

CIRCUIT INDEX

1980 BMW 320i

SECTION 4

1980

SCHEMATIC/WIRING DIAGRAM

CIRCUIT	PAGE
AIR CONDITIONING	4-7
AUXILIARY FAN	4-7
CHARGE	4-3
CIGAR LIGHTER	4-4
CLOCK/TACH	4-11
DIAGNOSTIC CONNECTOR	4-1B
FUEL DELIVERY	4-3
FUSE DESIGNATIONS	4-1A
HEATER	4-7
HORNS	4-11
IGNITION SYSTEM	4-3
INSTRUMENTS	4-4
LIGHTS	
BACKUP	4-8
BRAKE	4-11
FLASHLIGHT	4-4
FOG	4-8
GLOVE BOX	4-4
HAZARD	4-11
HEADLIGHTS	4-8
INTERIOR	4-4
PANEL	4-8
PARKING	4-8
TURN	4-11
WARNING	4-4
POWER MIRROR	4-7
RADIO	4-11
REAR WINDOW HEATER	4-7
START	4-3
WARNING BUZZER	4-4
WINDSHIELD WIPER/WASHER	4-11
DISTRIBUTION BOX	4-1B
POWER DISTRIBUTION	4-13
GROUND BUS DETAIL	4-12

FUSE DATA

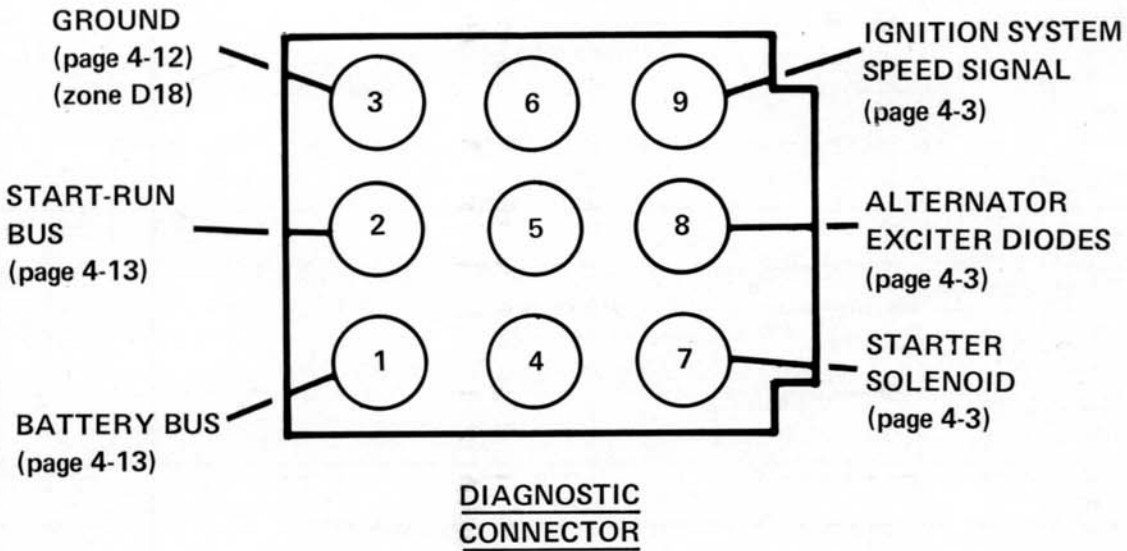
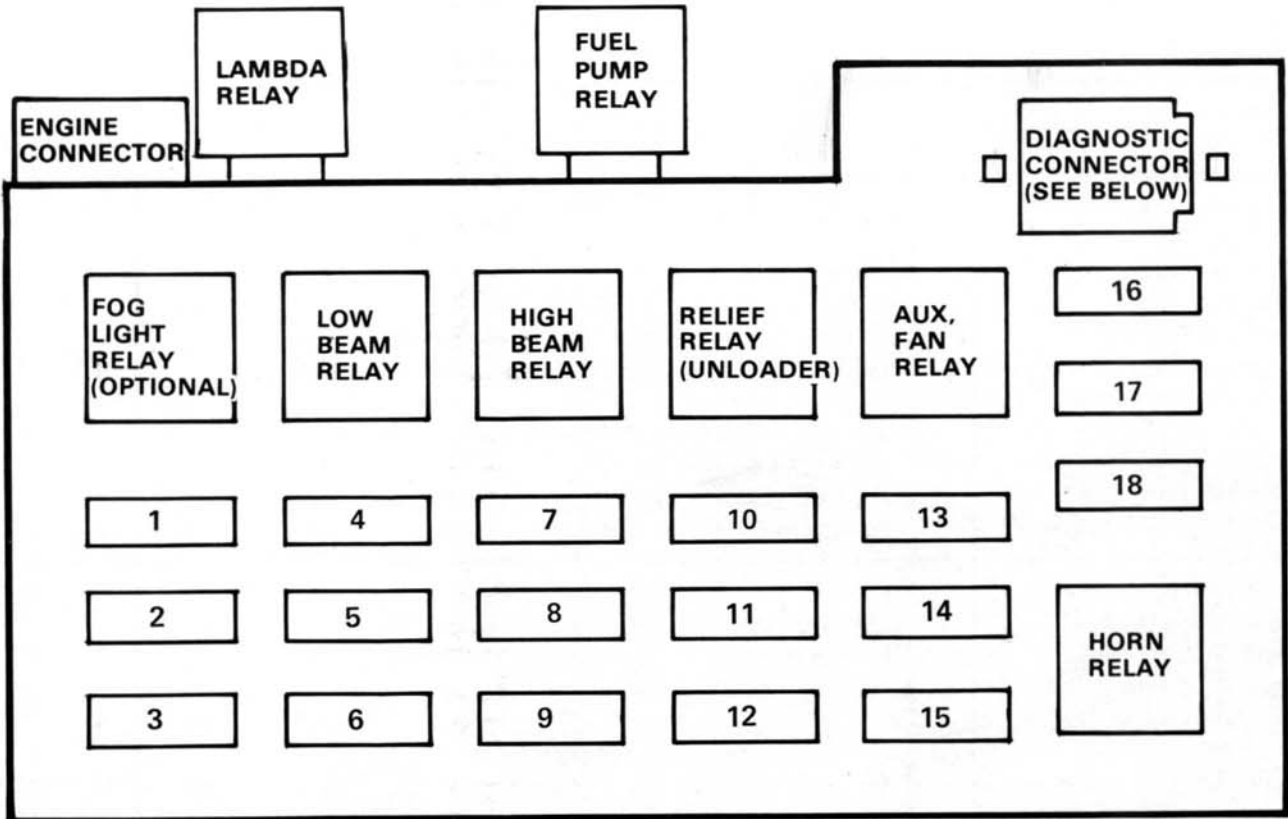
1980 BMW 320i

FUSE NUMBER	SIZE AND COLOR	CIRCUIT PROTECTED	SCHEMATIC PAGE
1	8A (wt)	Right fog light (optional)	4-8
2	8A (wt)	Left fog light (optional)	
3	16A (rd)	Fuel delivery and Lambda control	4-3
4	8A (wt)	Right low beam	4-8
5	8A (wt)	Left low beam	
6	8A (wt)	Right front parking light Right rear marker and tail lights License plate lights Under-hood light Instrument panel lights	
7	16A (rd)	High beams	
8	16A (rd)		
9	8A (wt)	Left front parking light Left rear marker and tail lights	
10	16A (rd)	Heated rear window	
11	25A (bu)	Heater and cooling blowers Auxiliary fan relay	
12	8A (wt)	Brake lights Radio Tachometer display	4-11
13	25A (bu)	Auxiliary fan motor	4-7
14	8A (wt)	Backup lights	4-8
		Warning display Instruments	4-4
15	16A (rd)	Horn Windshield wiper and washer	4-11
		Power mirror	4-7
16	16A (rd)	Cigar lighter	4-4
17	8A (wt)	Warning buzzer Interior lights	
		Clock Hazard lights	4-11
18	spare	None connected	

DISTRIBUTION BOX

1980 BMW 320i

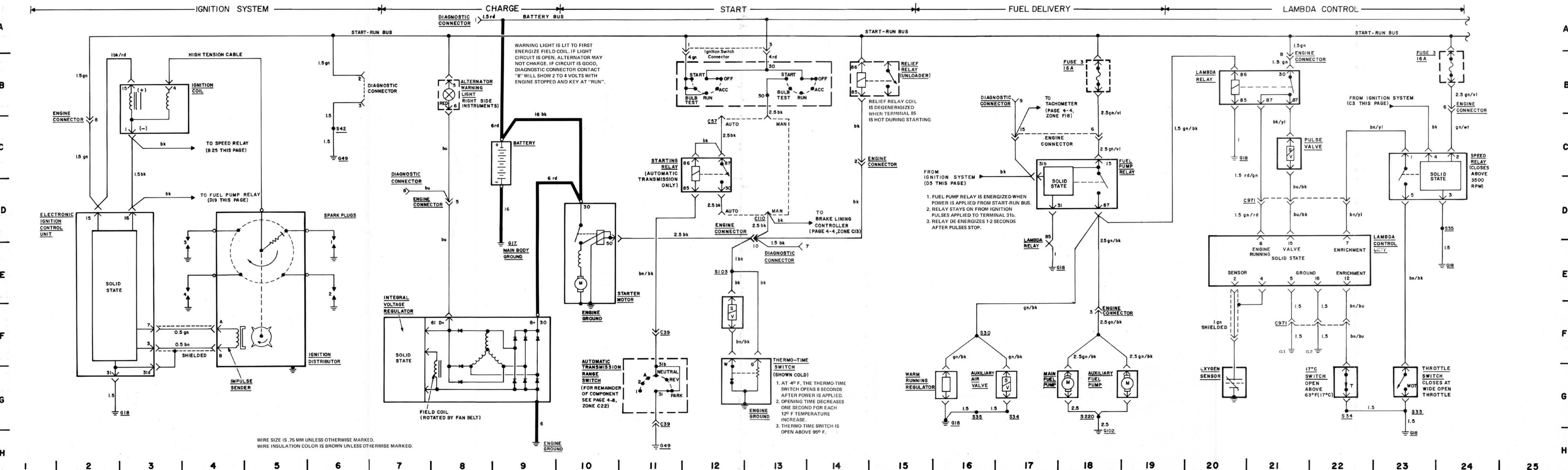
← FRONT
OF CAR



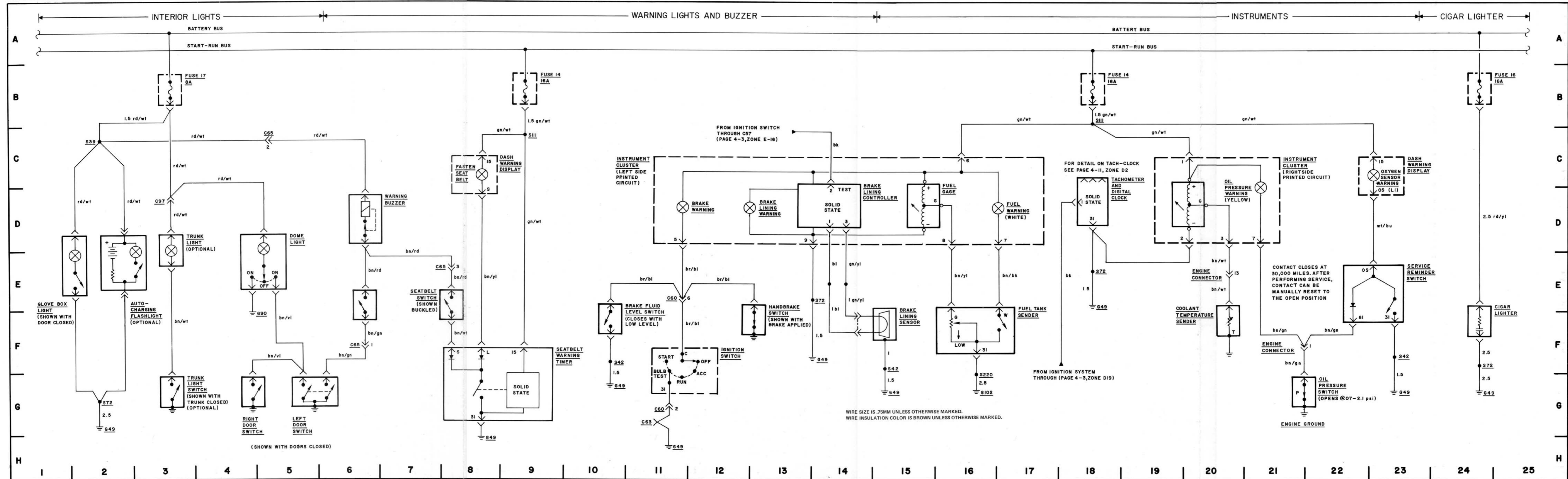
COMPONENT INDEX

1980 BMW 320i

COMPONENT	LOCATION	PHOTOGRAPH
Ignition System Coil Control Unit Distributor	On right front fender, near distributor On left front fender, behind shock tower On engine, right rear	1
Charge Alternator Warning Light	On engine, left front, near battery In instrument panel, upper RH side	
Start Starter motor Battery Ignition Switch Starting Relay Auto Trans. Range Switch Cold Start Valve Thermo-Time Switch Relief Relay (Unloader)	On engine, left rear Left front, behind headlights In steering column (Black connector left of column) Under dash, left of pedal hanger On gear select lever mounting plate (Auto trans. only) On right side of air collector In coolant outlet housing, top front of engine In distribution box (see page 4-1B)	5 11 7 3
Fuel Delivery Fuel Pump Relay Main Fuel Pump Aux. Fuel Pump Warm-Running Reg- ulator Aux. Air Valve	On distribution box (see page 4-1B) Under rear of car, to right of differential In tank, accessible below rear seat, right side On engine, left side, below starter On engine, above No. 2 intakeport	11
Lambda Control Lambda Relay Pulse Valve Lambda Control Unit Speed Relay Oxygen Sensor Switch (17°C) Throttle Switch	On distribution box (see page 4-1B) On fuel metering unit, under No. 1 intakeport Top of glove box On fire wall, behind engine, left of center In exhaust manifold, connector on right front fender, below coil On engine lifting bracket, above water pump Under air collector, on support	3 11
Connectors Engine Connector Diagnostic Connector C57 (1-pin in-line) C110 (1-pin in-line) C20f (4-pin rectangular) C971 (9-pin square)	15-pin rectangular, on distribution box (see page 4-1B) 9-pin square, in distribution box (see page 4-1B) Lower left instrument panel area Lower left instrument panel area (above C57) In distribution box Above glove box	12 4
Grounds G1 and G2 G17 (Main body ground) G18 (Engine ground) G49 G102	On engine, at rear of head, below distributor On battery mounting base, left side On engine, forward of starter On body electrical bracket, ahead of wiper control unit Rear parcel shelf, left side	12



WIRE SIZE IS .75 MM UNLESS OTHERWISE MARKED.
 WIRE INSULATION COLOR IS BROWN UNLESS OTHERWISE MARKED.



COMPONENT INDEX

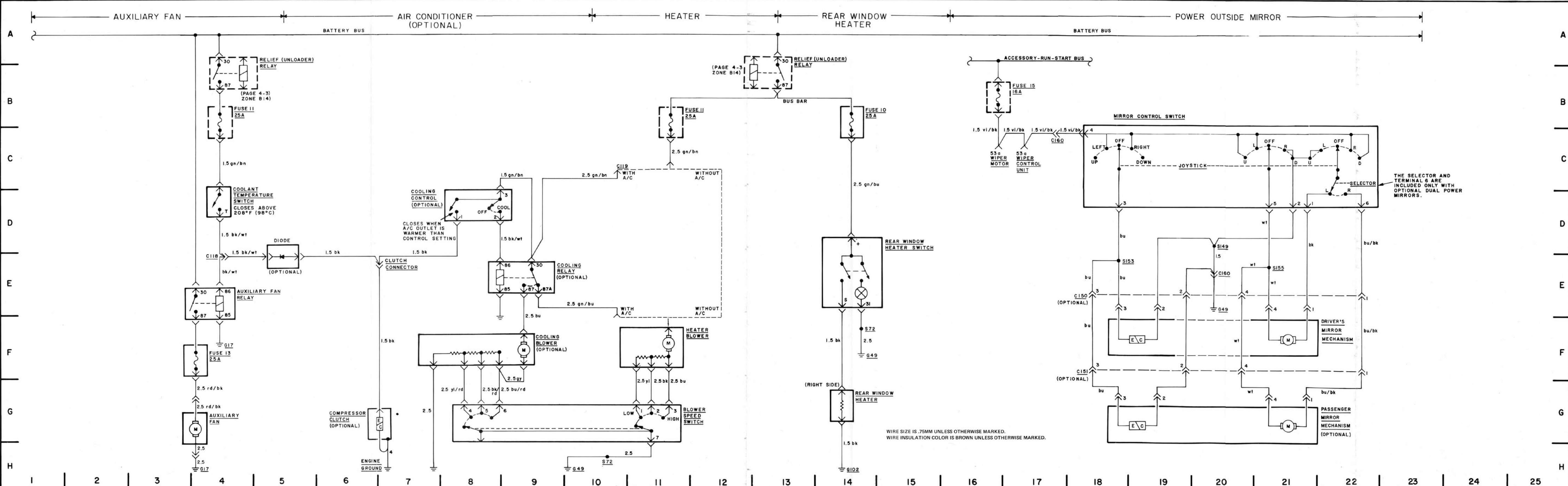
1980 BMW 320i

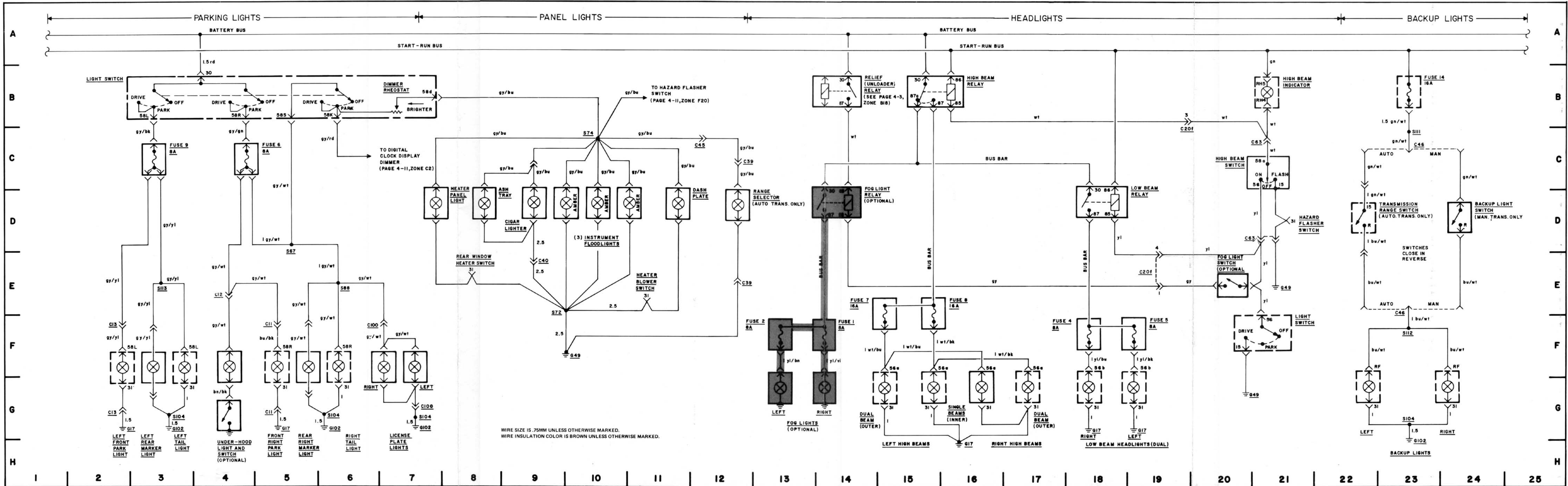
COMPONENT	LOCATION	PHOTOGRAPH
Interior Lights Glovebox Light Autocharge Flashlight Dome Light Trunk Light and switch Door Switches	In glovebox On left interior surface of glovebox door In center of roof In trunk lid, behind latch In body, between hinges	
Warning Lights and Buzzer Warning Buzzer Ignition Key Switch Dash Warning Display Seatbelt Warning Timer Brake Fluid Level Switch Hand Brake Switch Seat Belt Switch Ignition Switch	In steering column Attached to ignition switch, in steering column On right side of dash (with pigtail connector) Lower left instrument panel On top of brake fluid reservoir, on left front fenderwell At rear of hand brake lever under protective boot In driver's seat belt latch assembly In steering column, with pigtail connector	12 12
Instruments Fuel Gauge Fuel Warning Fuel Tank Sender Tachometer/Clock Temperature Gauge Oil Warning Coolant Temperature Sender Oil Pressure Switch Dash Warning Display Service Reminder Switch Brake Lining Sensor	Left side of instrument cluster In fuel gauge Below cover plate under rear seat (right side) Center of instrument cluster Right side of instrument cluster Above temperature gauge Top front of engine, in coolant connection flange Left rear end of cylinder head Right side of dash (with pigtail connector) Left inner fender well Left front wheel, in brake pad, with pigtail connector	7 11 10
Cigar Lighter Cigar Lighter	In console	
Connectors Engine Connector (15-pin rectangular) C65 (5-pin round) C97 (1-pin rectangular)	On distribution box (see page 4-13) Lower left instrument panel Trunk lid, at left hinge	5
Grounds G49 G102 G90	On body electrical bracket, ahead of wiper control unit Rear parcel shelf, left side In left center post, below shoulder harness anchor	12

COMPONENT INDEX

1980 BMW 320i

COMPONENT	LOCATION	PHOTOGRAPH
Auxiliary Fan Auxiliary Fan Auxiliary Fan Relay Coolant Temperature Switch Relief Relay (Unloader)	Ahead of radiator, with pigtail connector On distribution box (see page 4-1B) On bottom left side of radiator In distribution box (see page 4-1B)	
Air Conditioner* Cooling Control* Cooling Blower* Cooling Relay* Diode* Blower Speed Switch Compressor Clutch*	In center console In center console On dash brace under left side dash (later production - right side) Above A/C compressor In center console On front of A/C compressor, with pigtail connector	
Heater Heater Blower Blower Speed Switch	In center cowl frame, behind firewall cover panel In center dash	
Rear Window Heater Rear Window Heater Switch Rear Window Heater	Left side of dash Integral with rear window glass	
Power Outside Mirror Mirror Control Switch Mirror Mechanism	In driver's door Integral with external mirror	
Connectors C60 (6-pin rectangular) Engine Connector (15-pin) C20m (single pin) C119 (single pin) C118 C160 (2-pin)	Ignition switch connector, under left side of dash Inside distribution box Inside distribution box In center console, at heater blower connector Above A/C compressor In left kick panel	12 4, 8 4
Grounds G17 (Main body ground) G18 (Engine ground) G49 G102 *(optional equipment)	Left side of battery mounting base On engine, just forward of starter On body electrical bracket, ahead of wiper control unit Rear parcel shelf, left side	12





WIRE SIZE IS .75MM UNLESS OTHERWISE MARKED.
 WIRE INSULATION COLOR IS BROWN UNLESS OTHERWISE MARKED.

COMPONENT INDEX

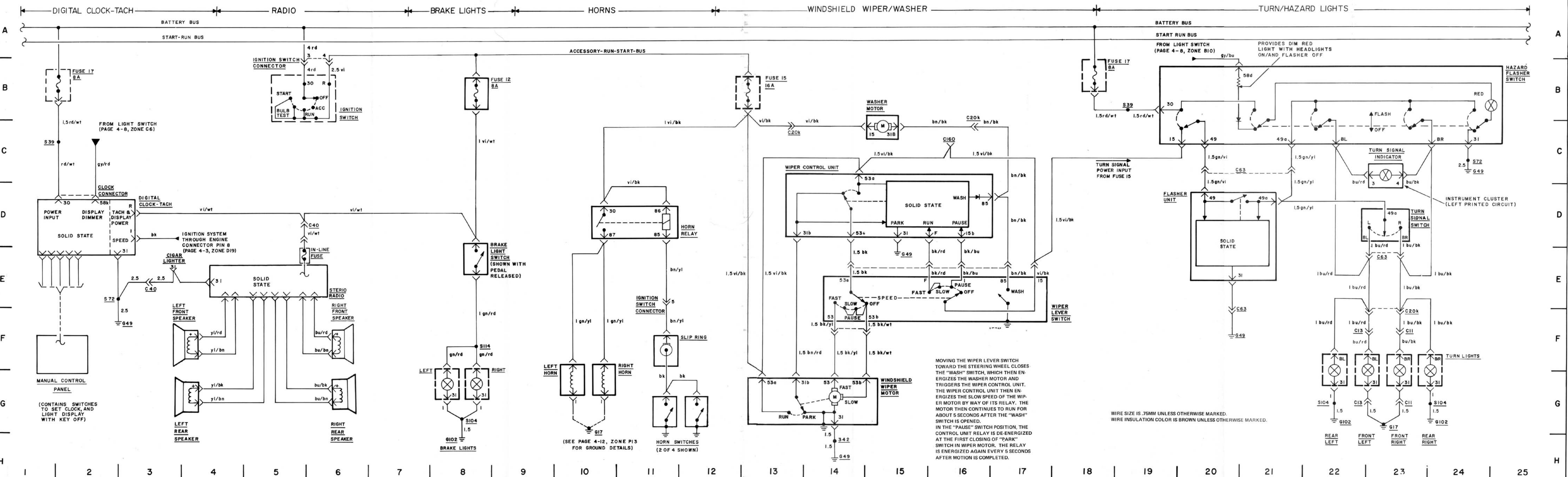
1980 BMW 320i

COMPONENT	LOCATION	PHOTOGRAPH
Parking Lights Light Switch Under-hood Light* Under-hood Light Switch*	On dash, left of steering column Under hood, right rear Under right rear corner of hood	
Panel Lights Instrument Flood Lights	In dash, above instrument cluster	
Headlights Light Switch High Beam Switch High Beam Relay Low Beam Relay High Beam Indicator Fog Light Switch* Fog Light Relay*	On dash, left of steering column On left side of steering column (combined with turn signal switch). Connector C63 mounted on body electrical bracket, above driver's kick panel. On distribution box (see page 4-1B) On distribution box (see page 4-1B) Right side of instrument cluster On lower dash, left of steering column On distribution box (see page 4-1B)	12 3
Backup Lights Automatic Transmission Range Switch* Manual Transmission Backup Light Switch	On gear selector mounting plate Rear of transmission	6
Connectors C20f (4-pin rectangular) C39 (9-pin rectangular)* C45 (2-pin in-line) C47 (3-pin rectangular) C69 (2-pin rectangular) C46 (2-pin rectangular) C63 (12-pin rectangular)	Inside distribution box On gear select mounting plate On body electrical bracket Below lower left instrument panel Behind heater control panel In center console, forward of shift lever On body electrical bracket, above driver's kick panel	4 12 12
Grounds G17 (Main body ground) G49 G102	Left side of battery mounting base Below lower left instrument panel Rear parcel shelf, left side	5
*(optional equipment)		

COMPONENT INDEX

1980 BMW 320i

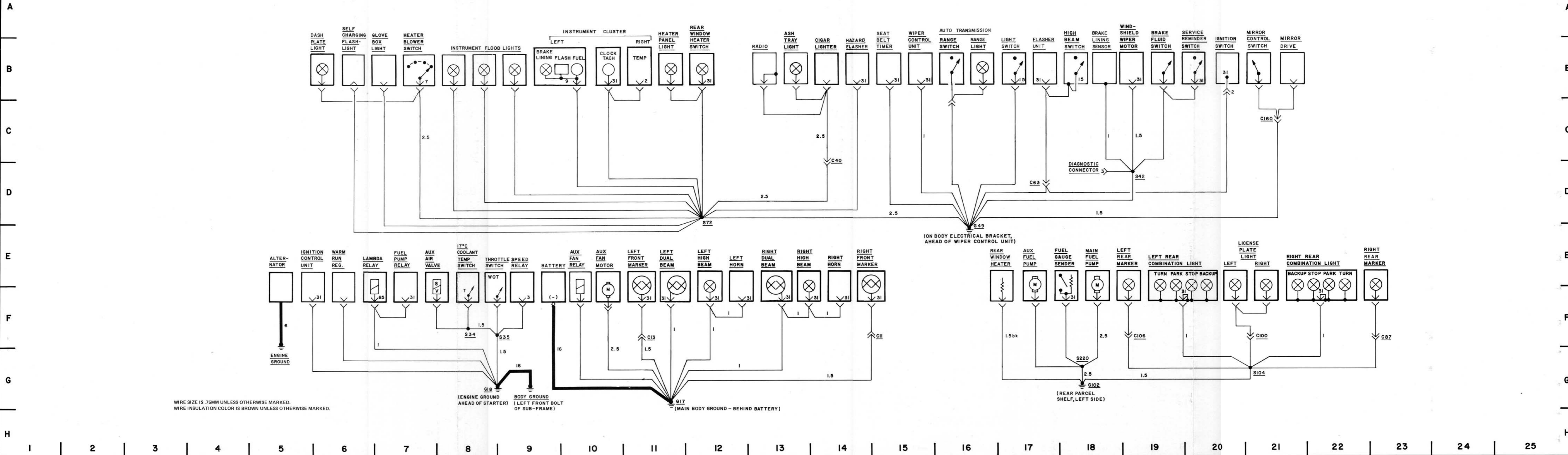
COMPONENT	LOCATION	PHOTOGRAPH
Digital Clock-Tachometer Clock-Tach Manual Control Panel	In instrument cluster Below instrument cluster	13
Radio Stereo Radio	In center console, with in-line fuse	13
Brake Lights Brake Light Switch	At top of brake pedal hanger	12
Horns Horn Relay Horns Horn Switches Slip Ring	On distribution box (see page 4-1B) Behind grille below front bumper Spokes of steering wheel In steering column, below wheel	
Windshield Wiper/Washer Wiper Control Unit Wiper Lever Switch Windshield Wiper Motor Washer Motor	On body electrical bracket, above driver's kick panel On right side of steering column In center cowl frame, behind firewall cover panel On front of washer fluid reservoir, at right front fender well	12 12
Turn and Hazard Lights Hazard Flasher Switch Flasher Unit Turn Signal Switch	In center dash In steering column, below ignition switch On left side of steering column (combined with high beam switch)	
Connectors C11 (5-pin) C13 (5-pin) C20k (9-pin rectangular) C40 (4-pin rectangular) C60 (6-pin rectangular) C63 (12-pin rectangular)	Behind front turn/park light Behind left front turn/park light Below distribution box In center console Below lower left instrument panel Below lower left instrument panel	4 12 12
Grounds G17 (Main body ground) G49 G102	Left side of battery mounting base On body electrical bracket, ahead of wiper control unit Rear parcel shelf, left side	12



MOVING THE WIPER LEVER SWITCH TOWARD THE STEERING WHEEL CLOSSES THE "WASH" SWITCH, WHICH THEN ENERGIZES THE WASHER MOTOR AND TRIGGERS THE WIPER CONTROL UNIT. THE WIPER CONTROL UNIT THEN ENERGIZES THE SLOW SPEED OF THE WIPER MOTOR BY WAY OF ITS RELAY. THE MOTOR THEN CONTINUES TO RUN FOR ABOUT 5 SECONDS AFTER THE "WASH" SWITCH IS OPENED. IN THE "PAUSE" SWITCH POSITION, THE CONTROL UNIT RELAY IS DE-ENERGIZED AT THE FIRST CLOSING OF "PAUSE" SWITCH IN WIPER MOTOR. THE RELAY IS ENERGIZED AGAIN EVERY 5 SECONDS AFTER MOTION IS COMPLETED.

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GROUND BUS DETAILS



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 WIRE INSULATION COLOR IS BROWN UNLESS OTHERWISE MARKED.

POWER DISTRIBUTION

