

CIRCUIT INDEX

1981/1983 BMW 320i

SECTION 4 1981/1982 SCHEMATIC/WIRING DIAGRAMS

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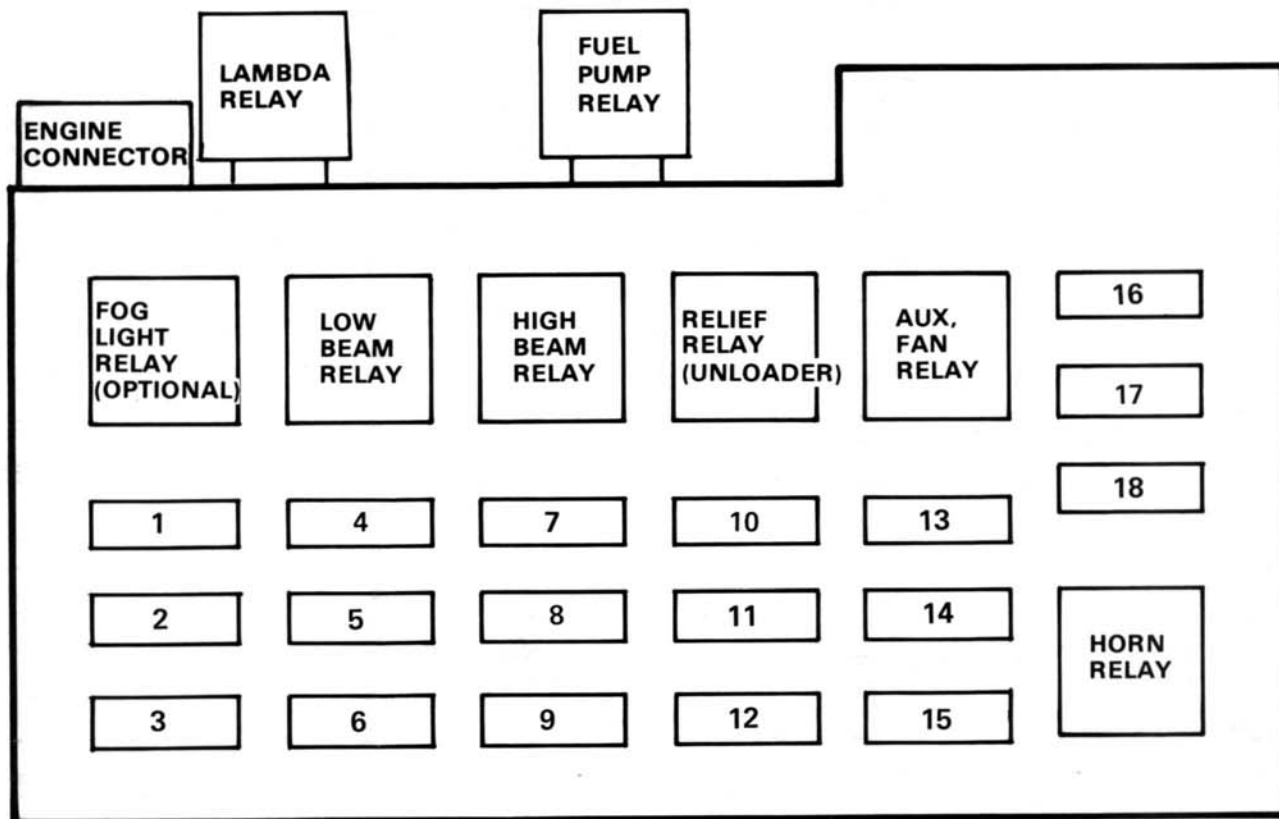
FUSE DATA

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)	Lambda control fuel delivery	4-3
4	8A (wt)	Right low beam	4-8
5	8A (wt)	Left low beam	
6	8A (wt)	Right front parking light Right tail lights, right rear marker License plate lights Under-hood light	
7	16A (rd)	Left high beam	
8	16A (rd)	Right high beam	
9	8A (wt)	Left front parking light Left tail lights, left rear marker	
10	16A (rd)	Heated rear window	
11	25A (bu)	Heater and cooling blowers Auxiliary fan relay	4-7
12	8A (wt)	Brake lights	4-11
13	25A (bu)	Auxiliary fan	4-7
14	8A (wt)	Backup lights	4-8
		Warning display Seatbelt warning timer Instrument cluster	4-4
15	16A (rd)	Horns Flasher unit Windshield wiper and washer	4-11
		Power mirror	4-7
16	16A (rd)	Cigar lighter	4-4
		Radio	4-11
17	8A (wt)	Warning buzzer Seatbelt switch Interior lights Trunk Light	4-4
		Digital clock Tachometer Turn signal Hazard lights	4-11
18	8A (wt)	Instrument panel lights	4-8
		Digital clock Tachometer Radio	4-11

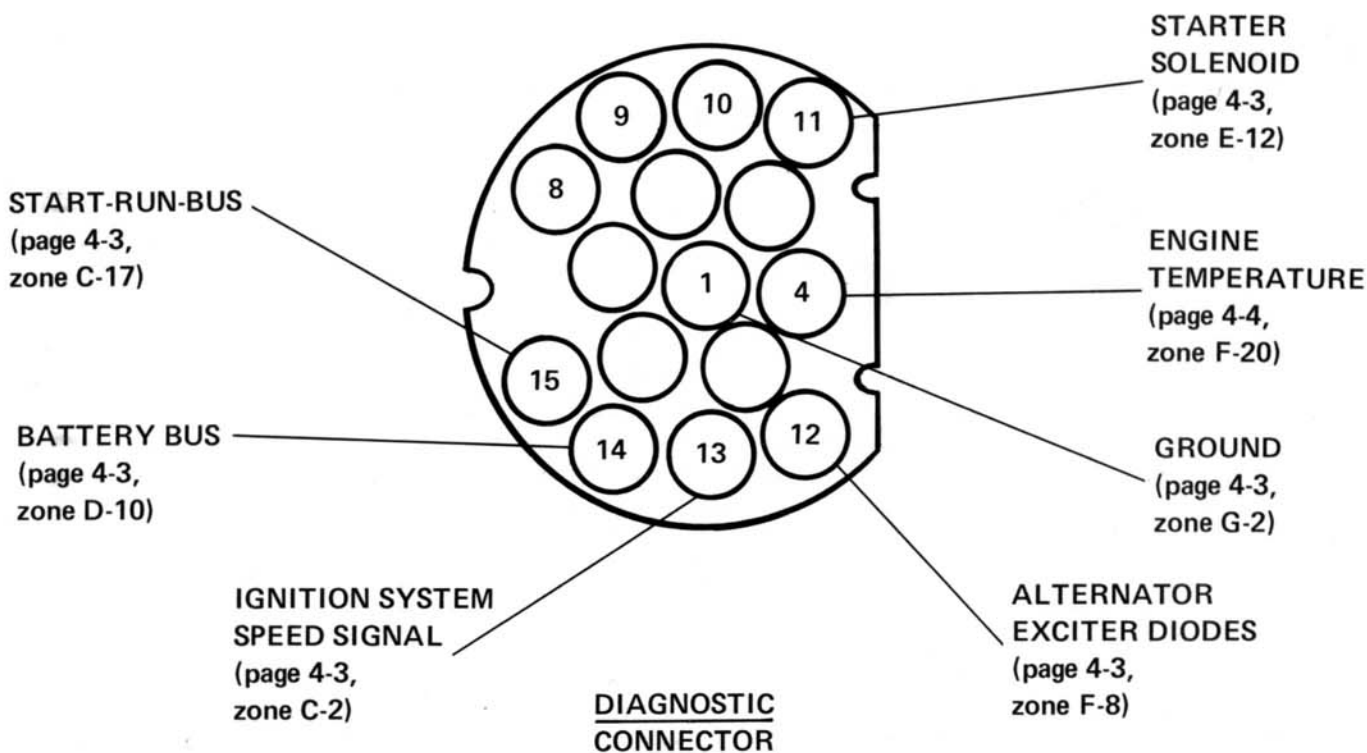
DISTRIBUTION BOX/DIAGNOSTIC CONNECTOR

1981 BMW 320i

← FRONT OF CAR



DISTRIBUTION BOX

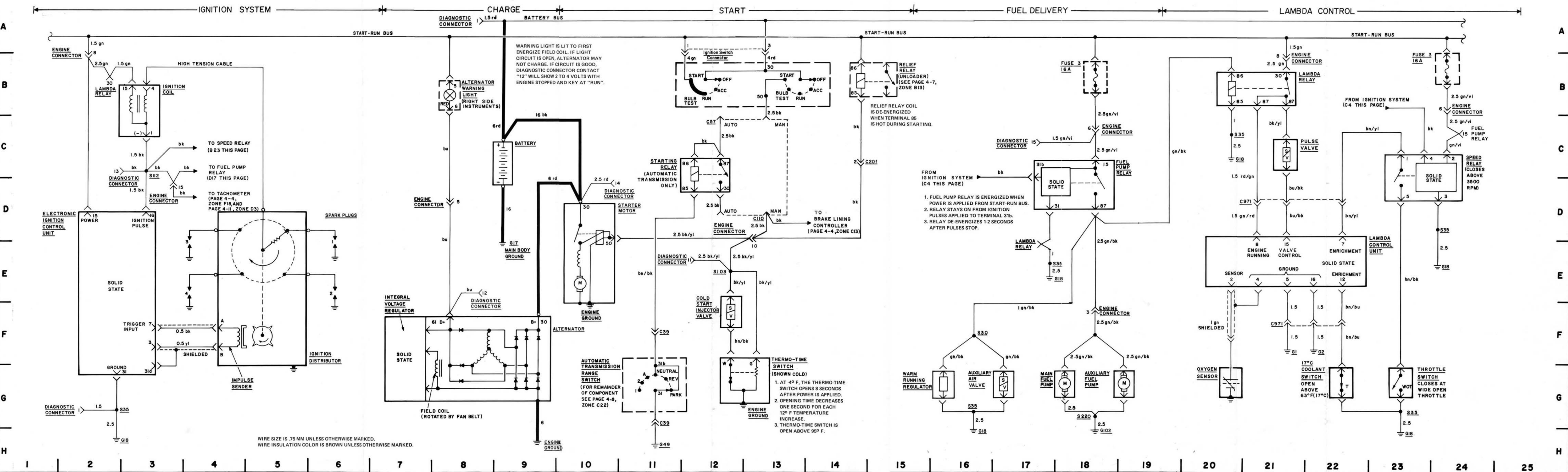


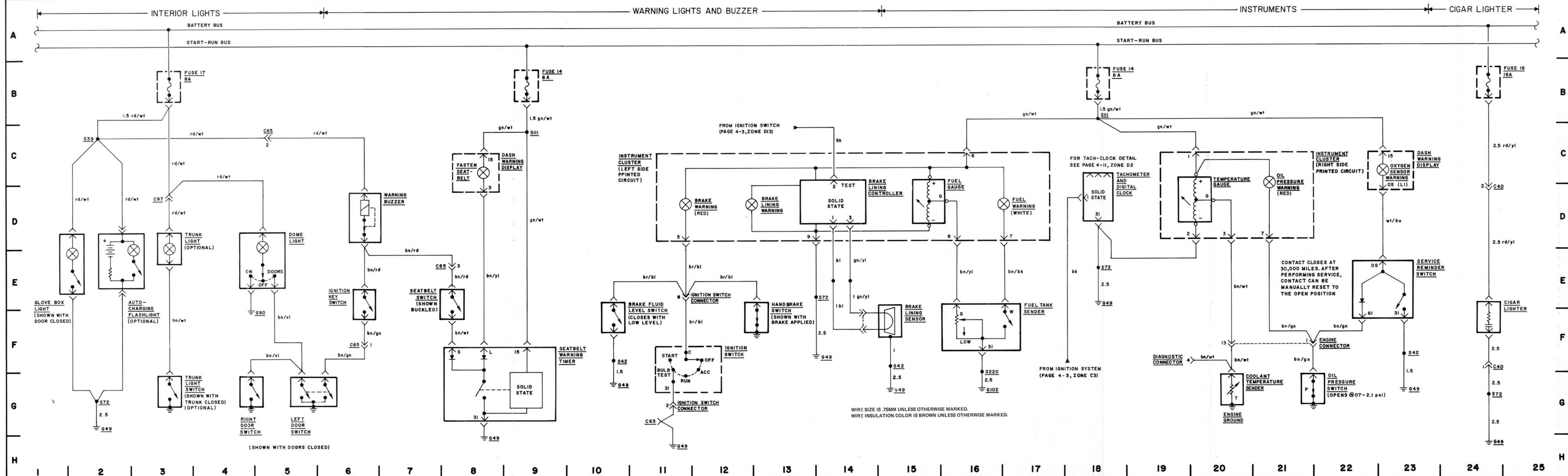
DIAGNOSTIC CONNECTOR

COMPONENT INDEX

1981 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 Injection 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 14 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 intake port	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 intake port 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 (15-pin, rectangular) Diagnostic Connector (15-pin, circular) C57 (1-pin, in-line) C110 (1-pin, in-line) C20f (4-pin, rectangular) C971 (9-pin, square) C39 (19-pin, rectangular)*	On distribution box (see page 4-1B) On top front of engine (see page 4-1B) Under left dash, on body electrical bracket Lower left instrument panel area (above C57) In distribution box Above glove box On gear selector mounting plate	14 4
Grounds G1 and G2 G17 (Main body ground) G18 (Engine ground) G49 G102 *(optional equipment)	On engine, at rear of head, below distributor On battery mounting base, left side On engine, forward of starter Under left dash, on body electrical bracket Rear parcel shelf, left side	15





COMPONENT INDEX

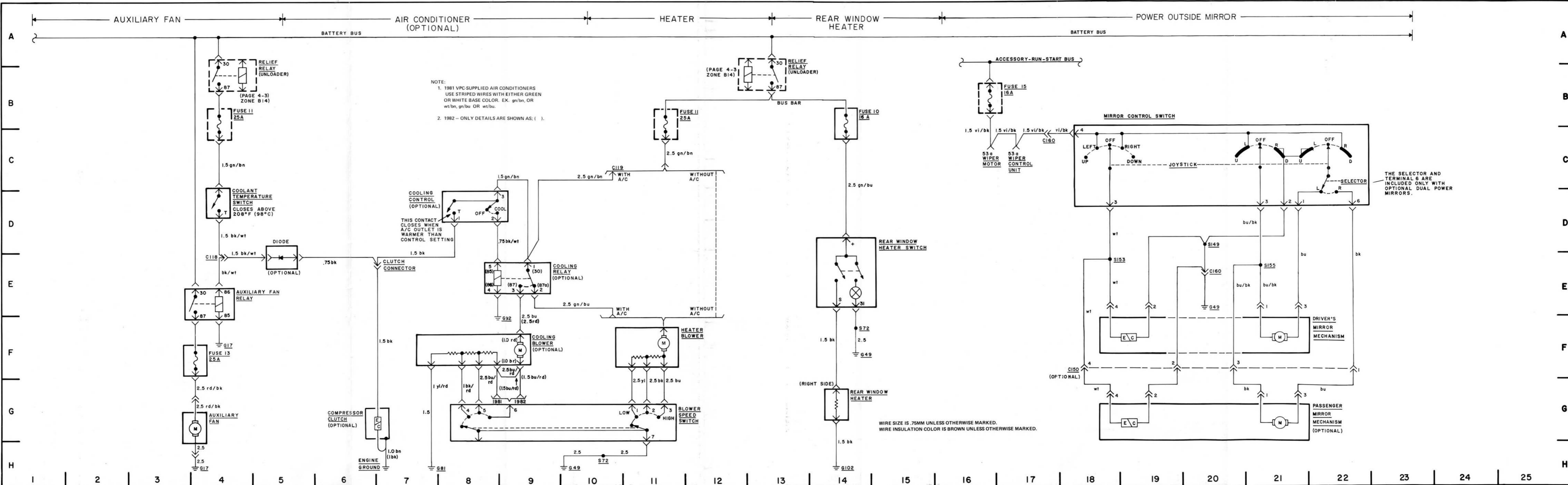
1981 BMW 320i

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) Under left dash, on body electrical bracket 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	15 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 Diagnostic Connector 15-pin, round Engine Connector (15-pin rectangular) Ignition Switch Connector (6-pin, rectangular) C40 (4-pin, rectangular) C65 (5-pin, round) C97 (1-pin, rectangular) C63 (12-pin, rectangular)	Top front of engine, at thermostat housing (see page 4-1B) On distribution box (see page 4-13) Under left dash, on body electrical bracket In center console Under left dash, on body electrical bracket Trunk lid, at left hinge Under left dash, on body electrical bracket	14 5 15 15 12 15
Grounds G49 G102 G90	Under left dash, on body electrical bracket Rear parcel shelf, left side In left center post, below shoulder harness anchor	15

COMPONENT INDEX

1981 BMW 320i

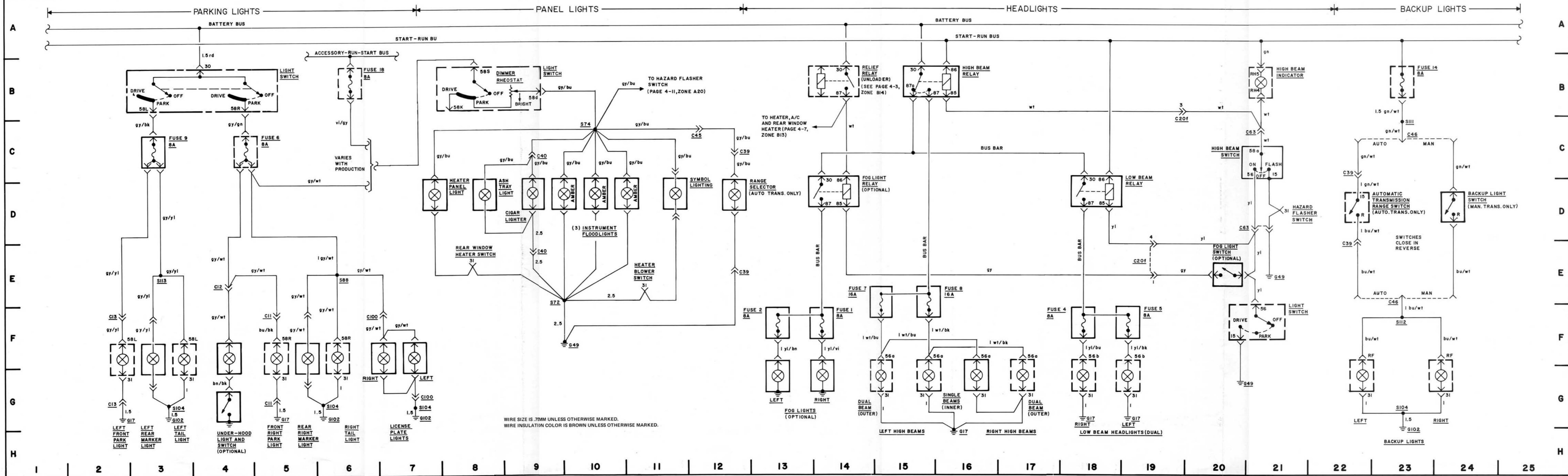
COMPONENT	LOCATION	PHOTOGRAPH
Auxiliary Fan Auxiliary Fan Auxiliary Fan Relay Coolant Temperature Switch Relief Relay (Unloader)	Ahead of radiator, with pigtail connector On distribution box (see page 4-1B) On bottom left side of radiator In distribution box (see page 4-1B)	
Air Conditioner* Cooling Control* Cooling Blower* Cooling Relay* Diode* Blower Speed Switch Compressor Clutch*	In center console In center console On dash brace under right side dash 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 C119 (single-pin) C118 C150 (4-pin, round) C160 (2-pin)	In center console, at heater blower connector Above A/C compressor In right kick panel Above left kick panel	4
Grounds G17 (Main body ground) G49 G102 G91 G92	Left side of battery mounting base Under left dash, on body electrical bracket Rear parcel shelf, left side Left upper evaporator bracket Right upper evaporator bracket	15
*(optional equipment)		



NOTE:
 1. 1981 VPC-SUPPLIED AIR CONDITIONERS USE STRIPED WIRES WITH EITHER GREEN OR WHITE BASE COLOR. EX. gn/bn, OR wt/bn, gn/bu OR wt/bu.
 2. 1982 - ONLY DETAILS ARE SHOWN AS: ().

THE SELECTOR AND TERMINAL 6 ARE INCLUDED ONLY WITH OPTIONAL DUAL POWER MIRRORS.

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



WIRE SIZE IS .7MM UNLESS OTHERWISE MARKED.
 WIRE INSULATION COLOR IS BROWN UNLESS OTHERWISE MARKED.

COMPONENT INDEX

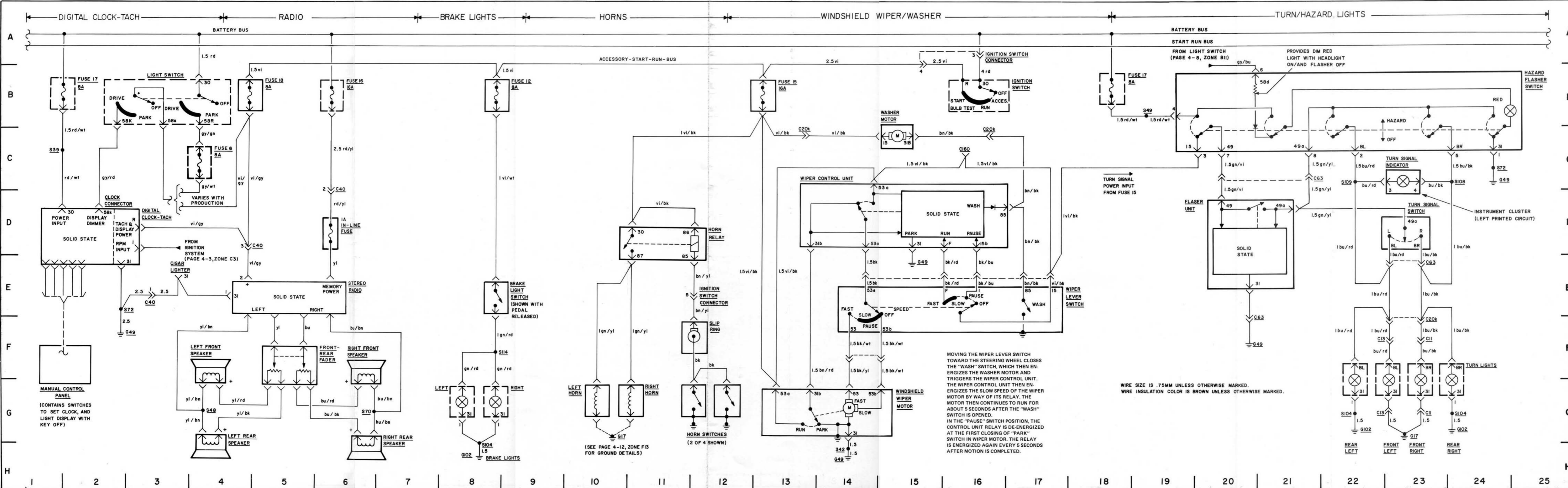
1981 BMW 320i

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 Symbol Lighting	In dash, above instrument cluster Lower left instrument panel	
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. In distribution box (see page 4-1B) In distribution box (see page 4-1B) Right side of instrument cluster On lower dash, left of steering column In 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 C11 (5-pin, round) C12 (1-pin, in-line) C13 (5-pin, round) C20f (4-pin, rectangular) C39 (9-pin, rectangular) C40 (4-pin, rectangular) C45 (2-pin, in-line) C46 (2-pin, rectangular) C63 (12-pin, rectangular) C100 (2-pin, in-line)	Behind right headlight Behind right headlight Behind left headlight Inside distribution box On gear selector mounting plate Center console On body electrical bracket In center console, forward of shift lever Under left dash, on body electrical bracket Inside trunk ahead of license plate	4 15
Grounds G17 (Main body ground) G49 G102	Left side of battery mounting base Under left dash, on body electrical bracket Rear parcel shelf, left side	5 15
*(optional equipment)		

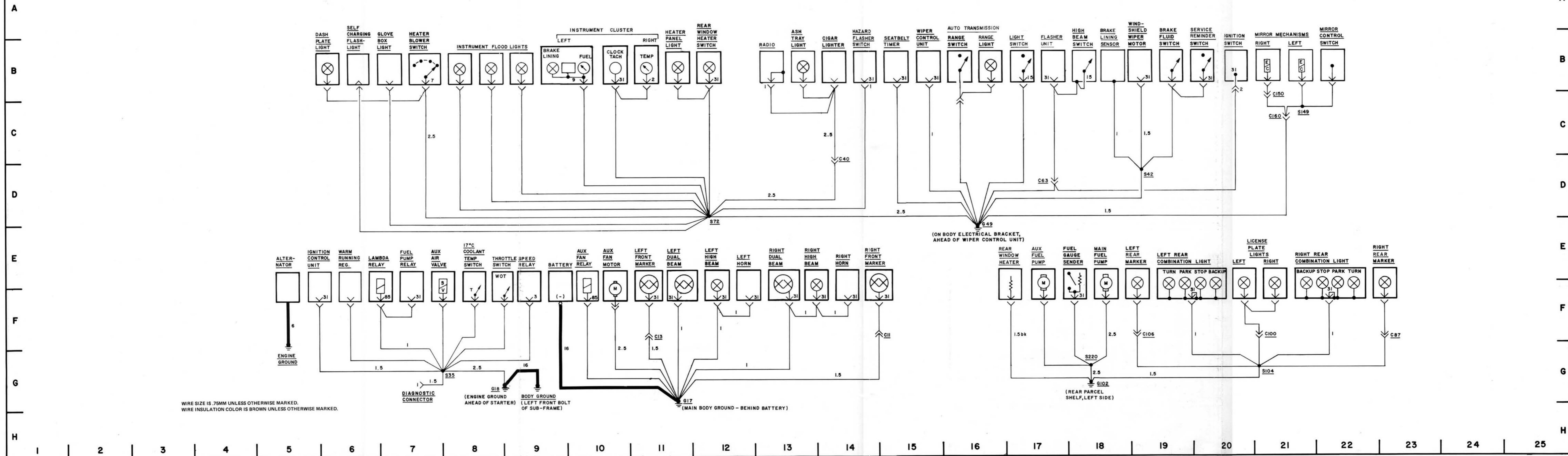
COMPONENT INDEX

1981 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 Ignition Switch Wiper Control Unit Wiper Lever Switch Windshield Wiper Motor Washer Motor	In steering column Under left dash, on body electrical bracket 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	15 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) C63 (12-pin, rectangular) Ignition Switch Connector (6-pin, rectangular) C160 (2-pin)	Behind front turn/park light Behind left front turn/park light Under distribution box In center console Under left dash, on body electrical bracket Under left dash, on body electrical bracket Above left kick panel	4 15 15
Grounds G17 (Main body ground) G49 G102	Left side of battery mounting base Under left dash, on body electrical bracket Rear parcel shelf, left side	15



GROUND BUS DETAILS



POWER DISTRIBUTION

