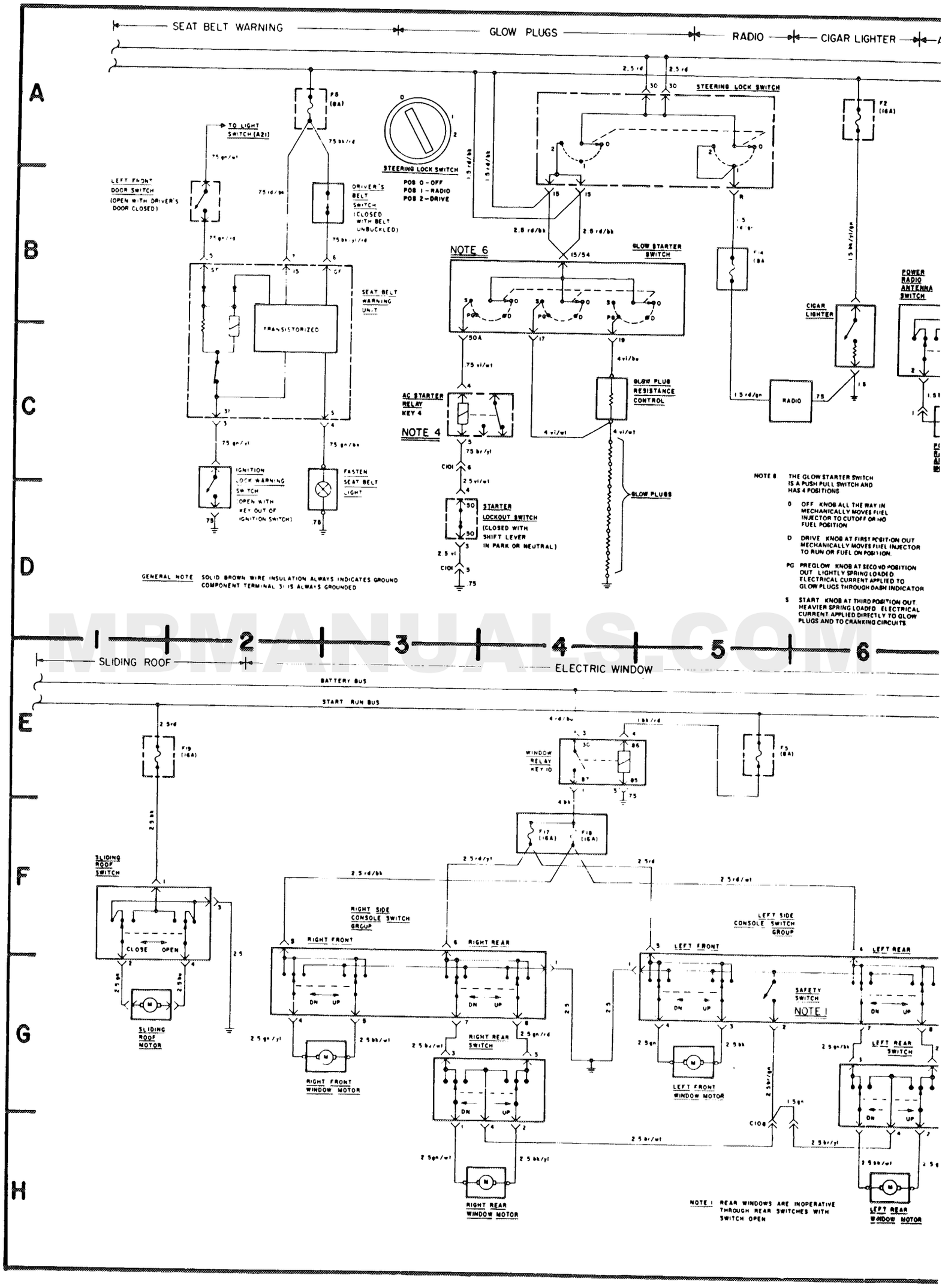
Fuse 19 (16 amps)
Sliding roof

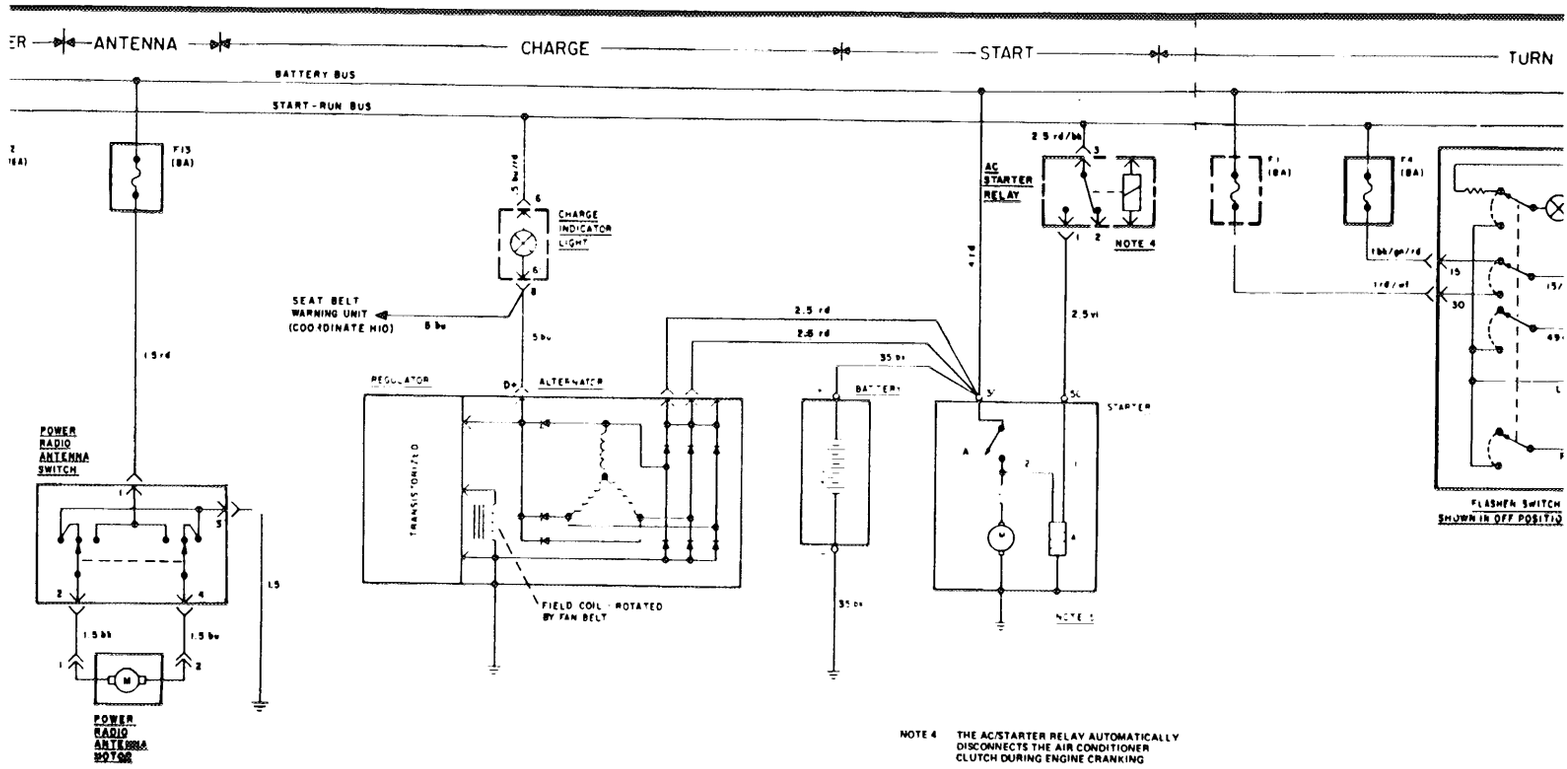
Fuse 20 (16 amps)
Auxiliary fan motor

Fuse 21 (8 amps)
A/C Blower motor

Fuse 22 (5 amps)
Air Conditioner clutch

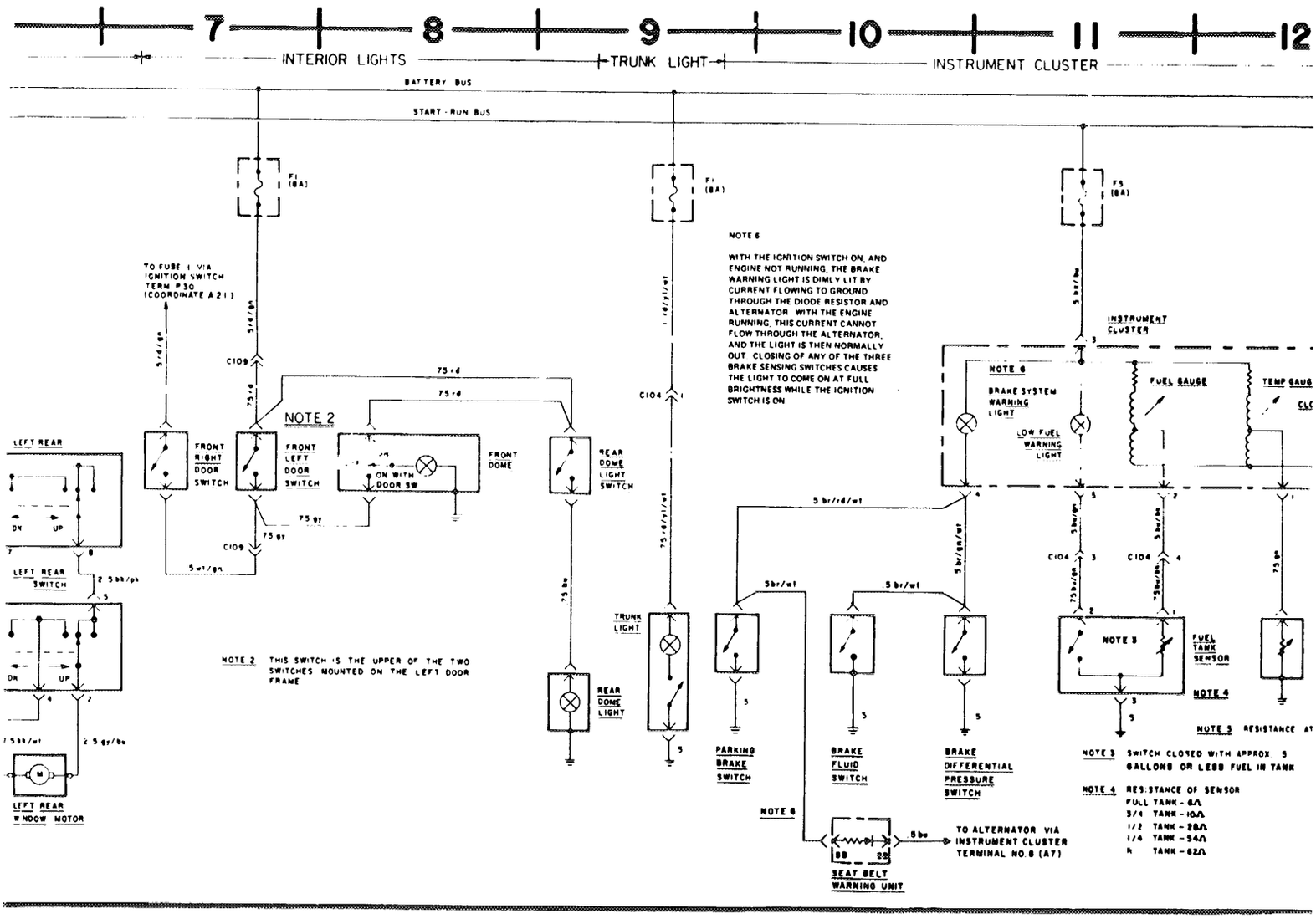
1976 230





NOTE 4 THE AC/STARTER RELAY AUTOMATICALLY DISCONNECTS THE AIR CONDITIONER CLUTCH DURING ENGINE CRANKING

NOTE 5 WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROP OUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED

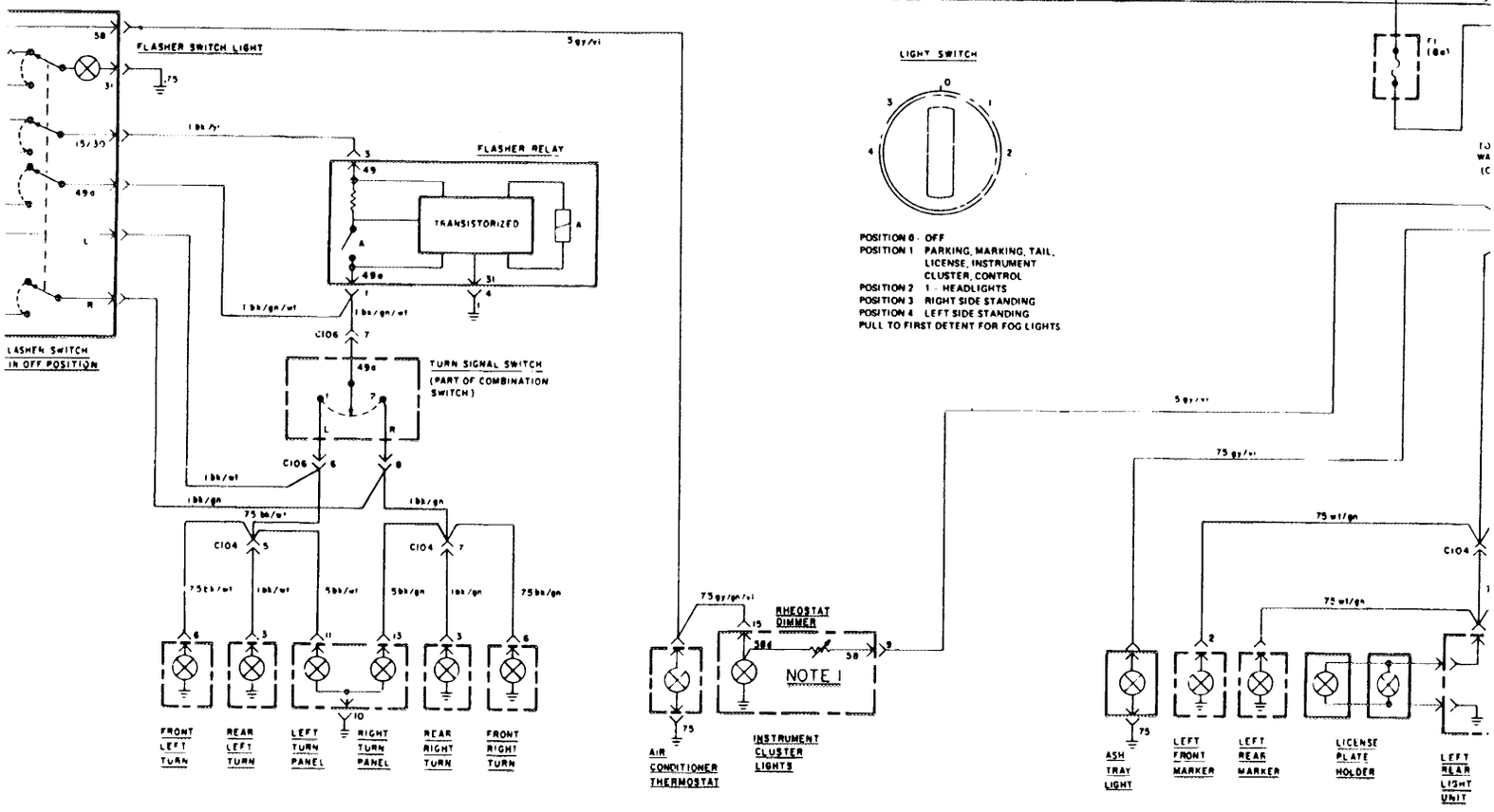


NOTE 2 THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME

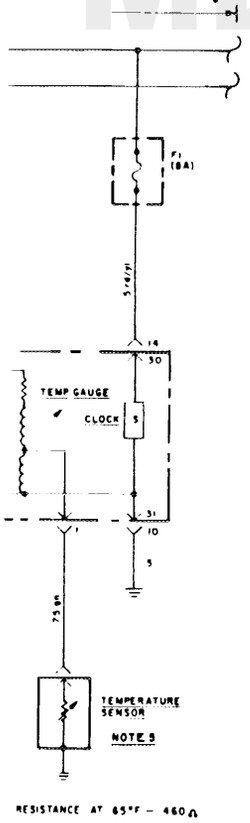
NOTE 3 SWITCH CLOSED WITH APPROX. 5 GALLONS OR LESS FUEL IN TANK

NOTE 4 RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 10Ω
1/2 TANK - 28Ω
1/4 TANK - 54Ω
E TANK - 62Ω

NOTE 5 RESISTANCE AT



12 13 14 15 16 17



COMPONENT INDEX

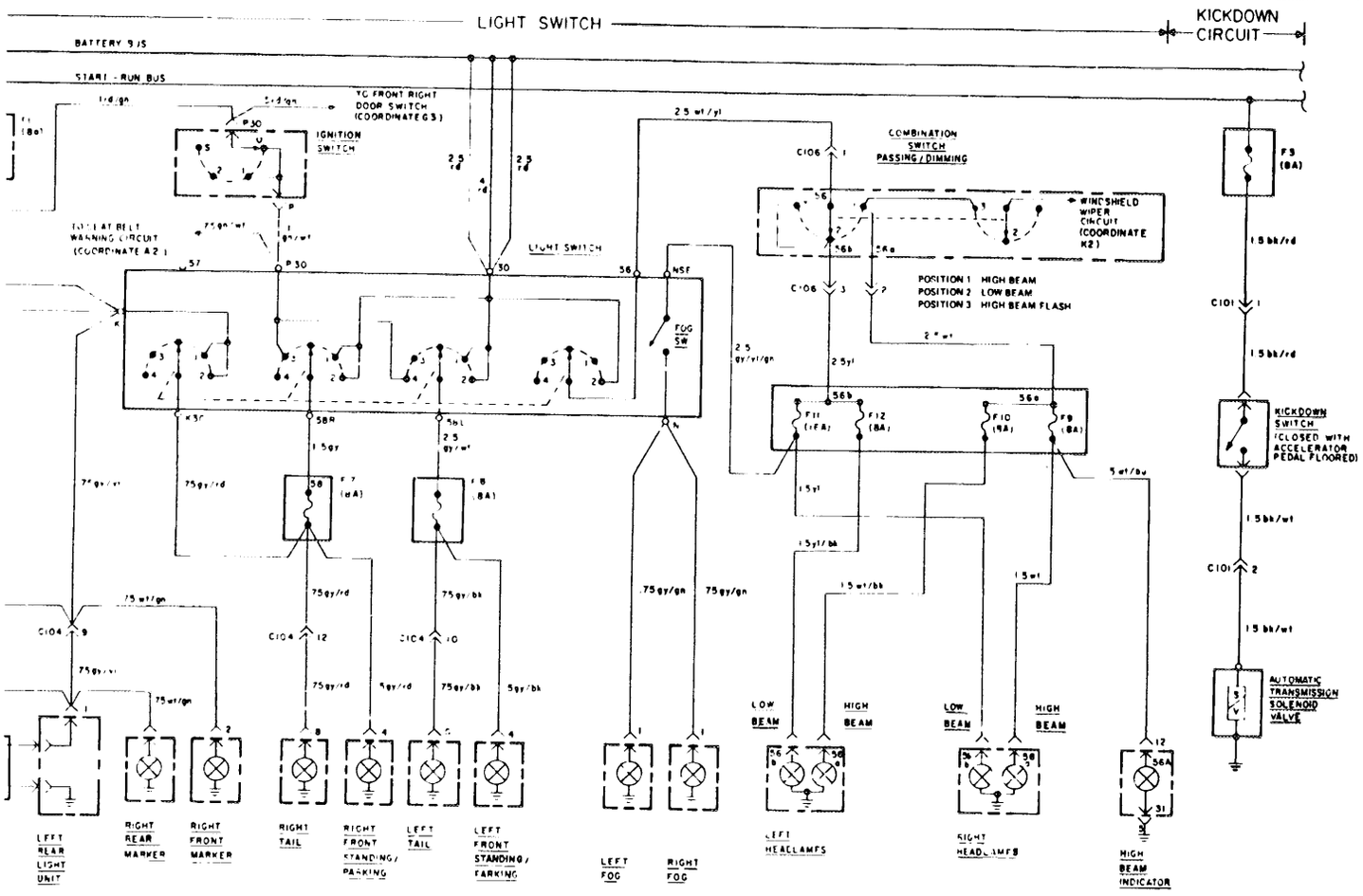
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
CHARGE			
Regulator	Alternator		
C105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay—key 10	Right firewall under fuse bracket		T7
C108	Console		
GLOW PLUGS			
A/C starter relay, key 4	rt firewall—under fuse bracket		T7
Glow plug resistance control			
Glow starter switch	Dash		
Starter Lockout switch	L side trans. (auto trans.) top of trans. (stand. trans.)		
C101	lower center console		
INSTRUMENT CLUSTER			
Brake fluid switches	Brake fluid reservoir		
Coolant temp sensor	Left front cylinder head	3	
Fuel tank sensor	Trunk	9	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side	6	T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	8	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side	6	T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning unit	Under dash, driver's side		
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right firewall, under fuse bracket		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
TRUNK LIGHT			
C 104 (12 pins)	Under dash, driver's side	6	T4
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T4
C 104 (12 pins)	Under dash, driver's side		
C 106 (14 pins)	Under dash, driver's side	6	T5

1 – A/C Blower

1 – Change over

1 – Main fuse b
2 – Heater blow
3 – Brake fluid
4 – Wiper mot



18 19 20 21 22 23

LOCATION FIGURES

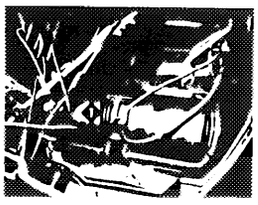


Fig 1
1 - A/C Blower motor

Fig 4
1 - C 113

Fig 7
1 - C 112

Fig 2
1 Change over switch for Blower Motors

Fig 5
1 - Temperature switch, refrigerant

Fig 8
1 - Kickdown switch

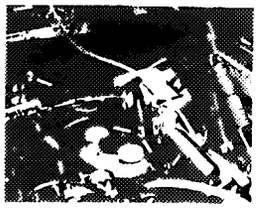


Fig 3
1 - Main fuse box
2 - Heater blower prn resistors
3 - Brake fluid switches
4 - Wiper motor

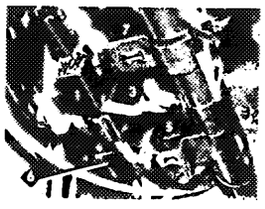


Fig 6
1 - Flasher relay
3 - Time delay relay, heated rear window
5 - Interval wiper timer
6 - C 104
7 - C 106

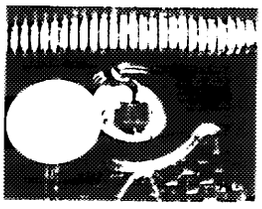
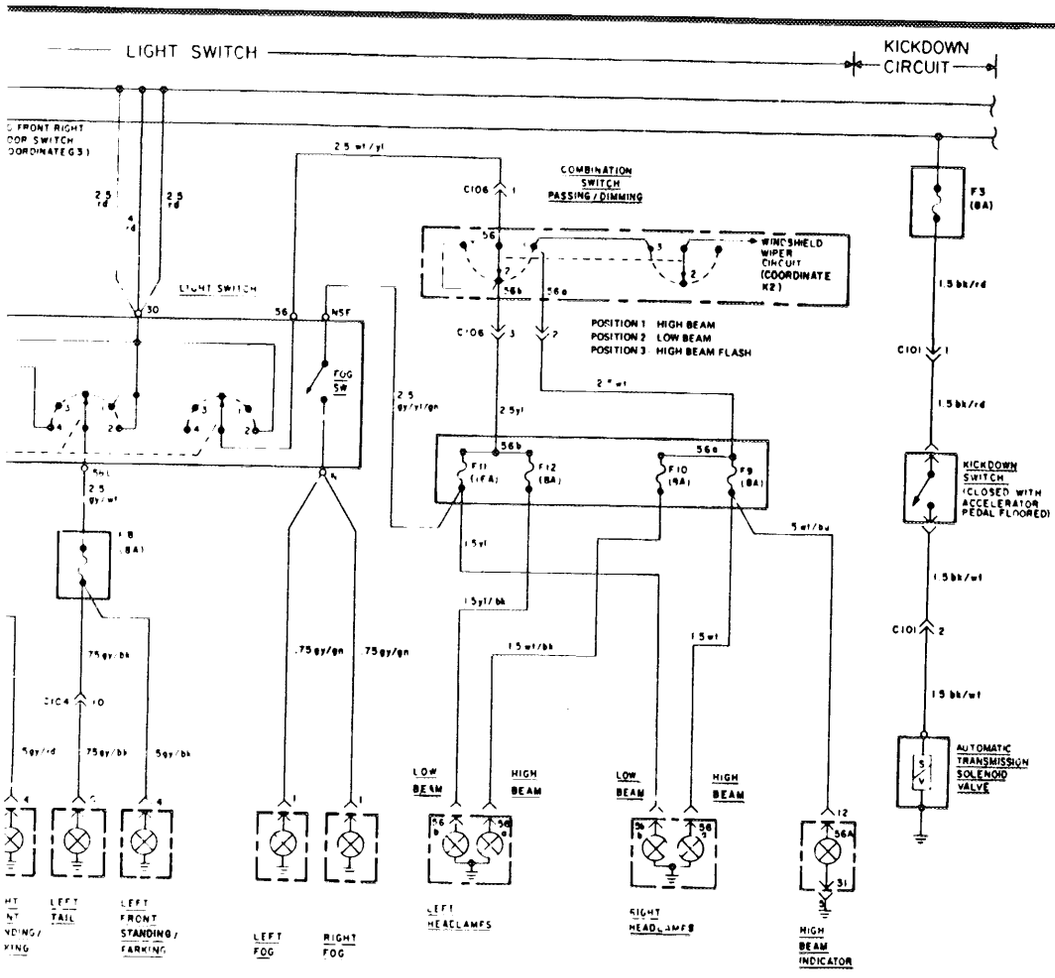


Fig 9
Fuel tank sensor



A

B

C

D

19 — 20 — 21 — 22 — 23 — 24

LOCATION FIGURES

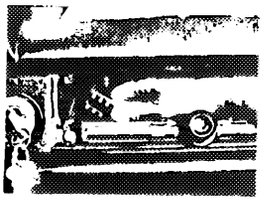


Fig 4
1 - C 113

Fig 5
– Temperature switch, refrigerant

Fig 6
Flasher relay
Time delay relay, heated rear window
Interval wiper timer
C 104
C 106

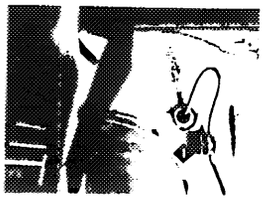


Fig. 7
1 – C 112

Fig. 8
1 – Kickdown switch

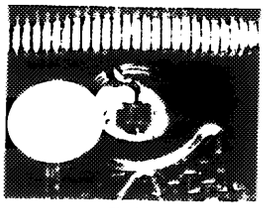
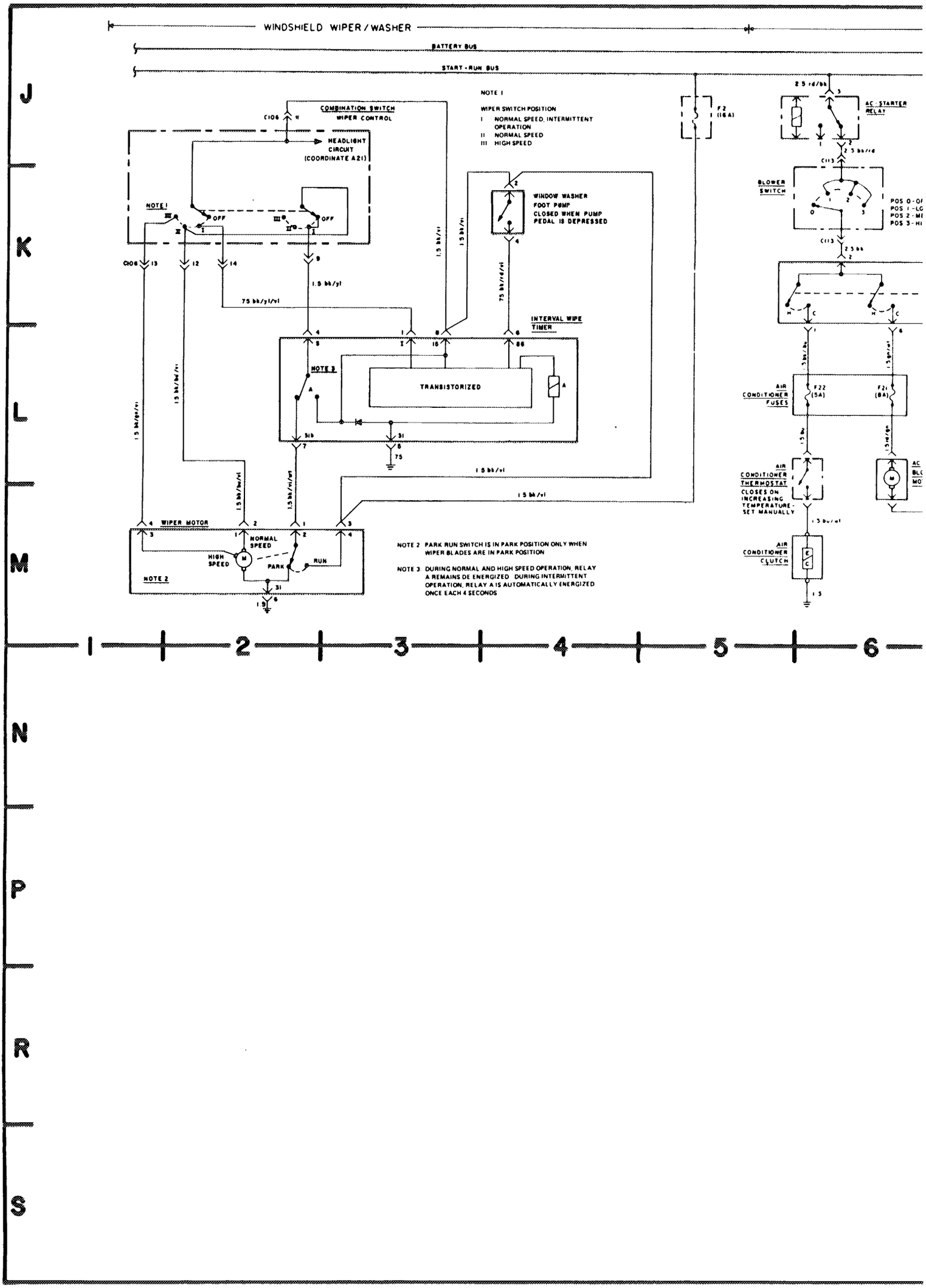
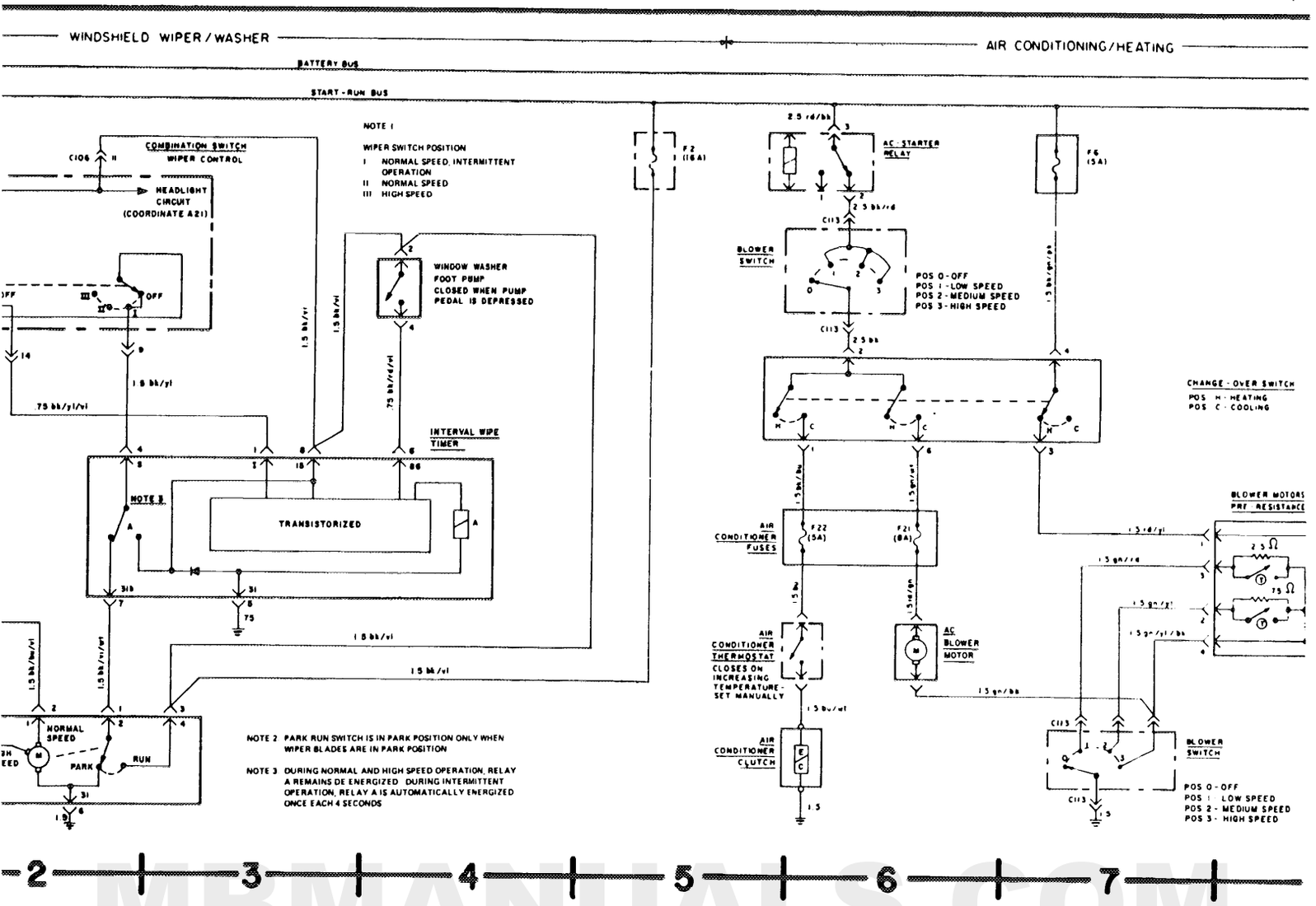


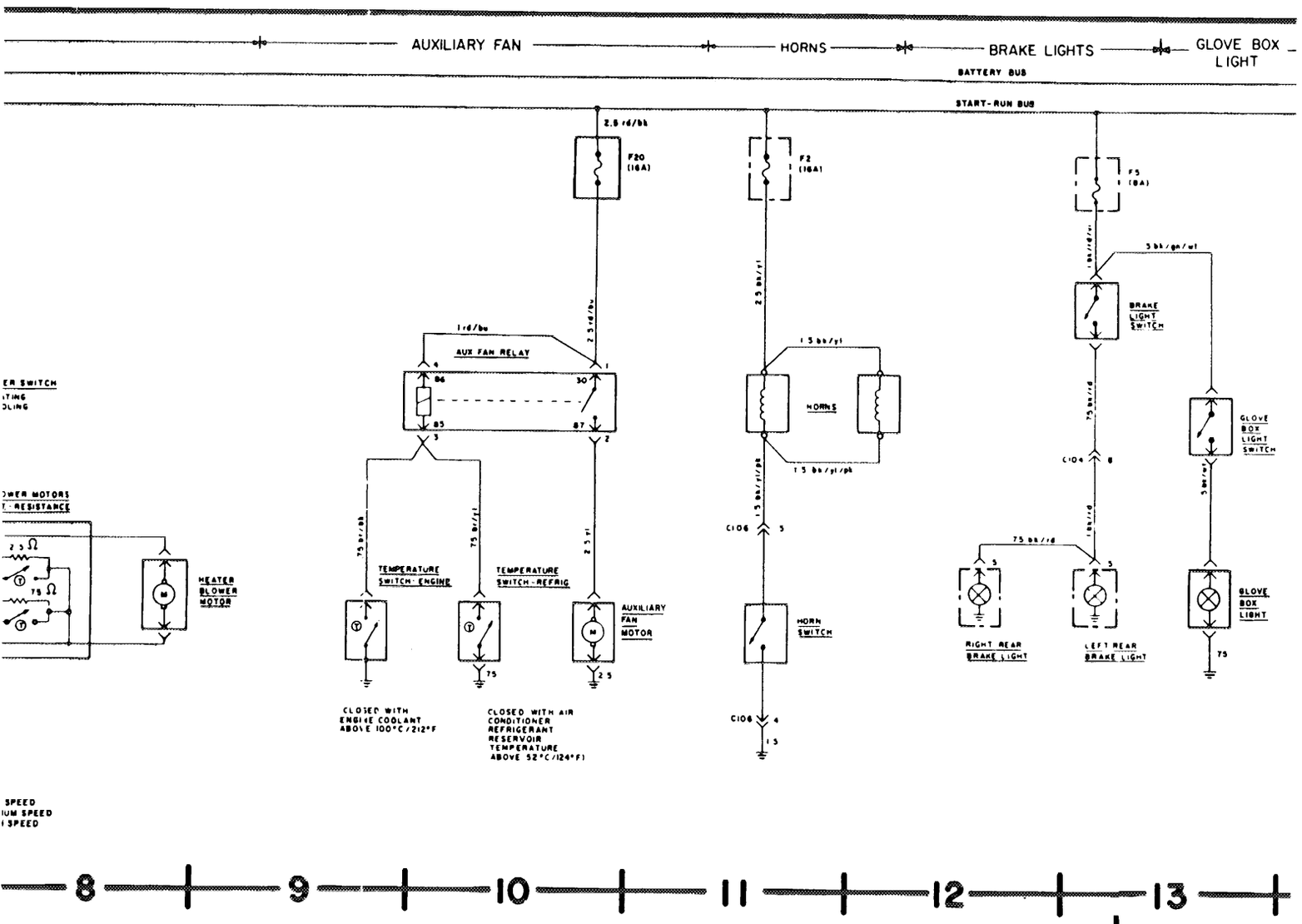
Fig. 9
Fuel tank sensor

1976 240 D

MBNA/MBC ETM 1409
Printed in U.S.A.


WINDSHIELD WIPER / WASHER
BATTERY BUS
START - RUN BUS
COMBINATION SWITCH
WIPER CONTROL
C106
HEADLIGHT CIRCUIT (COORDINATE A21)
NOTE 1
OFF
OFF
NOTE 1
WIPER SWITCH POSITION
I NORMAL SPEED, INTERMITTENT OPERATION
II NORMAL SPEED
III HIGH SPEED
WINDOW WASHER FOOT PUMP CLOSED WHEN PUMP PEDAL IS DEPRESSED
INTERVAL WIPE TIMER
TRANSISTORIZED
NOTE 3
WIPER MOTOR
NORMAL SPEED
HIGH SPEED
PARK
RUN
NOTE 2
NOTE 2 PARK RUN SWITCH IS IN PARK POSITION ONLY WHEN WIPER BLADES ARE IN PARK POSITION
NOTE 3 DURING NORMAL AND HIGH SPEED OPERATION, RELAY A REMAINS DE ENERGIZED DURING INTERMITTENT OPERATION, RELAY A IS AUTOMATICALLY ENERGIZED ONCE EACH 4 SECONDS
F2 (16A)
AC STARTER RELAY
BLOWER SWITCH
POS 0 - OF
POS 1 - LO
POS 2 - MI
POS 3 - HI
AIR CONDITIONER FUSES
F22 (5A)
F21 (8A)
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE - SET MANUALLY
AIR CONDITIONER CLUTCH
J
K
L
M
N
P
R
S
1
2
3
4
5
6





SYST
COMPO

AIR CONDITION
AC blower moto
AC/Starter relay

Change-over sw
Fuse 21 (AC Blo
Fuse 22 (AC clu
Heater blower m
preresistor
C 113

AUXILIARY FA
Aux fan relay, k
Fuse 20 (aux fa
Temp switch –
Temp switch –

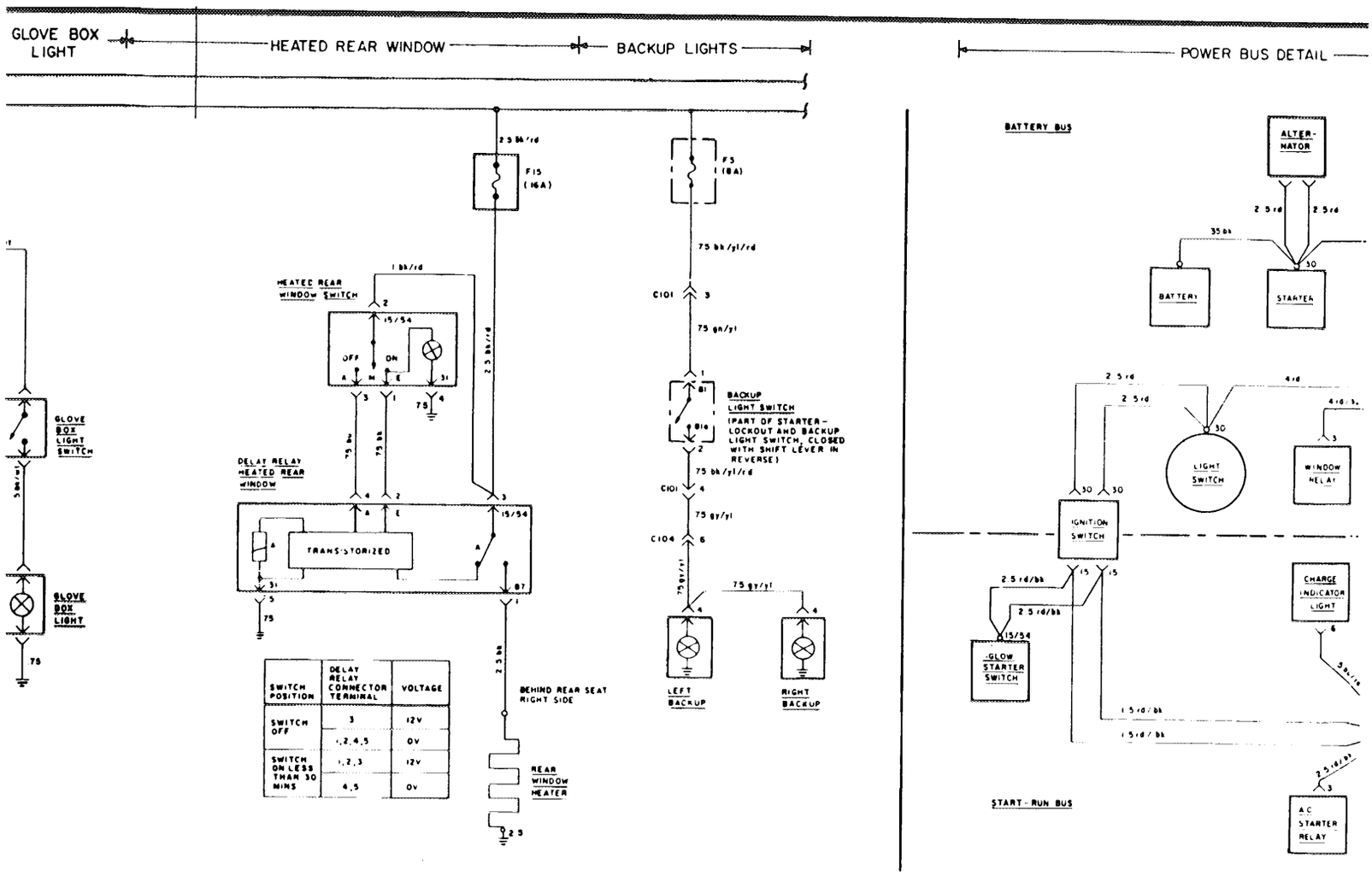
BACKUP LIGHT
C 104 (12 pins)

BRAKE LIGHTS
Switch
C 104 (12 pins)

HEATED REAR
Time delay relay
Fuse 19 (windo
C 112

HORNS
C 106 (14 pins)

WINDSHIELD W
Interval wipe tim
Wiper motor
C 106 (14 termina



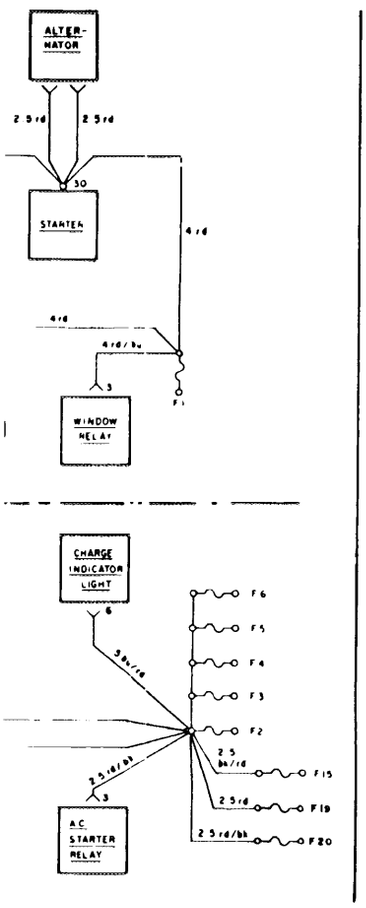
SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS	1,2,3	12V
	4,5	0V

COMPONENT INDEX

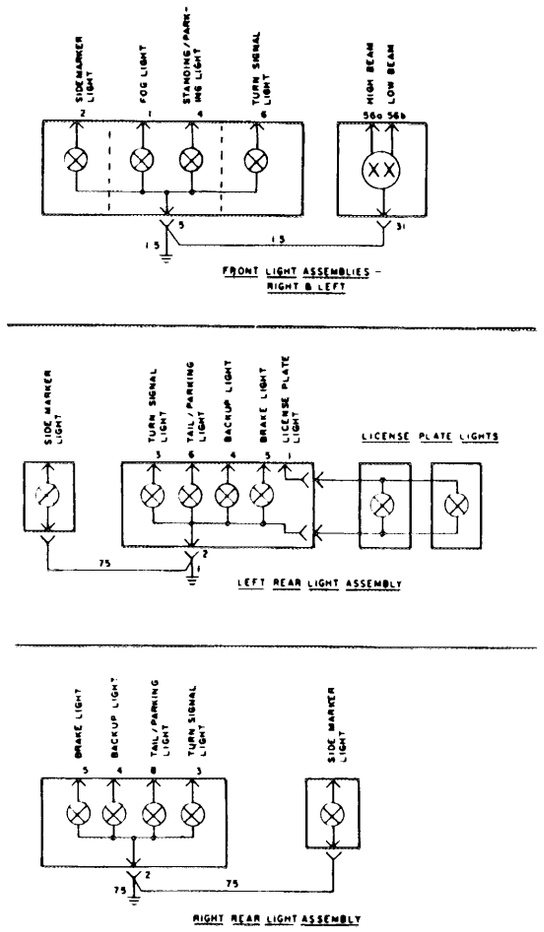
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
AIR CONDITIONING/HEATING			
AC blower motor	Center of console	1	
AC/Starter relay, key 4	Right firewall under fuse bracket		T7
Change-over switch	Console, left side	2	
Fuse 21 (AC Blower)	Right firewall — aux. box		
Fuse 22 (AC clutch)	Right firewall — aux. box		
Heater blower motor preresistor	Forward of AC blower	3	
C 113	Mounted to heater control lever plate	4	T2
AUXILIARY FAN			
Aux. fan relay, key 6	Below radio fuse		
Fuse 20 (aux. fan)	Left fender — aux. box		
Temp. switch — engine	Thermostat housing		
Temp. switch — refrigerant	Right firewall	5	
BACKUP LIGHTS			
C 104 (12 pins)	Under dash — driver's side	6	T4
BRAKE LIGHTS			
Switch	Above brake pedal		
C 104 (12 pins)	Under dash — driver's side	6	T4
HEATED REAR WINDOW			
Time delay relay	Under dash — driver's side	6	T14
Fuse 19 (window)	Left fender — aux. box		
C 112	Behind rear seat — right side	7	
HORNS			
C 106 (14 pins)	Under dash — driver's side	6	T5
WINDSHIELD WIPER/WASHER			
Interval wipe timer	Under dash — driver's side	6	T10
Wiper motor	Firewall — left side	3	
C 106 (14 terminal)	Under dash — driver's side	6	T5

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO

US DETAIL



SPECIAL GROUNDING CIRCUITS



J K L M

19 20 21 22 23 24

LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Horns
Windshield wiper/washer

Fuse 3 (8 amps)
Kickdown switch
Auto transmission solenoid valve

Fuse 4 (8 amps)
Turn signal

Fuse 5 (8 amps)
Backup lights
Brake lights
Glove box light
Instrument cluster
Seat belt warning
Window control

Fuse 6 (5 amps)
A/C control light
Heater blower motor

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing/parking (right)
Instrument cluster lights
Left and right markers
License plate light
Tail light (right)
Ash tray light

Fuse 8 (8 amps)
Front standing/parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Radio antenna

Fuse 14 (8 amps)
Radio

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right front window

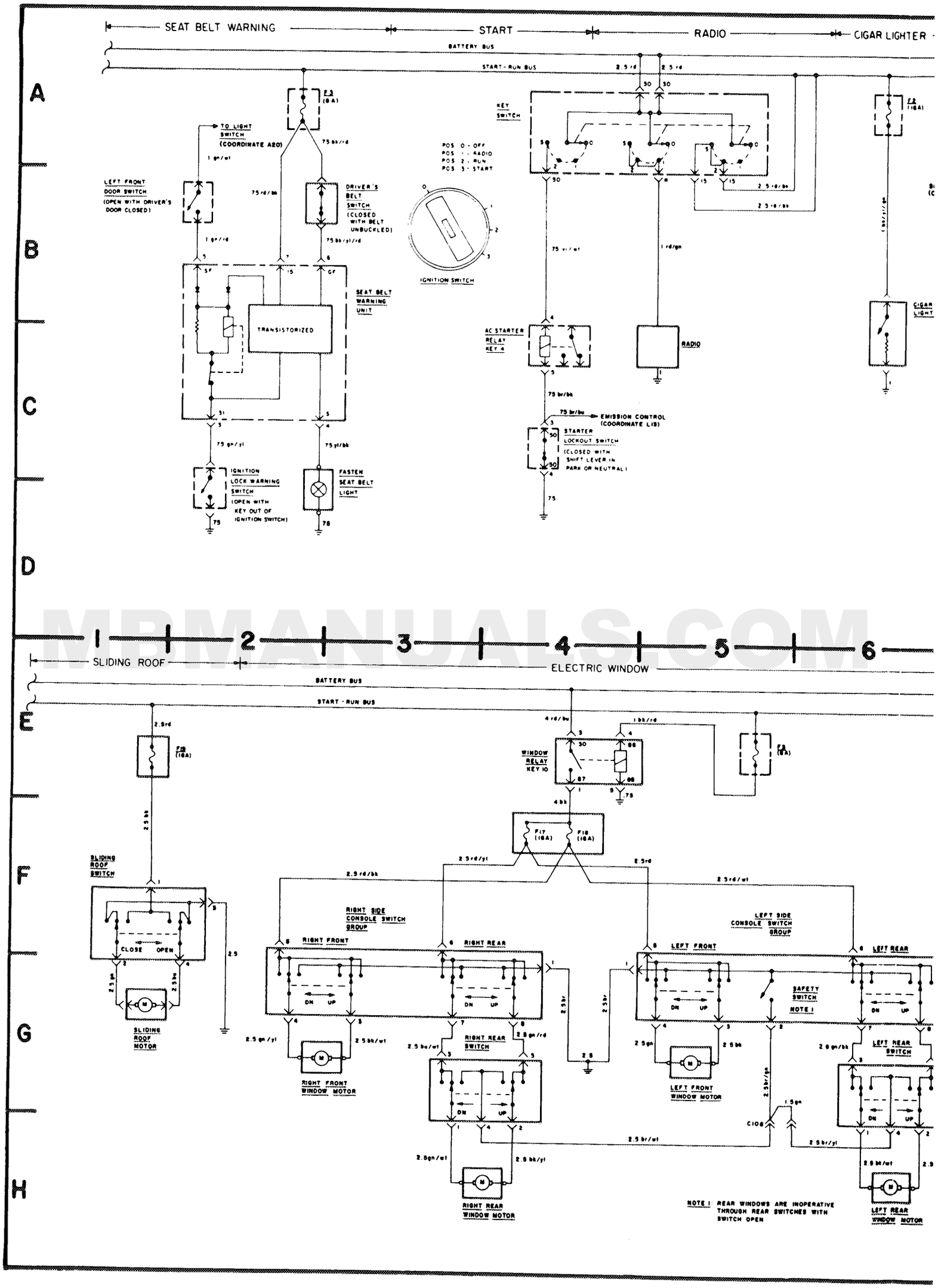
Fuse 19 (16 amps)
Sliding roof

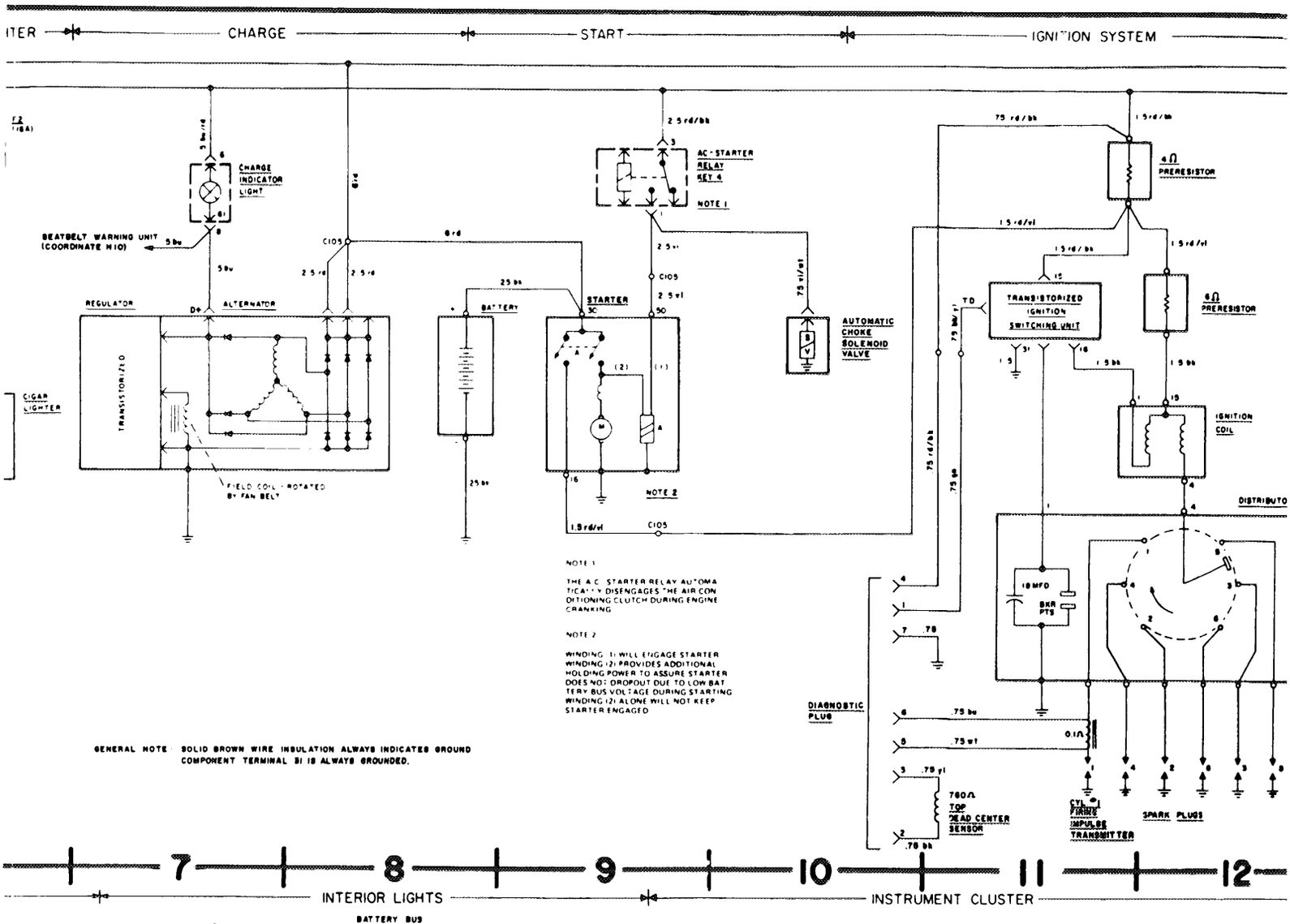
Fuse 20 (16 amps)
Auxiliary fan motor
Auxiliary fan relay

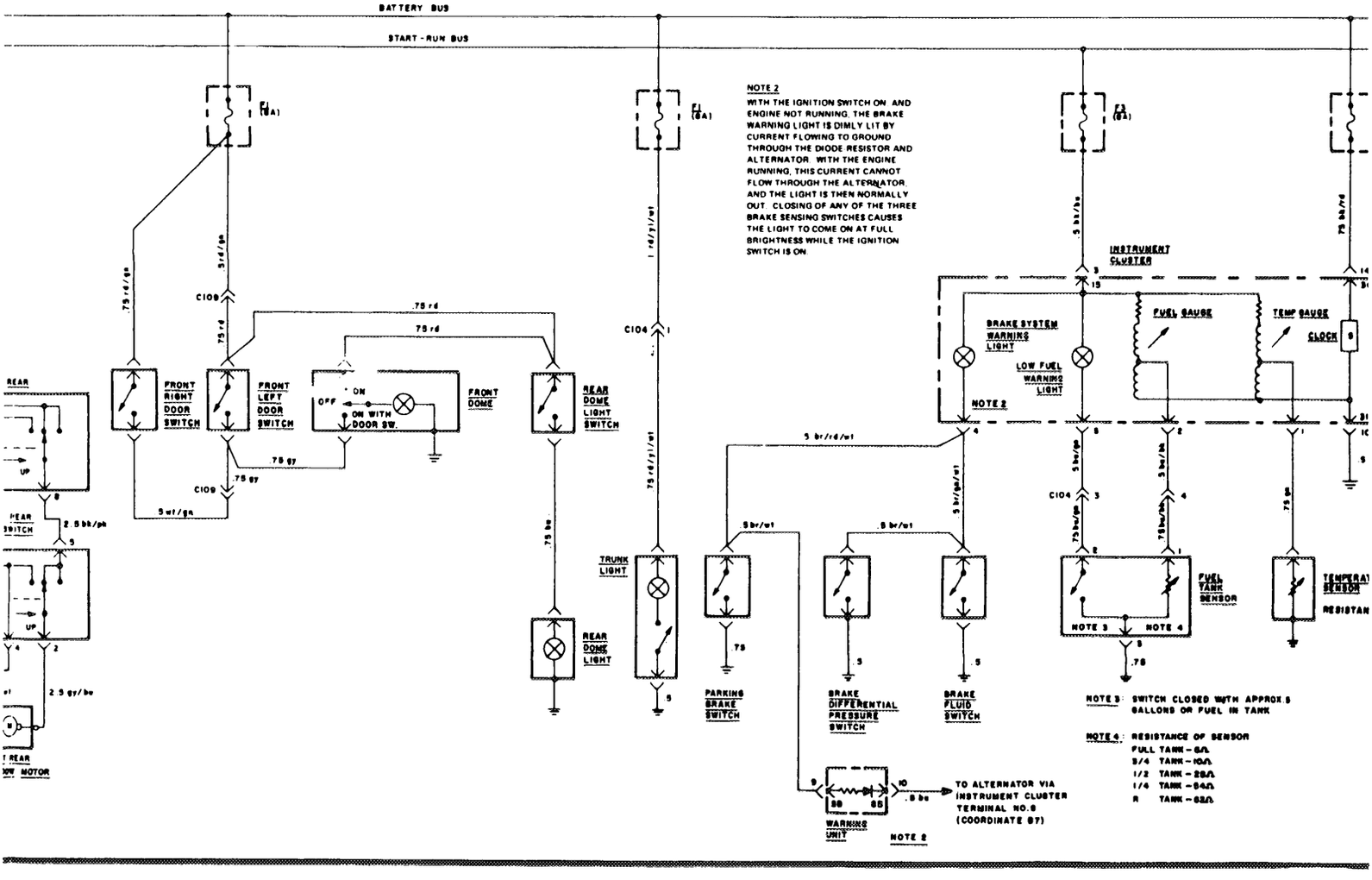
Fuse 21 (8 amps)
A/C Blower motor

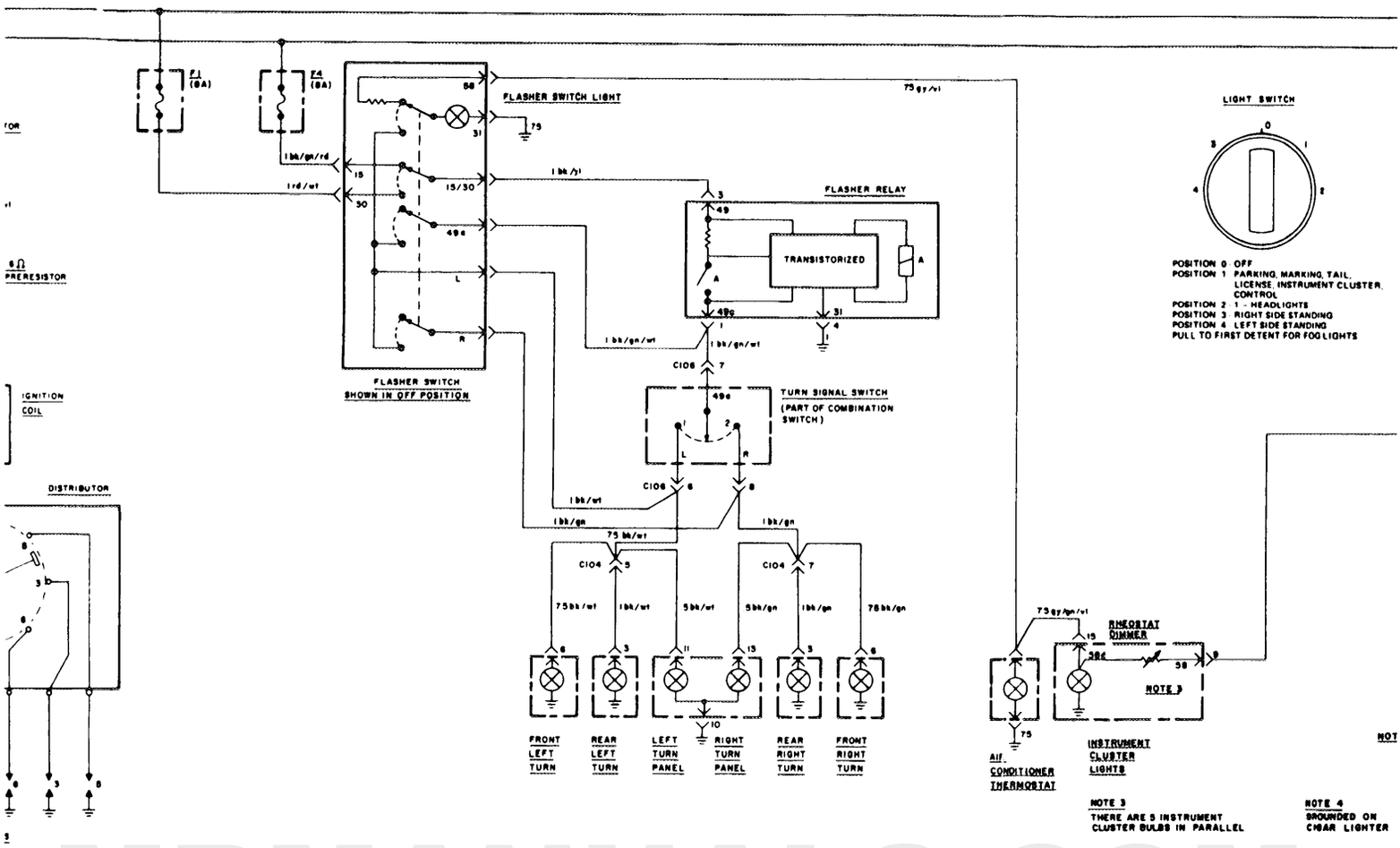
Fuse 22 (5 amps)
Air conditioner clutch

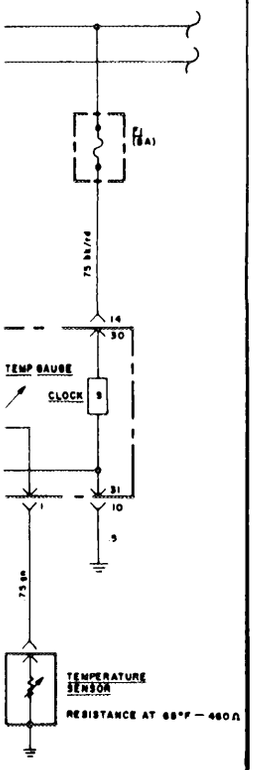
1976 240 D




ITER
CHARGE
START
IGNITION SYSTEM
CHARGE INDICATOR LIGHT
BEATBELT WARNING UNIT (COORDINATE H10)
REGULATOR
ALTERNATOR
TRANSISTORIZED
CIGAR LIGHTER
FIELD COIL - ROTATED BY FAN BELT
BATTERY
STARTER
AC-STARTER RELAY KEY 4
NOTE 1
NOTE 2
AUTOMATIC CHOKE SOLENOID VALVE
PRERESISTOR
TRANSISTORIZED IGNITION SWITCHING UNIT
IGNITION COIL
DISTRIBUTO
DIAGNOSTIC PLUG
TOP DEAD CENTER SENSOR
CYL. #1 FIRING IMPULSE TRANSMITTER
SPARK PLUGS
NOTE 1
THE A.C. STARTER RELAY AUTOMATICALLY DISENGAGES THE AIR CONDITIONING CLUTCH DURING ENGINE CRANKING.
NOTE 2
WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROPOUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED
GENERAL NOTE SOLID BROWN WIRE INSULATION ALWAYS INDICATES GROUND
COMPONENT TERMINAL 31 IS ALWAYS GROUNDED.


7
8
9
10
11
12
INTERIOR LIGHTS
INSTRUMENT CLUSTER
BATTERY BUS
START-RUN BUS
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
FRONT DOME
REAR DOME LIGHT SWITCH
REAR DOME LIGHT
TRUNK LIGHT
PARKING BRAKE SWITCH
BRAKE DIFFERENTIAL PRESSURE SWITCH
BRAKE FLUID SWITCH
WARNING UNIT
TO ALTERNATOR VIA INSTRUMENT CLUSTER TERMINAL NO. 6 (COORDINATE B7)
INSTRUMENT CLUSTER
BRAKE SYSTEM WARNING LIGHT
LOW FUEL WARNING LIGHT
FUEL GAUGE
TEMP GAUGE
CLOCK
FUEL TANK SENSOR
NOTE 2
WITH THE IGNITION SWITCH ON AND ENGINE NOT RUNNING, THE BRAKE WARNING LIGHT IS DIMLY LIT BY CURRENT FLOWING TO GROUND THROUGH THE DIODE RESISTOR AND ALTERNATOR. WITH THE ENGINE RUNNING, THIS CURRENT CANNOT FLOW THROUGH THE ALTERNATOR AND THE LIGHT IS THEN NORMALLY OUT. CLOSING OF ANY OF THE THREE BRAKE SENSING SWITCHES CAUSES THE LIGHT TO COME ON AT FULL BRIGHTNESS WHILE THE IGNITION SWITCH IS ON.
NOTE 3: SWITCH CLOSED WITH APPROX. 5 GALLONS OR FUEL IN TANK
NOTE 4: RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 10Ω
1/2 TANK - 28Ω
1/4 TANK - 54Ω
R TANK - 62Ω





COMPONENT INDEX

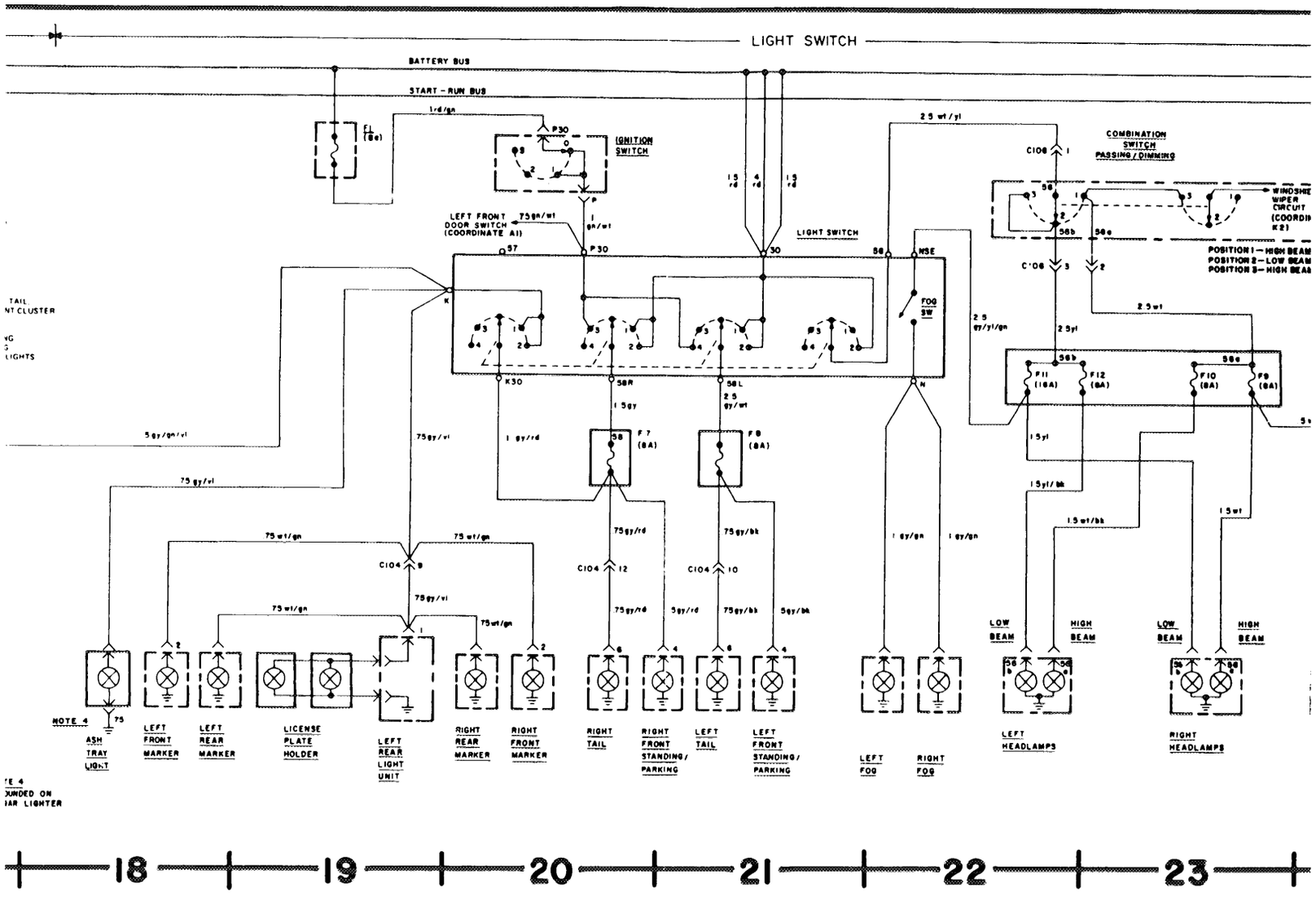
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO.	TERM. FIG. NO.
CHARGE			
Regulator	Alternator		
C 105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay — key 10	Right side under dash		T7
C 108	Console		
IGNITION SYSTEM			
Coil	Left front fender	8	
Distributor	Left front fender		
4 Ohm preresistor	Left front fender	8	
6 Ohm preresistor	Left front fender	8	
Transistorized ignition switching unit	Left front fender		
INSTRUMENT CLUSTER			
Brake fluid switches	Brake fluid reservoir	3	
Coolant temp. sensor	Right front cylinder head	11	
Fuel tank sensor	Trunk	9	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side		T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	10	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side		T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning buzzer	Under dash, driver's side	6	
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right side, under dash		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO.	TERM. FIG. NO.
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T6
C 104 (12 pins)	Under dash, driver's side		T4
C 106 (14 pins)	Under dash, driver's side	6	T5

1 — A/C Blow

1 — Change ov

1 — Main fuse
2 — Heater blo
3 — Brake fluid
4 — Wiper mot



LOCATION FIGURES

Fig 1
– A/C Blower motor

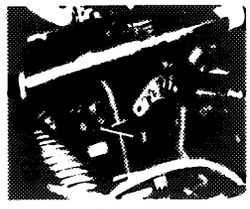


Fig 2
– Change over switch

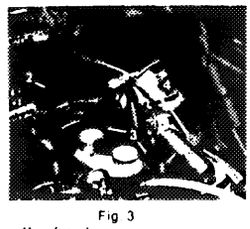


Fig 3
– Main fuse box
– Heater blower pre-resistors
– Brake fluid switches
– Wiper motor

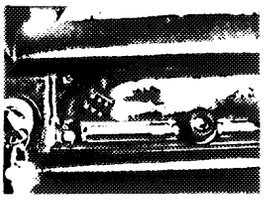


Fig 4
1 — C113

Fig 5
1 — Temperature switch, refrigerant

Fig 6
1 – Door and seat belt warning buzzer
2 – Turn signal flasher relay
3 – C106
4 – Cruise control amplifier
5 – Rear window heater time delay relay
6 – Speed sensor

Fig. 7
1 — C112

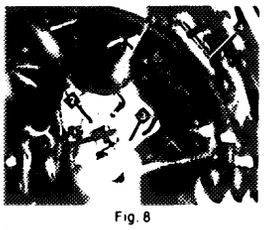


Fig. 8
1 – Ignition coil
2 – 0.4 ohm pre-resistor
3 – 0.6 ohm pre-resistor
4 – Transistorized ignition switching unit

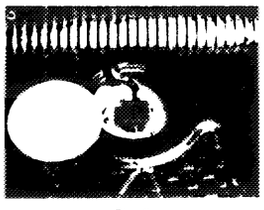
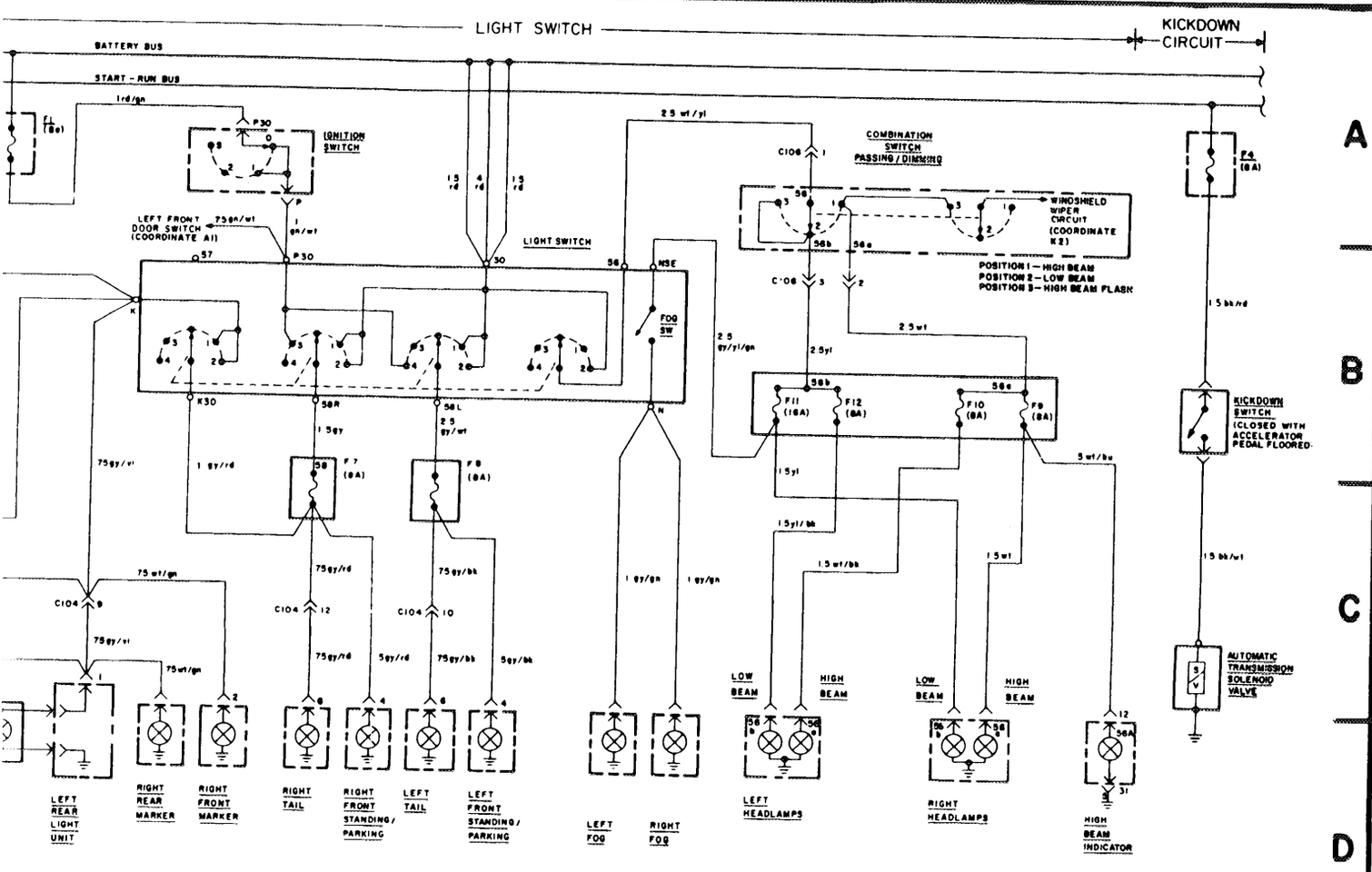


Fig. 9
Fuel tank sensor

Fig 10
1 — Kickdown switch

1976 28



LOCATION FIGURES

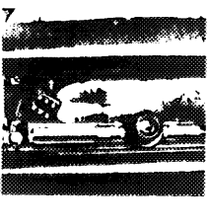


Fig. 4
3

Fig. 5
perature switch, refrigerant

Fig. 6
and seat belt warning buzzer
signal flasher relay
e control amplifier
window heater time delay relay
l sensor

Fig. 7
1 — C112

Fig. 8
1 - Ignition coil
2 - 0.4 ohm pre-resistor
3 - 0.6 ohm pre-resistor
4 - Transistorized ignition switching unit

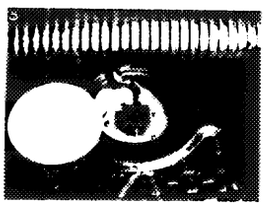
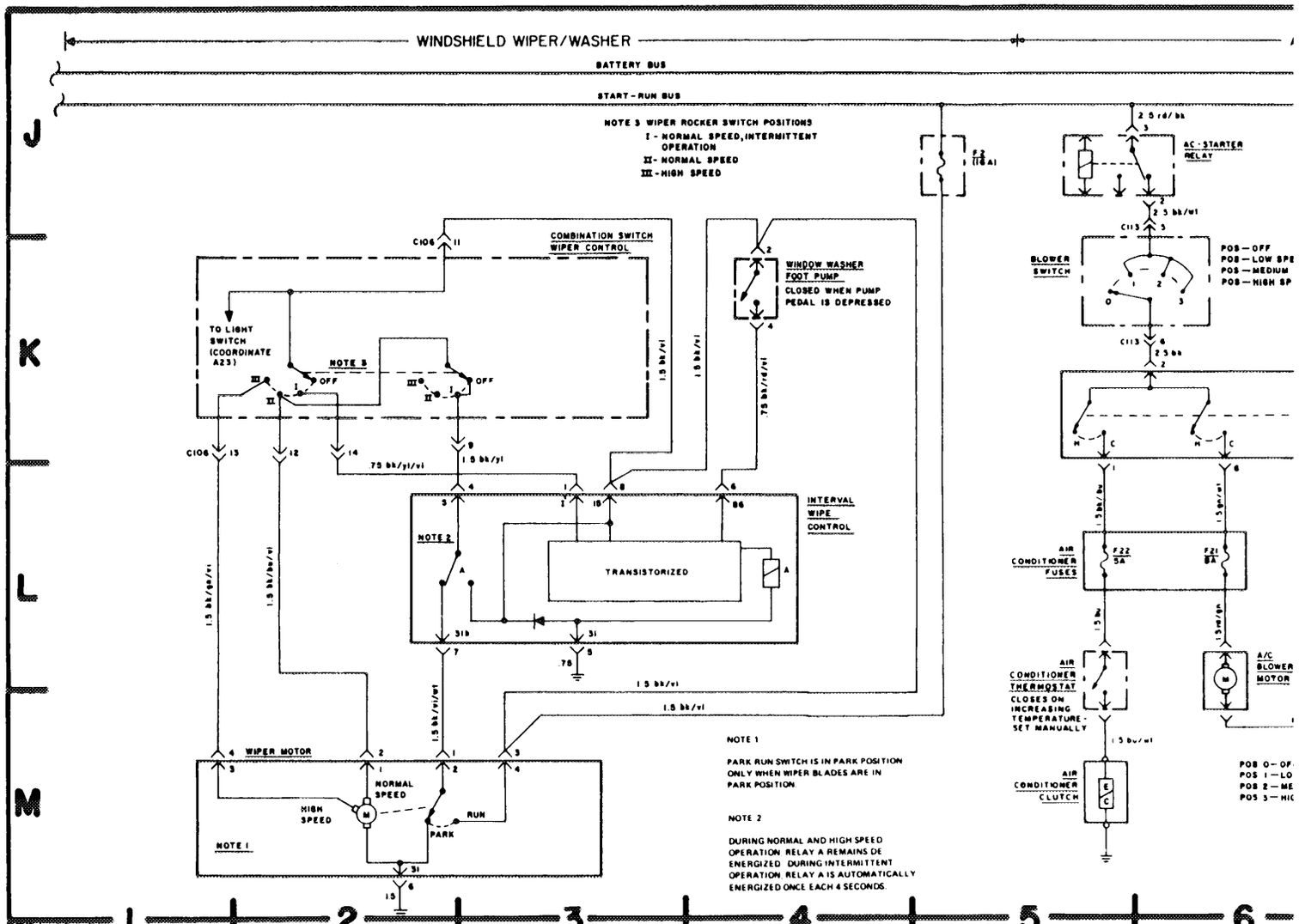


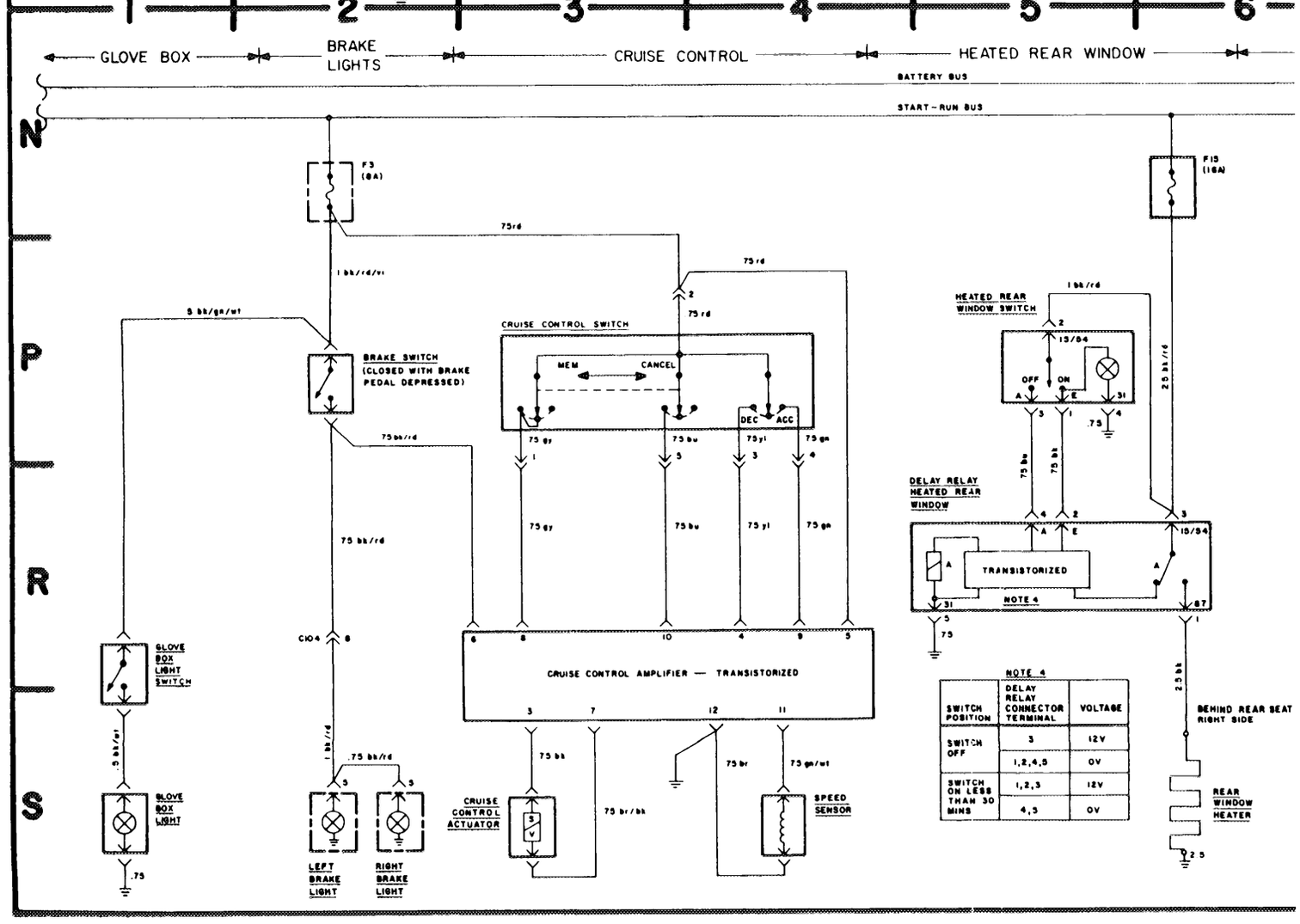
Fig. 9
Fuel tank sensor

Fig. 10
1 — Kickdown switch

1976 280/280 C

MBNA/MBC ETM 1411
Printed in U.S.A.


WINDSHIELD WIPER/WASHER
BATTERY BUS
START-RUN BUS
NOTE 3 WIPER ROCKER SWITCH POSITIONS
I - NORMAL SPEED, INTERMITTENT OPERATION
II - NORMAL SPEED
III - HIGH SPEED
COMBINATION SWITCH WIPER CONTROL
TO LIGHT SWITCH (COORDINATE A23)
NOTE 3
OFF
WINDOW WASHER FOOT PUMP
CLOSED WHEN PUMP PEDAL IS DEPRESSED
INTERVAL WIPE CONTROL
TRANSISTORIZED
NOTE 2
WIPER MOTOR
NORMAL SPEED
HIGH SPEED
RUN
PARK
NOTE 1
NOTE 1
PARK RUN SWITCH IS IN PARK POSITION ONLY WHEN WIPER BLADES ARE IN PARK POSITION.
NOTE 2
DURING NORMAL AND HIGH SPEED OPERATION RELAY A REMAINS DE ENERGIZED. DURING INTERMITTENT OPERATION, RELAY A IS AUTOMATICALLY ENERGIZED ONCE EACH 4 SECONDS.
F2 (16A)
AC-STARTER RELAY
BLOWER SWITCH
POS—OFF
POS—LOW SPE
POS—MEDIUM
POS—HIGH SP
AIR CONDITIONER FUSES
F22 5A
F21 8A
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE-SET MANUALLY
A/C BLOWER MOTOR
AIR CONDITIONER CLUTCH
POS 0—OF
POS 1—LO
POS 2—ME
POS 3—HI
J
K
L
M
1
2
3
4
5
6


GLOVE BOX
BRAKE LIGHTS
CRUISE CONTROL
HEATED REAR WINDOW
BATTERY BUS
START-RUN BUS
F3 (8A)
F15 (16A)
BRAKE SWITCH (CLOSED WITH BRAKE PEDAL DEPRESSED)
CRUISE CONTROL SWITCH
MEM
CANCEL
DEC
ACC
HEATED REAR WINDOW SWITCH
OFF
ON
DELAY RELAY HEATED REAR WINDOW
TRANSISTORIZED
NOTE 4
CRUISE CONTROL AMPLIFIER — TRANSISTORIZED
GLOVE BOX LIGHT SWITCH
GLOVE BOX LIGHT
LEFT BRAKE LIGHT
RIGHT BRAKE LIGHT
CRUISE CONTROL ACTUATOR
SPEED SENSOR
BEHIND REAR SEAT RIGHT SIDE
REAR WINDOW HEATER
NOTE 4
SWITCH POSITION
DELAY RELAY CONNECTOR TERMINAL
VOLTAGE
SWITCH OFF
3
12V
1,2,4,5
0V
SWITCH ON LESS THAN 30 MINS
1,2,3
12V
4,5
0V
P
R
S

WINDSHIELD WIPER/WASHER — AIR CONDITIONING/HEATING

BATTERY BUS

START-RUN BUS

NOTE 3 WIPER ROCKER SWITCH POSITIONS
I - NORMAL SPEED, INTERMITTENT OPERATION
II - NORMAL SPEED
III - HIGH SPEED

COMBINATION SWITCH WIPER CONTROL

NOTE 3

WINDOW WASHER FOOT PUMP
CLOSED WHEN PUMP PEDAL IS DEPRESSED

INTERVAL WIPE CONTROL

NOTE 2

TRANSISTORIZED

NORMAL SPEED

HIGH SPEED

RUN

PARK

NOTE 1

PARK RUN SWITCH IS IN PARK POSITION ONLY WHEN WIPER BLADES ARE IN PARK POSITION

NOTE 2

DURING NORMAL AND HIGH SPEED OPERATION RELAY A REMAINS DE ENERGIZED. DURING INTERMITTENT OPERATION, RELAY A IS AUTOMATICALLY ENERGIZED ONCE EACH 4 SECONDS

AC-STARTER RELAY

BLOWER SWITCH

POS — OFF
POS — LOW SPEED
POS — MEDIUM SPEED
POS — HIGH SPEED

CHANGE-OVER SWITCH
POS H - HEATING
POS C - COOLING

AIR CONDITIONER FUSES

AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE - SET MANUALLY

A/C BLOWER MOTOR

AIR CONDITIONER CLUTCH

BLOWER MOTORS PRE-RESISTANCE

NOTE 4

POS 0 — OFF
POS 1 — LOW SPEED
POS 2 — MEDIUM SPEED
POS 3 — HIGH SPEED

BLOWER SWITCH

2 — 3 — 4 — 5 — 6 — 7

BRAKE LIGHTS — CRUISE CONTROL — HEATED REAR WINDOW — BACKUP LIGHTS

BATTERY BUS

START-RUN BUS

BRAKE SWITCH (CLOSED WITH BRAKE PEDAL DEPRESSED)

CRUISE CONTROL SWITCH

MEM — CANCEL — DEC — ACC

CRUISE CONTROL AMPLIFIER — TRANSISTORIZED

CRUISE CONTROL ACTUATOR

SPEED SENSOR

LEFT BRAKE LIGHT

RIGHT BRAKE LIGHT

HEATED REAR WINDOW SWITCH

OFF — ON

DELAY RELAY HEATED REAR WINDOW

TRANSISTORIZED

NOTE 4

SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS	1,2,3	12V
	4,5	0V

BEHIND REAR SEAT RIGHT SIDE

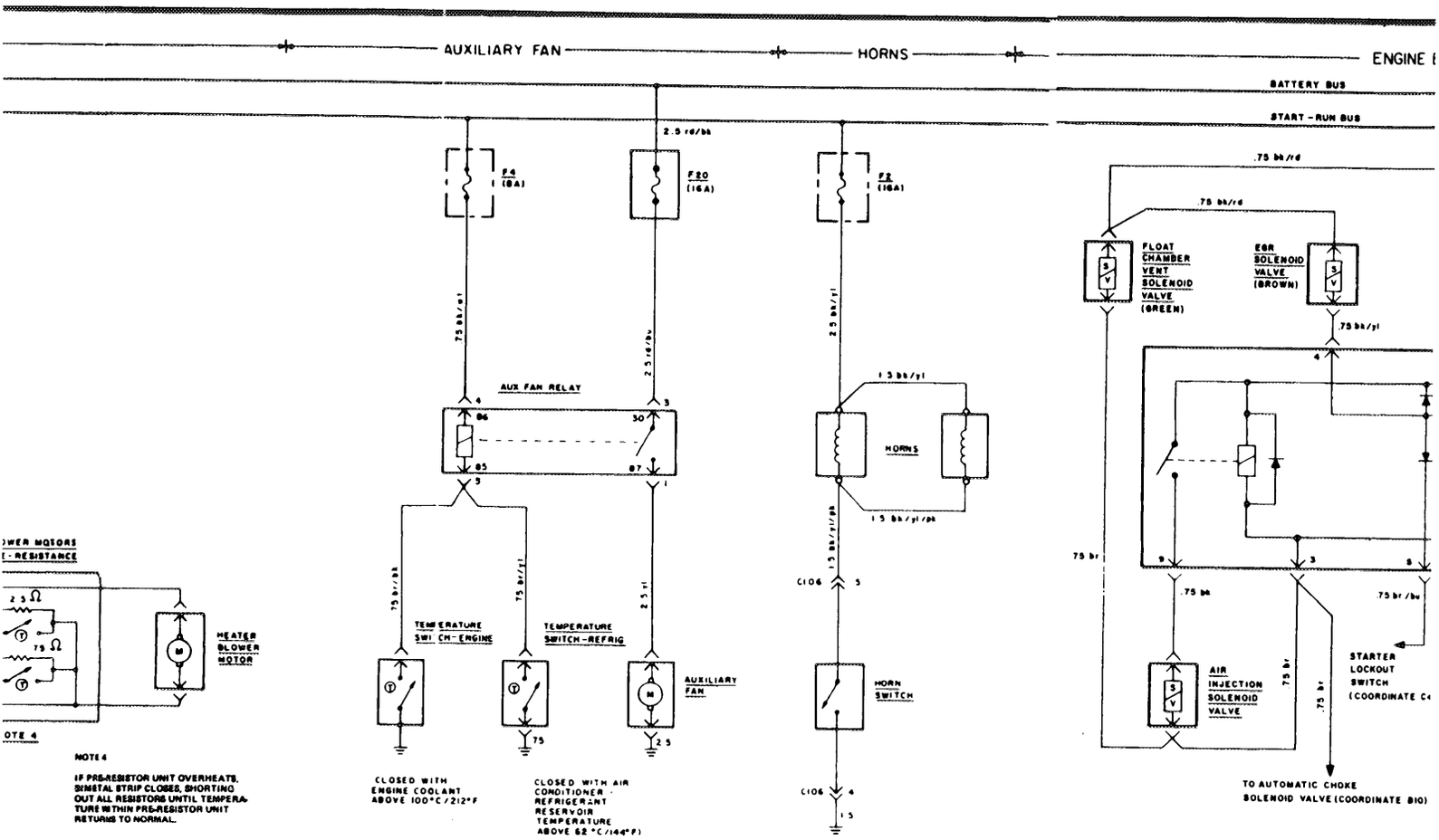
REAR WINDOW HEATER

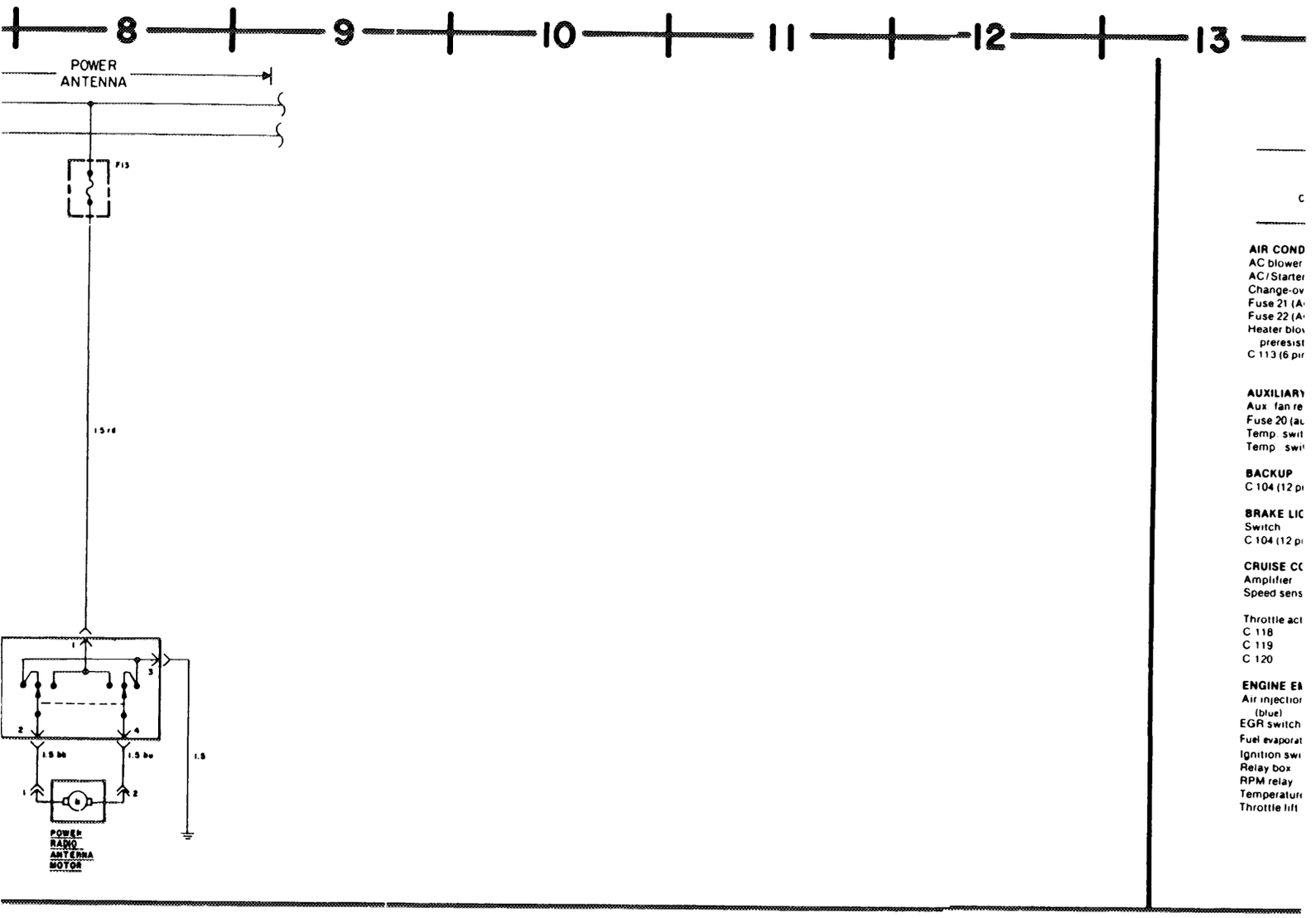
BACKUP LIGHT SWITCH (PART OF STARTER-LOCKOUT AND BACKUP LIGHT SWITCH, CLOSED WITH SHIFT LEVER IN REVERSE)

LEFT BACKUP

RIGHT BACKUP

POWER RADIO ANTENNA SWITCH





AIR COND
AC blower
AC/Starter
Change-ov
Fuse 21 (A
Fuse 22 (A
Heater blo
preresist
C 113 (6 pi

AUXILIARY
Aux fan re
Fuse 20 (au
Temp swit
Temp swi

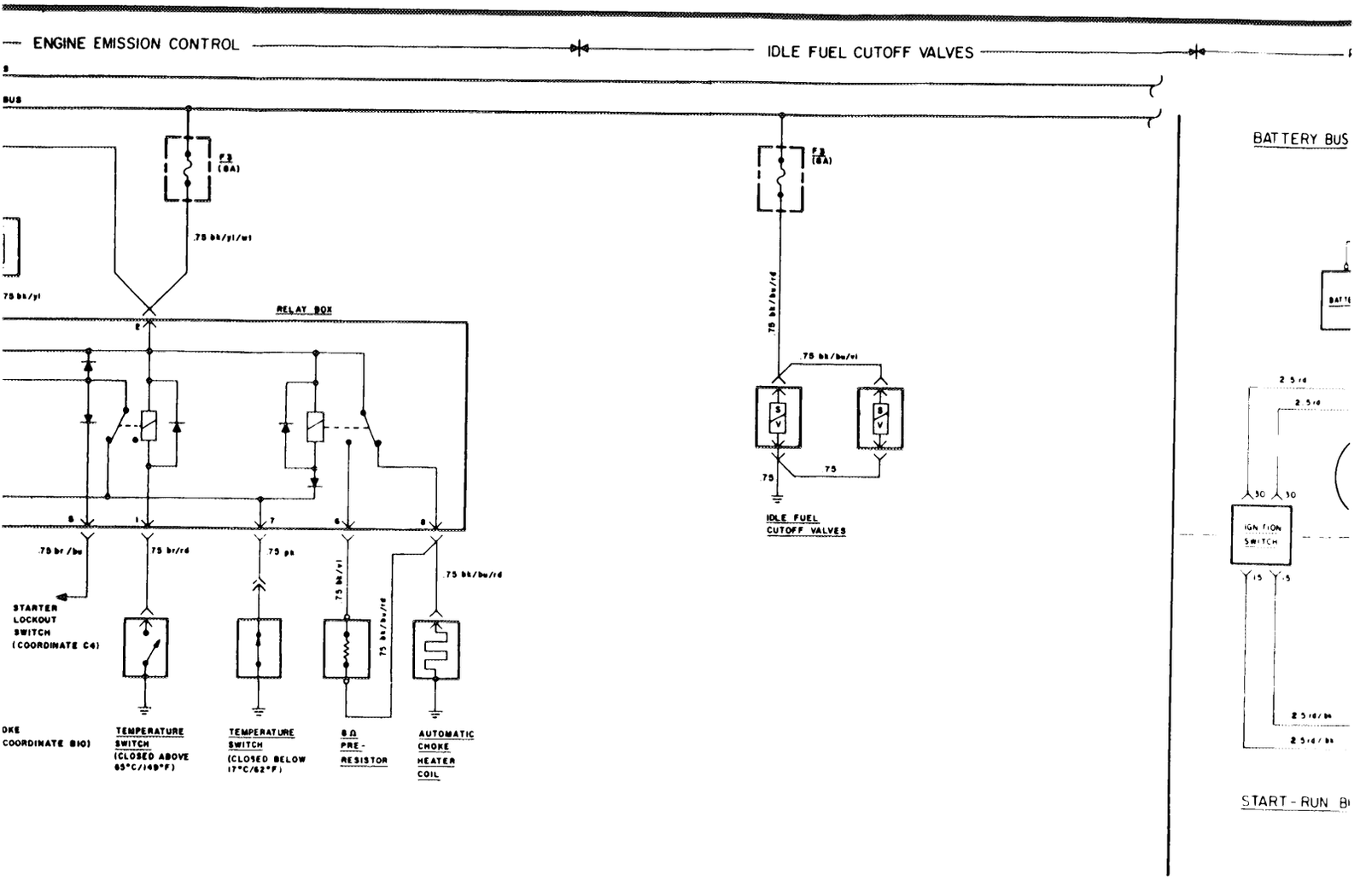
BACKUP
C 104 (12 p

BRAKE LIC
Switch
C 104 (12 p

CRUISE C
Amplifier
Speed sens

Throttle act
C 118
C 119
C 120

ENGINE E
Air injectio
(blue)
EGR switch
Fuel evaporat
Ignition sw
Relay box
RPM relay
Temperatur
Throttle lift



COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
AIR CONDITIONING/HEATING			
AC blower motor	Center of console	1	
AC/Starter relay, key 4	Right side, under dash		T7
Change-over switch	Console, left side	2	
Fuse 21 (AC blower	Right firewall — aux. box		
Fuse 22 (AC clutch)	Right firewall — aux. box		
Heater blower motor preresister	Forward of AC blower	3	
C 113 (6 pins)	Mounted to heater control lever plate	4	T2
AUXILIARY FAN			
Aux. fan relay, key6	Right side, under dash		
Fuse 20 (aux. fan)	Left fender — AUX. BOX		
Temp. switch — engine (212 F)	Thermostat housing	11	
Temp. switch — refrigerant	Right firewall	5	
BACKUP			
C 104 (12 pins)	Under dash—driver's side		T4
BRAKE LIGHTS			
Switch	Above brake pedal		
C 104 (12 pins)	Under dash—driver's side		T4
CRUISE CONTROL			
Amplifier	Under dash, driver's side	6	
Speed sensor	Under dash, driver's side—speedometer cable	6	
Throttle actuator	Right fender, near hood spring		
C 118		6	
C 119		6	
C 120		6	
ENGINE EMISSION CONTROL			
Air injection switch-over valve (blue)	Right fender skirt		
EGR switch-over valve (brown)	Right fender skirt	11	
Fuel evaporation switch over valve	Right fender skirt	11	
Ignition switch-over valve	Right fender skirt	11	
Relay box	Left fender		
RPM relay	Left fender		
Temperature switch	Oil filter mount		
Throttle lift switch-over valve	Right fender skirt		

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
HEATED REAR WINDOW	Under dash—driver's side	6	T14
Time delay relay	Left fender—aux. box		
Fuse 19 (window)	Behind rear seat—right side	7	
C 112			
HORNS			
C 106 (14 pins)	Under dash—driver's side	6	T5
WINDSHIELD WIPER/WASHER			
Interval wipe relay	Under dash—driver's side		T10
Motor	Firewall—left side	3	
C 106 (14 pins)	Under dash—driver's side	6	T5

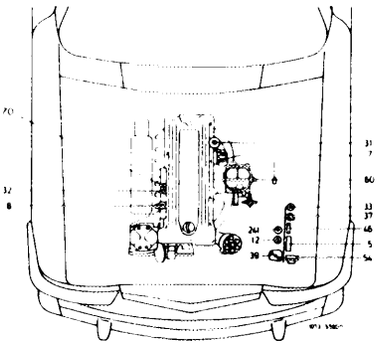
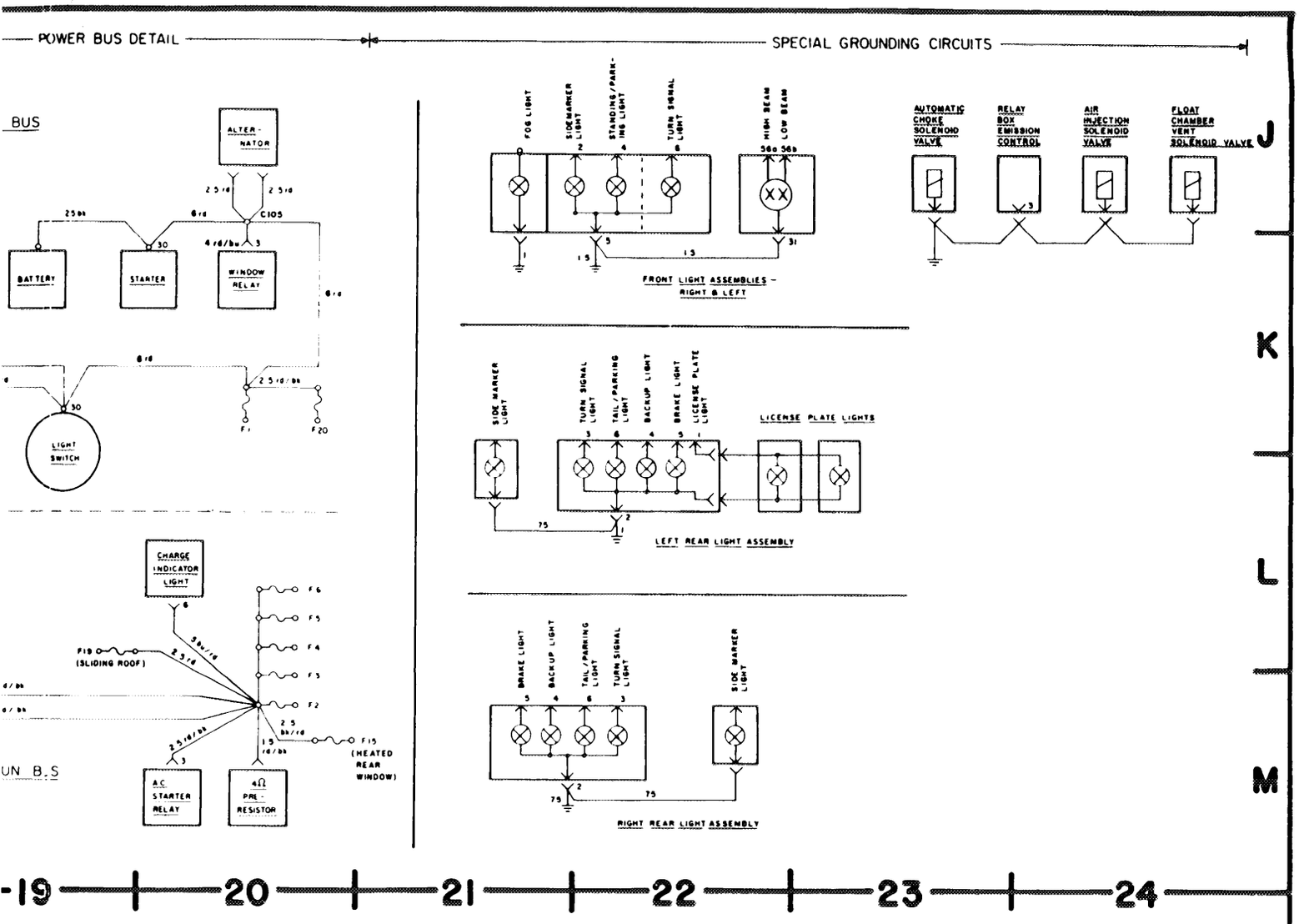


Fig 11

5 - Relay box
7 - 62 F (17 C) temperature switch
8 - 212 F (100 C) temperature switch
12 - Switch-over valve, EGR (brown)
31 - EGR valve
32 - 149 F (65 C) temperature switch
33 - Switch-over valve, air injection (blue)
37 - Switch-over valve, fuel evaporation control system (green)
39 - Charcoal canister
46 - Resistor, automatic choke cover
54 - Vacuum booster
60 - Venturi connection
70 - Coolant temp. sensor



LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Horns
Windshield wiper/washer

Fuse 3 (8 amps)
Backup lights
Brake lights
Cruise control
Engine emission control
Glove box light
Idle fuel cutoff valves
Instruments
Seat belt warning
Window control

Fuse 4 (8 amps)
Auxiliary fan
Kickdown solenoid

Fuse 6 (5 amps)
A/C control light
Heater blower motor

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing parking (right)
Instrument cluster lights
Left and right markers
License plate light
Tail light (right)

Fuse 8 (8 amps)
Front standing parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (8 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Radio antenn

Fuse 14

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right rear window

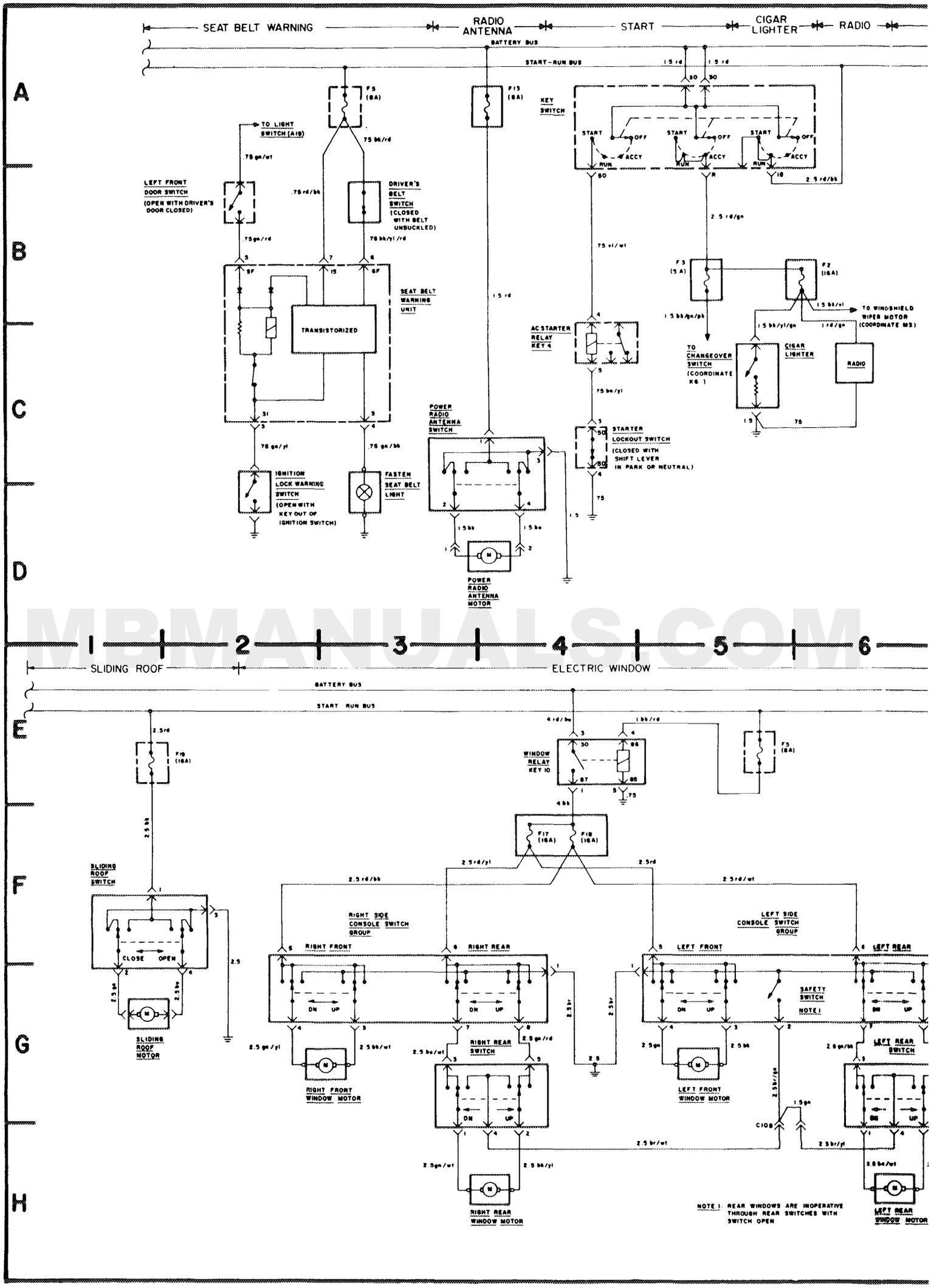
Fuse 19 (16 amps)
Sliding roof

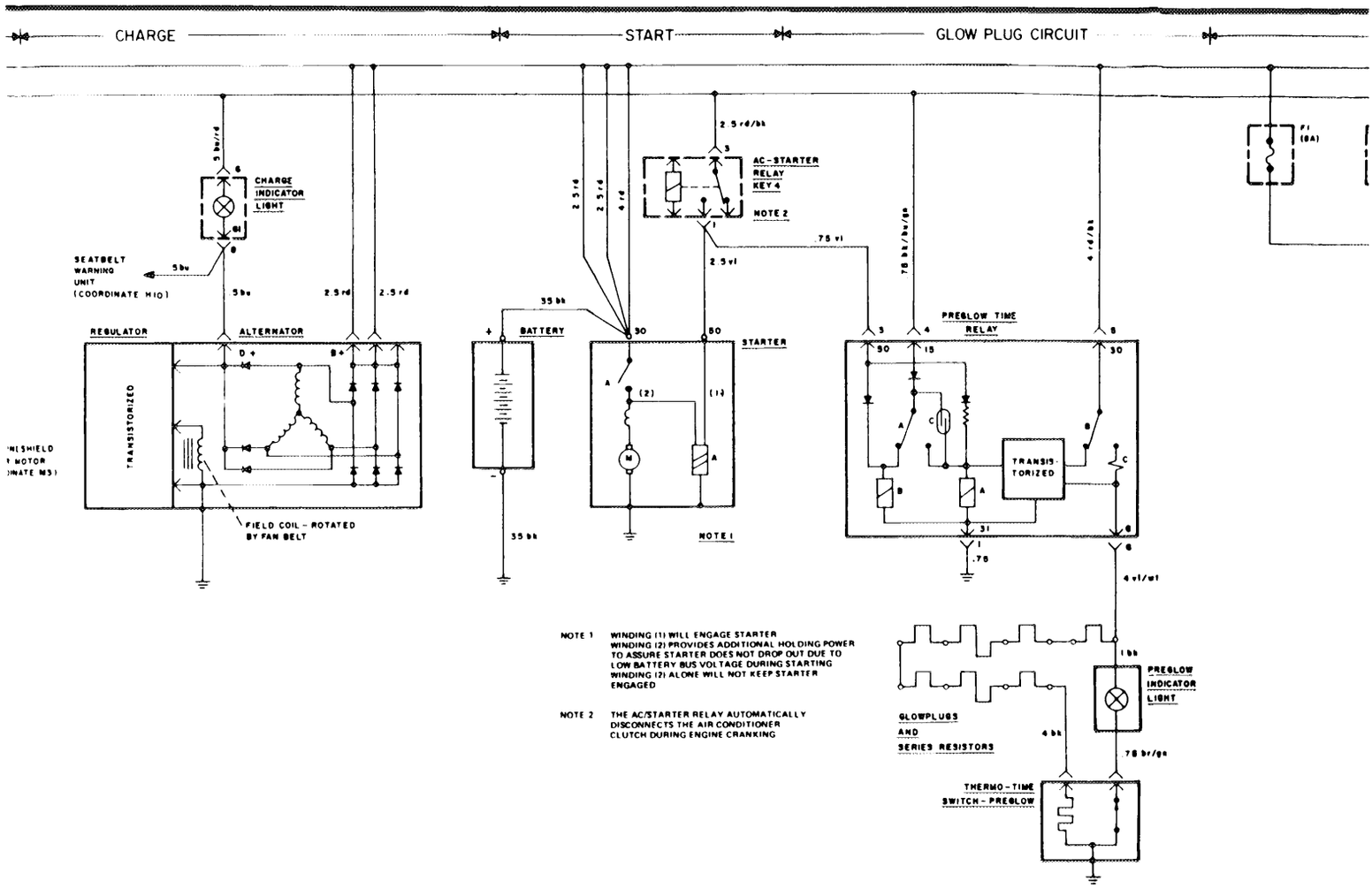
Fuse 20 (16 amps)
Auxiliary fan motor

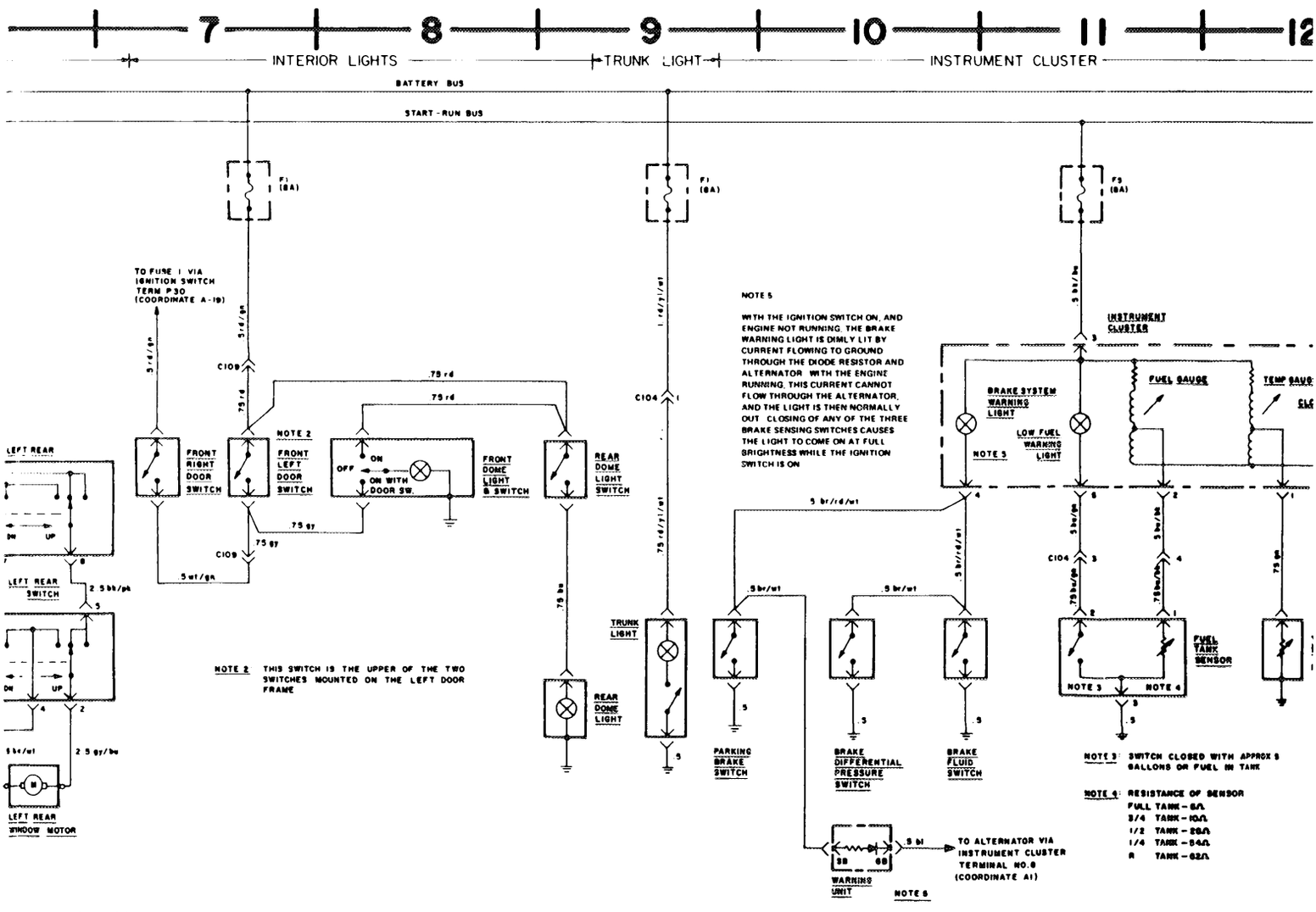
Fuse 21 (8 amps)
A/C Blower motor

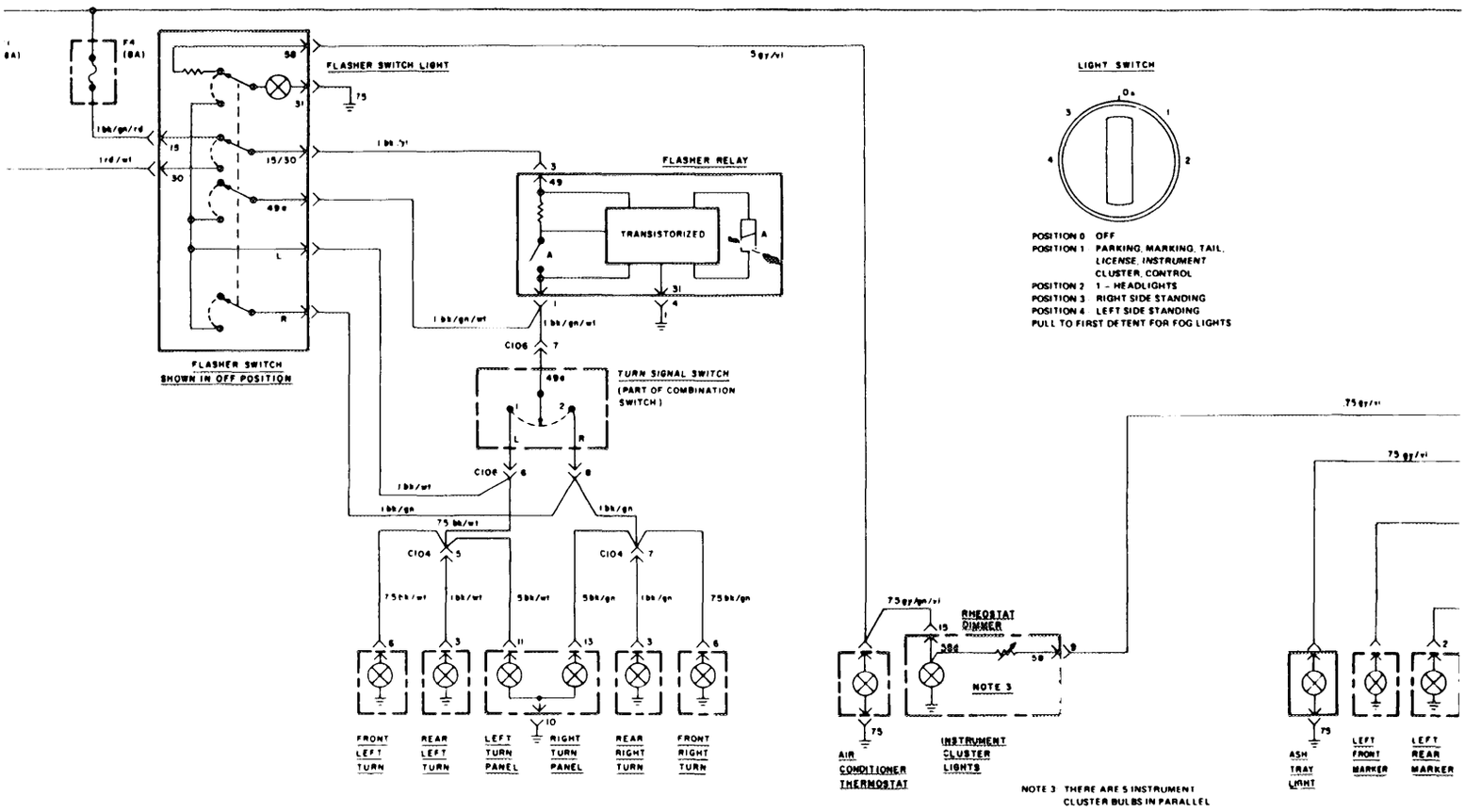
Fuse 22 (5 amps)
Air Conditioner clutch

1976 280/280 C

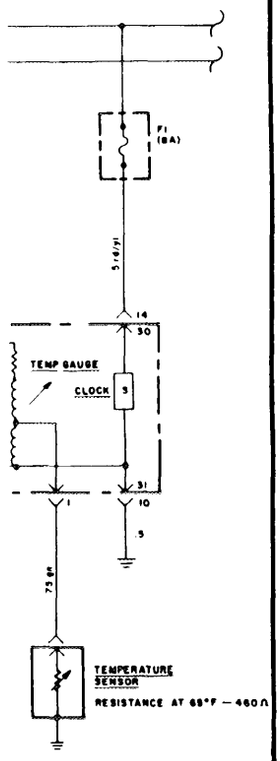



CHARGE
START
GLOW PLUG CIRCUIT
CHARGE INDICATOR LIGHT
SEATBELT WARNING UNIT (COORDINATE H10)
REGULATOR
ALTERNATOR
TRANSISTORIZED
FIELD COIL - ROTATED BY FAN BELT
BATTERY
AC-STARTER RELAY KEY 4
NOTE 2
STARTER
NOTE 1
PREGLOW TIME RELAY
TRANSIS-TORIZED
F1 (8A)
PREGLOW INDICATOR LIGHT
GLOWPLUGS AND SERIES RESISTORS
THERMO-TIME SWITCH - PREGLOW
NOTE 1 WINDING (1) WILL ENGAGE STARTER
WINDING (2) PROVIDES ADDITIONAL HOLDING POWER TO ASSURE STARTER DOES NOT DROP OUT DUE TO LOW BATTERY BUS VOLTAGE DURING STARTING
WINDING (2) ALONE WILL NOT KEEP STARTER ENGAGED
NOTE 2 THE AC/STARTER RELAY AUTOMATICALLY DISCONNECTS THE AIR CONDITIONER CLUTCH DURING ENGINE CRANKING


7
8
9
10
11
12
INTERIOR LIGHTS
TRUNK LIGHT
INSTRUMENT CLUSTER
BATTERY BUS
START-RUN BUS
F1 (8A)
F9 (8A)
TO FUSE 1 VIA IGNITION SWITCH TERM P30 (COORDINATE A-19)
FRONT RIGHT DOOR SWITCH
FRONT LEFT DOOR SWITCH
NOTE 2
FRONT DOME LIGHT & SWITCH
REAR DOME LIGHT SWITCH
REAR DOME LIGHT
LEFT REAR SWITCH
LEFT REAR WINDOW MOTOR
NOTE 2 THIS SWITCH IS THE UPPER OF THE TWO SWITCHES MOUNTED ON THE LEFT DOOR FRAME
TRUNK LIGHT
NOTE 5
WITH THE IGNITION SWITCH ON, AND ENGINE NOT RUNNING, THE BRAKE WARNING LIGHT IS DIMLY LIT BY CURRENT FLOWING TO GROUND THROUGH THE DIODE RESISTOR AND ALTERNATOR WITH THE ENGINE RUNNING, THIS CURRENT CANNOT FLOW THROUGH THE ALTERNATOR, AND THE LIGHT IS THEN NORMALLY OUT CLOSING OF ANY OF THE THREE BRAKE SENSING SWITCHES CAUSES THE LIGHT TO COME ON AT FULL BRIGHTNESS WHILE THE IGNITION SWITCH IS ON
INSTRUMENT CLUSTER
BRAKE SYSTEM WARNING LIGHT
LOW FUEL WARNING LIGHT
NOTE 5
FUEL GAUGE
FUEL TANK SENSOR
NOTE 3
NOTE 4
PARKING BRAKE SWITCH
BRAKE DIFFERENTIAL PRESSURE SWITCH
BRAKE FLUID SWITCH
WARNING UNIT
NOTE 6
TO ALTERNATOR VIA INSTRUMENT CLUSTER TERMINAL NO. 8 (COORDINATE A1)
NOTE 3: SWITCH CLOSED WITH APPROX 5 GALLONS OR FUEL IN TANK
NOTE 4: RESISTANCE OF SENSOR
FULL TANK - 6Ω
3/4 TANK - 10Ω
1/2 TANK - 28Ω
1/4 TANK - 54Ω
0 TANK - 62Ω



12 13 14 15 16 17



COMPONENT INDEX

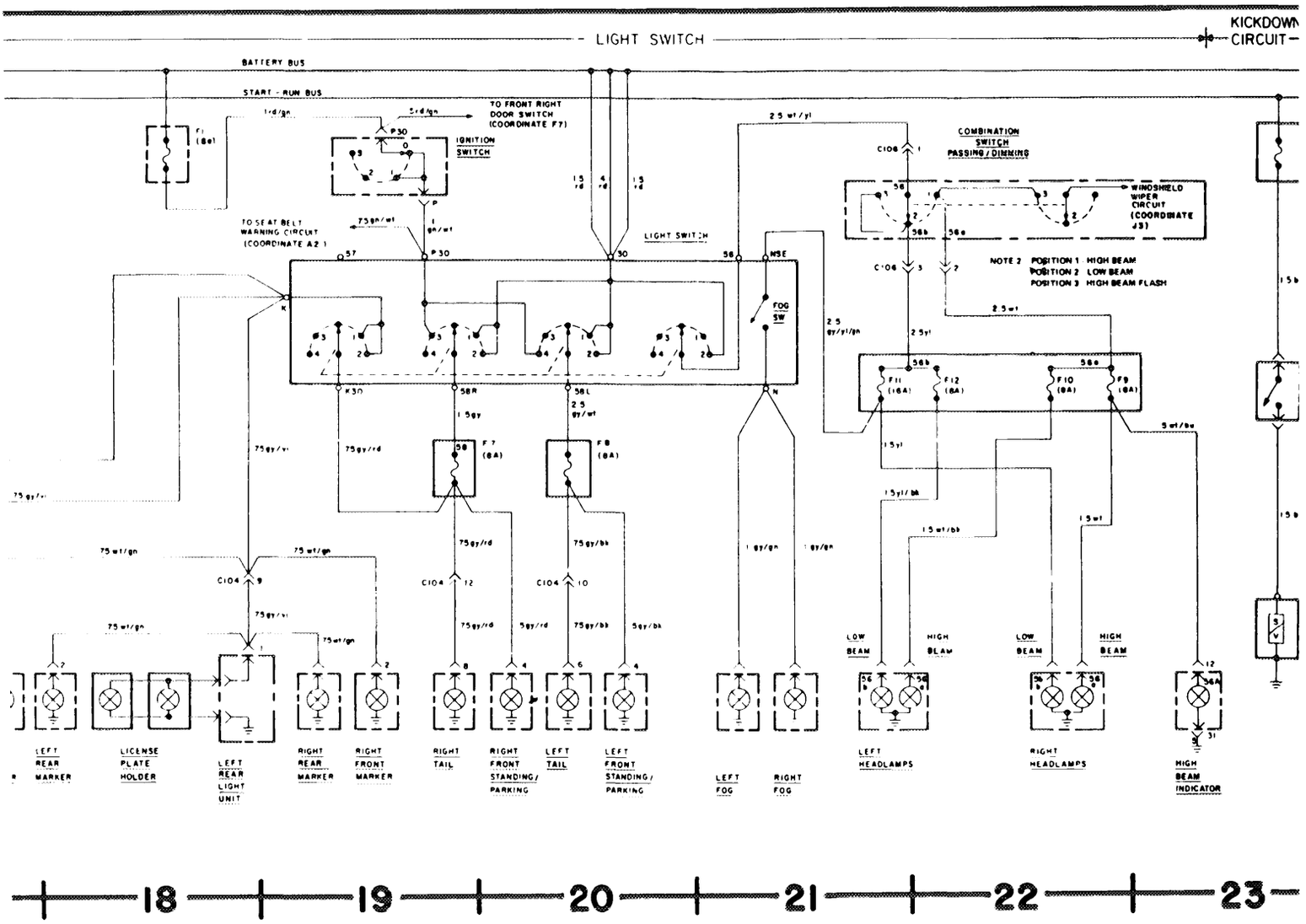
SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO	TERM. FIG. NO
CHARGE			
Regulator	Alternator		
C 105	Firewall		
ELECTRIC WINDOWS			
Front seat switch	Front seat console		T8
Window relay — key 10	Right firewall under fuse bracket		T7
C 108	Console		
GLOW PLUG CIRCUIT			
Preglow indicator light	Instrument panel	10	
Preglow time relay	Under dash, left side	6	
Thermo-time switch (preglow)	Engine block, left side		
AC-Starter Relay Key 4	Right firewall, under fuse bracket		T7
INSTRUMENT CLUSTER			
Brake fluid switch	Reservoir	3	
Coolant temp. sensor	Left front cylinder head		
Fuel tank sensor	Trunk	9	
Parking brake switch	Top parking brake		
C 104 (12 pins)	Under dash, driver's side		T4
INTERIOR LIGHTS			
C 109	Console		
KICKDOWN CIRCUIT			
Switch	Below accelerator pedal	8	
LIGHT SWITCH			
C 104 (12 pins)	Under dash, driver's side		T4
C 106 (14 pins)	Under dash, driver's side	6	T5
SEAT BELT WARNING			
Ignition warning switch	Ignition switch		T12
Warning buzzer	Under dash, driver's side	6	
SLIDING ROOF			
Motor	Behind spare tire		
START			
AC/Starter relay, key 4	Right firewall under fuse bracket		T7

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC. FIG. NO	TERM. FIG. NO.
TRUNK LIGHT			
C 104 (12 pins)	Under dash, driver's side		T4
TURN SIGNAL AND FLASHER			
Flasher relay	Under dash, driver's side	6	T6
C 104 (12 pins)	Under dash, driver's side		T4
C 106 (13 pins)	Under dash, driver's side	6	T5

1 – A/C Blo

1 – Change

1 – Main fu
2 – Heater
3 – Brake
4 – Wiper



LOCATION FIGURES

Fig. 1
1 - A/C Blower motor

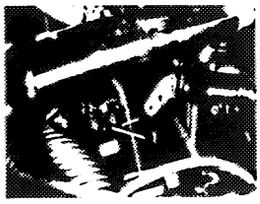


Fig. 2
1 - Change over switch for blower motors

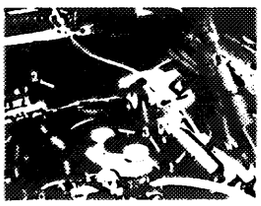


Fig. 3
1 - Main fuse box
2 - Heater blower pre resistors
3 - Brake fluid switches
4 - Wiper motor

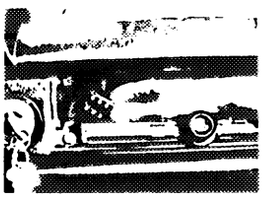


Fig. 4
1 - C 113

Fig. 5
1 - Temperature switch, refrigerant

Fig. 6
1 - Door and seat belt warning buzzer
2 - Turn signal flasher relay
3 - C106
4 - Cruise control amplifier
5 - Rear window heater delay relay
6 - Speed sensor
7 - Preglow time relay

Fig. 7
1 - C112

Fig. 8
1 - Kickdown switch

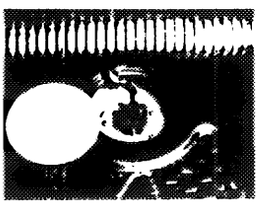
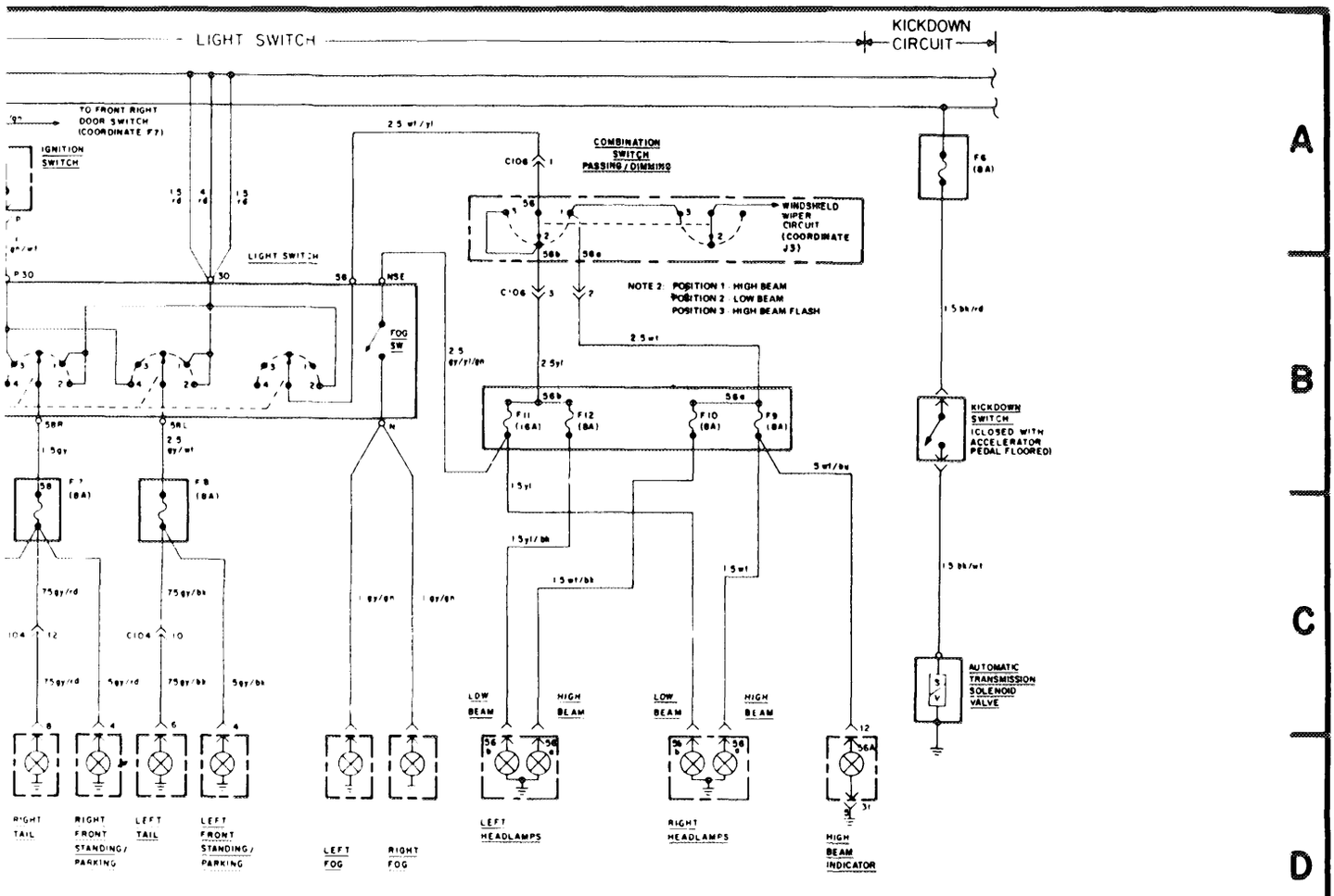


Fig. 9
Fuel tank sensor

Fig. 10

AIR COND
AUXILIAR
CHARGE
CIGAR LI
CLOCK
COOLANT
CRUISE C
FUEL GAU
HEATED
HEATER
HORNS
KICKDOW
LIGHT CI
AIR CO
ASH TR
BACKU
BRAKE
BRAKE
FOG
GLOVE
HEAD
INSTRU
INTERI
LOW FU
MARKE
PARKIN
STAND
TAIL
TRUNK
POWER A
PREGLOW
RADIO
SEAT BEL
SLIDING
START
TURN SIG
WINDOW
WINDSHI

POWER B
SPECIAL



LOCATION FIGURES

Fig. 4

Fig. 7
1 - C112

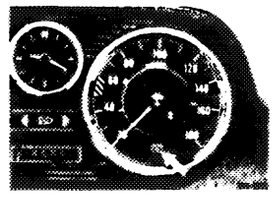


Fig. 10

Fig. 5
switch, refrigerant

Fig. 8
1 - Kickdown switch

Fig. 6
t belt warning buzzer
asher relay

l amplifier
heater delay relay

relay

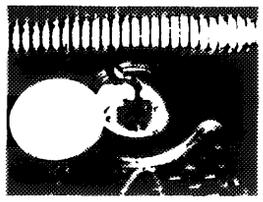
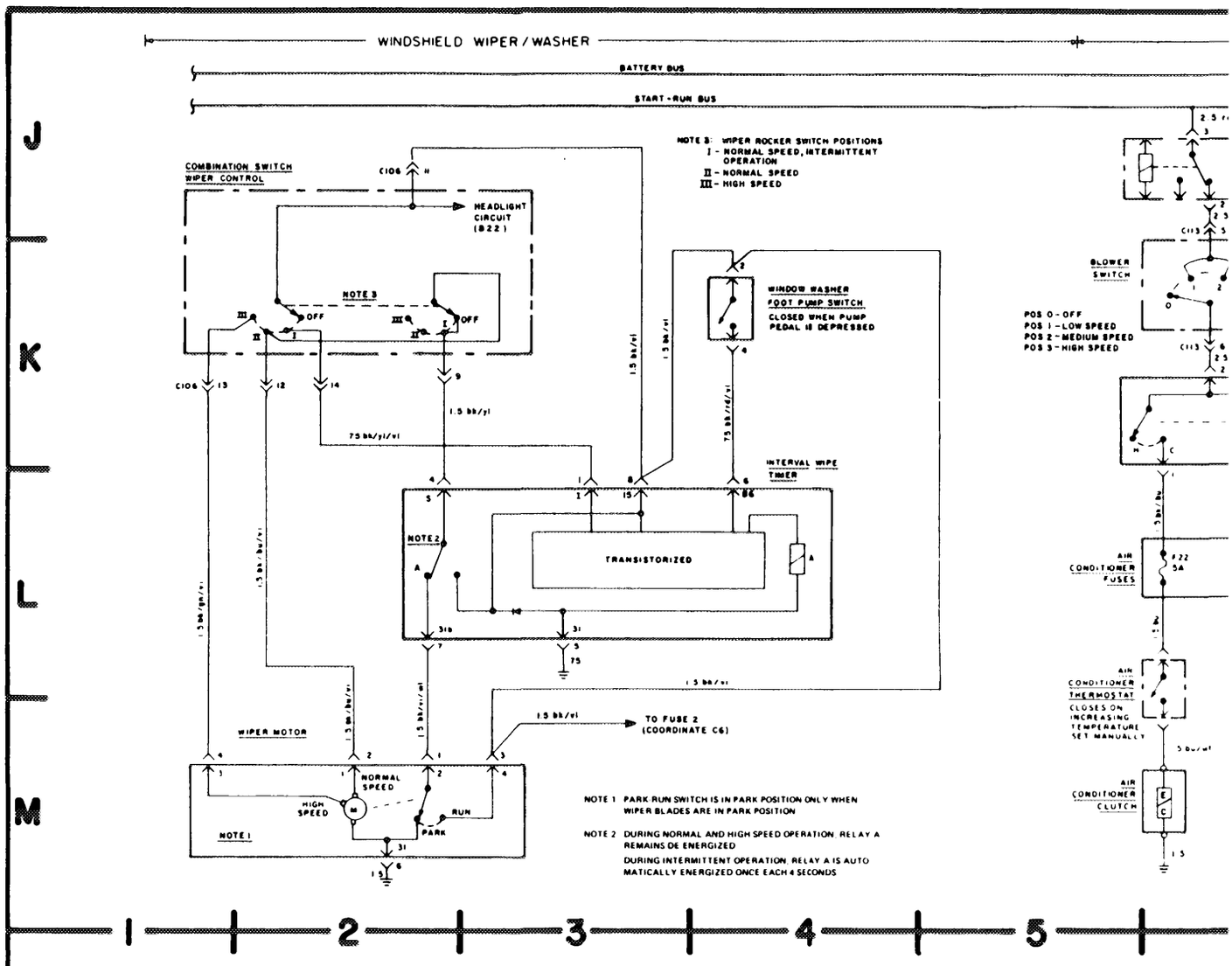
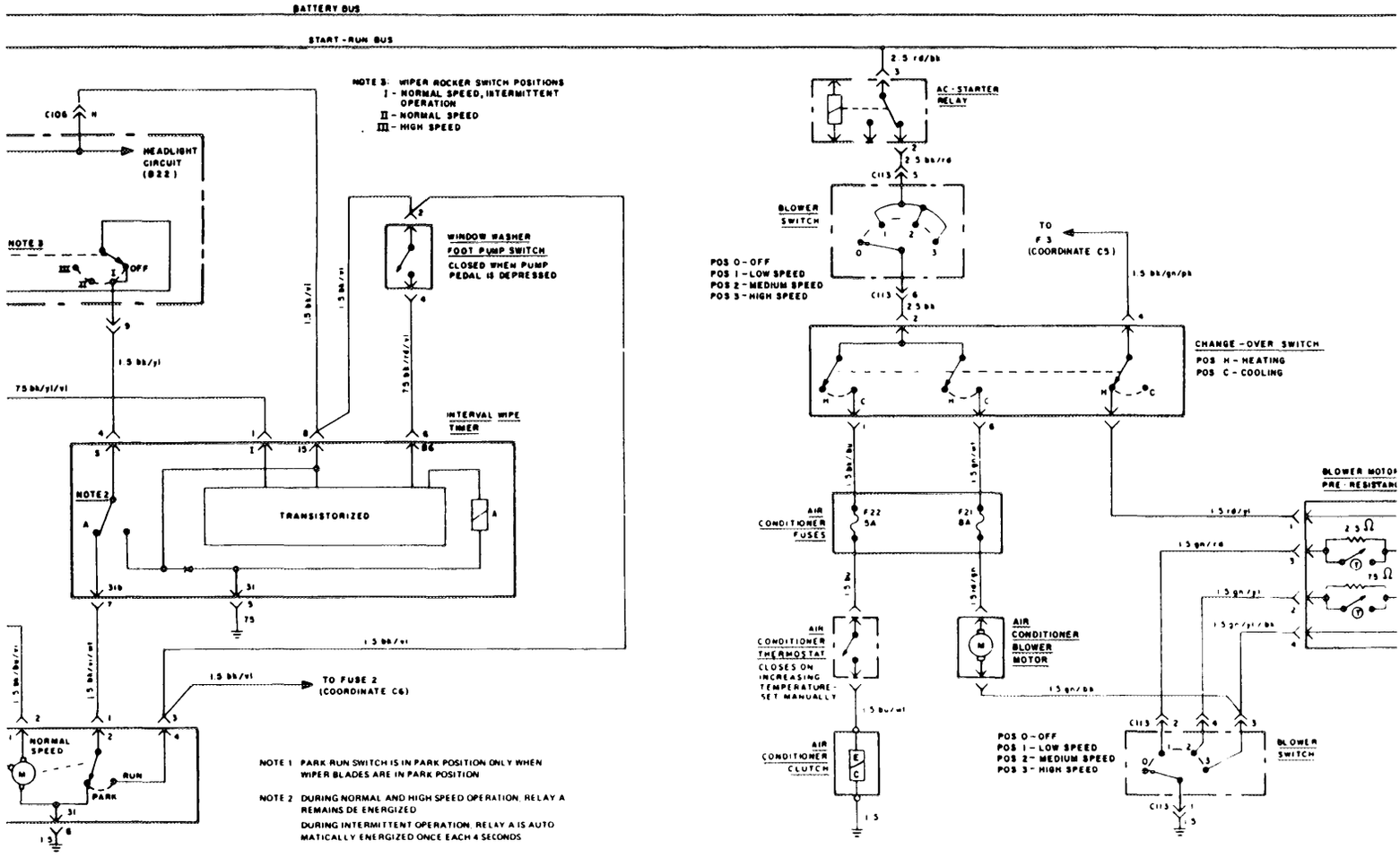


Fig. 9
Fuel tank sensor

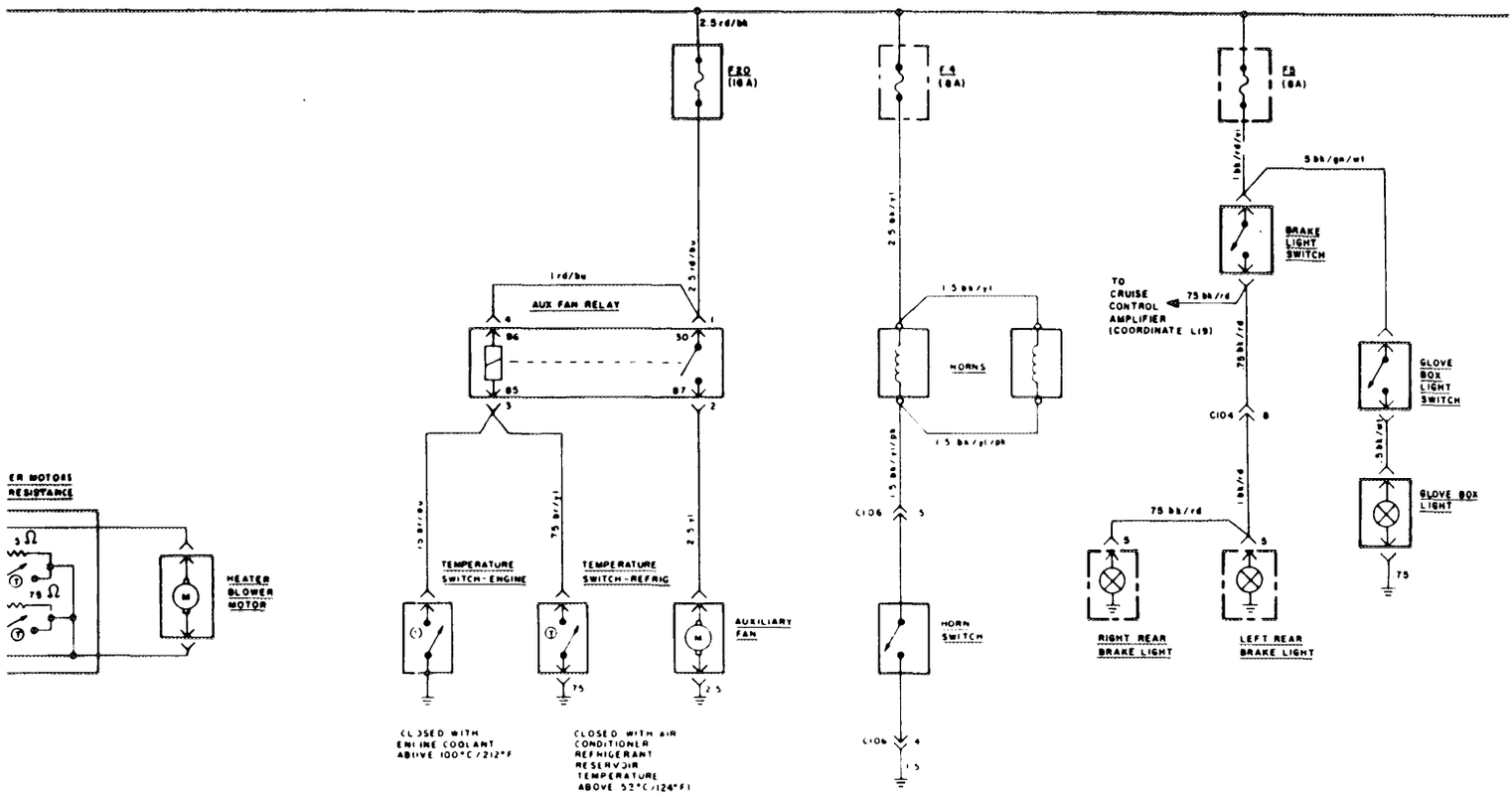
1976 300 D

MBNA/MBC ETM 1410
Printed in U.S.A.


WINDSHIELD WIPER / WASHER
BATTERY BUS
START-RUN BUS
COMBINATION SWITCH
WIPER CONTROL
C106
HEADLIGHT CIRCUIT (B22)
NOTE 3
OFF
NOTE 3: WIPER ROCKER SWITCH POSITIONS
I - NORMAL SPEED, INTERMITTENT OPERATION
II - NORMAL SPEED
III - HIGH SPEED
WINDOW WASHER
FOOT PUMP SWITCH
CLOSED WHEN PUMP PEDAL IS DEPRESSED
INTERVAL WIPE TIMER
TRANSISTORIZED
NOTE 2
WIPER MOTOR
NORMAL SPEED
HIGH SPEED
RUN
PARK
NOTE 1
TO FUSE 2 (COORDINATE C6)
NOTE 1 PARK-RUN SWITCH IS IN PARK POSITION ONLY WHEN WIPER BLADES ARE IN PARK POSITION
NOTE 2 DURING NORMAL AND HIGH SPEED OPERATION RELAY A REMAINS DE ENERGIZED
DURING INTERMITTENT OPERATION RELAY A IS AUTO MATICALLY ENERGIZED ONCE EACH 4 SECONDS
BLOWER SWITCH
POS 0 - OFF
POS 1 - LOW SPEED
POS 2 - MEDIUM SPEED
POS 3 - HIGH SPEED
AIR CONDITIONER FUSES
#22 5A
AIR CONDITIONER THERMOSTAT
CLOSES ON INCREASING TEMPERATURE SET MANUALLY
AIR CONDITIONER CLUTCH



2 3 4 5 6 7



8 — 9 — 10 — 11 — 12 — 13

SY
COM

AIR CONDITI
AC Blower m
AC/Starter re

Change-over :
Fuse 21 (AC t
Fuse 22 (AC c
Heater blower
preresistor
C 113 (6 pins)

AUXILIARY F
Aux. fan relay
Fuse 20 (aux
Temp. switch
Temp. switch

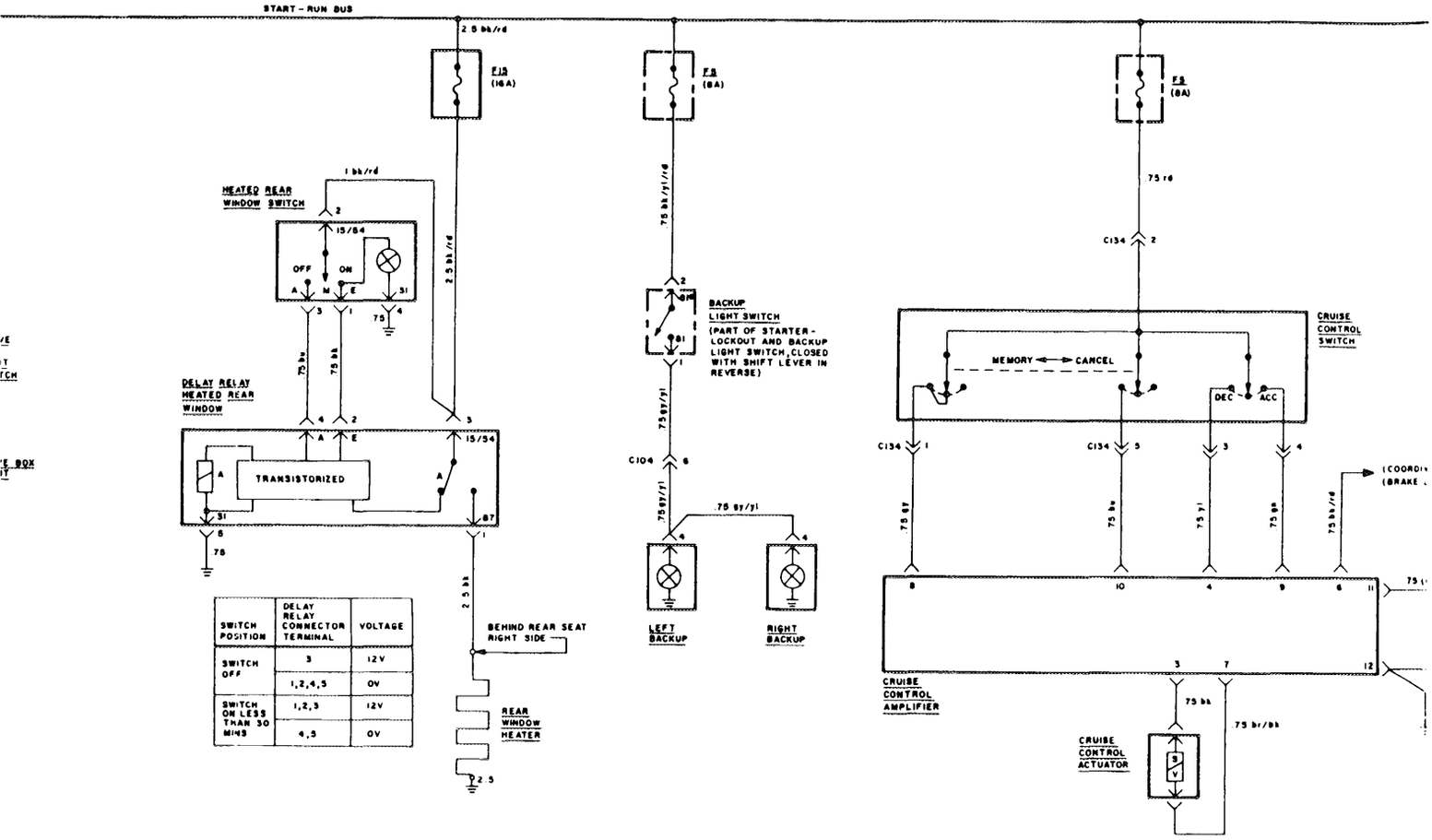
BACKUP
C 104 (12 pins

BRAKE LIGH
Switch
C 104 (12 pins

CRUISE CONT
Amplifier
Speed sensor
Throttle actuat

HEATED REA
Time delay rel
Fuse 19 (wind
C 112

HORNS
C 106 (14 pins)



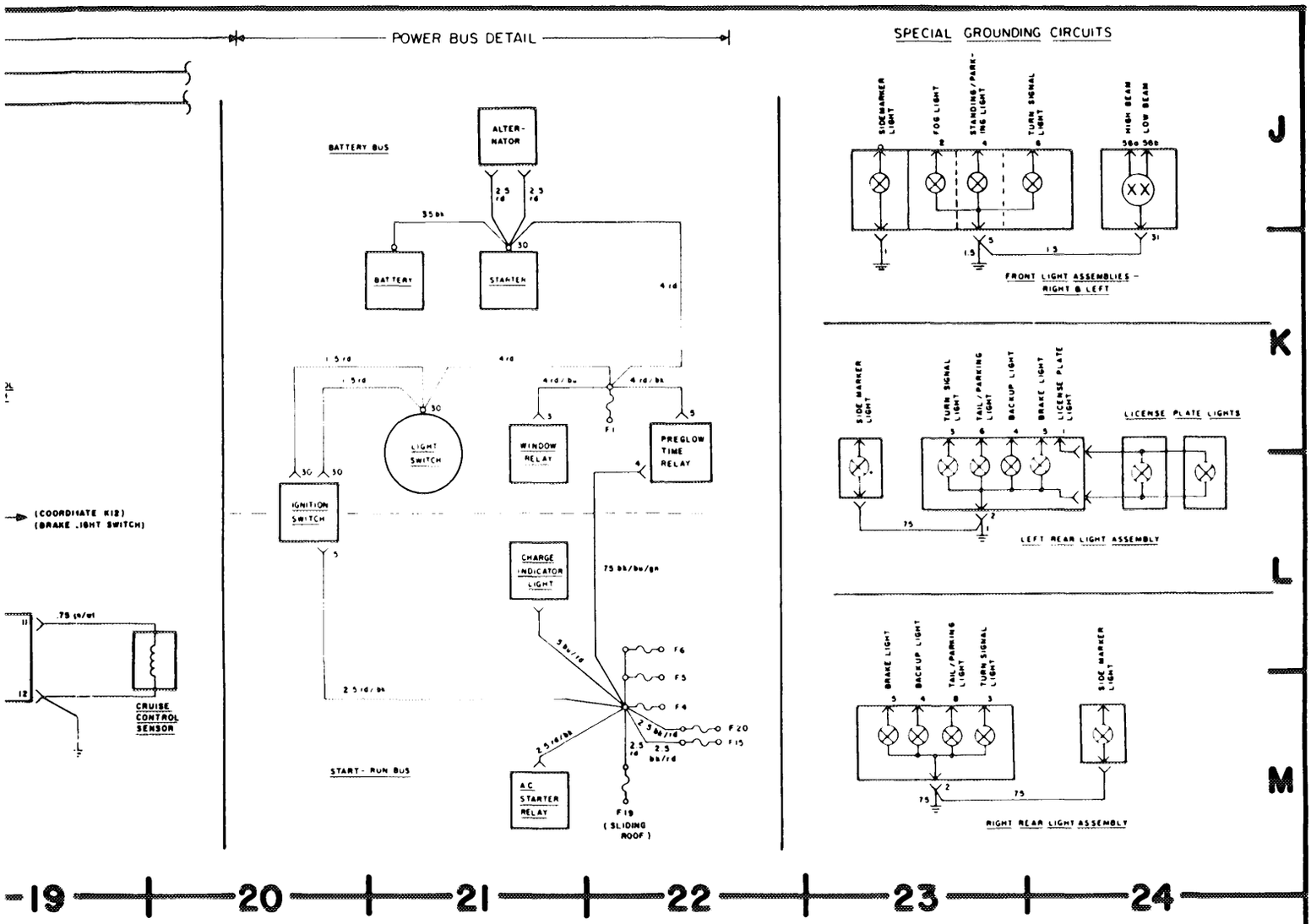
SWITCH POSITION	DELAY RELAY CONNECTOR TERMINAL	VOLTAGE
SWITCH OFF	3	12V
	1,2,4,5	0V
SWITCH ON LESS THAN 30 MINS	1,2,3	12V
	4,5	0V

14 15 16 17 18 19

COMPONENT INDEX

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
R CONDITIONING/HEATING			
C Blower motor	Center of console	1	
C/Starter relay, key 4	Right firewall under fuse bracket		T7
hange-over switch	Console, left side	2	
use 21 (AC blower)	Right firewall — aux. box		
use 22 (AC clutch)	Right firewall — aux. box		
eater blower motor	Forward of AC blower	3	
preresistor			
113 (6 pins)	Mounted to heater control lever plate	4	T2
UXILIARY FAN			
ux. fan relay, key 6	Below radio fuse		
use 20 (aux. fan)	Left fender — aux. box		
mp. switch — engine	Thermostat housing		
mp. switch — refrigerant	Right firewall	5	
ACKUP			
104 (12 pins)	Under dash — driver's side		T4
RAKE LIGHTS			
vitch	Above brake pedal		
104 (12 pins)	Under dash — driver's side		T4
RUISE CONTROL			
nplifier	Under dash, driver's side	6	
eed sensor	Under dash, driver's side	6	
rottle actuator	Right fender, near hood spring		
ATED REAR WINDOW			
e delay relay	Under dash — driver's side	6	T14
se 19 (window)	Left fender — aux. box		
12	Behind rear seat — right side	7	
RNS			
06 (14 pins)	Under dash — driver's side	6	T5

SYSTEM/ COMPONENT	LOCATION ON VEHICLE	LOC FIG NO	TERM FIG NO
WINDSHIELD WIPER/WASHER			
Interval wipe timer	Under dash — driver's side		T10
Motor	Firewall — left side	3	
C 106 (14 pins)	Under dash — driver's side	6	T5



LOCATION FIGURES

FUSE DATA

Fuse 1 (8 amps)
Clock
Flasher
Interior lights
Key Buzzer
Trunk light

Fuse 2 (16 amps)
Cigar lighter
Windshield wiper/washer
Radio

Fuse 3 (5 amps)
Heater blower motor
A/C control light

Fuse 4 (8 amps)
Turn signal
Horns

Fuse 5 (8 amps)
Backup lights
Brake lights
Glove box light
Instrument cluster
Seat belt warning
Window control
Cruise control

Fuse 6 (8 amps)
Kickdown circuit

Fuse 7 (8 amps)
A/C thermostat illumination
Flasher illumination
Front standing/parking (right)
Instrument cluster lights
Left and right marker lights
License plate light
Tail light (right)
Ash tray light

Fuse 8 (8 amps)
Front standing parking (left)
Left tail light

Fuse 9 (8 amps)
High beam indicator
Right head lights, high beam

Fuse 10 (8 amps)
Left headlight, high beam

Fuse 11 (16 amps)
Fog lights
Right head light, low beam

Fuse 12 (8 amps)
Left head light, low beam

Fuse 13 (8 amps)
Not used

Fuse 14 (8 amps)
Not used

Fuse 15 (16 amps)
Heated rear window

Fuse 16
Not used

Fuse 17 (16 amps)
Left front window
Right rear window

Fuse 18 (16 amps)
Left rear window
Right front window

Fuse 19 (16 amps)
Sliding roof

Fuse 20 (16 amps)
Auxiliary fan motor
Auxiliary fan relay

Fuse 21 (8 amps)
A/C Blower motor

Fuse 22 (5 amps)
Air conditioner clutch

1976 300 D