2.8l - Injection Engine, 142kW, 6-Cylinder, Code ATQ

2000 m. y.

Fuse Panel :

Fuse Colors :

30 A - Green
25 A - White
20 A - Yellow
15 A - Blue
10 A - Red

Fuse in fusebox from 23 onwards are numbered 223 onwards in Current Flow Diagram.

Micro Central Electric :

Relay Location :

1 - Dual Horn Relay
2 - Load Reduction Relay
4 - Fuel Pump (FP) Relay
5 - Wipper / Washer Intermittent Relay
6 - Wipper / Washer Intermittent Relay

3-way Relay Carrier:

Relay Location :

2 - Secondary Air Injection (AIR) Relay

Fuse Location :

7 - Fuse for Secondary Air Pump

13-way Relay Carrier:

Relay Location :

13 - Park / Neutral Position (PNP) Relay

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- 3 - Ground strap, engine to body
- 12 - Ground connection, in engine compartment, left
- 32 - Ground connection, behind instrument panel, left
- 43 - Ground connection, on right A-pillar
- 81 - Ground connection -1-, in instrument panel wiring harness
- 83 - Ground connection -1-, in right front wiring harness
- 86 - Ground connection -1-, in rear wiring harness
- 87 - Ground connection -2-, in rear wiring harness
- 135 - Ground connection -2-, in instrument panel wiring harness
- 176 - Ground connection, in right headlight wiring harness
- 196 - Ground connection -3-, in wiring harness, rear

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

A - Battery
B - Starter
C - Generator (GEN)
C1 - Voltage Regulator (VR)
J226 - Park / Neutral Position (PNP) Relay
T2ab - Wire Connector, double, grey, in engine compartment, right
T10 - Wire Connector, 10 Point, brown, connector station, electronics box in plenum chambe
T10m - Wire Connector, 10 Point, black, connector station, electronics box in plenum chamber
T10aa - Wire Connector, 10 Point, orange, connector station left, A-pillar

11 - Ground connection, in battery box
44 - Ground connection, on left A-pillar, lower part
81 - Ground connection -1-, in instrument panel wiring harness
179 - Ground connection, in left headlight wiring harness
A17 - Wire connection (61), in instrument panel wiring harness
A86 - Connector (50a), in instrument panel wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

J17 - Fuel Pump (FP) Relay
J220 - Motronic Engine Control Module (ECM)
N30 - Injector, Cyl. 1
N31 - Injector, Cyl. 2
N32 - Injector, Cyl. 3
N33 - Injector, Cyl. 4
N80 - Evaporative (EVAP) Canister Purge Regulator Valve
N83 - Injector, Cyl. 5
N84 - Injector, Cyl. 6
N112 - Secondary Air Injection (AIR) Solenoid Valve
N156 - Intake Manifold Change-Over Valve
N205 - Valve -1- for camshaft adjustment
N208 - Valve -2- for camshaft adjustment
T10m - Wire Connector, 10 Point, black, connector station, electronics box in plenum chamber
T10ar - Wire Connector, 10 Point, orange, connector station, electronics box in plenum chamber
D14 - Wire connection (ignition coil - control module), in right front wiring harness
D22 - Connector (over fuse 234), in wiring harness front, right

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E45 - Cruise Control Switch
G2 - Engine Coolant Temperature (ECT) Sensor
G42 - Intake Air Temperature (IAT) Sensor
G61 - Knock Sensor (KS) 1
G62 - Engine Coolant Temperature (ECT) Sensor
G66 - Knock Sensor (KS) 2
J220 - Motronic Engine Control Module (ECM)
T3n - Wire Connector, 3 Point, blue, in engine compartment, left
T3o - Wire Connector, 3 Point, blue, in engine compartment, right
T6y - Wire Connector, 6 Point, black, near steering column
T10m - Wire Connector, 10 Point, black, connector station, electronics box in plenum chamber
T15 - Wire Connector, 15 Point, white, connector station, electronics box in plenum chamber

104 - Ground connection, in right front wiring harness (sensor grounds)
139 - Ground connection (sensor grounds), in Motronic Multi-port Fuel Injection (MFI) wiring harness
199 - Ground connection -3-, in instrument panel wiring harness
220 - Ground connection (sensor ground), in engine compartment wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- G28 - Engine Speed (RPM) Sensor
- G40 - Camshaft Position (CMP) Sensor
- G79 - Throttle Position (TPP) Sensor
- G185 - Sender -2- for accelerator pedal position
- G163 - Camshaft Position (CMP) Sensor 2
- J220 - Motronic Engine Control Module (ECM)
- T3m - Wire Connector, 3 Point, grey, in engine compartment, left
- T6as - Wire Connector, 6 Point, black, in engine compartment, rear
- T10 - Wire Connector, 10 Point brown, connector station, electronics box in plenum chamber
- T10m - Wire Connector, 10 Point black, connector station, electronics box in plenum chamber
- T15 - Wire Connector, 15 Point, white, connector station, electronics box in plenum chamber

- 220 - Ground connection (sensor ground), in engine compartment wiring harness
- A27 - Wire Connection (vehicle speed signal), in instrument panel wiring harness
- A45 - Wire Connection (RPM-signal), in instrument panel wiring harness
- D141 - Connector (5V), in wiring harness, engine pre-wiring

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- F - Brake Light Switch
- F36 - Clutch Vacuum Vent Valve Switch
- G70 - Mass Air Flow (MAF) Sensor
- J220 - Motronic Engine Control Module (ECM)
- J299 - Secondary Air Injection (AIR) Pump Relay
- S130 - Fuse for secondary air pump
- T3aa - Wire Connector, 3 Point, white, connector station, electronics box in plenum chamber
- T10ar - Wire Connector, 10 Point, orange, connector station, electronics box in plenum chamber
- V101 - Secondary Air Injection (AIR) Pump Motor

- 12 - Ground connection, in engine compartment, left
- 200 - Ground connection (shielding), in engine compartment wiring harness
- A18 - Wire connection (54), in instrument panel wiring harness
- A40 - Plus connection -1- (30), in instrument panel wiring harness
- A104 - Plus connector -2- (15), in instrument panel wiring harness
- A106 - Connector -2- (86s), in instrument panel wiring harness
- D101 - Wire connection -1-, in engine compartment wiring harness
- * - Manual Transmission Only

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- G130 - Oxygen Sensor (OS2) Behind Three Way Catalytic Converter (TWC)
- G131 - Oxygen Sensor (OS2) 2 Behind Three Way Catalytic Converter (TWC)
- J220 - Motronic Engine Control Module (ECM)
- T4w - Wire Connector, 4 Point, green, in engine compartment, right
- T4x - Wire Connector, 4 Point, brown, in engine compartment, right
- T6aa - Wire Connector, 6 Point, brown, connector station right, A-pillar
- T10ar - Wire Connector, 10 Point, orange, connector station, electronics box in plenum chamber
- V144 - Leak Detection Pump (LDP)
- Z29 - Heater for Lambda-probe 1
- Z30 - Heater for Lambda-probe 2
- 200 - Ground connection (shielding), in engine compartment wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- E87 - A/C Control Head
- G39 - Heated Oxygen Sensor (HO2S) 1
- G108 - Heated Oxygen Sensor (HO2S) 2
- J220 - Motronic Engine Control Module (ECM)
- J338 - Throttle Valve Control Module
- T4y - Wire Connector, 4 Point, black, in engine compartment, right
- T4z - Wire Connector, 4 Point, black, in engine compartment, left
- T15m - Wire Connector, 15 Point, red, connector station, electronics box in plenum chamber
- Z19 - Oxygen Sensor (O2S) I Heater
- Z28 - Oxygen Sensor (O2S) II Heater

- 83 - Ground connection -1-, in right front wiring harness
- 200 - Ground connection (shielding), in engine compartment wiring harness
- A100 - Connector -2- (87), in instrument panel wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

C6 - Distributor Ignition (DI) Capacitor
J104 - ABS Control Module (w/EDL)
J220 - Motronic Engine Control Module (ECM)
N - Ignition Coil
N122 - Power Output Stage
N128 - Ignition Coil 2
N158 - Ignition Coil 3
P - Spark Plug Connector
Q - Spark Plugs
T5d - Wire Connector, 5 Point, near ignition coil
T10ar - Wire Connector, 10 Point, orange, connector station, electronics box in plenum chamber
T15m - Wire Connector, 15 Point, red, connector station, electronics box in plenum chamber
T16 - Wire Connector, 16 Point, Data Link Connector (DLC), behind instrument panel, left

83 - Ground connection -1-, in right front wiring harness
A70 - Connector (15a, fuse 231), in instrument panel wiring harness
A121 - Connector (High-Bus), in instrument panel wiring harness
A122 - Connector (Low-Bus), in instrument panel wiring harness
D23 - Connector (over fuse 229), in wiring harness front, right

* - Front wheel drive Only
● - CAN-Bus

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

D - Ignition/Starter Switch
J59 - Load Reduction Relay
J234 - Airbag Control Module
T10an - Wire Connector, 10 Point, yellow, connector station right, A-pillar
T15a - Wire Connector, 15 Point, black, connector station right, A-pillar
109 - Ground connection, in airbag wiring harness
A2 - Plus connection (15), in instrument panel wiring harness
A21 - Plus connection (86s), in instrument panel wiring harness

* - Canada Only

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

F4 - Back-Up Light Switch
L46 - Left Rear Fog Light
L47 - Right Rear Fog Light
M2 - Tail Light, Right
M4 - Tail Light, Left
M6 - Turn Signal Light, Left Rear
M8 - Turn Signal Light, Right Rear
M9 - Brake Light, Left
M10 - Brake Light, Right
M16 - Back-Up Light, Left
M17 - Back-Up Light, Right
M25 - High-Mount Brake Light
T3au - Wire Connector, 3 Point, red, connector station electronics box in plenum chamber
T6e - Wire Connector, 6 Point, blue, connector station left, A-Pillar
T10 - Wire Connector, 10 Point, brown, connector station electronics box in plenum chamber
T10a - Wire Connector, 10 Point, brown, connector station left, A-pillar
86 - Ground connection -1-, in rear wiring harness
196 - Ground connection -3-, in rear wiring harness
A87 - Connector (reserve lamp), in instrument panel wiring harness
* - Manual Transmission Only

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E1 - Light Switch
E4 - Headlight Dimmer/Flasher Switch
E19 - Park Light Switch

A9 - Plus connection (56b), in instrument panel wiring harness

A32 - Plus connection (30), in instrument panel wiring harness

A43 - Wire connection (57l), in instrument panel wiring harness

A44 - Wire connection (57r), in instrument panel wiring harness

* - Canada Only

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E15 - Rear Window Defogger Switch
E87 - A / C Control Head
T2f - Wire Connector, double, near washer nozzle heater, left
T2g - Wire Connector, double, near washer nozzle heater, right
T6e - Wire Connector, 6 Point, blue, connector station left, A-pillar
T10a - Wire Connector, 10 Point, brown, connector station left, A-pillar
T10c - Wire Connector, 10 Point, violet, connector station left, A-pillar
T15a - Wire Connector, 15 Point, black, connector station right, A-pillar
W6 - Glove Compartment Light
X - License Plate Light
Z1 - Rear Window Defogger / Heat Element
Z20 - Washer Nozzle Heater, Left
Z21 - Washer Nozzle Heater, Right

81 - Ground connection -1-, in instrument panel wiring harness
87 - Ground connection -2-, in rear wiring harness
261 - Ground connection, in wiring harness heated spray jet
A3 - Plus connection (58), in instrument panel wiring harness
A34 - Wire connection (75x), in instrument panel wiring harness
A37 - Wire connection (58a), in instrument panel wiring harness
Q53 - Plus connection (15), in alarm system wiring harness
W2 - Plus Connection (58), in rear wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

H - Horn Button
H2 - High Tone Horn
H7 - Low Tone Horn
J4 - Dual Horn Relay
T3ag - Wire Connector, 3 Point, black, connector station right, A-pillar
T5g - Wire Connector, 5 Point, behind steering column switch cover
T6a - Wire Connector, 6 Point, red, connector station right, A-pillar
T6e - Wire Connector, 6 Point, blue, connector station left, A-pillar
T10ad - Wire Connector, 10 Point, red, connector station left, A-pillar
T16 - Wire Connector, 16 Point, Data Link Connector (DLC), behind instrument panel, left

81 - Ground connection -1-, in instrument panel wiring harness
176 - Ground connection, in right headlight wiring harness
179 - Ground connection, in left headlight wiring harness
A40 - Plus connection -1- (30), in instrument panel wiring harness
A50 - Plus connection (30as), in instrument panel wiring harness
A72 - Connector (71), in instrument panel wiring harness
A90 - Connector (two-tone horn), in instrument panel wiring harness
S1 - Plus connection (30) -1-, in central locking system wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

L1 - Headlight, Left
L2 - Headlight, Right
L22 - Left Front Fog Light
L23 - Right Front Fog Light
M1 - Parking Light, Left
M3 - Parking Light, Right
M5 - Turn Signal Light, Left Front
M7 - Turn Signal Light , Right Front
M18 - Left, Side Turn Signal Light
M19 - Right, Side Turn Signal Ligh
T3s - Wire Connector, 3 Point, white, near headlight, left
T3t - Wire Connector, 3 Point, white, near headlight, right
T6 - Wire Connector, 6 Point , yellow, connector station right, A-pillar
T8g - Wire Connector, 8 Point, near headlight, right
T8h - Wire Connector, 8 Point, near headlight, left
T10ad - Wire Connector, 10 Point, red, connector station left, A-pillar
T10ae - Wire Connector, 10 Point, bright pink, connector station left, A-pillar

176 - Ground connection, in right headlight wiring harness
179 - Ground connection, in left headlight wiring harness
A51 - Wire connection (56), in instrument panel wiring harness
C19 - Connector -1- (right turn signal), in wiring harness headlamp
C20 - Connector (right turn signal), in headlight wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

L15 - Ashtray Light
L28 - Cigarette Lighter Light
L67 - Left Instrument Panel Vent Illumination
L68 - Center Instrument Panel Vent Illumination
L69 - Right Instrument Panel Vent Illumination
L121 - Illumination for cup holder
R15 - Left Rear Woofer
R34 - Left Rear Midrange Speaker
T6e - Wire Connector, 6 Point, blue, connector station left, A-pillar
T6aa - Wire Connector, 6 Point, brown, connector station right, A-pillar
T10i - Wire Connector, 10 Point, black, in center console
U1 - Cigarette Lighter

81 - Ground connection -1-, in instrument panel wiring harness
A19 - Wire connection (58d), in instrument panel wiring harness
A20 - Wire connection (15a), in instrument panel wiring harness
A57 - Wire connection (30c), in instrument panel wiring harness
A151 - Connector -4- (87), in instrument panel wiring harness
A152 - Connector -5- (87), in instrument panel wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E7 - Fog Light Switch
E18 - Rear Fog Light Switch
J512 - Control module for fog light/rear fog light
T6a - Wire Connector, 6 Point, red, connector station right, A-pillar
T10ad - Wire Connector, 10 Point, red, connector station left, A-pillar

(81) - Ground connection -1-, in instrument panel wiring harness
(135) - Ground connection -2-, in instrument panel wiring harness
(A19) - Wire connection (58d), in instrument panel wiring harness
(A47) - Wire connection (55), in instrument panel wiring harness
(A74) - Connector (15a - fuse 5), in instrument panel wiring harness

* - Canada Only
** - USA Only

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

F9 - Parking Brake Warning Light Switch
J218 - Instrument Cluster Combination Processor
K1 - Headlight High Beam Indicator Light
K2 - Generator (GEN) Warning Light
K14 - Parking Brake Indicator Light
K18 - Trailer Operation Indicator Light
K65 - Left Turn Signal Indicator Light
K83 - Malfunction Indicator Lamp (MIL)
K86 - Traction Control Indicator Light
K94 - Right Turn Signal Indicator Light
K98 - Convertible Top Locked Indicator Light
K132 - Fault light for power accelerator activation (EPC)
R - Radio
T10af - Wire Connector, 10 Point, red, on radio
T32 - Wire Connector, 32 Point, blue, on instrument cluster
T32a - Wire Connector, 32 Point, green, on instrument cluster

81 - Ground connection -1-, in instrument panel wiring harness
A4 - Wire connection (brake system monitoring), in instrument panel wiring harness
A24 - Plus connection (58b), in instrument panel wiring harness

* - Optional For All Models

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- E87 - A / C Control Head
- G266 - Oil Level Thermal Sensor (SRI)
- J218 - Instrument Cluster Combination Processor
- J347 - Control Module for Ultra-Sound sensors
- J452 - Control Module for door warning lights
- T10 - Wire Connector, 10 Point, brown, connector station, electronics box in plenum chamber
- T10aa - Wire Connector, 10 Point, orange, connector station right, A-pillar
- T15a - Wire Connector, 15 Point, black, connector station right, A-pillar
- T16 - Wire Connector, 16 Point, behind instrument panel, left (diagnostic connection)
- T32 - Wire Connector, 32 Point, blue, on instrument cluster
- T32a - Wire Connector, 32 Point, green, on instrument cluster

- 83 - Ground connection -1-, in right front wiring harness
- A73 - Connector (outside temperature indicator) in instrument panel wiring harness
- A76 - Connector (K-diagnosis wire) in instrument panel wiring harness
- S3 - Wire connection (switch/control module) -1-, in central locking system wiring harness

- * - Auto Check System Only
- ** - Without Auto Check System

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

- E20 - Instrument Panel Light Dimmer Switch
- F1 - Oil Pressure Switch
- F66 - Engine Coolant Level (ECL) Warning Switch
- G - Fuel Level Sensor
- G1 - Fuel Gauge
- G3 - Engine Coolant Temperature (ECT) Gauge
- G5 - Tachometer
- G6 - Fuel Pump
- G9 - Engine Oil Temperature Gauge
- G14 - Voltmeter
- G21 - Speedometer
- G22 - Speedometer Vehicle Speed Sensor (VSS)
- H3 - Warning Buzzer
- J218 - Instrument Cluster Combination Processor
- T10a - Wire Connector, 10 Point, brown, connector station left, A-pillar
- T10m - Wire Connector, 10 Point, black, connector station, electronics box in plenum chamber
- T10ao - Wire Connector, 10 Point, white, connector station left, A-pillar
- T32 - Wire Connector, 32 Point, blue, on instrument cluster
- T32a - Wire Connector, 32 Point, green, on instrument cluster
- Y - Analog Clock

- (83) - Ground connection -1-, in right front wiring harness
- (86) - Ground connection -1-, in rear wiring harness
- (199) - Ground connection -3-, in instrument panel wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E24 - Seat Belt Switch, Left
G34 - Left Front Brake Pad Wear Sensor
G35 - Right Front Brake Pad Wear Sensor
J104 - ABS Control Module (w/EDL)
J218 - Instrument Cluster Combination Processor
K4 - Park Light Indicator Light
K19 - Seat Belt Warning Light
K47 - ABS Warning Light
K75 - Airbag Malfunction Indicator Lamp (MIL)
K117 - Warning light for anti-theft imobilizer sensor
T6af - Wire Connector, 6 Point, black, below driver's seat
T6r - Wire Connector, 6 Point, white, connector station left, A-pillar
T10b - Wire Connector, 10 Point, orange, connector station left, A-pillar
T10ap - Wire Connector, 10 Point, grey, connector station right, A-pillar
T32 - Wire Connector, 32 Point, blue, on instrument cluster
T32a - Wire Connector, 32 Point, green, on instrument cluster
V94 - Central Locking / Alarm System / Interior Light Delay Control Modul
W - Front Interior Light
32 - Ground connection, behind instrument panel, left
81 - Ground connection -1-, in instrument panel wiring harness
100 - Ground connection -1-, in ABS wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E22 - Windshield Wiper Intermittent Switch
E38 - Windshield Wiper Intermittent Regulator
F34 - Brake Fluid Level Warning Switch
J31 - Washer / Wiper Intermittent Relay
T6al - Wire Connector, 6 Point, black, near steering column
T10c - Wire Connector, 10 Point, violet, connector station left, A-pillar
T10ad - Wire Connector, 10 Point, red, connector station left, A-pillar
T10ae - Wire Connector, 10 Point, bright pink, connector station left, A-pillar
V - Windshield Wiper Motor
V5 - Windshield Washer Pump

81 - Ground connection -1-, in instrument panel wiring harness
135 - Ground connection -2-, in instrument panel wiring harness
261 - Ground connection, in wiring harness heated spray jet
A60 - Wire connection (vehicle speed signal), in instrument panel wiring harness
A97 - Connector (53), in instrument panel wiring harness

ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = violet
ge = yellow

E2 - Turn Signal Switch
E3 - Emergency Flasher Switch
J2 - Emergency Flasher Relay
T3q - Wire Connector, 3 Point, black, on Turn Signal Switch
T3au - Wire Connector, 3 Point, red, connector station, electronics box in plenum chamber

(81) - Ground connection -1-, in instrument panel wiring harness
(A5) - Plus connection (right turn signal), in instrument panel wiring harness
(A6) - Plus connection (left turn signal), in instrument panel wiring harness
(A125) - Wire connection (crash signal), in instrument panel wiring harness

* - Optional For All Models