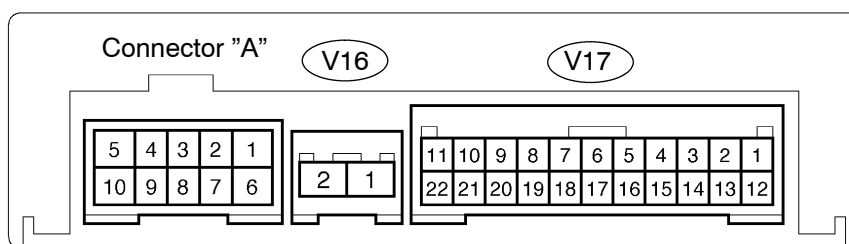


TERMINALS OF ECU



N

F17007

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
BMV (A1) – BMW (A6)	G – BL	IG switch ON	0.1 to 1 Ω
MSW (A2) – MG (A7)	W – GR	Turn the steering wheel	Repeat below 1 k Ω or Above 100 k Ω
LG (A3) – Body ground	B – Body ground	IG switch ON	Below 1.0 V
MSU (A4) – MG (A7)	Y – GR	Turn the steering wheel	Repeat below 1 k Ω or Above 100 k Ω
BMU (A5) – BMW (A6)	BR – BL	IG switch OFF	0.1 to 1 Ω
BMW (A6) – BMV (A1)	BL – G	IG switch OFF	0.1 to 1 Ω
MG (A7) – Body ground	GR – Body ground	Always	Continuity
MSV (A8) – MG (A7)	G–R – GR	Turn the steering wheel	Repeat below 1 k Ω or Above 100 k Ω
MV (A10) – Body ground	R – Body ground	Always	Continuity
MSW (A2) – GND (V17 – 6 or 22)	W – W–B	Turn the steering wheel	Repeat below 1 or Above 4 V
LG (A3) – GND (V17 – 6 or 22)	B – W–B	IG switch ON	Below 1.0 V
MSU (A4) – GND (V17 – 6 or 22)	Y – W–B	Turn the steering wheel	Repeat below 1 or Above 4 V
MG (A7) – GND (V17 – 6 or 22)	GR – W–B	Always	Below 1 V
MSV (A8) – GND (V17 – 6 or 22)	G–R – W–B	Turn the steering wheel	Repeat below 1 or Above 4 V
PIG (V16 – 1) – PGND (V16 – 2)	W – W–B	Idling	9 to 16 V
PGND (V16 – 2) – Body ground	W–B – Body ground	Always	Below 1 V
TS (V17 – 1) – GND (V17 – 6 or 22)	W – W–B	IG switch ON	10 to 14 V
+BI (V17 – 2) – GND (V17 – 6 or 22)	LG – W–B	IG switch ON	10 to 14 V
IG (V17 – 3) – GND (V17 – 6 or 22)	B–W – W–B	IG switch ON	10 to 14 V
SS1 (V17 – 4) – GND (V17 – 6 or 22)	B–Y – W–B	Turn the steering wheel	Repeat below 1 or Above 4 V
SS3 (V17 – 5) – GND (V17 – 6 or 22)	B–L – W–B	Turn the steering wheel	Repeat below 1 or Above 4 V

DIAGNOSTICS – VARIABLE GEAR RATIO STEERING

GND (V17 – 6) – Body ground	W-B – Body ground	Always	Below 1.0 V
AFS+ (V17 – 7) – AFS- (V17 – 17)	LG-R – GR-B	IG switch ON	Pulse generation
VSC+ (V17 – 8) – VSC- (V17 – 18)	V – Y-G	IG switch ON	Pulse generation
TA+ (V17 – 9) – TA- (V17 – 21)	R-B – G-W	IG switch ON	Pulse generation
FRO (V17 – 11) – GND (V17 – 6 or 22)	R-W – W-B	Vehicle driving at about 20 km/h (12 mph)	Pulse generation
TC (V17 – 12) – GND (V17 – 6 or 22)	P-B – W-B	IG switch ON	10 to 14 V
+BO (V17 – 13) – GND (V17 – 6 or 22)	L-W – W-B	Always	10 to 14 V
SIL (V17 – 14) – GND (V17 – 6 or 22)	V-W – W-B	IG switch ON	10 to 14 V
SS2 (V17 – 15) – GND (V17 – 6 or 22)	G-W – W-B	Turn the steering wheel	Repeat below 1 or Above 4 V
WL (V17 – 16) – GND (V17 – 6 or 22)	R-B – W-B	After IG switch ON and VGRS warning light turns on for 1.5 sec. then it goes off	Below 1.0 V
FLO (V17 – 20) – GND (V17 – 6 or 22)	R-Y – W-B	Vehicle driving at about 20 km/h (12 mph)	Pulse generation
GND2 (V17 – 22) – Body ground	W-B – Body ground	Always	Below 1.0 V