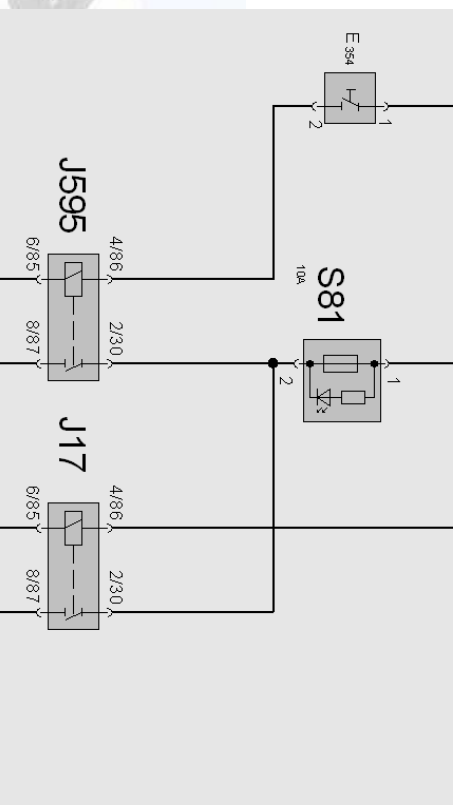
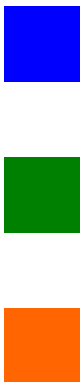
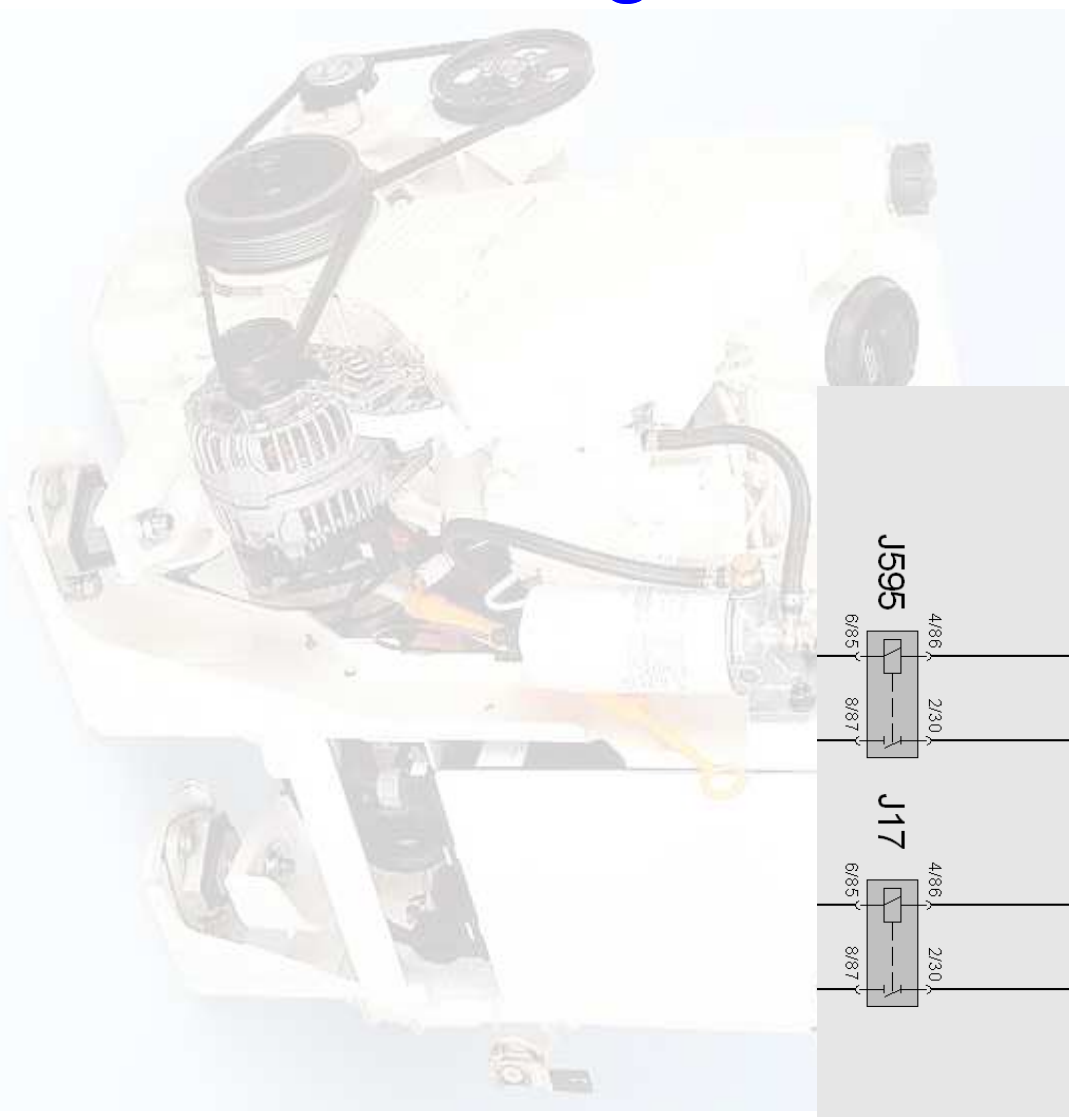


Current Flow Diagram



Boat Engines from Volkswagen Marine

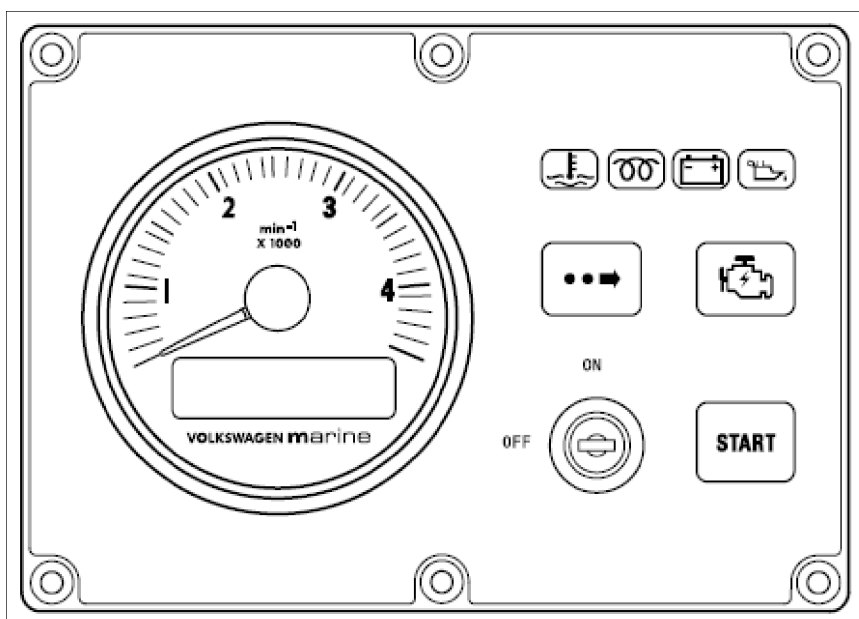


4 Cylinder TDI from model year 2008
Midi Panel

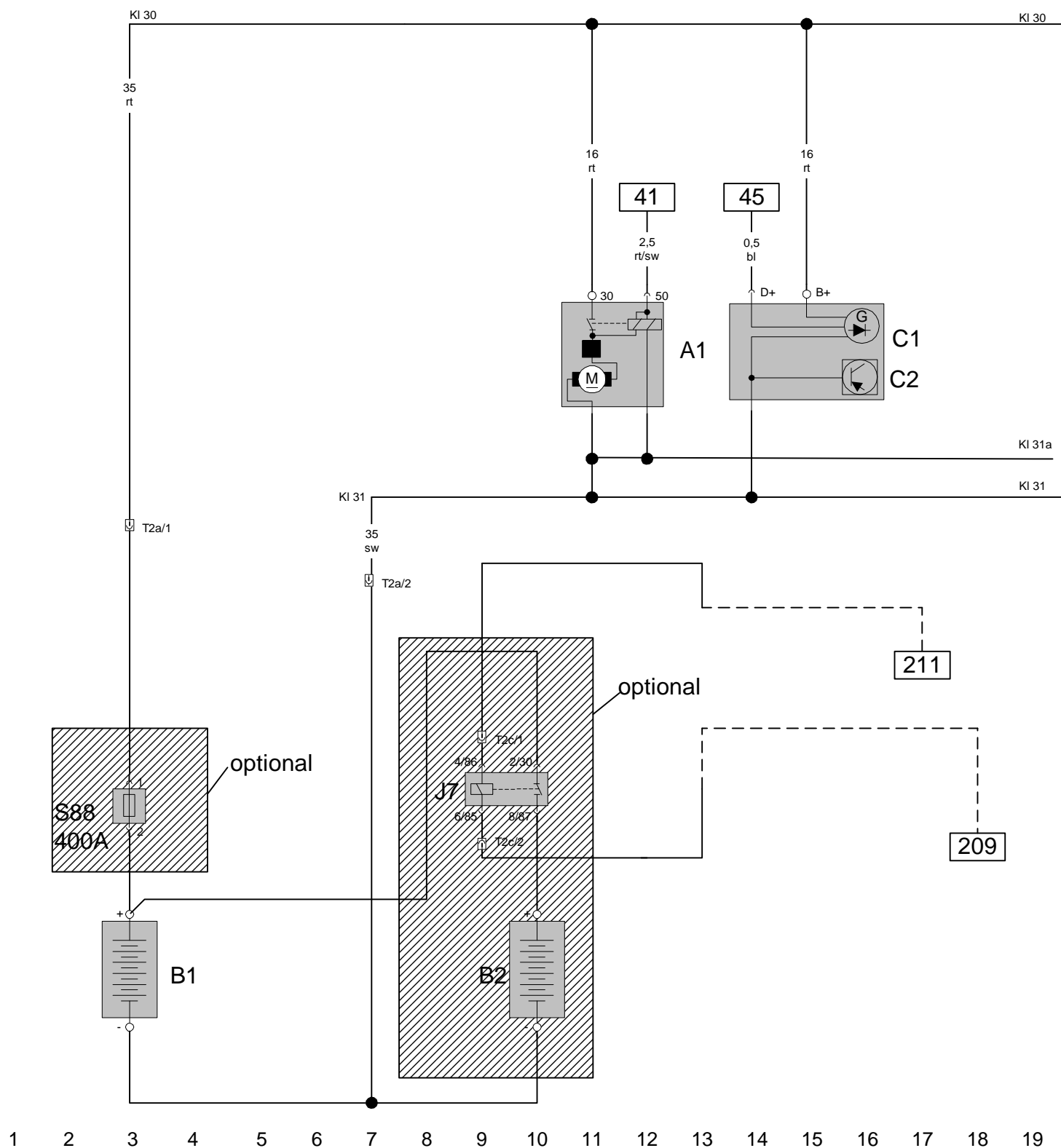
VOLKSWAGEN *marine*
SUPERIOR TECHNOLOGY

Information of versions

for all 4-cyl. engines with central electric box no. 065 937 025 B
and midi panel 065 805 104



065 805 104



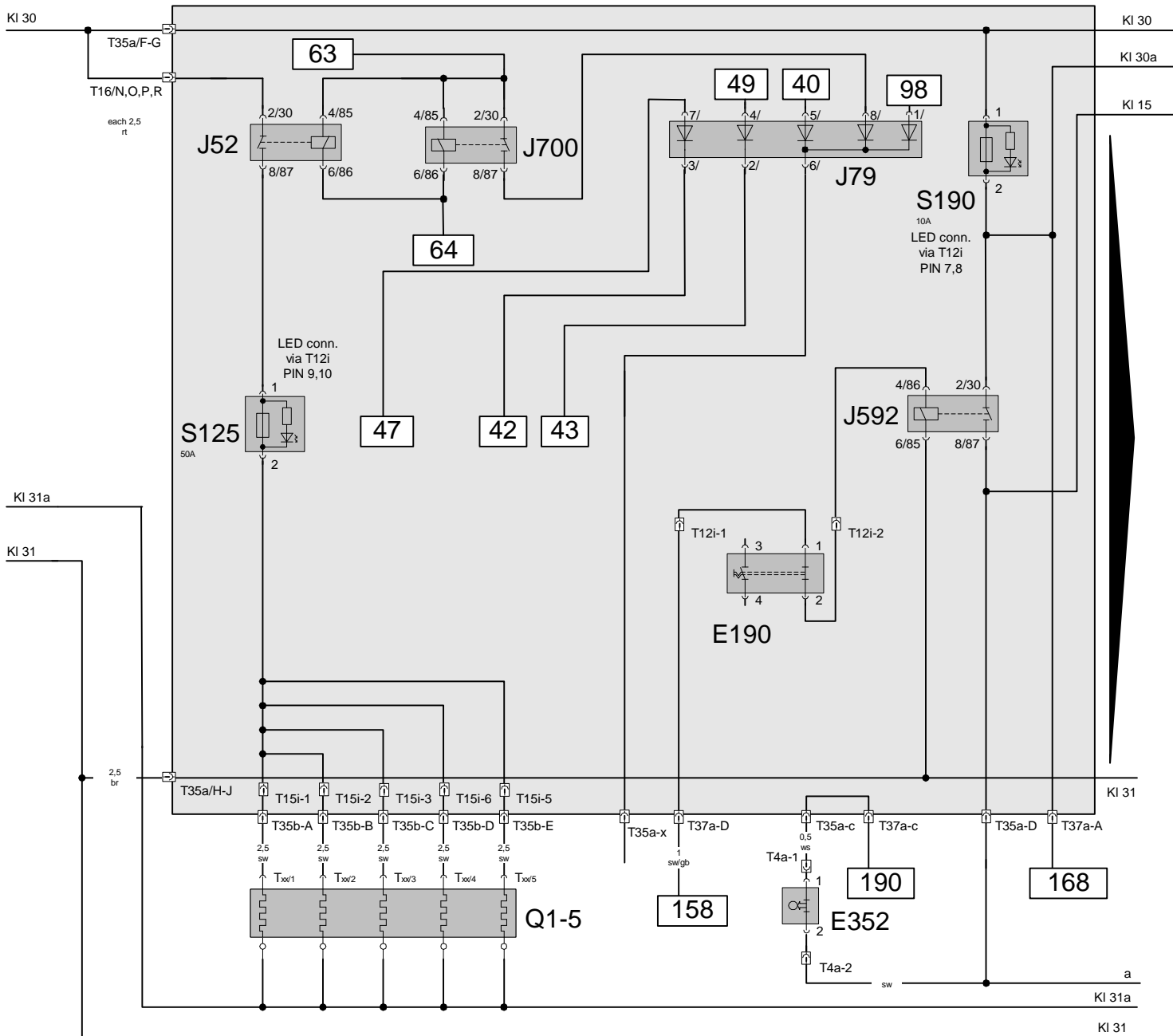
B1 Starter-Battery
B2 optional 2nd battery
S88 optional fuse
J7 optional battery separation relay

A1 starter
C1 alternator
C2 voltage regulator in alternator
C24 Cap pack for relay "ground free"

T2a 2pin high current connector
T2c 2pin connector at relay J7

Colors:

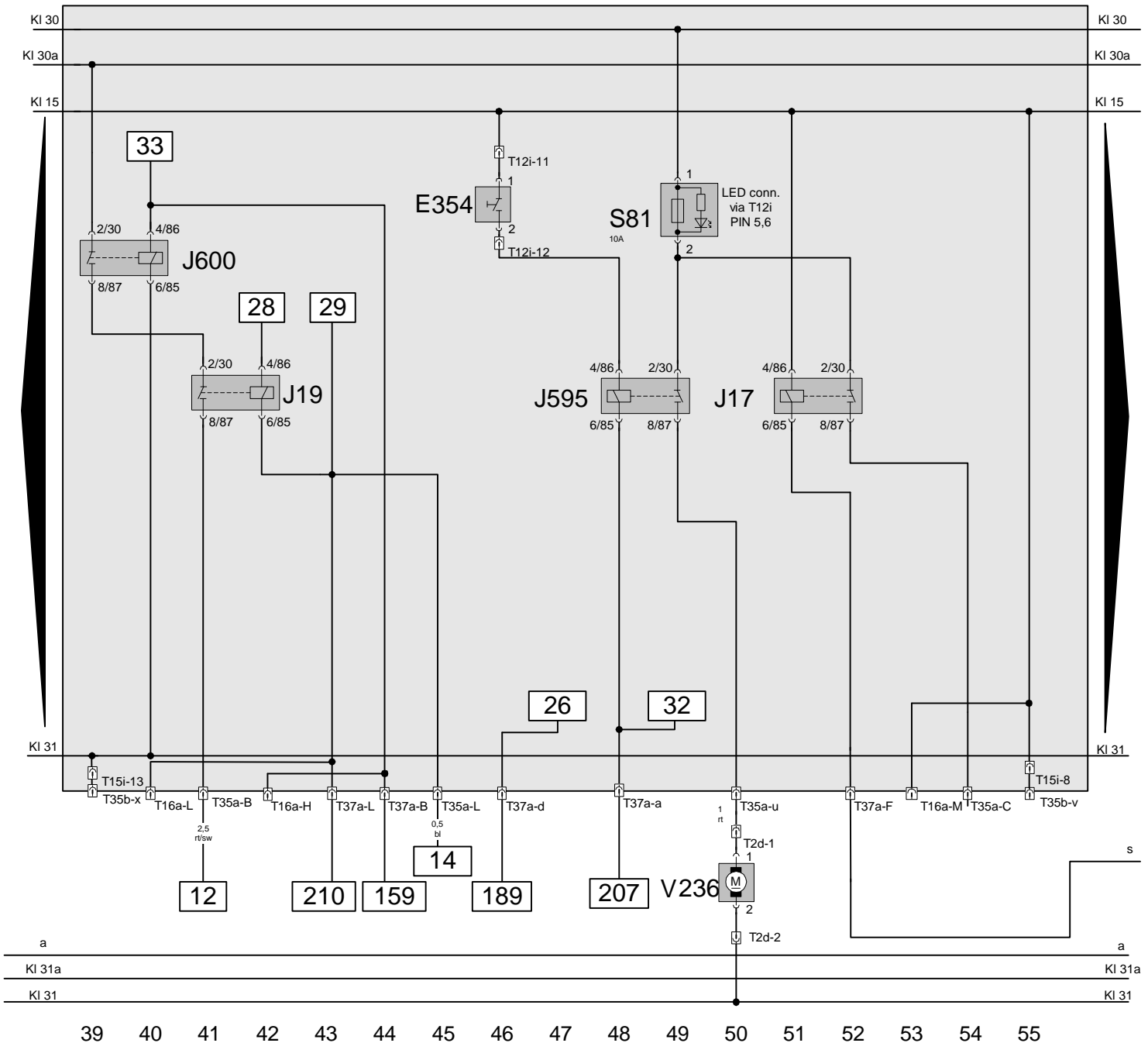
rt = red sw = black bl = blue
ws = white gb = yellow gr = gray
gn = green li = violet



20	J52	relay for glowing plugs	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
J700	relay "ground free" shutoff device																			
S125	fuse for glowing plugs																			
J79	diode group																			
S190	fuse terminal 30a																			
J592	fuse terminal 15																			
E190	stop switch at central electric box																			
E352	neutral switch (gear box)																			
Q1 bis Q5	glowing plugs																			
T35a	35pin connector at bottom of central electric box																			
T35b	35pin connector at back side of central electric box																			
T16a	16pin connector at bottom of central electric box																			
T37a	37pin connector at bottom of central electric box																			
T4a	4pin connector "gear box version" on the back of the engine																			
Txx	connector glowing plug																			
T15i	15pin internal connector in central electric																			
T12i	12pin internal connector in central electric																			

Colors:

rt = red sw = black bl = blue
ws = white gb = yellow gr = gray
gn = green li = violet

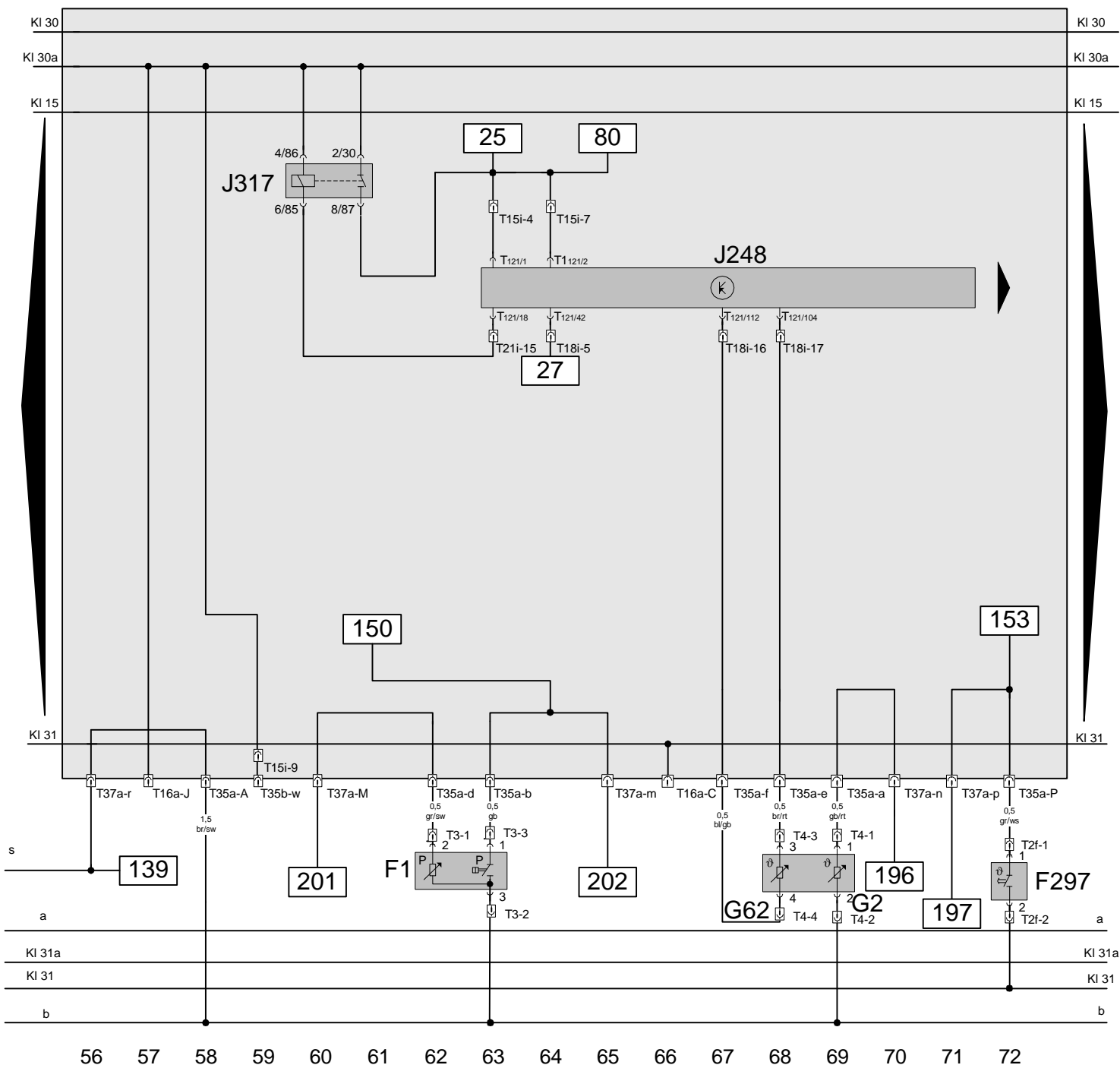


- T35a 35pin connector at bottom of central electric box
- T35b 35pin connector at back side of central electric box
- T16a 16pin connector at bottom of central electric box
- T37a 37pin connector at bottom of central electric box
- T2d 2pin connector at oil extraction pump
- J600 starting aid relay
- J19 starting relay
- E354 switch for oil extraction pump
- S81 fuse for oil extr./fuel pump
- J595 relay oil extraction pump
- J17 relay fuel pump
- V236 oil extraction pump
- T15i 15pin internal connector in central electric
- T12i 12pin internal connector in central electric
- T121 121pin two part connector pin 1-81 and pin 82-121

- a terminal 15 in engine harness
- s connection in harness

Colors:

rt = red sw = black bl = blue
ws = white gb = yellow gr = gray
gn = green li = violet

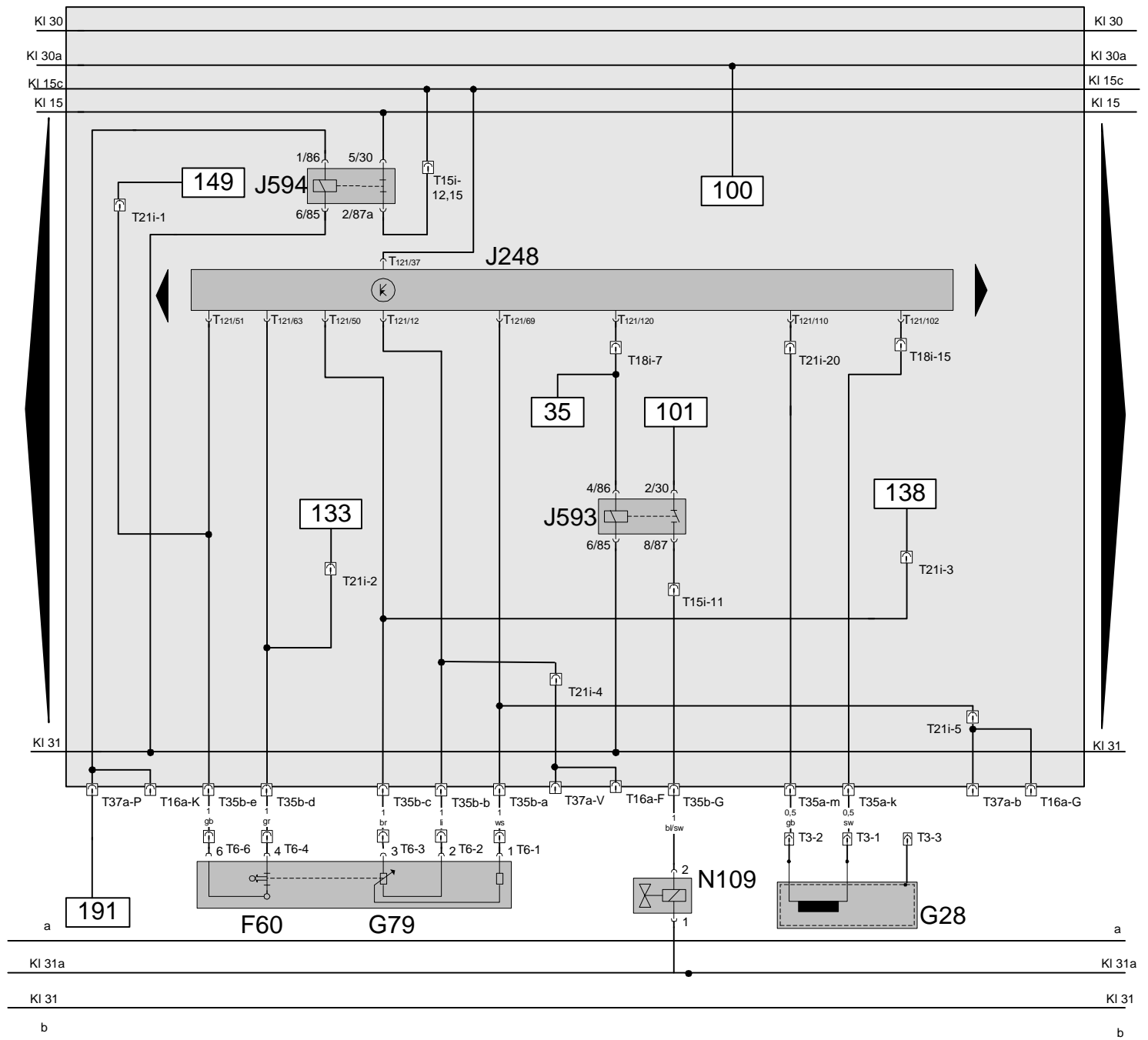


- T16a 16pin connector at bottom of central electric box
- T35a 35pin connector at bottom of central electric box
- T35b 35pin connector at the back side of central electric box
- T37a 37pin connector at bottom of central electric box
- T2f 2pin connector at temperature switch
- F1 oil pressure sensor / switch
- G62 coolant temp. sensor for MDC
- G2 coolant temp. sensor for instruments
- F297 coolant temp. switch (Instruments)
- J317 main relay MDC
- J248 MDC (ECU)
- T15i 15pin internal connector in central electric
- T12i 12pin internal connector in central electric
- T21i 21pin internal connector in central electric
- T18i 18pin internal connector in central electric
- T121 121pin two part connector pin 1-81 and pin 82-121
- T4 4pin connector at temp. sensor
- T3 3pin connector at oil pressure sensor

- a terminal 15 in engine harness
- b sensor ground in engine harness
- s connection in harness

Colors:

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- gn = green li = violet



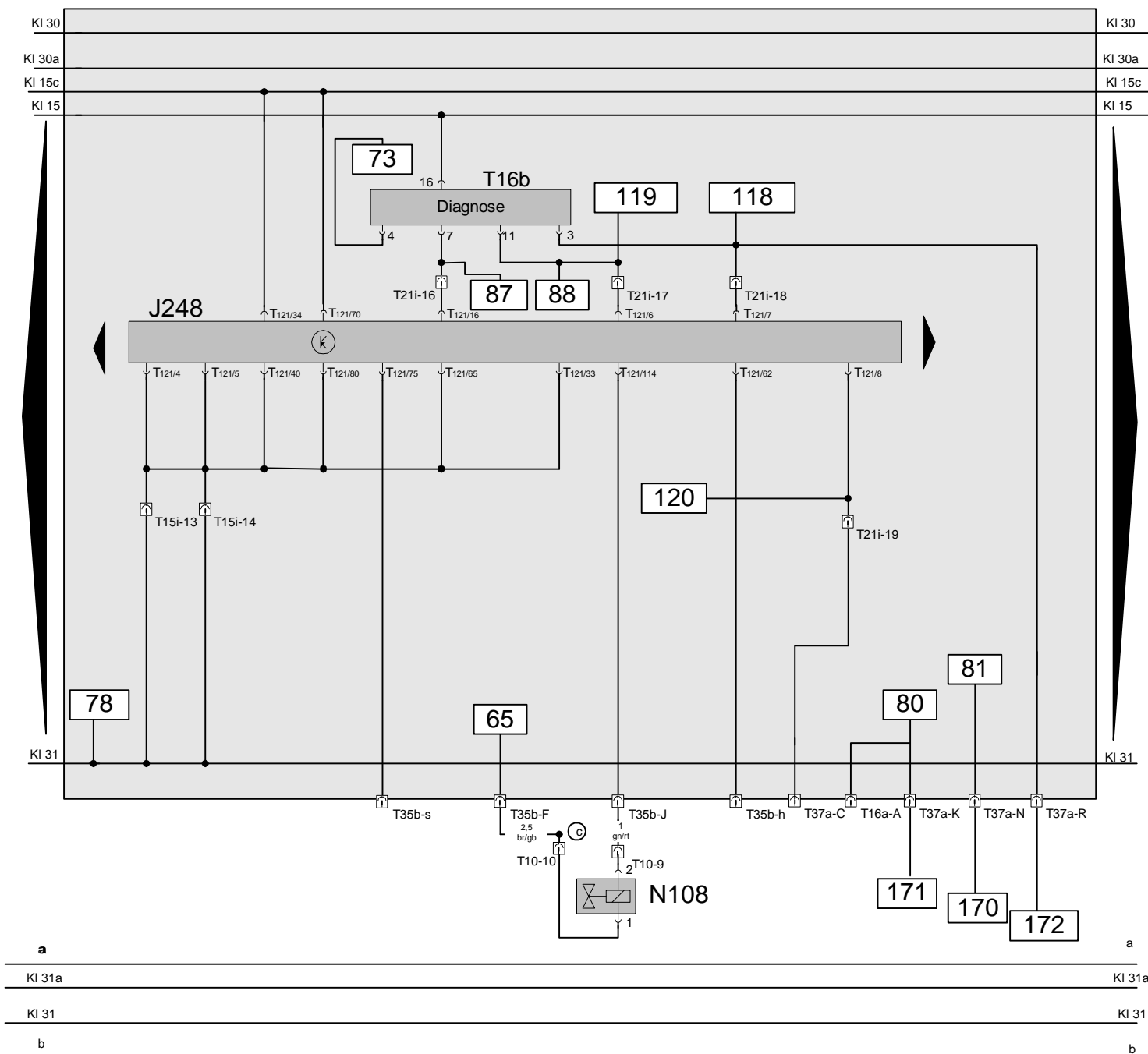
90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106

T16a 16pin connector at bottom of central electric box
T35a 35pin connector at bottom of central electric box
T35b 35pin connector at the back side of central electric box
T37a 37pin connector at bottom of central electric box
J593 relay "ground free" shutoff device
J594 stop relay
F60 idle switch in pedal-force sensor
G79 sensor in pedal-force sensor
N109 shutoff device
G28 rpm sensor
T15i 15pin internal connector in central electric
T12i 12pin internal connector in central electric
T21i 21pin internal connector in central electric
T18i 18pin internal connector in central electric
T121 121pin two part connector pin 1-81 and pin 82-121
T6 6pin connector at pedal-force sensor
T3 3pin connector at rpm sensor

a terminal 15 in engine harness
b sensor ground in engine harness

Colors:

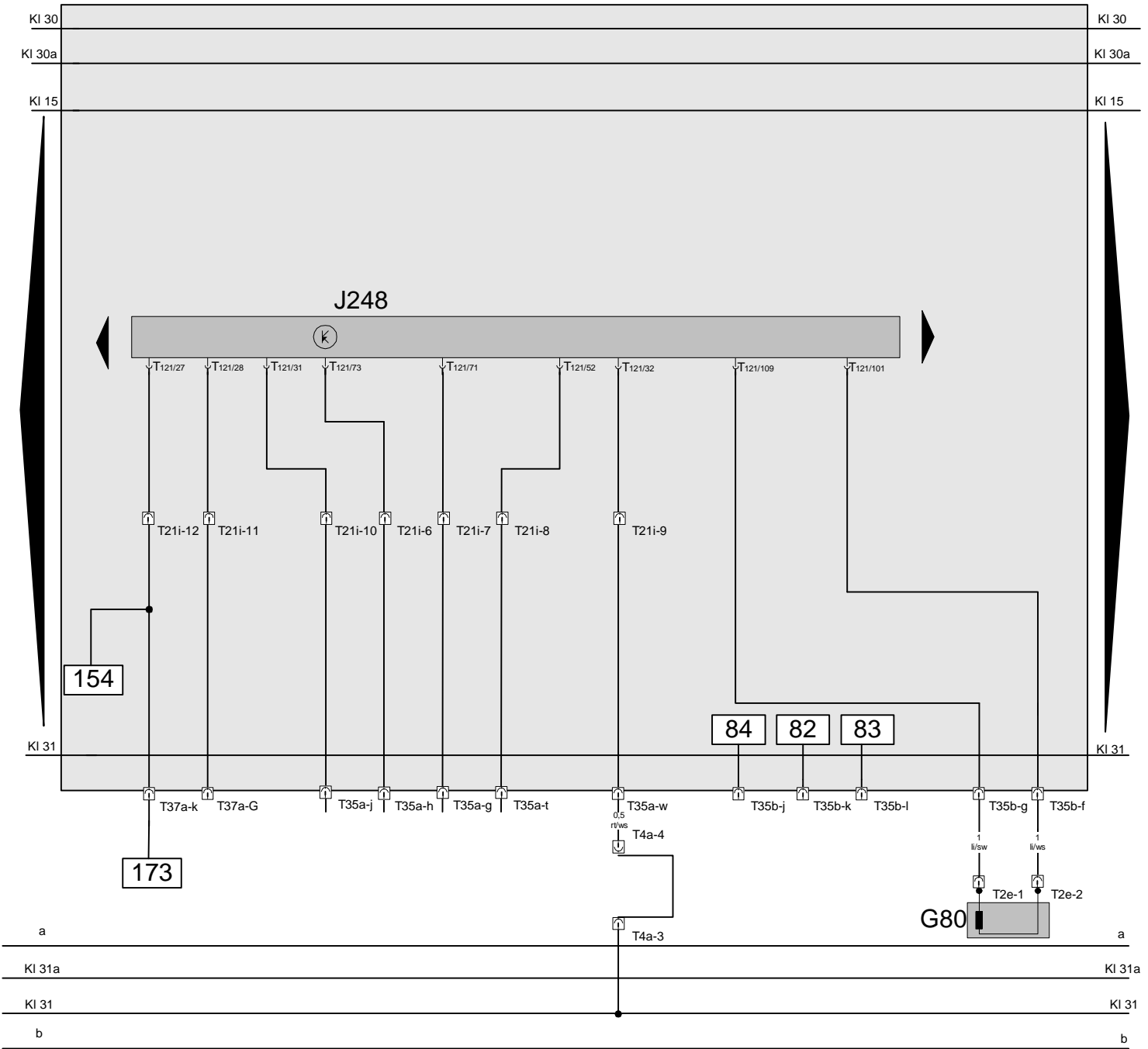
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ws = white gb = yellow gr = gray
gn = green li = violet



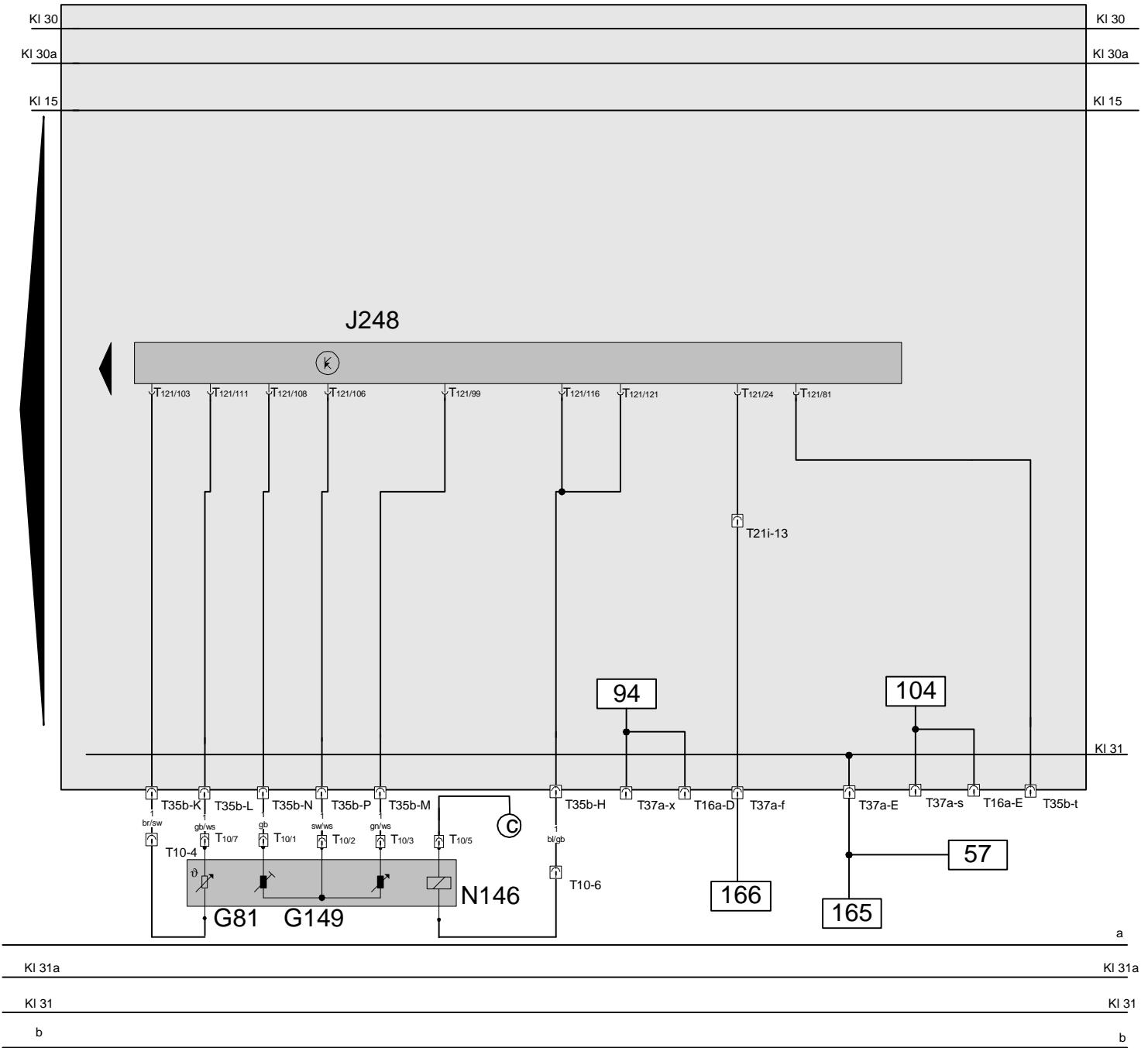
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	
T16a	16pin connector at bottom of central electric box										a	terminal 15 in engine harness						
T35a	35pin connector at bottom of central electric box										b	sensor ground in engine harness						
T35b	35pin connector at the back side of central electric box											c	connection in harness					
T37a	37pin connector at bottom of central electric box																	
T16b	16pin connector "diagnosis" in central electric box																	
T10	10pin connector at distribution pump																	
J248	MDC (ECU)																	
N108	timming adjuster																	
T15i	15pin internal connector in central electric																	
T12i	12pin internal connector in central electric																	
T21i	21pin internal connector in central electric																	
T18i	18pin internal connector in central electric																	
T121	121pin two part connector pin 1-81 and pin 82-121																	
T4b	4pin connector at intake-pipe flap										Colors:							

Colors:

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ws = white gb = yellow gr = gray
gn = green li = violet



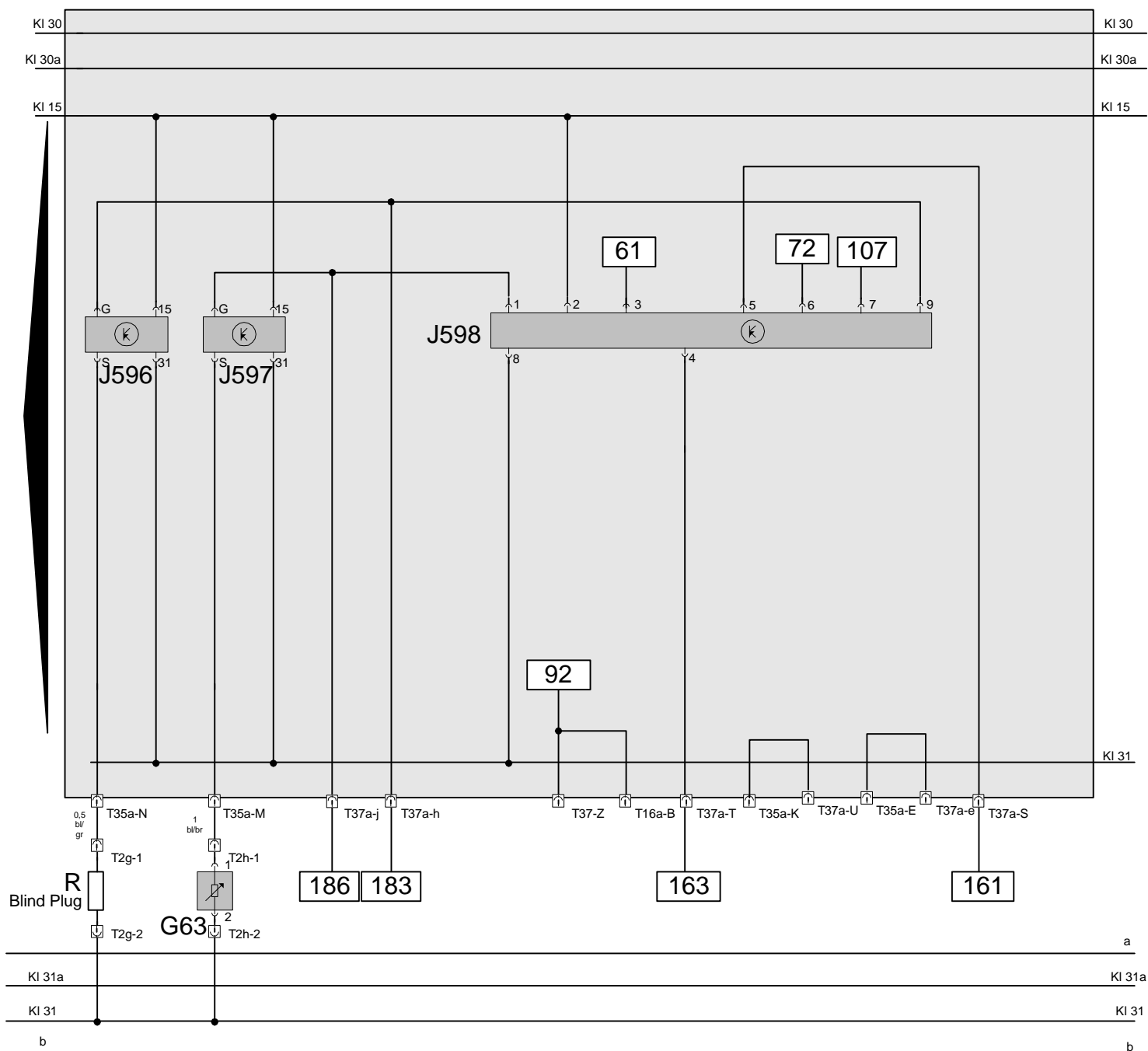
107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123						
T16a	16pin connector at bottom of central electric box									a	terminal 15 in engine harness											
T35a	35pin connector at bottom of central electric box									b	sensor ground in engine harness											
T35b	35pin connector at the back side of central electric box																					
T37a	37pin connector at bottom of central electric box																					
J248	MDC (ECU)																					
G71 G72	sensor air temp. and pressure																					
G80	needle-stroke sensor																					
T15i	15pin internal connector in central electric																					
T12i	12pin internal connector in central electric																					
T21i	21pin internal connector in central electric																					
T18i	18pin internal connector in central electric																					
T121	121pin two part connector pin 1-81 and pin 82-121																					
T4a	4pin connector of "gear box " at the back of the engine																					
T4b	4pin connector at air temp. and pressure sensor									Colors:												
T2e	2pin connector at needle-stroke sensor																					
												rt = red		sw = black		bl = blue						
												ws = white		gb = yellow		gr = gray						
												gn = green		li = violet								



124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
T16a	16pin connector at bottom of central electric box									a	terminal 15 in engine harness					
T35a	35pin connector at bottom of central electric box									b	sensor ground					
T35b	35pin connector at the back side of central electric box										c	connection in harness				
T37a	37pin connector at bottom of central electric box															
J248	MDC (ECU)															
G81	fuel temp. sensor in distribution pump															
G149	modulation piston movement sensor in distribution pump															
N146	metering adjuster sensor in distribution pump															
T15i	15pin internal connector in central electric															
T12i	12pin internal connector in central electric															
T21i	21pin internal connector in central electric															
T18i	18pin internal connector in central electric															
T121	121pin two part connector pin 1-81 and pin 82-121															
T10	10pin sensor at distribution pump															

Colors:

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ws = white	gb = yellow	gr = gray
gn = green	li = violet	

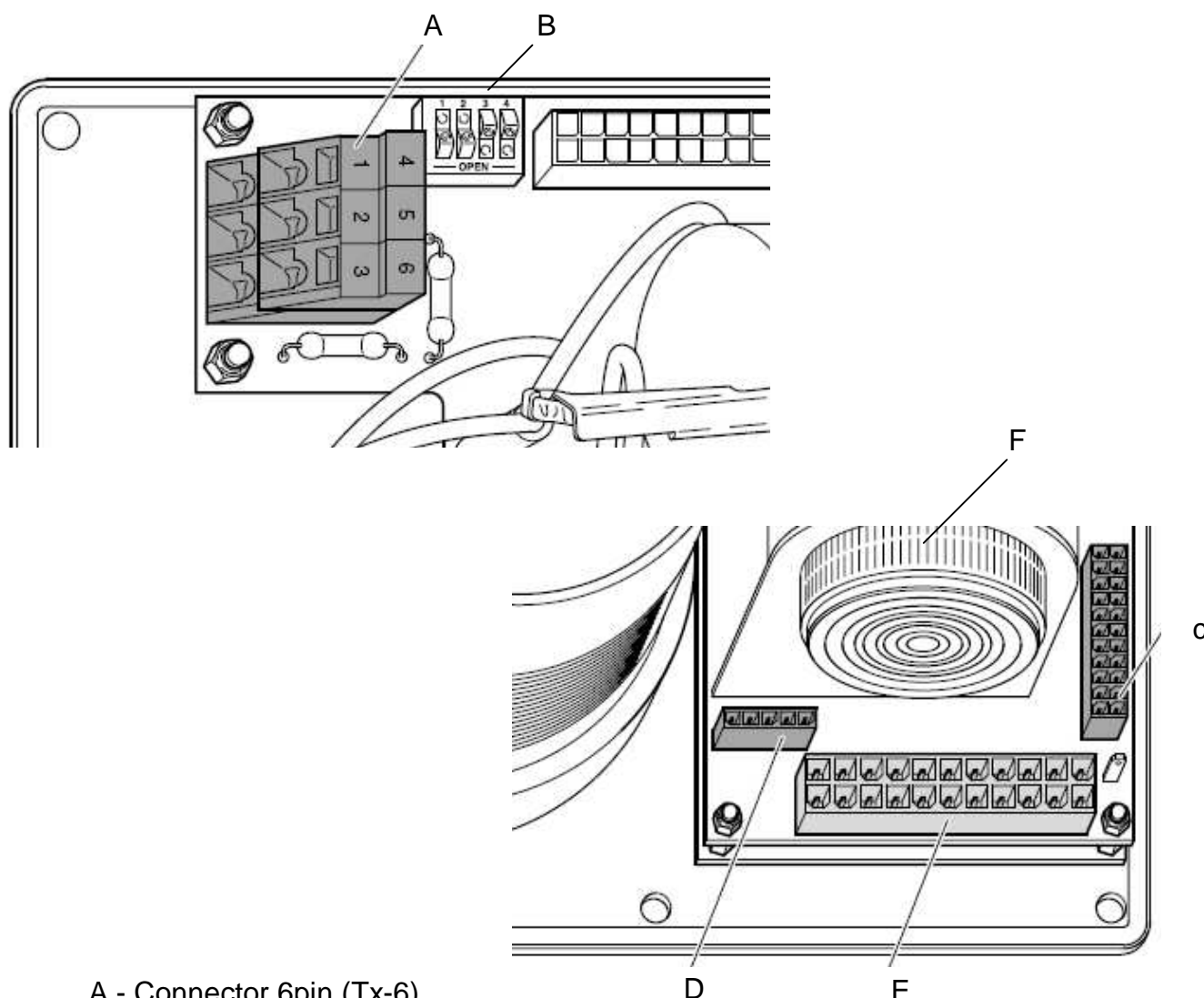


141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157
T16a	16pin connector at bottom of central electric box									a	Terminal 15 in engine harness					
T35a	35pin connector at bottom of central electric box									b	sensor ground in engine harness					
T35b	35pin connector at the back side of central electric box															
T37a	37pin connector at bottom of central electric box															
T2g	2pin connector of coolant level sensor															
T2h	2pin connector of "water in fuel" sensor															
G63	"water in fuel" sensor															
J596	relay "coolant level"															
J597	relay "water in fuel"															
J598	acoustic alert relay															
T121	121pin two part connector pin 1-81 and pin 82-121															

Colors:

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Instruments



A - Connector 6pin (Tx-6)

- 1 - Neutral
- 2 - Neutral to central electric
- 3 - Neural to flybridge
- 4 - batt. separation relay (D+)
- 5 - NMEA - B
- 6 - NMEA - A

B - Dip-Switch (E91)

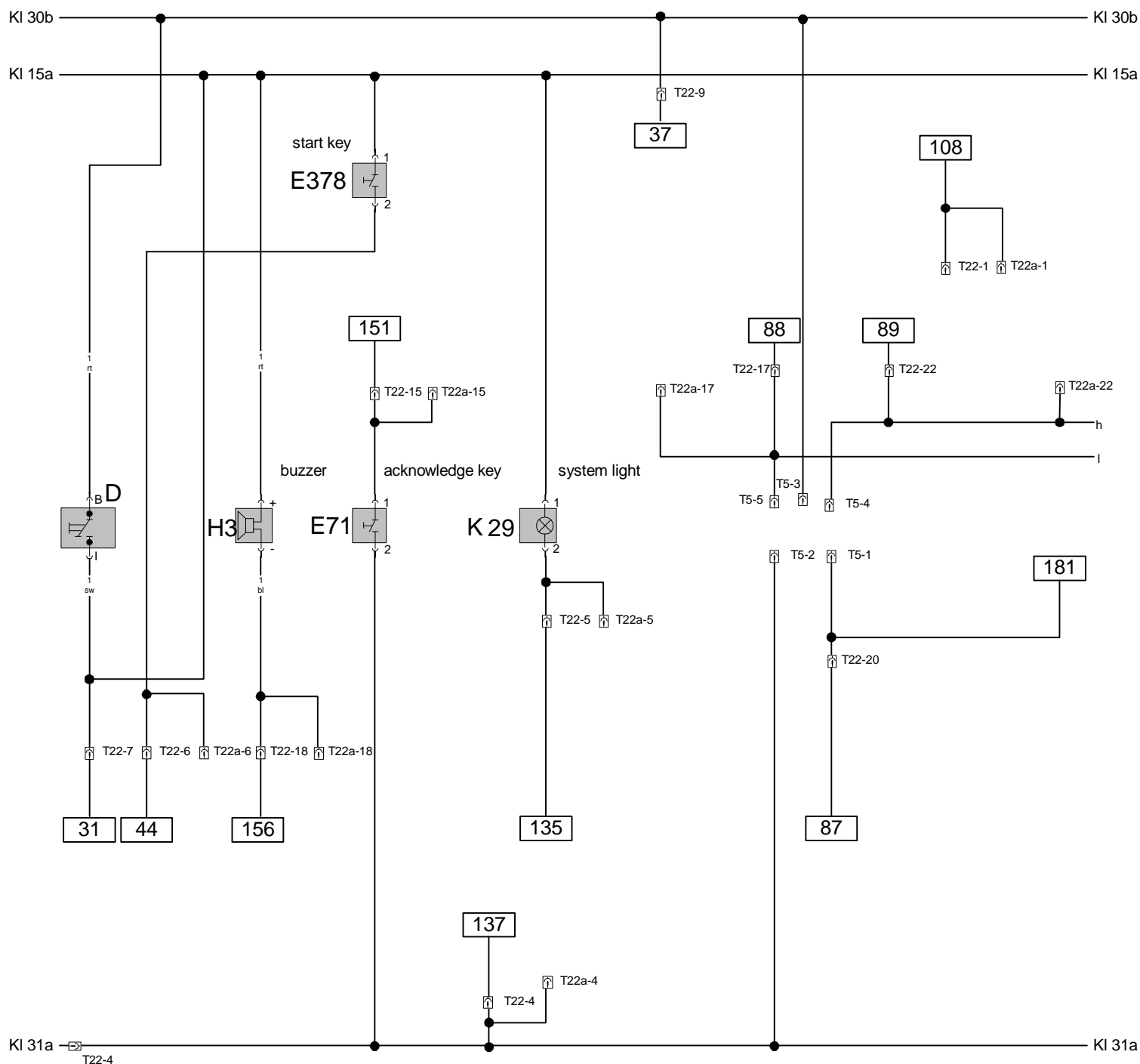
- 1 - instrum. light dark / bright
- 2 - instrum. light on / off
- 3 - changeover switch (off for 4-5 Zyl / on for 6 Zyl)
- 4 - Diagnosis at flybridge

C - 22pin connector to flybridge

D - 5pin connector for diagnosis

E - 22pin connector to central electric

F - buzzer

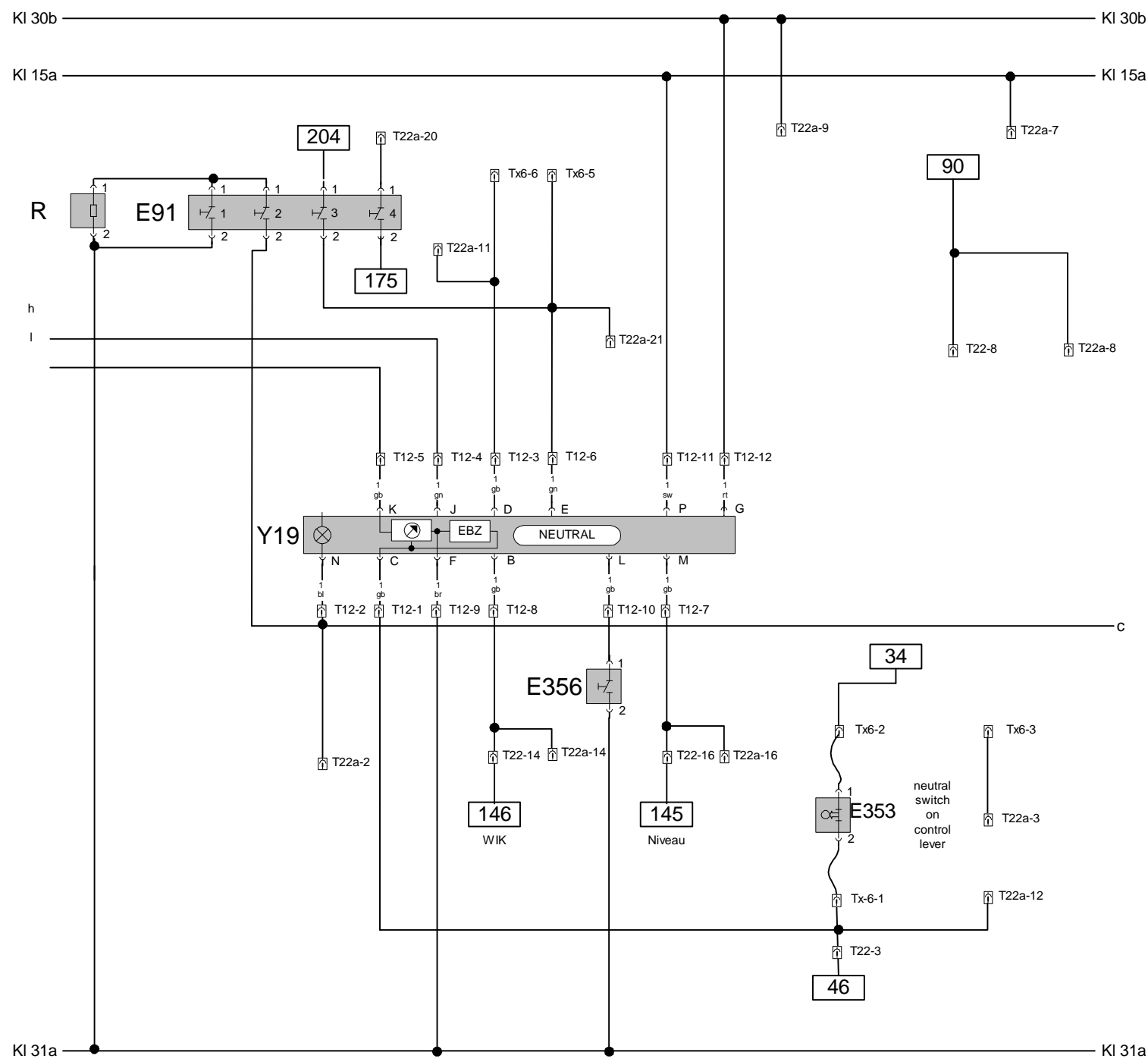


D ignition key
H3 buzzer
E71 key alert acknowledge
K29 system light
T6x 6pin connector
T37 37pin connector at central electric
T22 22pin connector at panel
T22a 22pin connector to flybridge
E378 start key

T5 5pin connector at panel
h, l connection in harness

Colors:

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- E356 mdf key
- Y19 tacho, multi function display
- T12 12pin connector at tacho
- Tx6 6pin connector
- E353 neutral switch at control lever
- T22 22pin connector at panel
- T22a 22pin connector to flybridge
- E91 dip switch

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