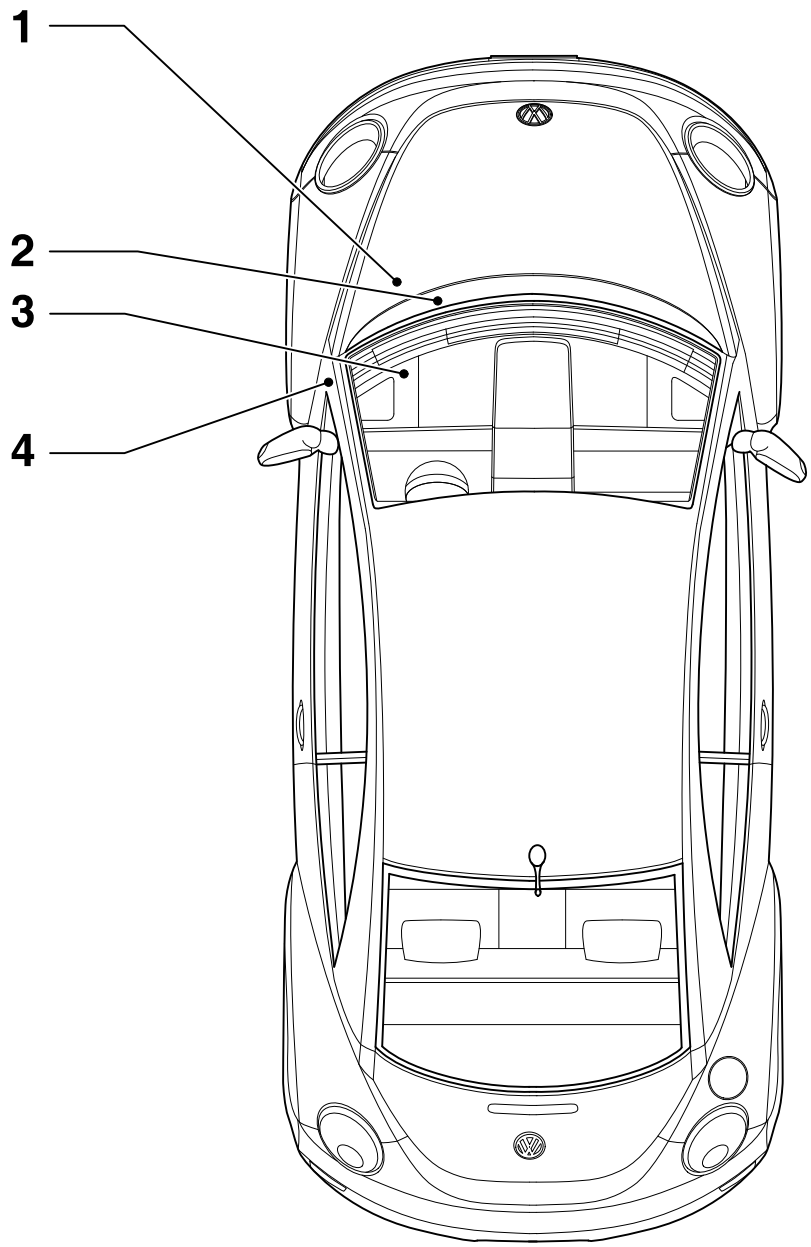


Relay and fuse arrangements, from June 2002,

Overview

1 - Fuse arrangements in fuse bracket/batery,

♦ ⇒ From page 201/2 to 201/3

2 - Inside housing relays, in engine compartment, left side,

J271 Motronic Engine Control Module (ECM) Power Supply Relay, (428), (429)

J299 Secondary Air Injection (AIR) Pump Relay (100)

J359/J360 Preheating Coolant, Low/High Heat Output Relay

♦ ⇒ From page 201/4

3 - Relay and fuse arrangements on relay panel

♦ ⇒ From page 201/6

3 - Relay arrangements / Fuse arrangements on thirteen position auxiliary relay panel, above relay panel

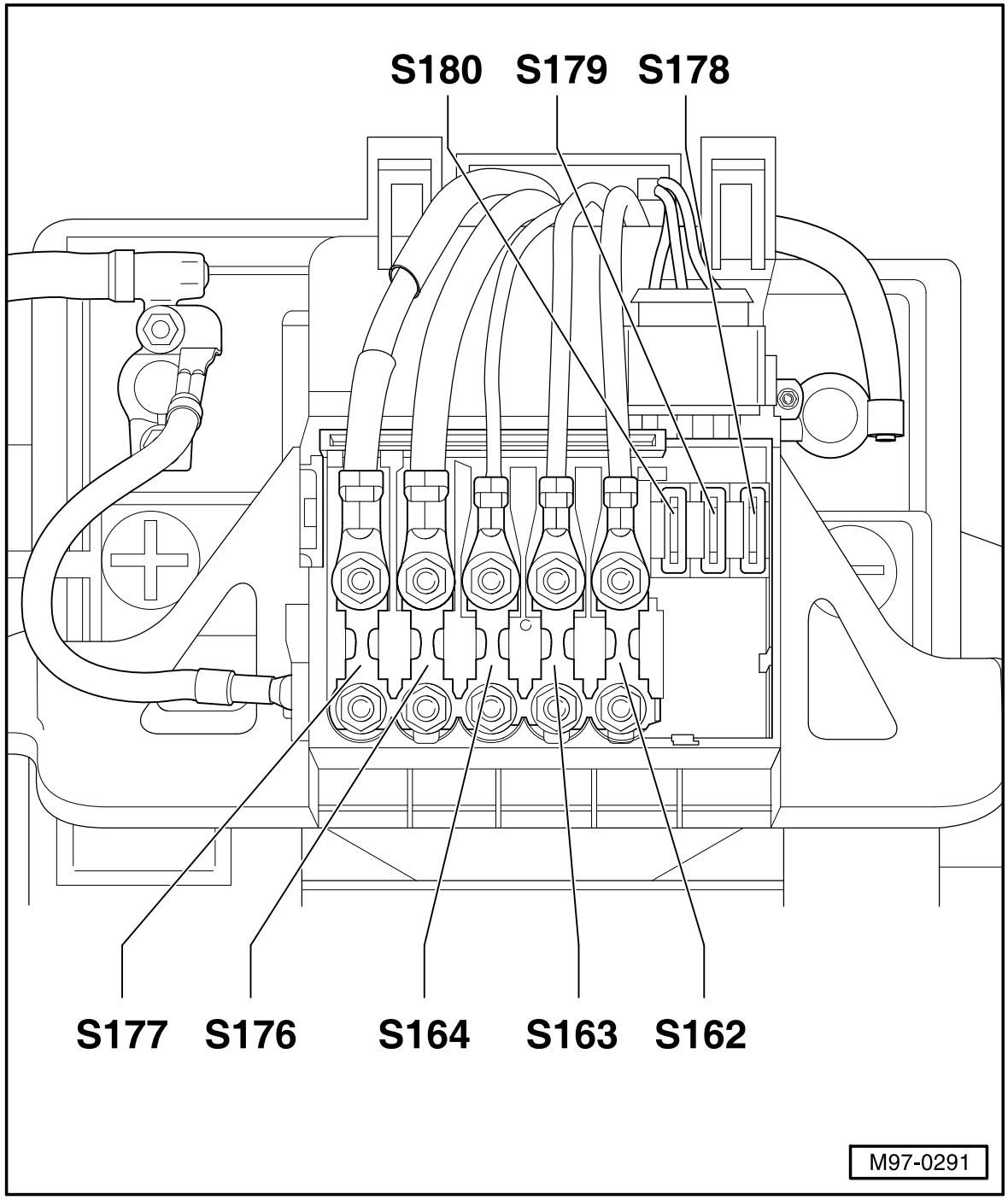
♦ ⇒ From page 201/8

4 - Fuse arrangements in fuse panel, instument panel, left

♦ ⇒ From page 201/12

5 - -J179 - Automatic Glow Time Control Module, in plenum chamber, center

♦ ⇒ From page 201/5

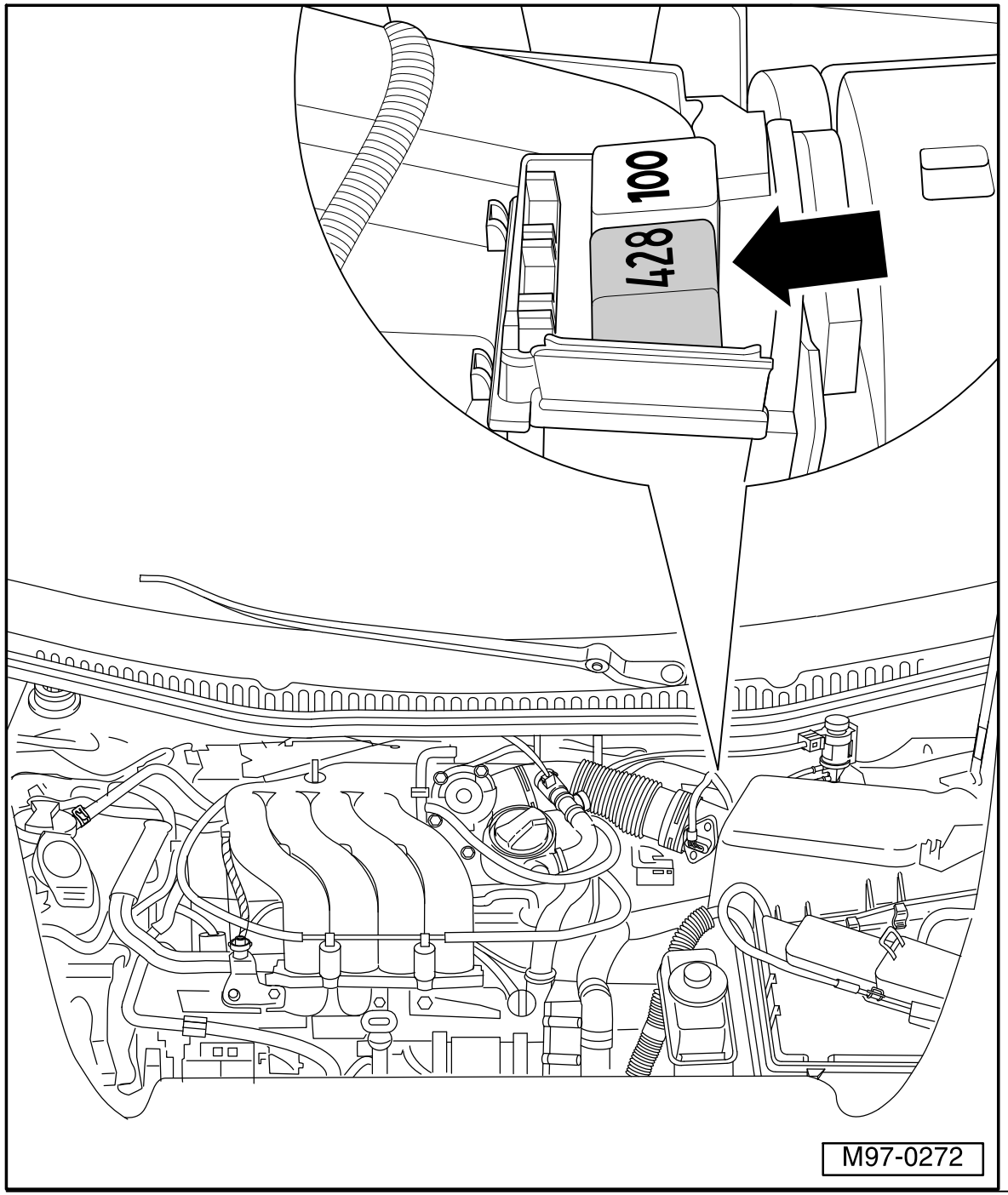


Fuse arrangements in fuse bracket/batery

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
1	-	S162 - Fuse 1 - terminal 30 (on battery fuse panel)	50A	-	V101 - Secondary Air Injection (AIR) Pump Motor 1) J359 - Preheating Coolant, Low Heat Output Relay 3) J360 - Preheating Coolant, High Heat Output Relay 3)	30
2	-	S163 - Fuse 2 - terminal 30 (on battery fuse panel)	50A	-	J17 - Fuel Pump (FP) Relay (17/30) J370 - Glow Plug Activation Control Module 2)	30
3	-	S164 - Fuse 3 - terminal 30 (on battery fuse panel)	40A	-	J293 - Coolant Fan Control (FC) Control Module, (T4e/1) V7 - Coolant Fan	30
4	-	S176 - Fuse 4 - terminal 30 (on battery fuse holder)	110A	-	J59 - Load Reduction Relay, (7/30)	30a
5	-	S177 - Fuse 5 - terminal 30 (on battery fuse panel)	110 A 150 A	-	C - Generator (GEN) (90 Amp.) C - Generator (GEN) (120 Amp.)	30 30
6	-	S178 - Fuse 6 - terminal 30 (on battery fuse panel)	30A	-	J104 - ABS Control Module, (T47a/1)	30
7	-	S179 - Fuse 7 - terminal 30 (on battery fuse panel)	30A	-	J104 - ABS Control Module, (T47a/32)	30
8	-	S180 - Fuse 8 - terminal 30 (on battery fuse panel)	30A	-	F18 - Coolant Fan Control (FC) Thermal Switch J293 - Coolant Fan Control (FC) Control Module, (T4e/3)	30

Notes:

1) Only vehicles with Secondary Air Injection (AIR) Pump
2) Only Diesel engines
3) Only Diesel engines with manual transmission



Inside housing relays, in engine compartment, left side,

- Inside housing relays [1], in engine compartment, left side, to the left of brake fluid reservoir, inside housing

1 - J271 Motronic Engine Control Module (ECM) Power Supply Relay (428), (429) [2]

2 - J299 Secondary Air Injection (AIR) Pump Relay (100) [2]

3 - J359 - Preheating Coolant, Low Heat Output Relay (100) [3]

4 - J360 - Preheating Coolant, High Heat Output Relay (53) [3]

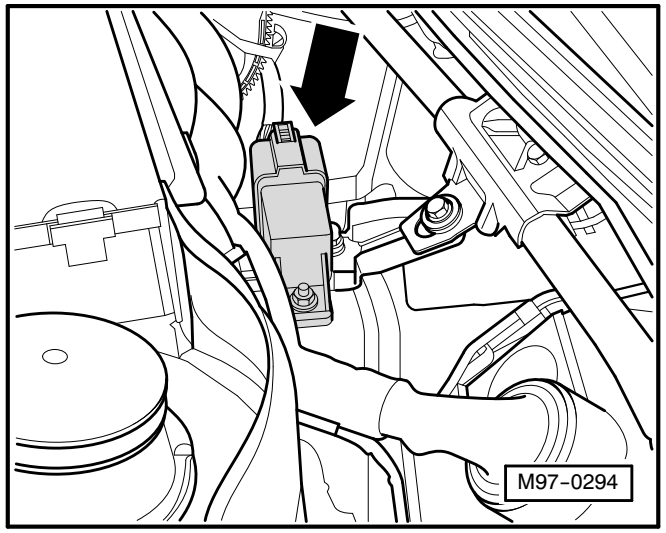
[1] From model year 2002 to model year 2005

[2] Only gasoline engines

[3] Only Diesel engines

Note:

Number in parentheses indicates production control number stamped on relay housing.



-J179 - Automatic Glow Time Control Module [1) 2)]

Location:

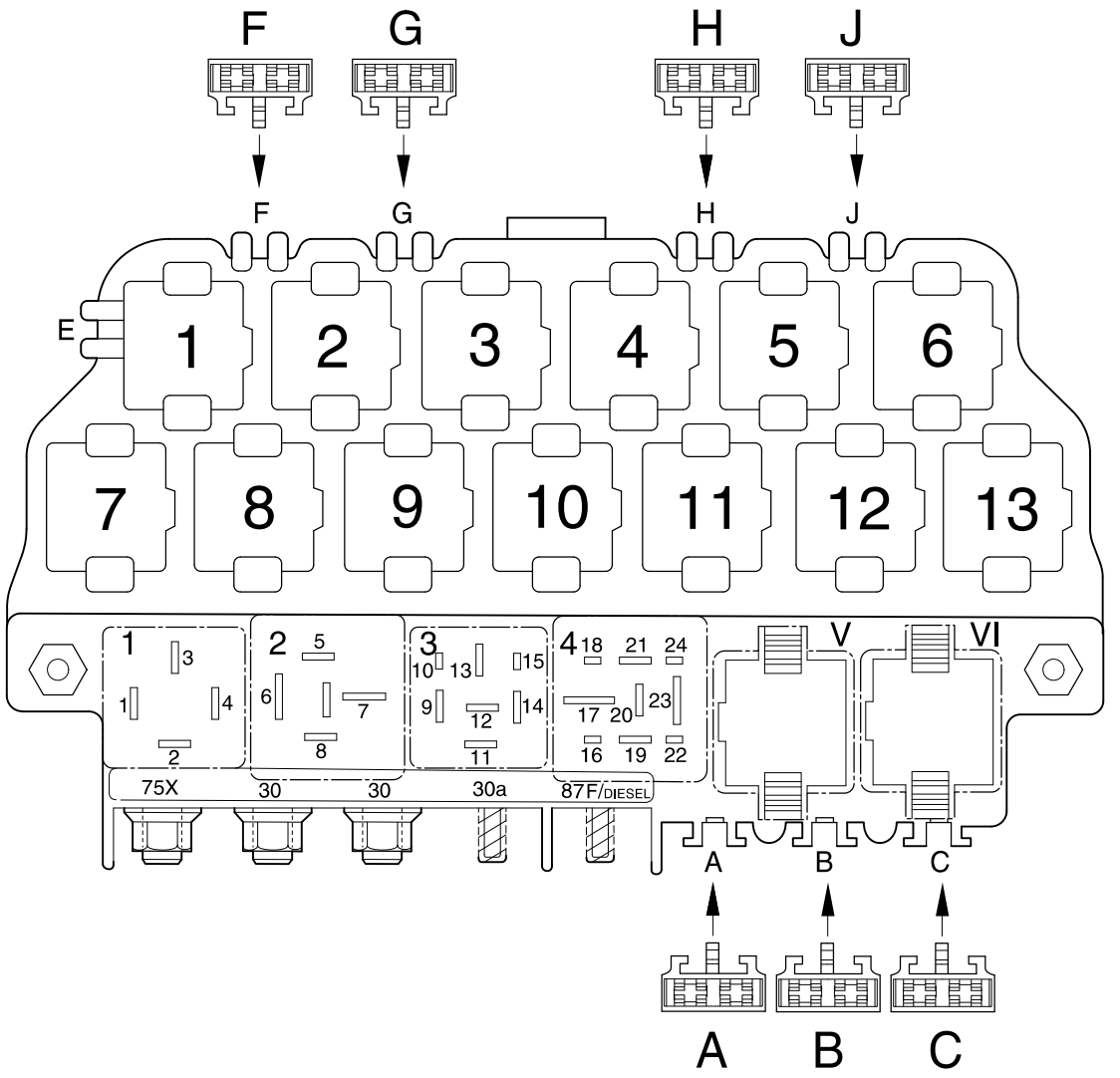
in plenum chamber, center ⇒ -arrow-

[1)] Only 1.9L engine, code BEW,

[2)] From June 2003 to December 2006,

Note:

Number in parentheses indicates production control number stamped on relay housing.



Relay and fuse arrangements on relay panel

Relays (on relay panel):

1 - J4 Horn Relay (53)

2 - J59 Load Reduction Relay (213), (100)

3 - Vacant

4 - J17 Fuel Pump (FP) Relay (409)

4 - J52 Glow Plug Relay (103) [4)]

- V/ VI - J31 Wiper/Washer Intermittent Relay/Rain Sensor (377) [1)], (192) [2)], (389) [3)]

[1)] windshield wiper intermittent control with potentiometer / without headlight washer system (377)

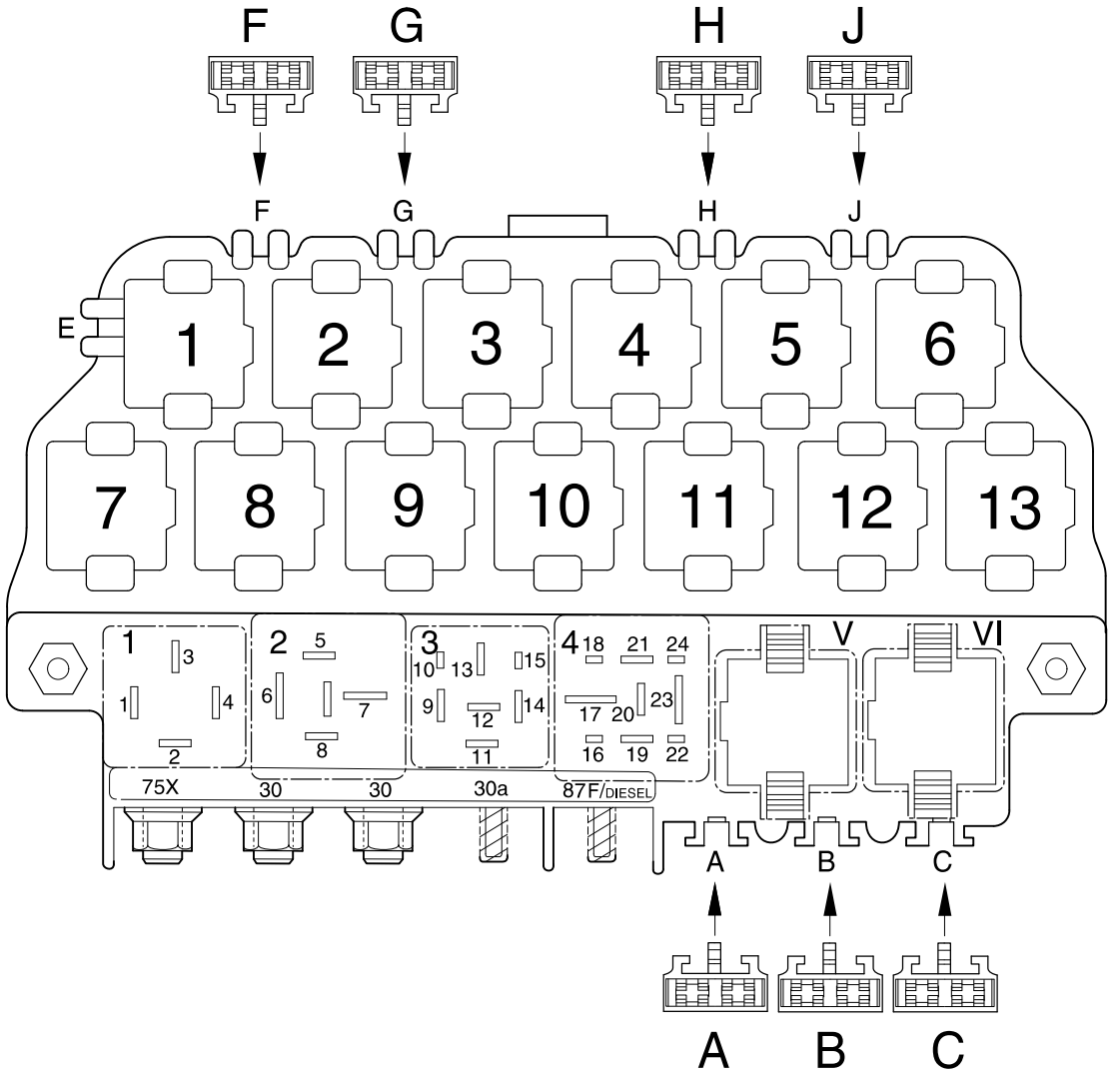
[2)] windshield wiper intermittent control with rain sensor / headlight washer system (192)

[3)] windshield wiper intermittent control with potentiometer / headlight washer system (389)

[4)] Only 1.9 L-Engine, code ALH

Note:

Number in parentheses indicates production control number stamped on relay housing.



Relay and fuse arrangements on relay panel

Fuses on relay panel:

A - S43 Power Window Circuit Breaker, (30 A)

B - S283 Brake Vacuum Pump Fuse [1)]

Only vehicles with automatic tranmission

B - Vacant [2)]

♦ ⇒ New position in J, page 201/11

C - S329 - Rear Spoiler Motor Fuse, (30 A) [3)] [4)]

[1)] Through model year 2003

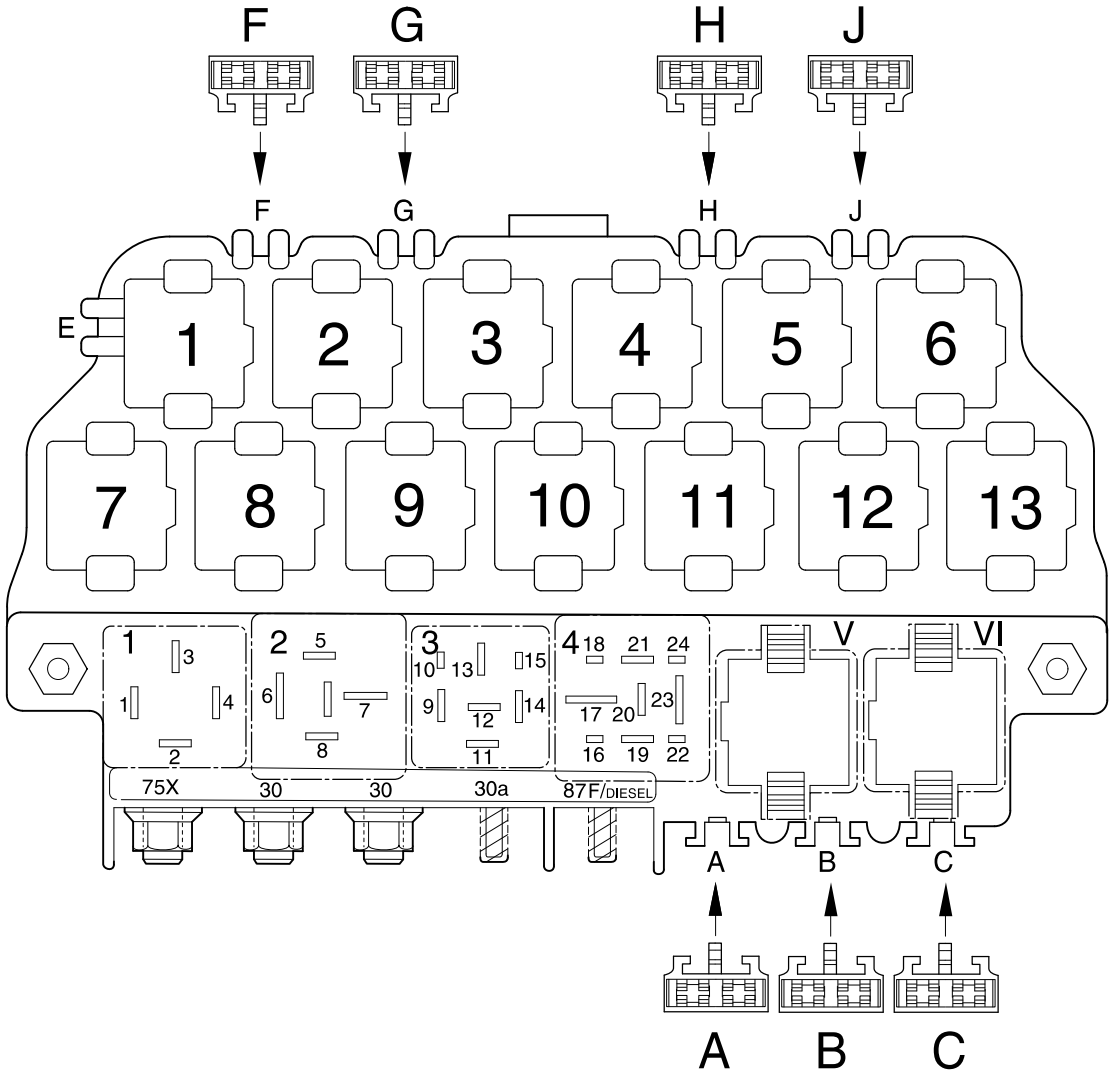
[2)] From model year 2004

[3)] Only 1.8 L- Engines,

[4)] Through model year 2003, 2004 and 2005

Note:

Number in parentheses indicates production control number stamped on relay housing.



Relay arrangements on thirteen position auxiliary relay panel, above relay panel

1 - Vacant

2 - Vacant

3 - J434 Starter Lock/Clutch Pedal Switch Relay (53) [1)]

4 - J5 Fog Light Relay (53), (94)

5 - Vacant

6 - Vacant

7 - J89 Daytime Running Lights Change-over Relay (173) [2)]

8 - J 99 Heated Mirror Relay (53) [3)]

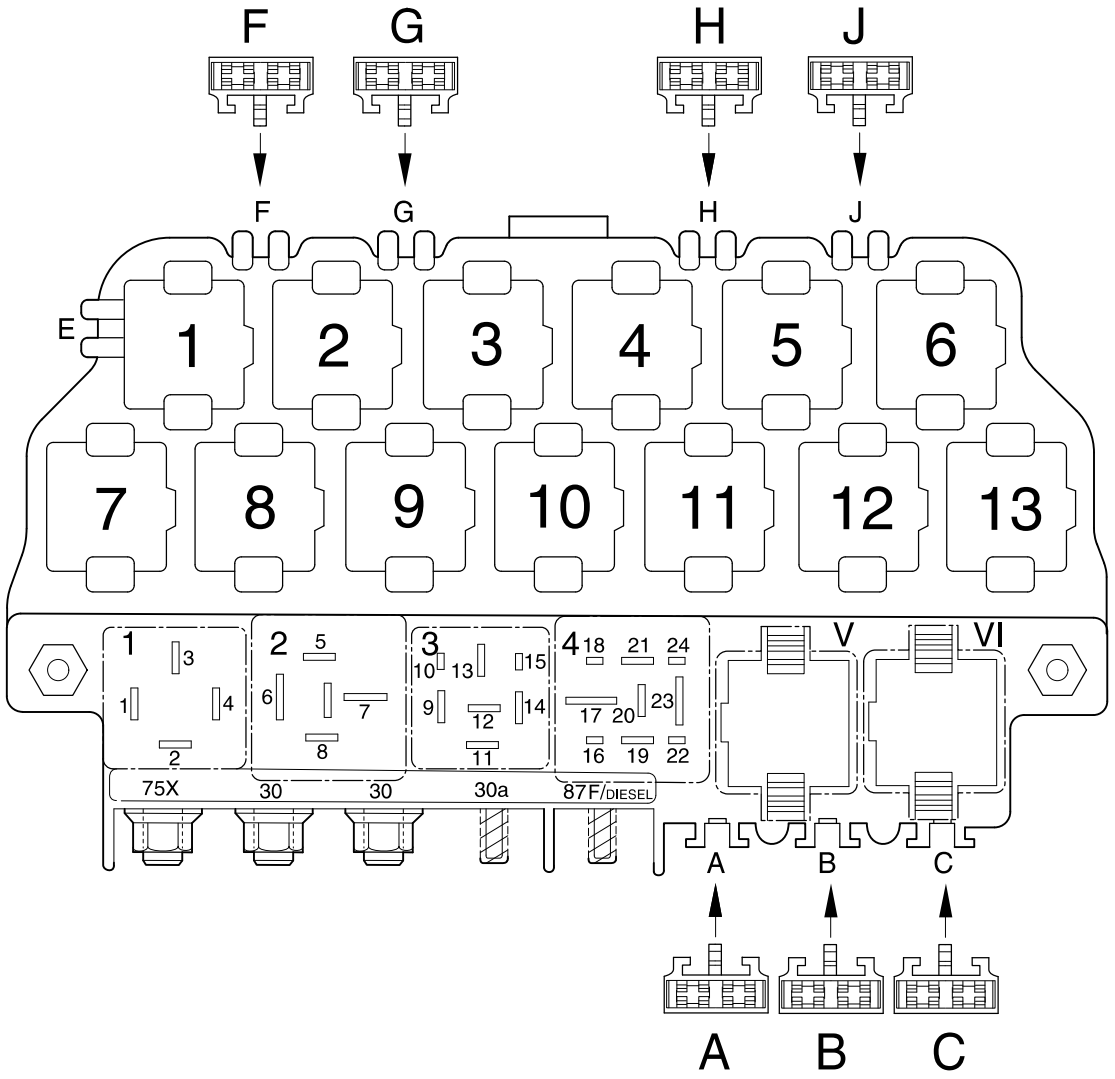
[1)] Only vehicles with Manual tranmission

[2)] Only vehicles with Daytime Running Lights

[3)] Only vehicles with manual windows

Note:

Number in parentheses indicates production control number stamped on relay housing.



Relay arrangements on thirteen position auxiliary relay panel, above relay panel

9 - J641 - Alarm Horn Relay [1)]

10 - J237 - Alarm System Light Flasher Relay [1)]

10 - J135 Third Speed Coolant Fan Control (FC) Relay (100) [2)]

11 - J226 - Park/Neutral Position (PNP) Relay (126) [3)]

11 - J207 - Starting Interlock Relay (176) [4)], [5)]

[1)] Only vehicles with Telematics

[2)] Only 1.8 L- Engines

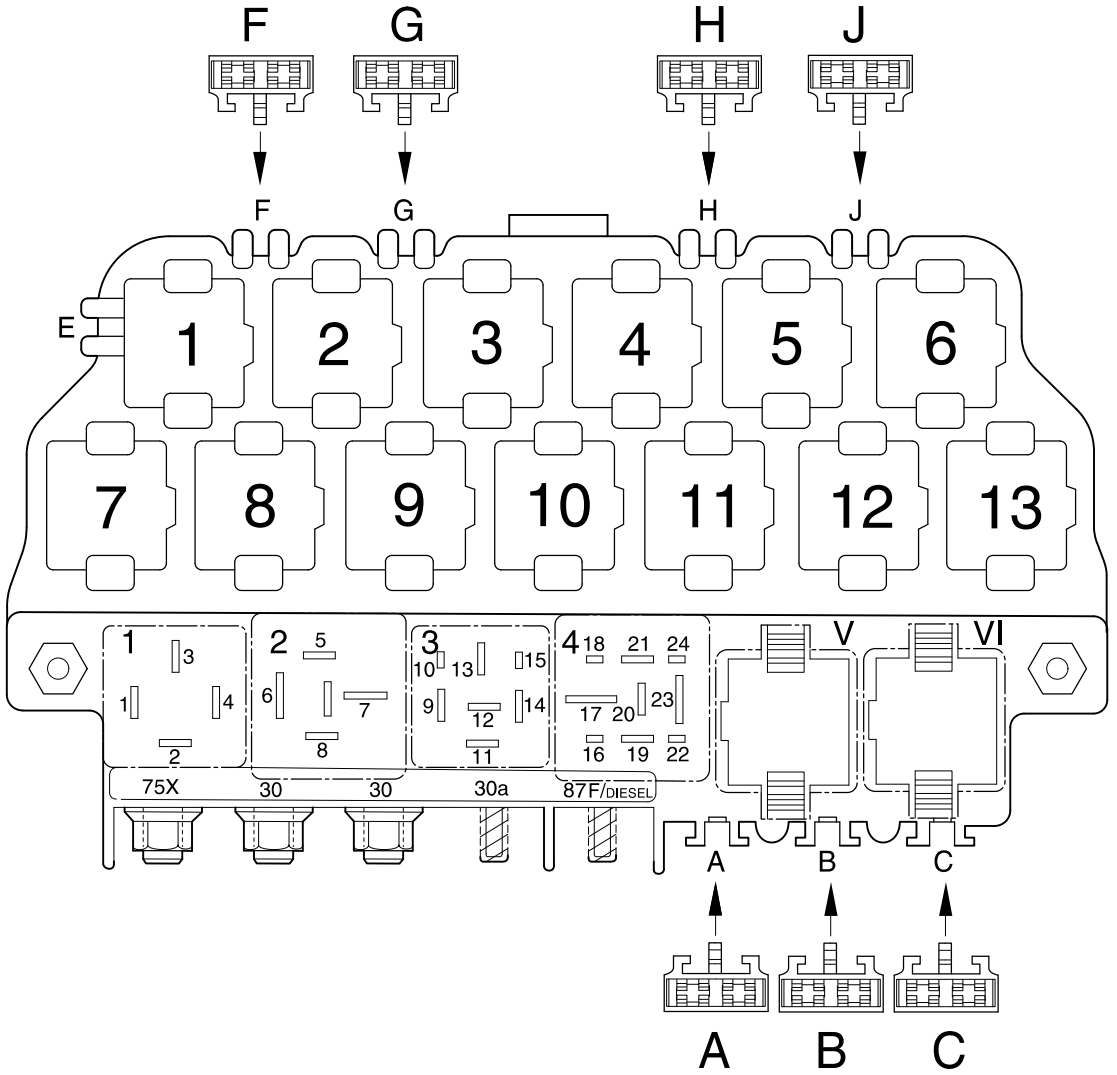
[3)] Only vehicles with automatic tranmission, 01M

[4)] From model year 2005.

[5)] Only vehicles with Automatic transmission, 6-speed automatic with Tiptronic, 09G

Note:

Number in parentheses indicates production control number stamped on relay housing.



Relay arrangements on thirteen position auxiliary relay panel, above relay panel

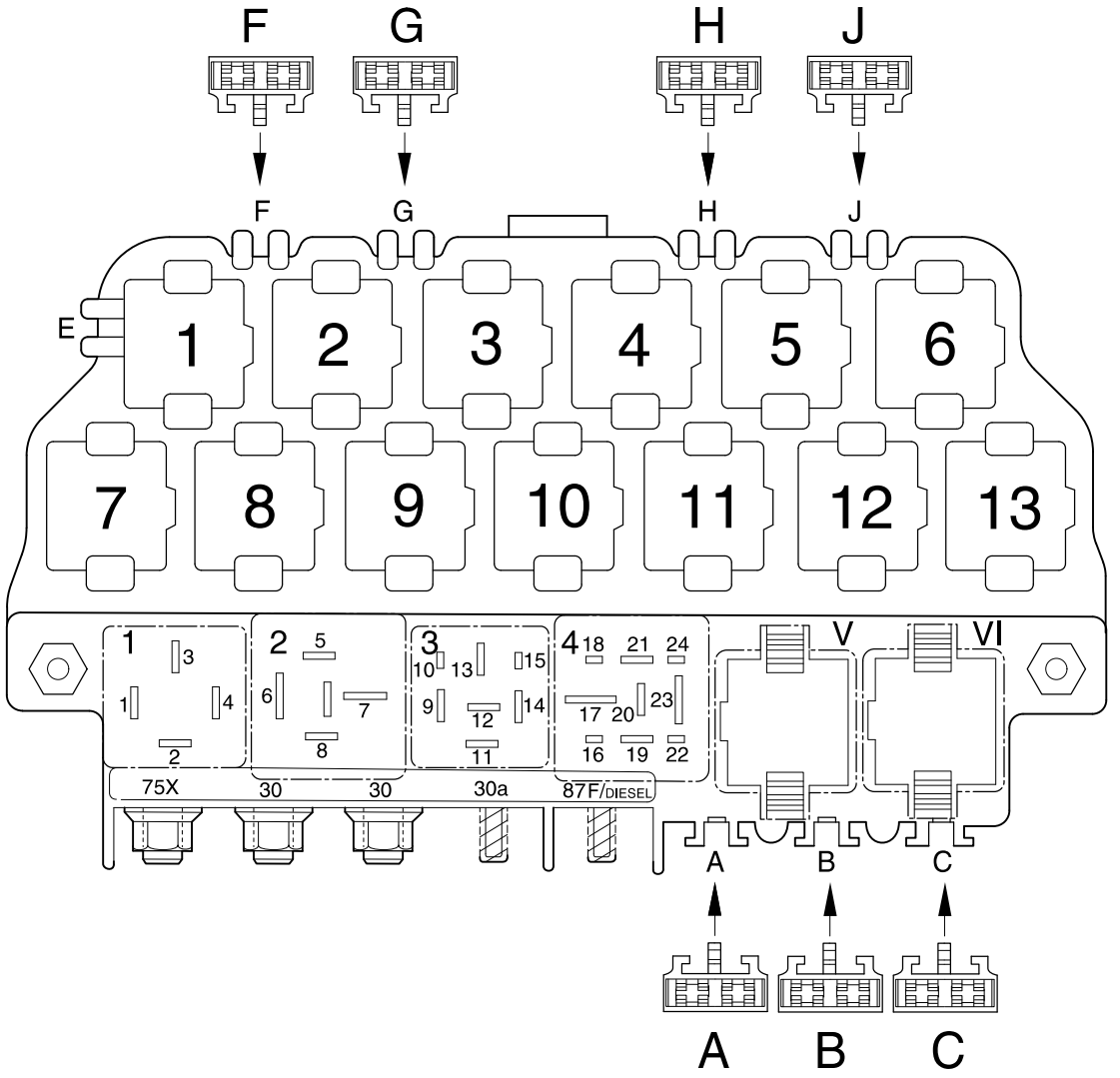
12 - J317 Power supply (Terminal 30, B+) relay, (109) [6)]

13 - Vacant

[6)] Only Diesel engines

Note:

Number in parentheses indicates production control number stamped on relay housing.



Fuse arrangements on thirteen position auxiliary relay panel, above relay panel, continued

E - Vacant

F - Vacant

G - Vacant

H - S111 Alarm System and Anti-Theft Immobilizer Fuse, (15 A)

H - S338 Telematics Fuse, (15 A) [1)]

J - S144 Central Locking/Anti-Theft Warning System Fuse (15A)

J - S283 Brake Vacuum Pump Fuse (20A) [1)]

Only vehicles with automatic tranmission

J - S337 Mechatronic Direct Shift Gearbox (DSG) Fuse (20A) [1) 2)]

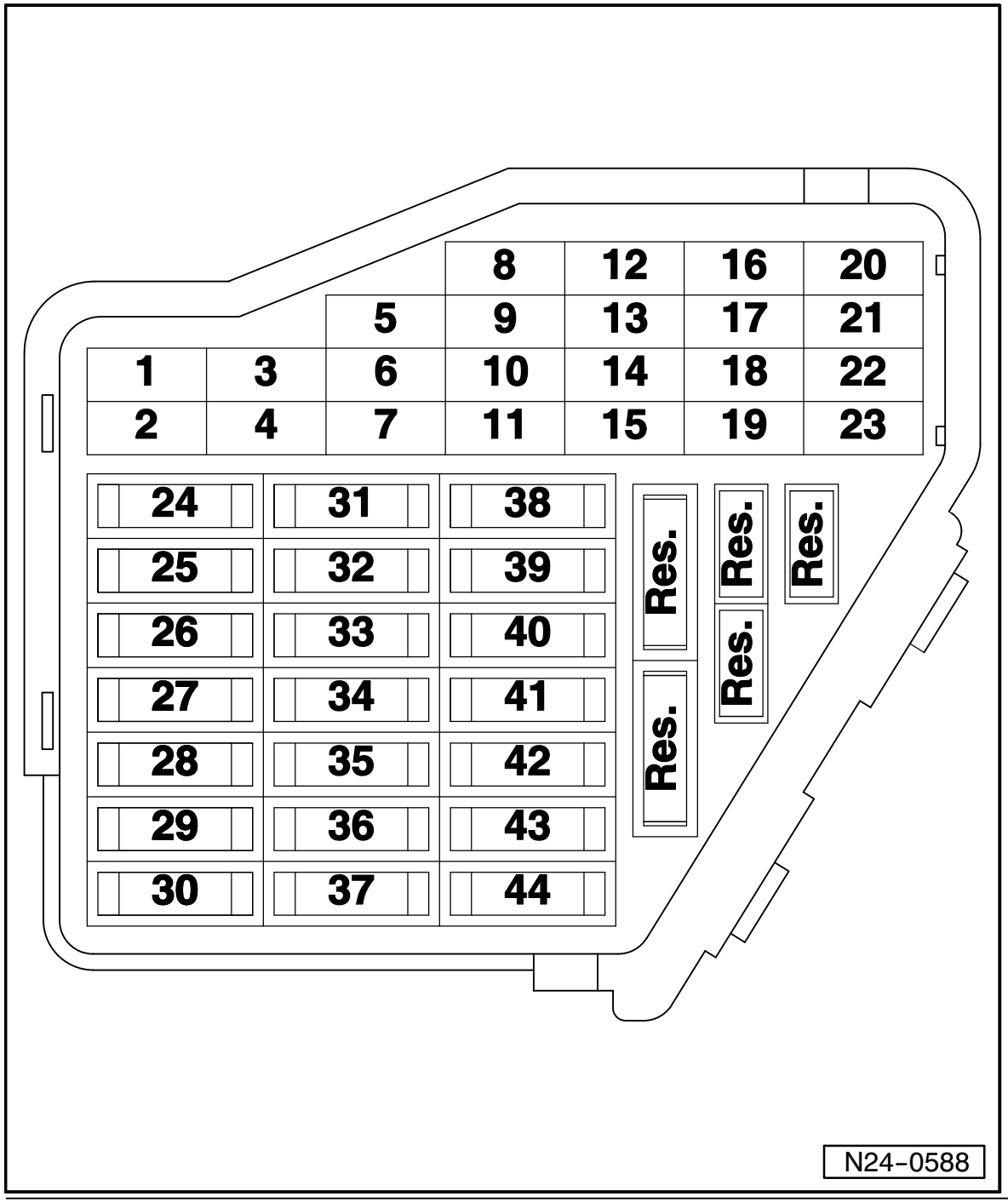
Only vehicles with DSG tranmission, 02E

[1)] From model year 2004

[2)] Only 1.9 L-Engine, code BEW

Note:

Number in parentheses indicates production control number stamped on relay housing.



Fuse arrangements in fuse panel, instument panel, left

- Behind instrument cluster, left

Fuse colors

30 A - green
25 A - white
20 A - yellow
15 A - blue
10 A - red
7,5 A - brown
5 A - beige
3 A - violet

Note:

Fuses from S23 to S44 are identified with additional prefix 2, in wiring diagram.

Example: Fuse S28 on fuse panel is listed as S228 in wiring diagram.

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
1	-	S1 -Fuse (on fuse/relay panel)	10A	-	J99 - Heated Mirror Relay J131 - Driver's Heated Seat Control Module, (T6/5) J132 - Front Passenger's Heated Seat Control Module, (T6b/5) W6 - Glove Compartment Light Z20/ Z21 - Washer Nozzle Heaters	X
2	-	S2 -Fuse (on fuse/relay panel)	10A	-	J1 - Turn Signal Relay, (T7/6) M5/ M7 - Front Turn Signal Lamps M6/ M8 - Rear Turn Signal Lamps	X
3	-	S3 -Fuse (on fuse/relay panel)	5A	-	E1 - Light Switch, E20 - Instrument Panel Illumination Dimmer Switch, J5 - Fog Light Relay, (4/86)	58
4	-	S4 -Fuse (on fuse/relay panel)	5A	-	X - License Plate Light	58
5	-	S5 -Fuse (on fuse/relay panel)	7,5 A	-	E159 - Fresh Air/Recirculating Flap Switch, (T8b/5) E184 - Fresh Air Blower/Recirculated Air Switch E227 - Cruise Control -SET- Button (T4q/3) 1) E231 - Outside Mirror Heating Switch F36 - Clutch Pedal Switch, (T4q/3) 2) F47 - Brake Pedal Switch G65 - High Pressure Sensor, (T3e/3) J89 - Daytime Running Lights Change-over Relay (8/86) J255 - Climatronic Control Module, (T16c/9) 3) J293 - Coolant Fan Control (FC) Control Module, (T14/9) J386 - Driver Door Control Module, (T18d/3) T16 - 16-Pin Connector (OBD) , (T16/1), (T16/16) V48 - Left Headlamp Beam Adjustment Motor 4) V49 - Right Headlamp Beam Adjustment Motor 4)	15

Notes:

1) Only vehicles with cruise control
2) Only vehicles with manual transmission
3) Only vehicles with Climatronic

[4] Only vehicles with High Intensity Gas Discharge (HID) Headlights,

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
6	-	S6 -Fuse (on fuse/relay panel)	5A	-	J393 - Comfort System Central Control Module, (T23/5)	15
7	-	S7 -Fuse (on fuse/relay panel)	10A	-	F4 - Back-Up Light Switch G22 - Speedometer Vehicle Speed Sensor (VSS) J226 - Park/Neutral Position (PNP) Relay, (T9/5) K142 - Selector Lever Position P/N Indicator Lamp M16 / M17 - Back-Up Lamps T16 - 16-Pin Connector (OBD) , (T16/1)	15
8	-	S8 -Fuse (on fuse/relay panel)	-	-	Vacant	15
9	-	S9 -Fuse (on fuse/relay panel)	5A	-	E256 - ASR/ESP Button, (T6/6) [5] J104 - ABS Control Module, (T47a/4) G85 - Steering Angle Sensor, (T6k/5) [5]	15
10	-	S10 -Fuse (on fuse/relay panel)	10A	-	J285 - Instrument Cluster Control Module, (T32/30) R - Radio, Y2 - Digital Clock	86s
11	-	S11 - Fuse (on fuse/relay panel)	5A	-	J285 - Instrument Cluster Control Module, (T32/1) N110 - Shift Lock Solenoid	15
12	-	S12 - Fuse (on fuse/relay panel)	7,5A	-	T16 - 16-Pin Connector (OBD) , (T16/16)	30
13	-	S13 - Fuse (on fuse/relay panel)	10A	-	F - Brake Light Switch	30
14	-	S14 - Fuse (on fuse/relay panel)	10A	-	J220 - Motronic Engine Control Module (ECM), (T121/62) J271 - Motronic Engine Control Module (ECM) Power Supply Relay J393 - Comfort System Central Control Module, (T23/22) [6]	30

Notes:

[5] Only vehicles with ASR/ESP

[6] Only vehicles with power windows

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
15	-	S15 - Fuse (on fuse/relay panel)	5A	-	G85 - Steering Angle Sensor, (T6p/4) 5) J217 - Transmission Control Module (TCM), (T68/45) J285 - Instrument Cluster Control Module, (T32/23)	30
16	-	S16 - Fuse (on fuse/relay panel)	10A	-	J293 - Coolant Fan Control (FC) Control Module, (T14/4)	30
17	-	S17 - Fuse (on fuse/relay panel)	-	-	Vacant	30
18	-	S18 - Fuse (on fuse/relay panel)	10A	-	J5 - Fog Light Relay, J285 - Instrument Cluster Control Module, (T32/a17) J607 - Right High/Low Beam Switch-Over Relay 4) M32 - Right High Beam Headlamp	56a
19	-	S19 - Fuse (on fuse/relay panel)	10A	-	J606 - Left High/Low Beam Switch-Over Relay 4) M30 - Left High Beam Headlamp	56a
20	-	S20 - Fuse (on fuse/relay panel)	15A	-	J607 - Right High/Low Beam Switch-Over Relay 4) M31 - Right Low Beam Headlamp	56b
21	-	S21 - Fuse (on fuse/relay panel)	15A	-	J606 - Left High/Low Beam Switch-Over Relay 4) M29 - Left Low Beam Headlamp	56b
22	-	S22 - Fuse (on fuse/relay panel)	5A	-	J285 - Instrument Cluster Control Module, (T32/26) M22 - Right Brake/Taillight Lamp M36 - Right Front Turn Signal/Side Marker Lamp M38 - Right Rear Side Marker Lamp	58r

Notes:

4) Only vehicles with High Intensity Gas Discharge (HID) Headlights,

5) Only vehicles with ASR/ESP

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
23	-	S23 - Fuse (on fuse/relay panel)	5A	-	J285 - Instrument Cluster Control Module, (T32/27) M21 - Left Brake/Taillight Lamp M35 - Left Front Turn Signal/Side Marker Lamp M37 - Left Rear Side Marker Lamp	58l
24	-	S24 - Fuse (on fuse panel)	20A	-	E22 - Windshield Wiper/Washer Switch, (T8c/8) J31 - Wiper/Washer Intermittent Relay, (T18a/13) 7)	X
25	-	S25 - Fuse (on fuse panel)	25A	-	E9 - Fresh Air Blower Switch, (T6d/2) J255 - Climatronic Control Module, (T16b/14) 3) V2 - Fresh Air Blower 3)	X
26	-	S26 - Fuse (on fuse panel)	25A	-	E15 - Rear Window Defogger Switch, (T6b/5) Z1 - Heated Rear Window	X
27	-	S27 - Fuse (on fuse panel)	15A	-	U1 - Cigarette Lighter 8) J29 - Blocking Diode 8)	X
28	-	S28 - Fuse (on fuse panel)	15A	-	G6 - Transfer Fuel Pump (FP)	87
29	-	S29 - Fuse (on fuse panel)	15A	-	J220 - Motronic Engine Control Module (ECM), (T121/3) J248 - Diesel Direct Fuel Injection (DFI) Engine Control Module (ECM), (T121/37)	30
30	-	S30 - Fuse (on fuse panel)	20A	-	J245 - Power Sunroof Control Module, (T6l/4)	30

Notes:

3) Only vehicles with Climatronic
7) Only vehicles with Headlight washer
8) From model year 2007

Note:

Fuses from S23 to S44 are identified with additional prefix 2, in wiring diagram.
Example: Fuse S23 on fuse panel is listed as S223 in wiring diagram.

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
31	-	S31 - Fuse (on fuse panel)	20A	-	F125 - Multi-Function Transmission Range (TR) Switch, (T8a/7) J217 - Transmission Control Module (TCM), (T68/23) J539 - Brake Booster Control Module, (T6k/3)	15
32	-	S32 - Fuse (on fuse panel)	30A	-	N30/ N31/ N32/ N33 - Cylinder Fuel Injectors	87
32 9)	-	S32 - Fuse (on fuse panel)	15A	-	J248 - Diesel Direct Fuel Injection (DFI) Engine Control Module (ECM), (T121/2) N146 - Quantity Adjuster	87
33	-	S33 - Fuse (on fuse panel)	20A	-	Vacant	30
34	-	S34 - Fuse (on fuse panel)	10A	-	J52 - Glow Plug Relay 9) N18 - EGR Vacuum Regulator Solenoid Valve 9) N75 - Wastegate Bypass Regulator Valve N108 - Cold Start Injector 9) N239 - Intake Manifold Flap Change-over Valve 9) N205 - Camshaft Adjustment Valve 1 9) N249 - Turbocharger Recirculating Valve 9)	87
35	-	S35 - Fuse (on fuse panel)	30A	-	U19 - 12V Socket 3 (in luggage compartment)	30
36	-	S36 - Fuse (on fuse panel)	15A	-	E7 - Fog Lamp Switch, (T17/2)	X

Notes:

6) Only vehicles with power windows

Note:

Fuses from S23 to S44 are identified with additional prefix 2, in wiring diagram.
Example: Fuse S23 on fuse panel is listed as S223 in wiring diagram.

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
37	-	S37 - Fuse (on fuse panel)	20A	-	J220 - Motronic Engine Control Module (ECM), (T121/62) J248 - Diesel Direct Fuel Injection (DFI) Engine Control Module (ECM), (T121/88) 9) J271 - Motronic Engine Control Module (ECM) Power Supply Relay, (1/30) J393 - Comfort System Central Control Module, (T23/17) 6) S283 - Brake Vacuum Pump Fuse	30
38	-	S38 - Fuse (on fuse panel)	15A	-	E204 - Remote Fuel Tank Flap Switch E233 - Rear Lid Remote Control Lock Switch J386 - Driver Door Control Module, (T29/19) 6) J387 - Front Passenger Door Control Module, (T29a/19) 6)	30
39	-	S39 - Fuse (on fuse panel)	15A	-	E3 - Emergency Flasher Switch, (T8d/8)	30
40	-	S40 - Fuse (on fuse panel)	20A	-	H1 - Signal Horn/Dual Tone Horn J4 - Horn Relay (3/30)	30
41	-	S41 - Fuse (on fuse panel)	15A	-	U1 - Cigarette Lighter U5 - 12 V Socket	30
42	-	S42 - Fuse (on fuse panel)	25A	-	R - Radio, (T8/5, T8/7)	30

Notes:

6) Only vehicles with power windows

9) Only ALH and BEW engines

Note:

Fuses from S23 to S44 are identified with additional prefix 2, in wiring diagram.

Example: Fuse S23 on fuse panel is listed as S223 in wiring diagram.

No.		Description in Wiring diagram	Amp.		Function/Consumer	Signal
43	-	S43 - Fuse (on fuse panel)	10A	-	G39 - Heated Oxygen Sensor (HO2S) G70 - Mass Air Flow (MAF) Sensor G108 - Heated Oxygen Sensor (HO2S) 2 G130 - Oxygen Sensor (O2S) Behind Three Way Catalytic Converter (TWC) J299 - Secondary Air Injection (AIR) Pump Relay, (4/85) N80 - Evaporative Emission (EVAP) Canister Purge Regulator Valve N112 - Secondary Air Injection (AIR) Solenoid Valve V144 - Leak Detection Pump (LDP)	87
43[9)]	-	S43 - Fuse (on fuse panel)	10A	-	F36 - Clutch Pedal Switch F47 - Brake Pedal Switch J359 - Preheating Coolant, Low Heat Output Relay J360 - Preheating Coolant, High Heat Output Relay N79 - Positive Crankcase Ventilation (PCV) Heating Element	87
44	-	S44 - Fuse (on fuse panel)	15A	-	J131 - Driver's Heated Seat Control Module, (T6/4) J132 - Front Passenger's Heated Seat Control Module, (T6b/4)	30

Notes:

9) Only ALH and BEW engines

Note:

Fuses from S23 to S44 are identified with additional prefix 2, in wiring diagram.

Example: Fuse S23 on fuse panel is listed as S223 in wiring diagram.