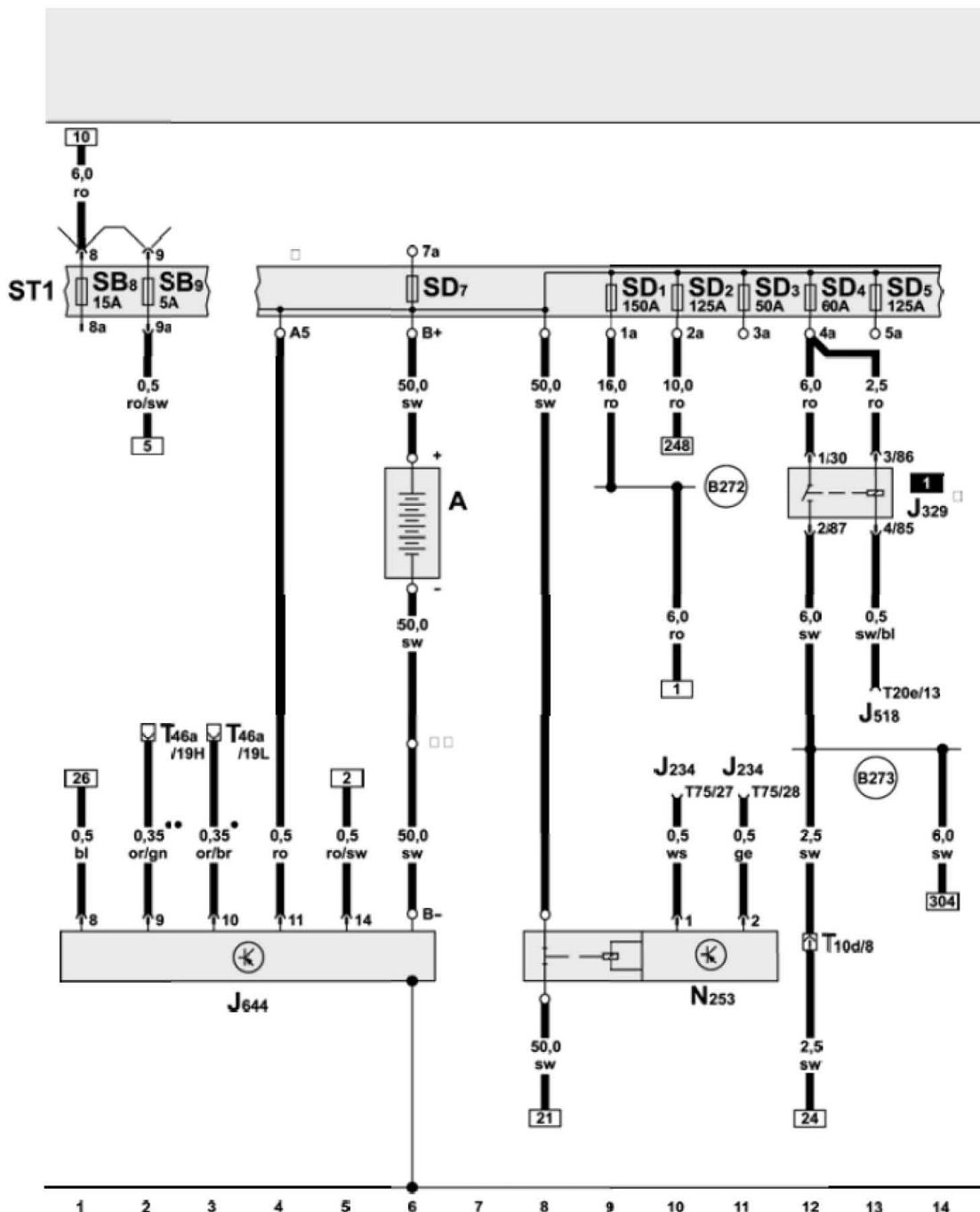


4.2 1 Fuel injection engine



Legend for wire colors:
 ws = white sw = black ro = red
 br = brown gn = green bl = blue
 gr = grey li = purple ge = yellow
 or = orange rs = pink

Battery, terminal 15 voltage supply relay, energy managementcontrol unit, battery isolation igniter, fuses

A - Battery

J234 - Airbag control unit

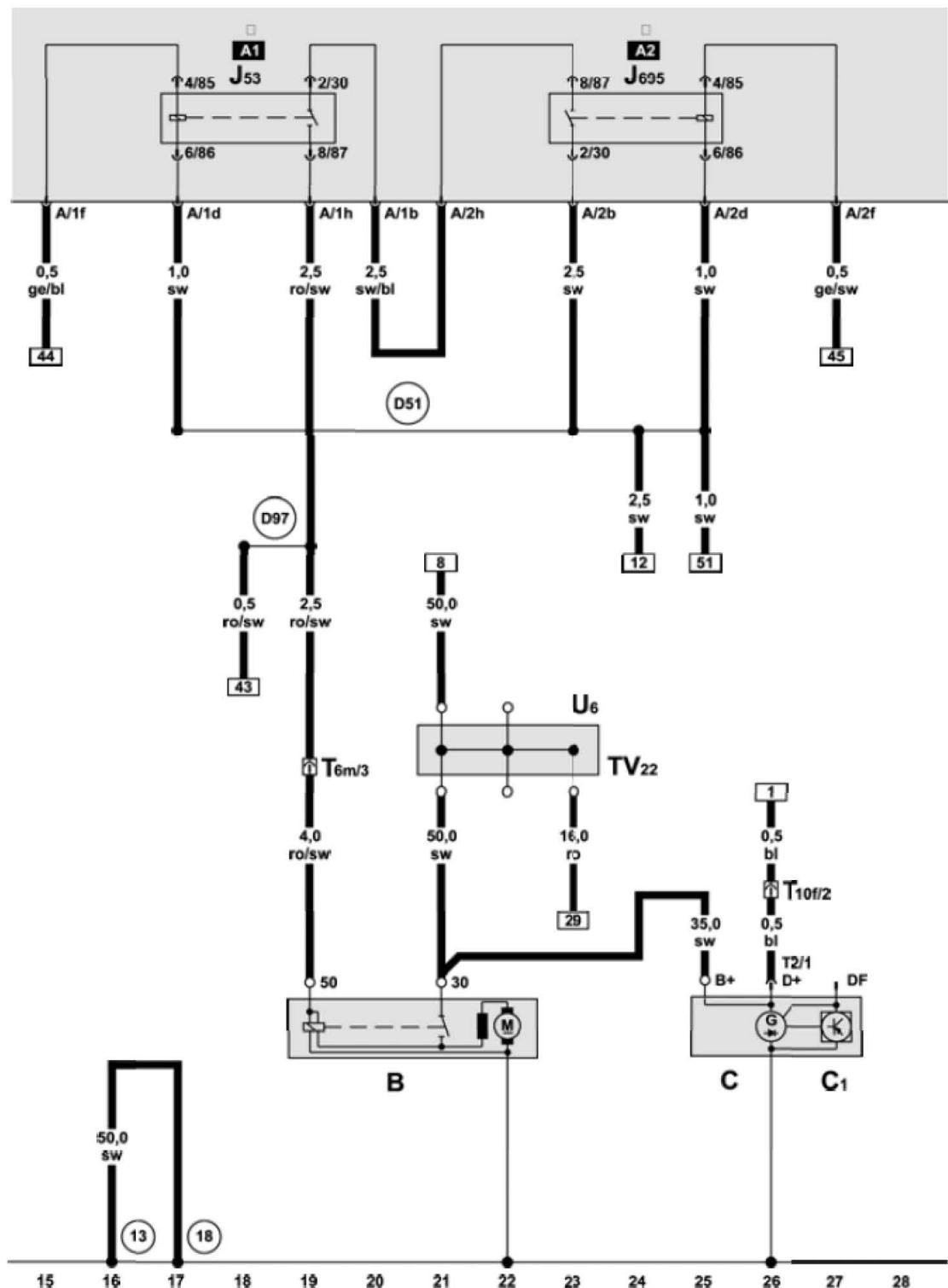
J329 - Terminal 15 voltage supply relay

J518 - Entry and start authorisation control unit

J644 - Energy management control unit

N253 - Battery isolation igniter
SB8 - Fuse 8 on fuse holder B
SB9 - Fuse 9 on fuse holder B
SD1 - Fuse 1 on fuse holder D
SD2 - Fuse 2 on fuse holder D
SD3 - Fuse 3 on fuse holder D
SD4 - Fuse 4 on fuse holder D
SD5 - Fuse 5 on fuse holder D
SD7 - Fuse 7 on fuse holder D
T10d - 10-pin connector, blue, coupling station on electronics box, plenum chamber
T20e - 20-pin connector, black, on entry and start authorization control unit
T46a - 46-pin connector, black, CAN separating connector left
T75 - 75-pin connector, grey, on airbag control unit (USA: white)
B272 - Positive connection (30), in main wiring harness
B273 - Positive connection (15), in main wiring harness
 -CAN bus (data wire)
 - Relay and fuse carrier under driver seat
 - screw connection (31) battery wire before driver seat

LAUNCH



ws = white sw = black ro = red br = brown gn = green bl = blue

gr = grey li = purple ge = yellow or = orange rs = pink

Starter, alternator, starter motor relay, starter motor relay 2, slavestart socket

B - Starter

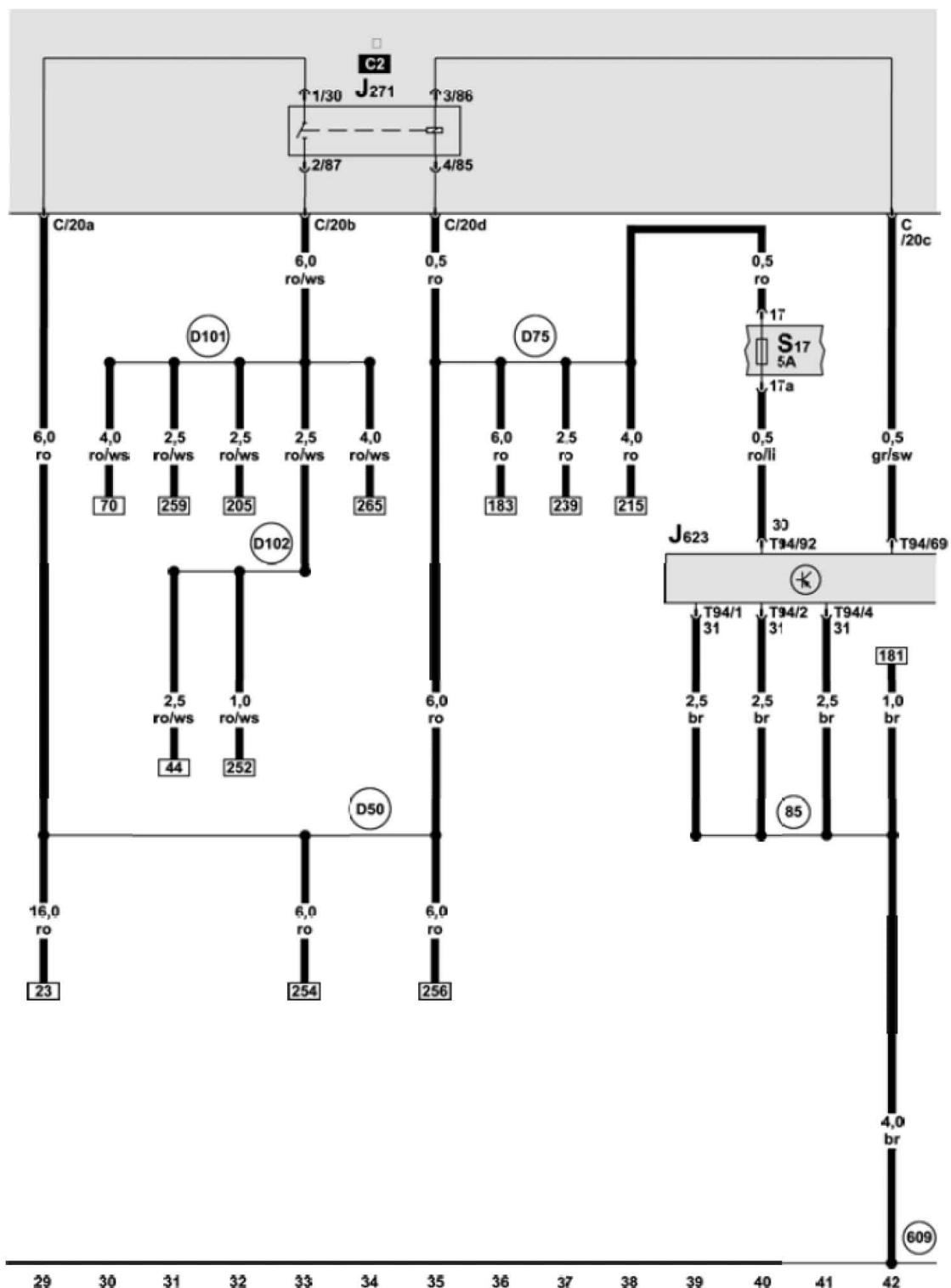
C - Alternator

C1 - Voltage regulator

J53 - Starter motor relay

J695 - Starter motor relay 2
T2 - 2-pin connector, black, on alternator
T6m - 6-pin connector, white, coupling station on electronics box, plenum chamber
T10f - 10-pin connector, red, coupling station on electronics box, plenum chamber
TV22 - Terminal 30 wiring junction 2
U6 - Slave start socket
13 - Earth point, on right in engine compartment
18 - Earth point on engine block
D51 - Positive connection 1 (15), in engine compartment wiring harness
D97 - Connection (50), in engine compartment wiring harness
- Relay and fuse carrier, electronics box plenum chamber

LAUNCH



ws = white sw = black ro = red br = brown gn = green bl = blue
 gr = grey li = purple ge = yellow or = orange rs = pink

Engine control unit, Motronic current supply relay

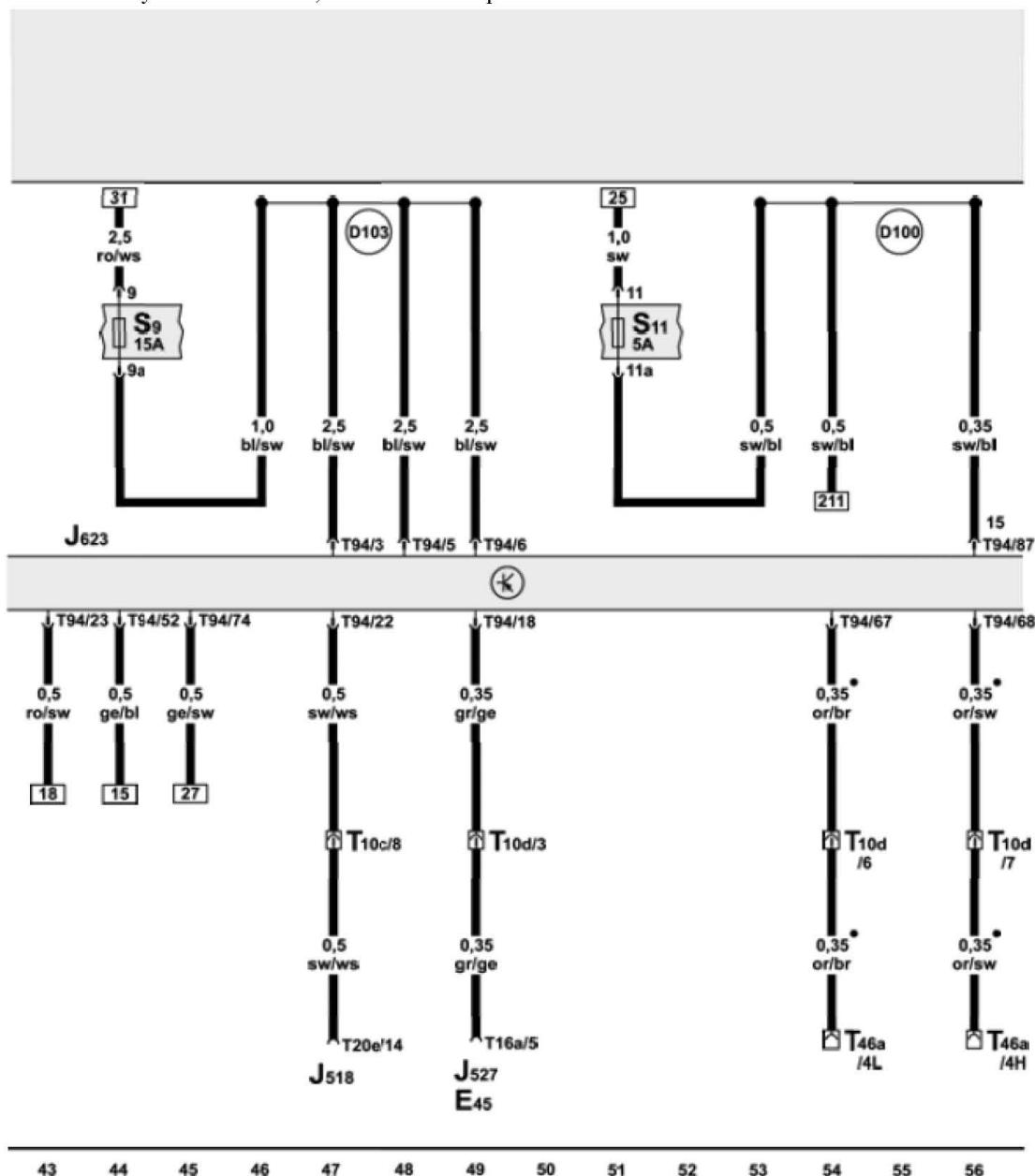
J271 - Motronic current supply relay

J623 - Engine control unit

S17 - Fuses in relay plate fuse holder

T94 - 94-pin connector, black, on engine control unit

- 85 - Earth connection 1, in engine compartment wiring harness
 609 - Earth point, on right in plenum chamber
 D50 - Positive connection (30), in engine compartment wiring harness
 D75 - Positive connection 2 (30), in engine compartment wiring harness
 D101 - Connection 1, in engine compartment wiring harness
 D102 - Connection 2, in engine compartment wiring harness
 - Relay and fuse carrier, electronics box plenum chamber



ws = white sw = black ro = red br = brown gn = green bl = blue
 gr = grey li = purple ge = yellow or = orange rs = pink

Engine control unit

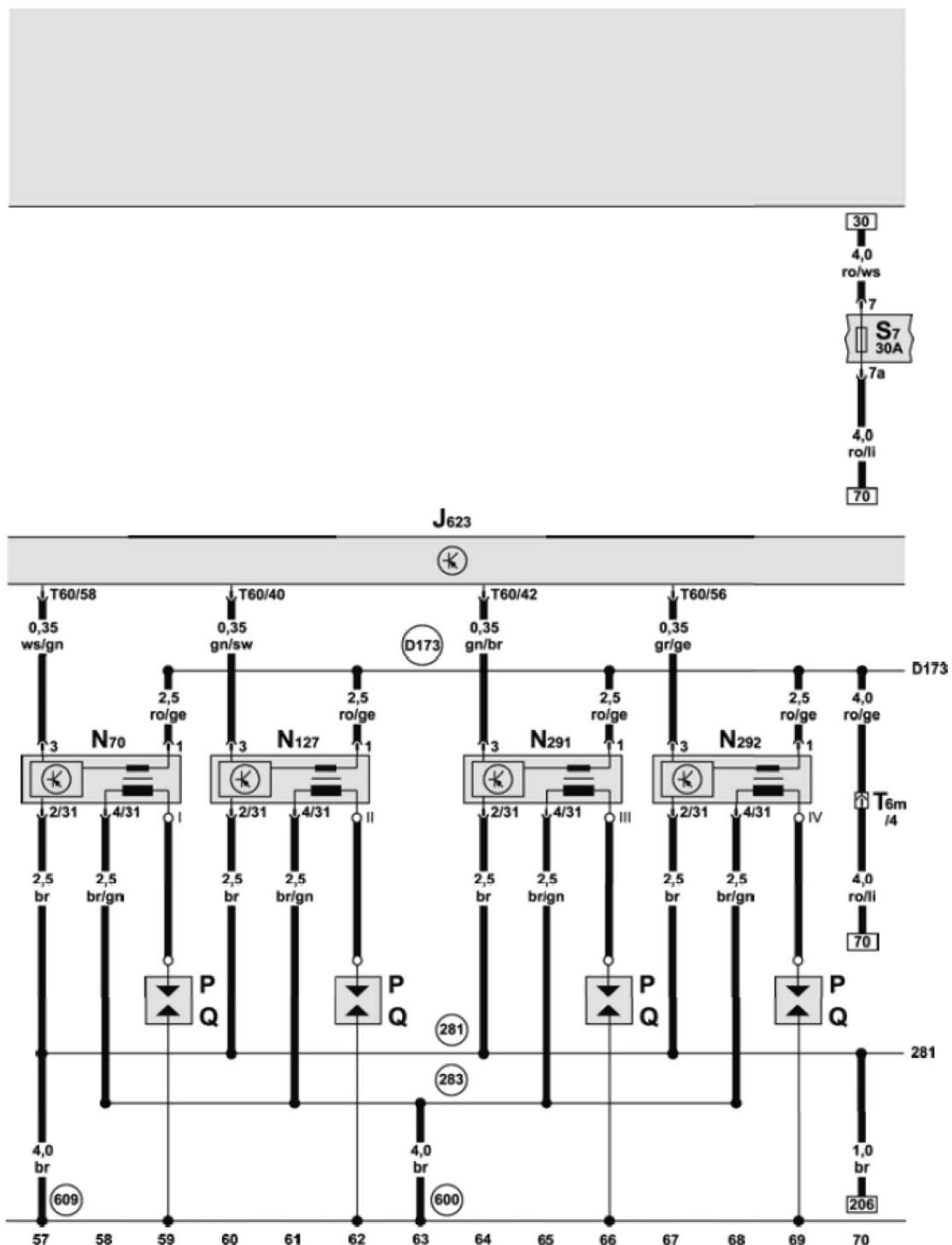
E45 - Cruise control system switch

J518 - Entry and start authorisation control unit

J527 - Steering column electronics control unit

J623 - Engine control unit
S9 - Fuses in relay plate fuse holder
S11 - Fuses in relay plate fuse holder
T10c - 10-pin connector, pink, coupling station on electronics box, plenum chamber
T10d - 10-pin connector, blue, coupling station on electronics box, plenum chamber
T16a - 16-pin connector, on steering column electronics control unit
T20e - 20-pin connector, black, on entry and start authorization control unit
T46a - 46-pin connector, black, CAN separating connector left
T94 - 94-pin connector, black, on engine control unit
D100 - Positive connection 2 (15), in engine compartment wiring harness
D103 - Connection 3, in engine compartment wiring harness
- CAN bus (data wire)

LAUNCH



ws = white sw = black ro = red br = brown gn = green bl = blue
 gr = grey li = purple ge = yellow or = orange rs = pink

Engine control unit, ignition coil 1 - 4 with output stage

J623 - Engine control unit

N70 - Ignition coil 1 with output stage

N127 - Ignition coil 2 with output stage

N291 - Ignition coil 3 with output stage

N292 - Ignition coil 4 with output stage

P - Spark plug connector

Q - Spark plugs

S7 - Fuses in relay plate fuse holder

T6m - 6-pin connector, white, coupling station on electronics box, plenum chamber

T60 - 60-pin connector, black, on engine control unit

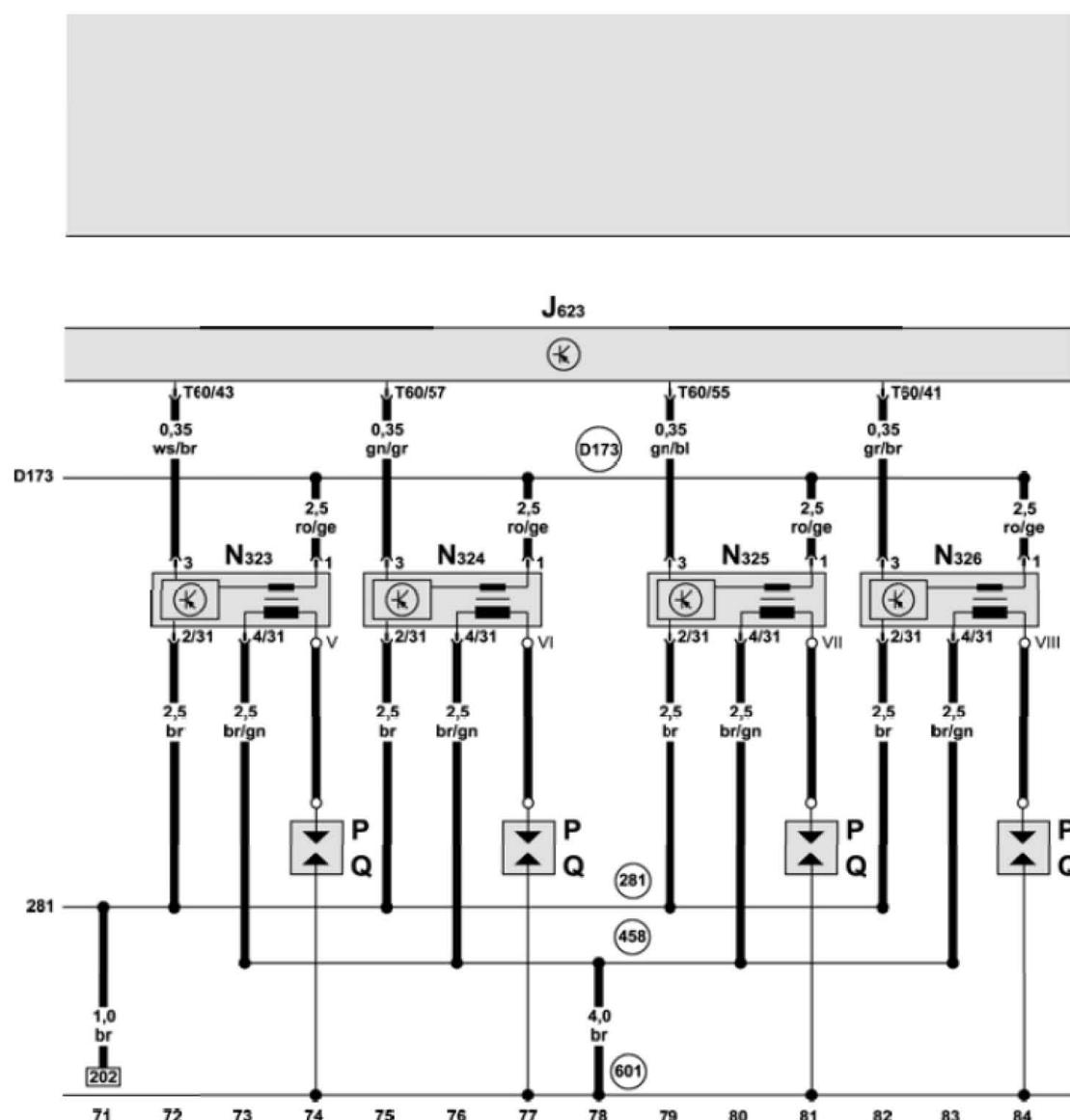
281 - Earth connection 1, in engine harness

283 - Earth connection 2, in engine harness

600 - Earth point, on right of cylinder head

609 - Earth point, on right in plenum chamber

D173 - Connection (87), in engine wiring harness



ws = white sw = black ro = red br = brown gn = green bl = blue

gr = grey li = purple ge = yellow or = orange rs = pink

Engine control unit, ignition coil 5 -8 with output stage

J623 - Engine control unit

N323 - Ignition coil 5 with output stage

N324 - Ignition coil 6 with output stage

N325 - Ignition coil 7 with output stage

N326 - Ignition coil 8 with output stage

P - Spark plug connector

Q - Spark plugs

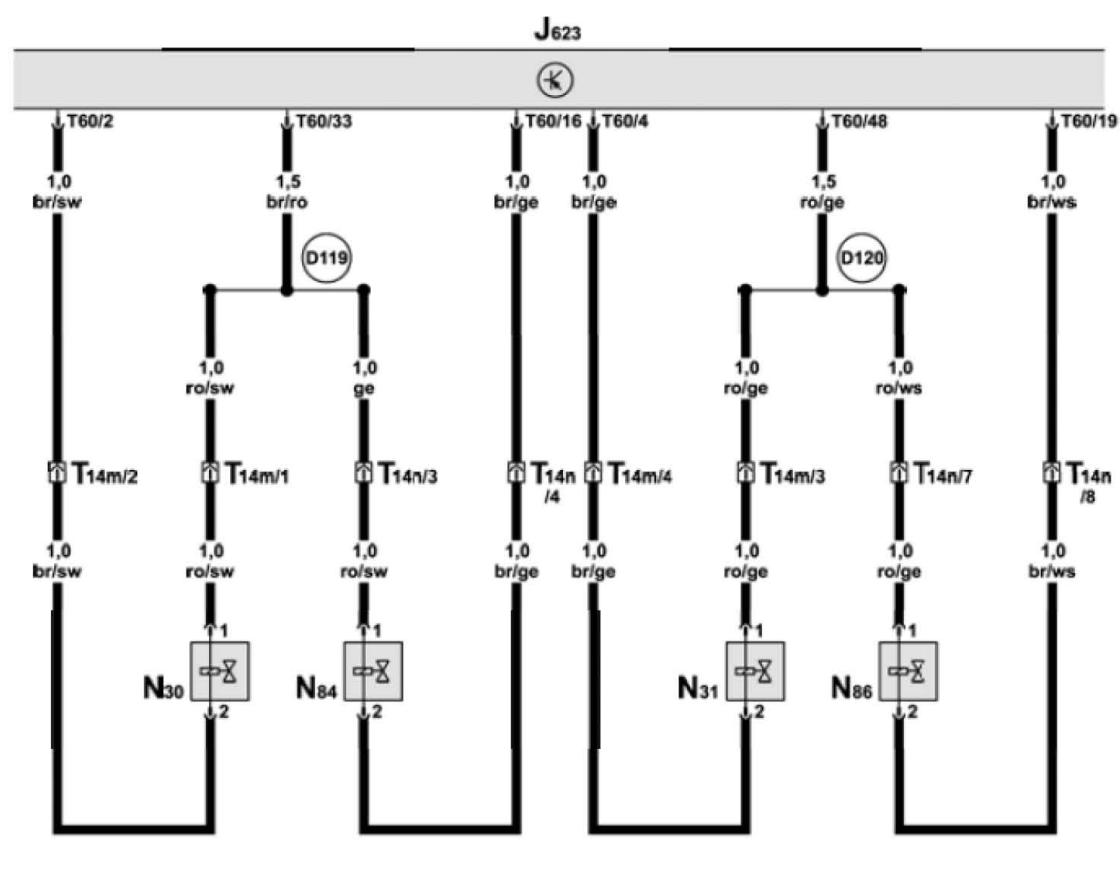
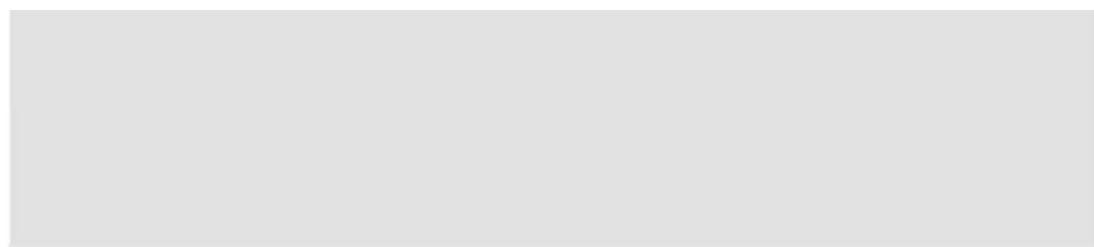
T60 - 60-pin connector, black, on engine control unit

281 - Earth connection 1, in engine harness

458 - Earth connection 3, in engine harness

601 - Earth point, on left of cylinder head

D173 - Connection (87), in engine wiring harness



ws = white

sw = black

ro = red

br = brown

gn = green

bl = blue

gr = grey

li = purple

ge = yellow

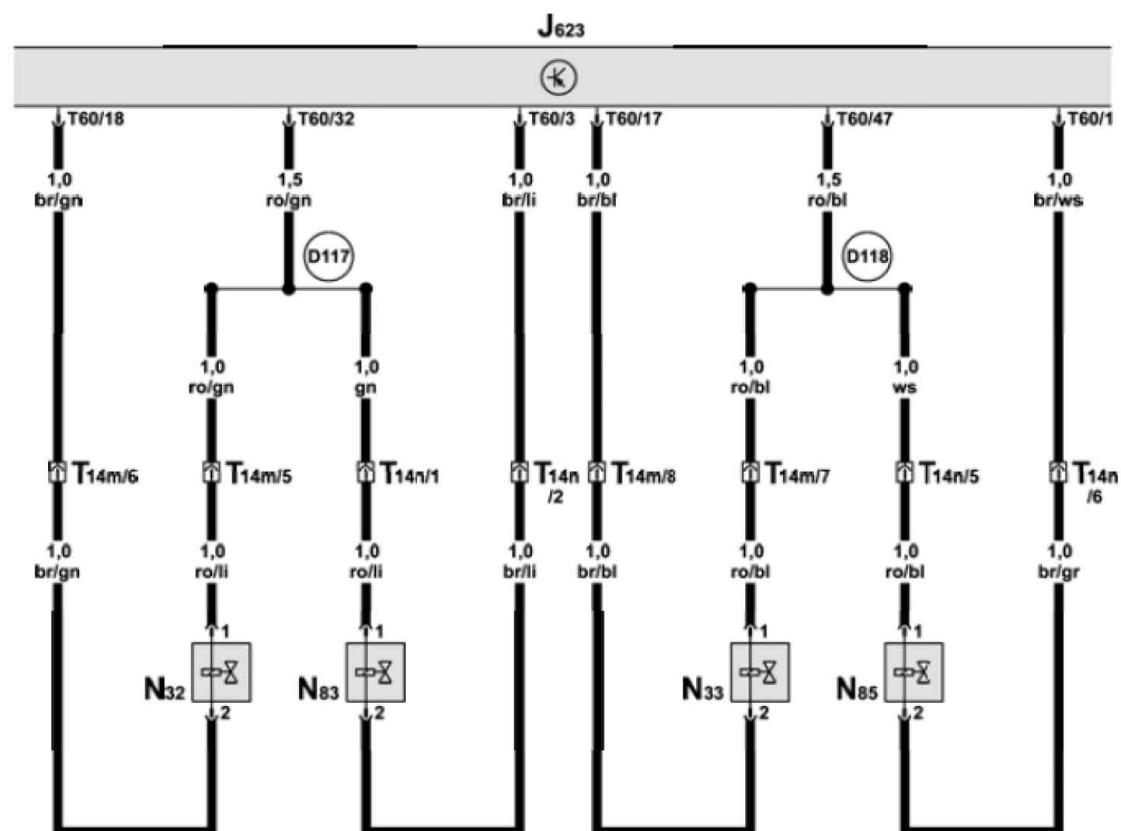
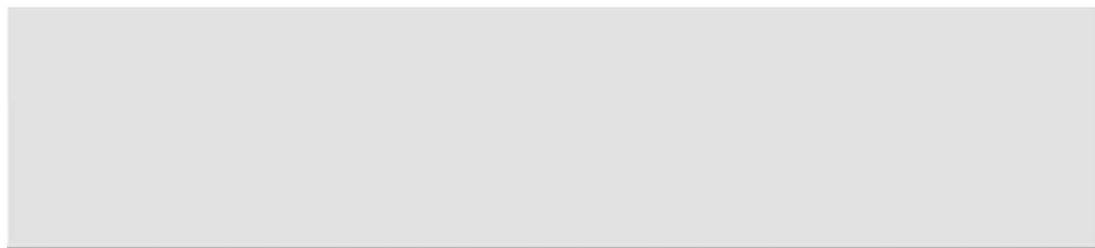
or = orange

rs = pink

Engine control unit, injector for cylinders 1, 2, 6, 8

J623 - Engine control unit

N30 - Injector, cylinder 1
 N31 - Injector, cylinder 2
 N84 - Injector, cylinder 6
 N86 - Injector, cylinder 8
 T14m - 14-pin connector, black, in engine compartment, bank 1
 T14n - 14-pin connector, black, in engine compartment, bank 2
 T60 - 60-pin connector, black, on engine control unit
 D119 - Connection 17, in engine compartment wiring harness
 D120 - Connection 18, in engine compartment wiring harness



99	100	101	102	103	104	105	106	107	108	109	110	111	112
ws = white	sw = black	ro = red	br = brown	gn = green	bl = blue								
gr = grey	li = purple	ge = yellow	or = orange	rs = pink									

Engine control unit, injector for cylinders 3, 4, 5, 7

J623 - Engine control unit

N32 - Injector, cylinder 3

N33 - Injector, cylinder 4

N83 - Injector, cylinder 5

N85 - Injector, cylinder 7

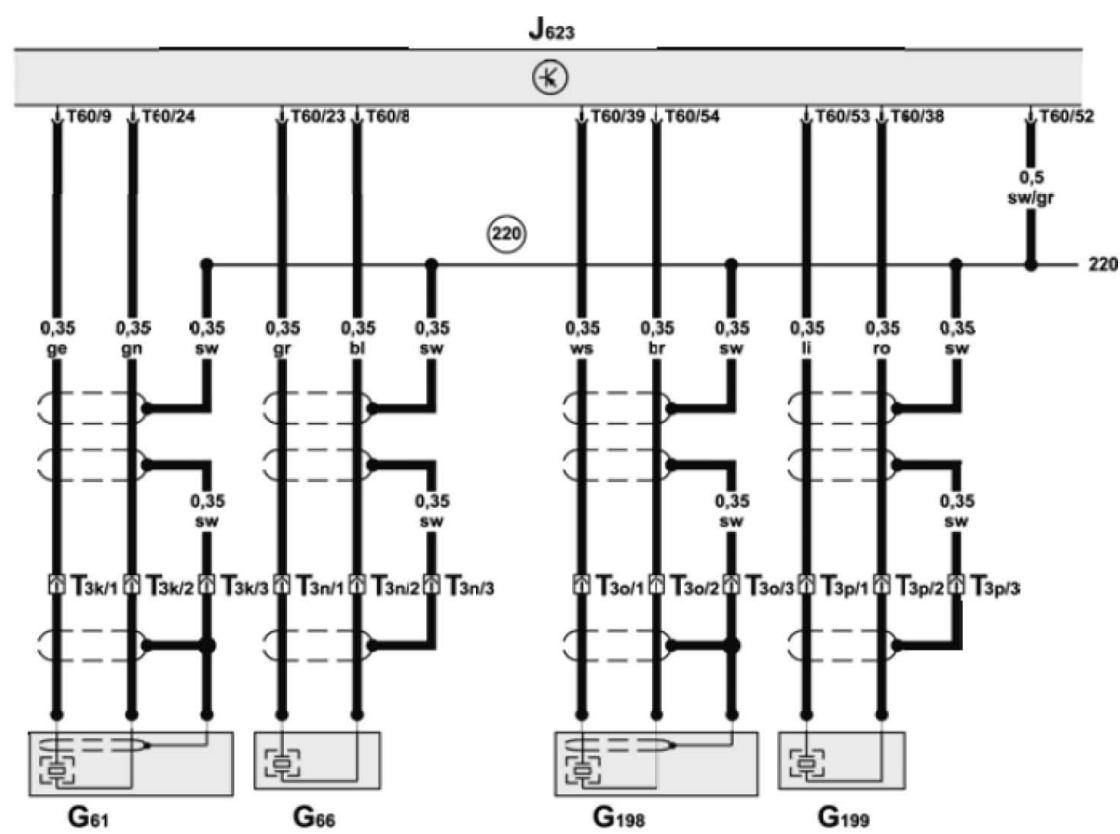
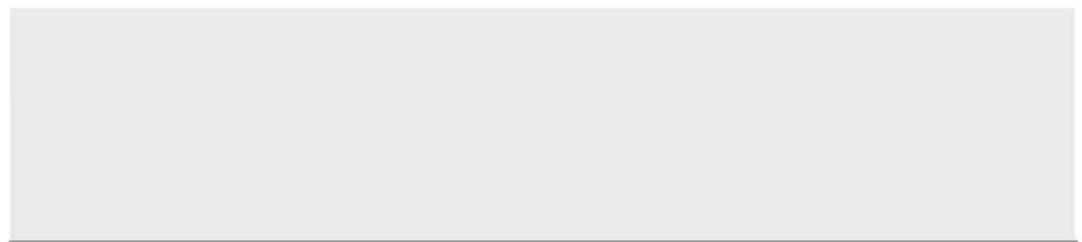
T14m - 14-pin connector, black, in engine compartment, bank 1

T14n - 14-pin connector, black, in engine compartment, bank 2

T60 - 60-pin connector, black, on engine control unit

D117 - Connection 15, in engine compartment wiring harness

D118 - Connection 16, in engine compartment wiring harness



113 114 115 116 117 118 119 120 121 122 123 124 125 126

ws = white	sw = black	ro = red	br = brown	gn = green	bl = blue
gr = grey	li = purple	ge = yellow	or = orange	rs = pink	

Engine control unit, knock sensor

G61 - Knock sensor 1

G66 - Knock sensor 2

G198 - Knock sensor 3

G199 - Knock sensor 4

J623 - Engine control unit

T3k - 3-pin connector, black, on knock sensor 1

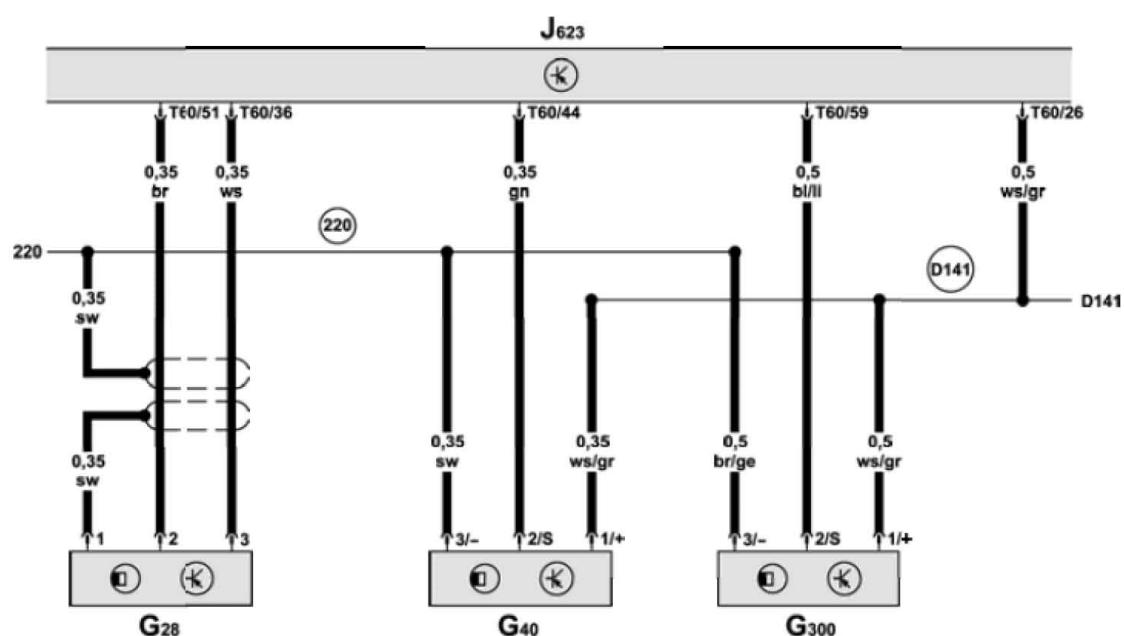
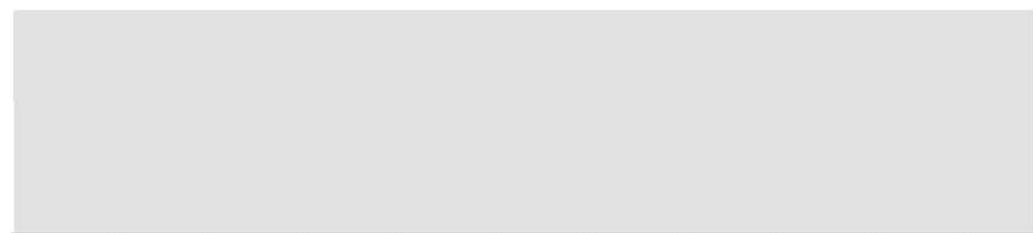
T3n - 3-pin connector, brown, on knock sensor 2

T3o - 3-pin connector, black, on knock sensor 3

T3p - 3-pin connector, brown, on knock sensor 4

T60 - 60-pin connector, black, on engine control unit

220 - Earth connection (sender earth), in engine wiring harness



127	128	129	130	131	132	133	134	135	136	137	138	139	140
ws = white	sw = black	ro = red	br = brown	gn = green	bl = blue								
gr = grey	li = purple	ge = yellow	or = orange	rs = pink									

Engine control unit, engine speed sender, Hall sender

G28 - Engine speed sender

G40 - Hall sender

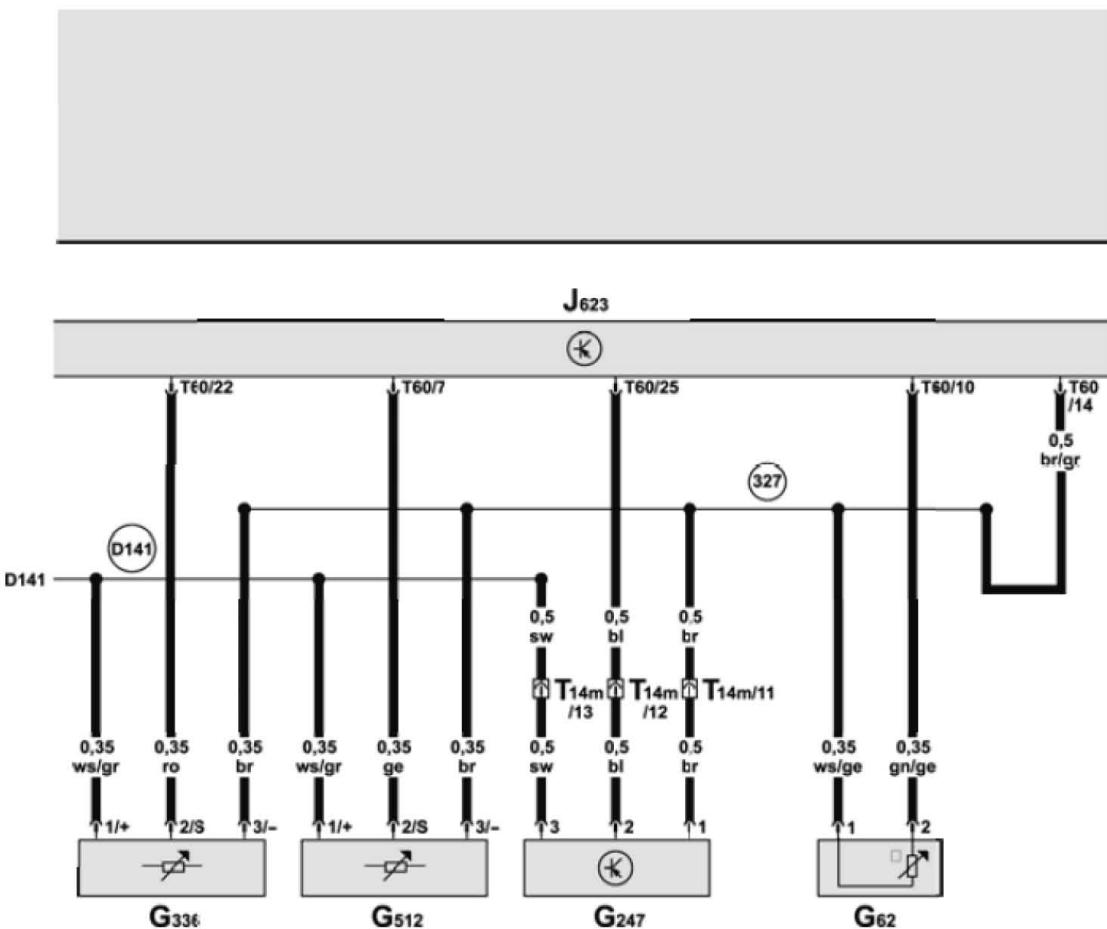
G300 - Hall sender 3

J623 - Engine control unit

T60 - 60-pin connector, black, on engine control unit

220 - Earth connection (sender earth), in engine wiring harness

D141 - Connection (5V), in engine wiring harness



141	142	143	144	145	146	147	148	149	150	151	152	153	154
ws = white gr = grey	sw = black li = purple	ro = red ge = yellow	br = brown or = orange	gn = green rs = pink	bl = blue								

Engine control unit, coolant temperature sender, fuel pressuresender, intake manifold flap potentiometer

G62 - Coolant temperature sender

G247 - Fuel pressure sender

G336 - Intake manifold flap potentiometer

G512 - Intake manifold flap 2 potentiometer

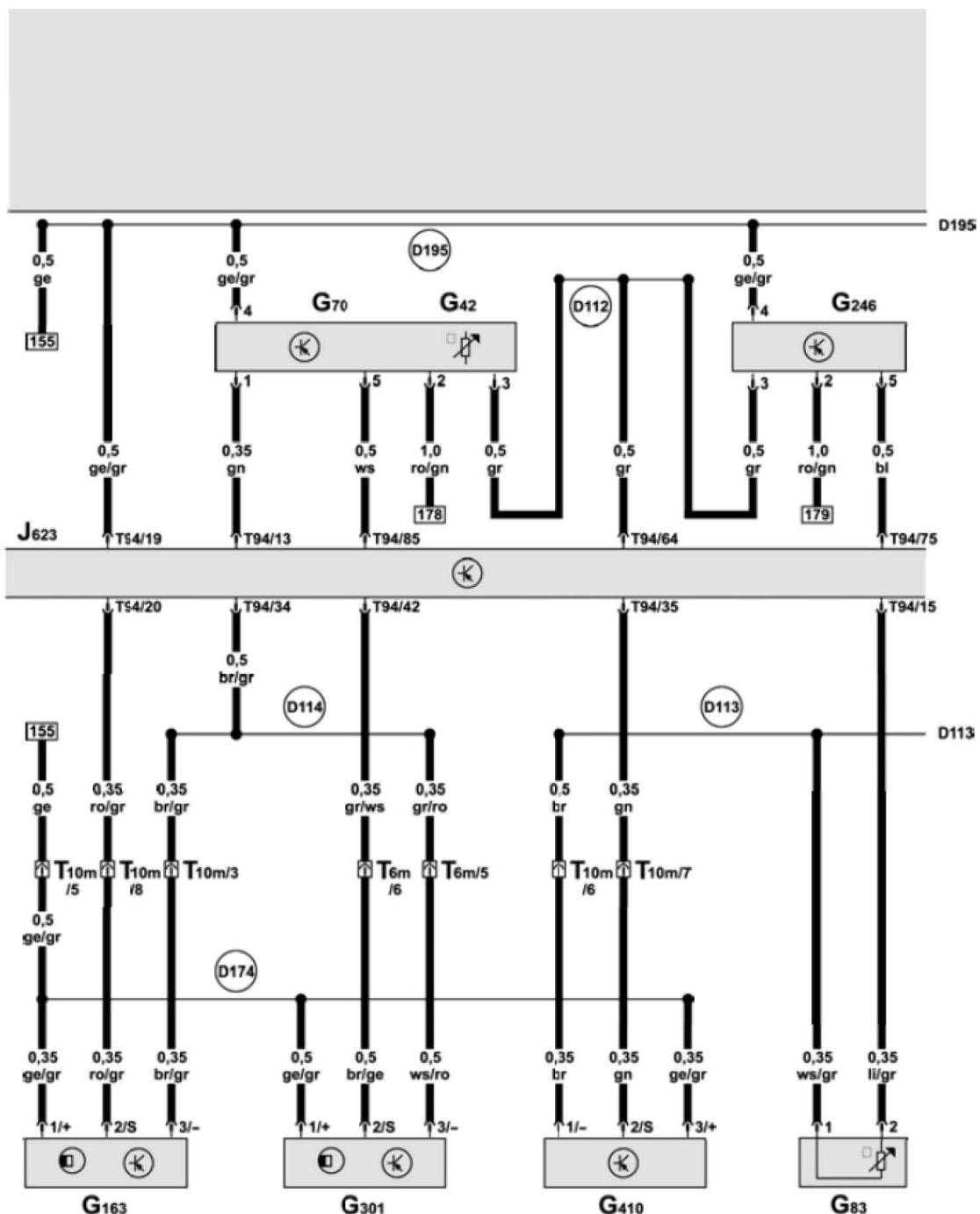
J623 - Engine control unit

T14m - 14-pin connector, black, in engine compartment, bank 1

T60 - 60-pin connector, black, on engine control unit

327 - Earth connection (sender earth), in engine compartment wiring harness

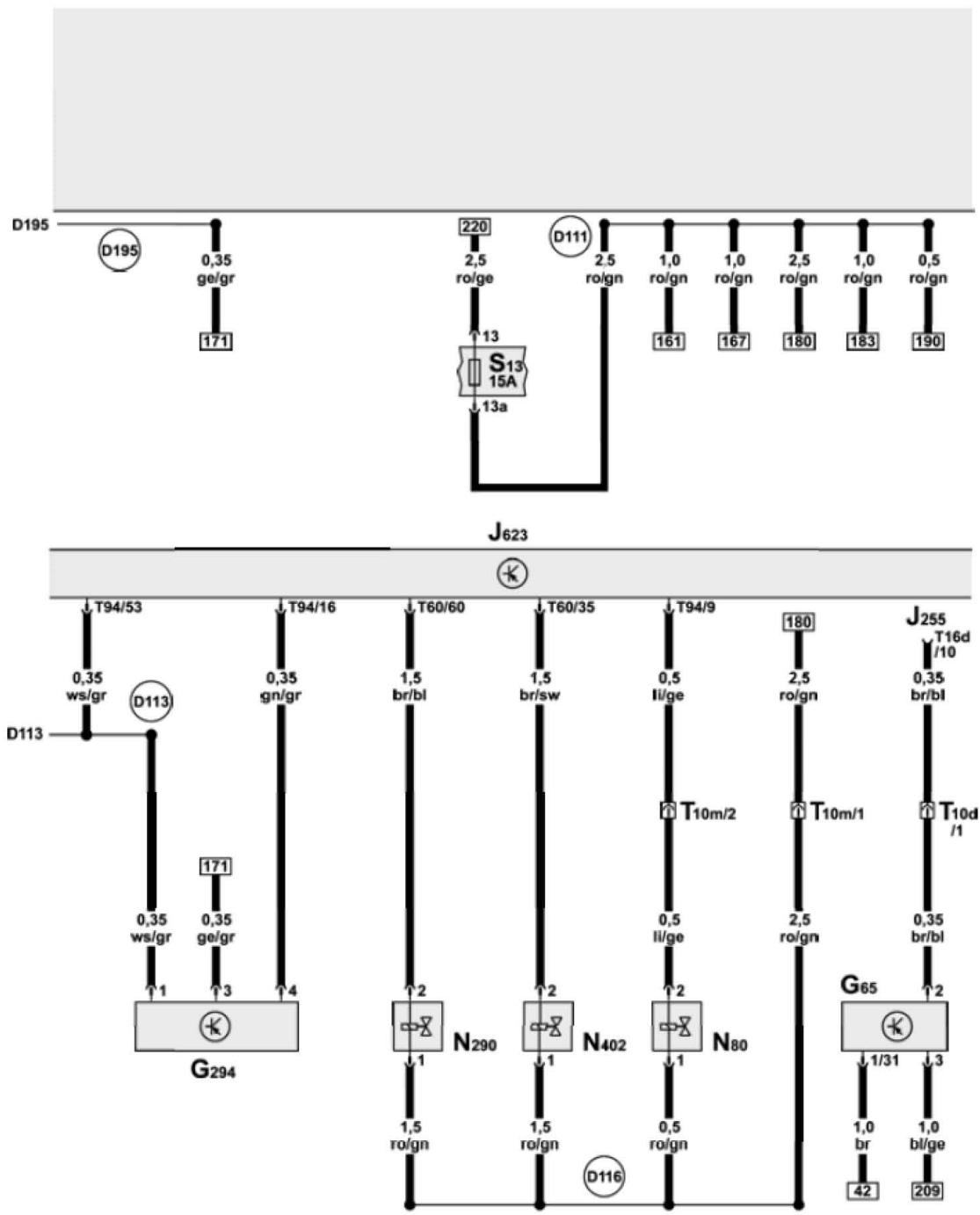
D141 - Connection (5V), in engine wiring harness



155	156	157	158	159	160	161	162	163	164	165	166	167	168
ws = white	sw = black			ro = red			br = brown		gn = green		bl = blue		
gr = grey	li = purple			ge = yellow			or = orange		rs = pink				

Engine control unit, air mass meter, radiator outlet coolant temperature sender, Hall sender, fuel pressure sender for low pressure, intake air temperature sender
G42 - Intake air temperature sender
G70 - Air mass meter
G83 - Radiator outlet coolant temperature sender
G163 - Hall sender 2
G246 - Air mass meter 2
G301 - Hall sender 4
G410 - Fuel pressure sender for low pressure
J623 - Engine control unit
T6m - 6-pin connector, white, coupling station on electronics box, plenum chamber
T10m - 10-pin connector, black, coupling station on electronics box, plenum chamber
T94 - 94-pin connector, black, on engine control unit
D112 - Connection 10, in engine compartment wiring harness
D113 - Connection 11, in engine compartment wiring harness
D114 - Connection 12, in engine compartment wiring harness
D174 - Earth connection 2 (5V), in engine wiring harness
D195 - Connection 1 (5V), in engine compartment wiring harness

LAUNCH



169	170	171	172	173	174	175	176	177	178	179	180	181	182
ws = white		sw = black		ro = red		br = brown		gn = green		bl = blue			
gr = grey		li = purple		ge = yellow		or = orange		rs = pink					

Engine control unit, high pressure sender, brake servo pressure sensor, active charcoal filter system solenoid valve 1, fuel metering valve

G65 - High pressure sender

G294 - Brake servo pressure sensor