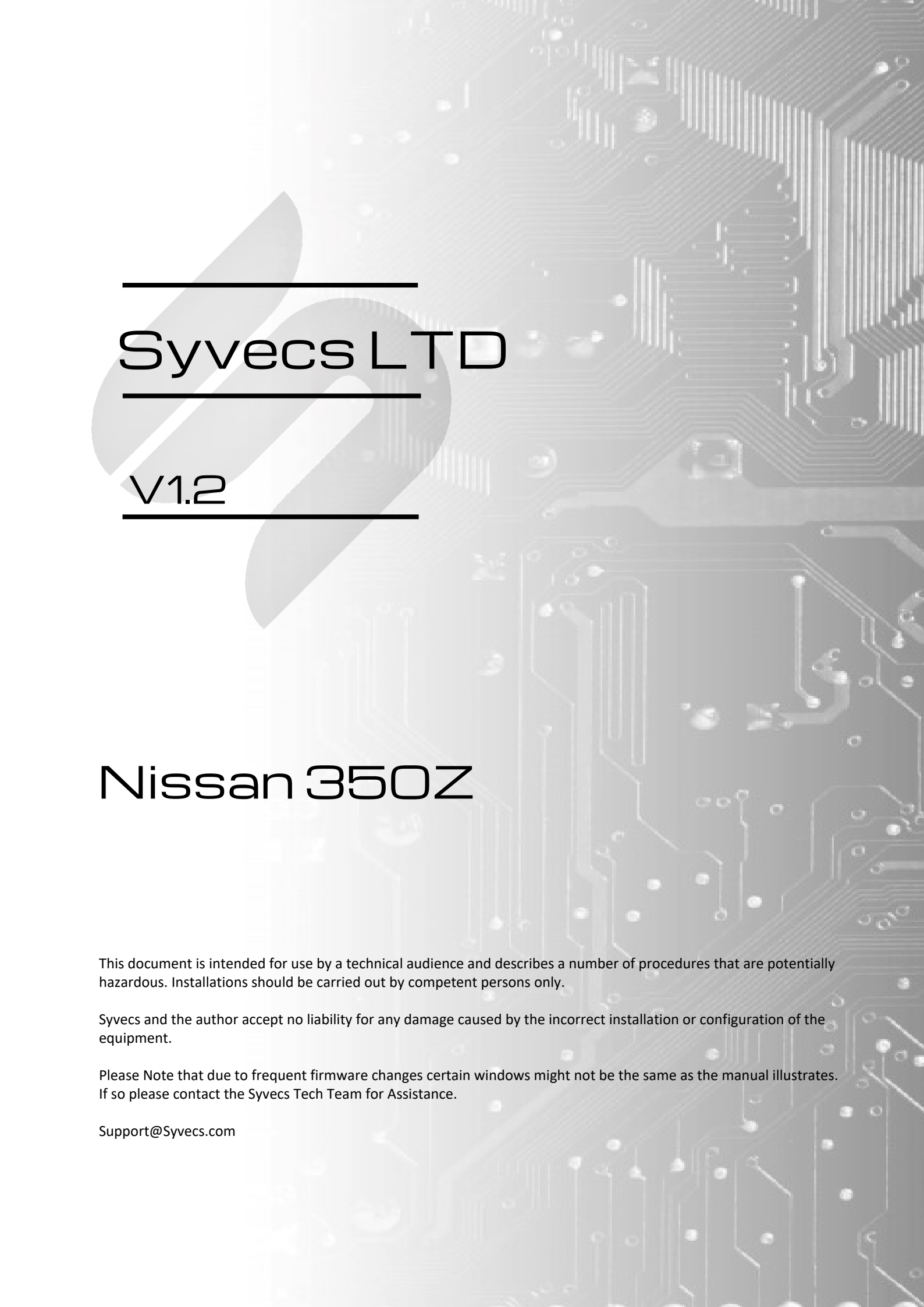




Syvecs LTD

V1.2

Nissan 350Z

This document is intended for use by a technical audience and describes a number of procedures that are potentially hazardous. Installations should be carried out by competent persons only.

Syvecs and the author accept no liability for any damage caused by the incorrect installation or configuration of the equipment.

Please Note that due to frequent firmware changes certain windows might not be the same as the manual illustrates. If so please contact the Syvecs Tech Team for Assistance.

Support@Syvecs.com



Contents

Designed for the 350z DE & HR Manual Transmission

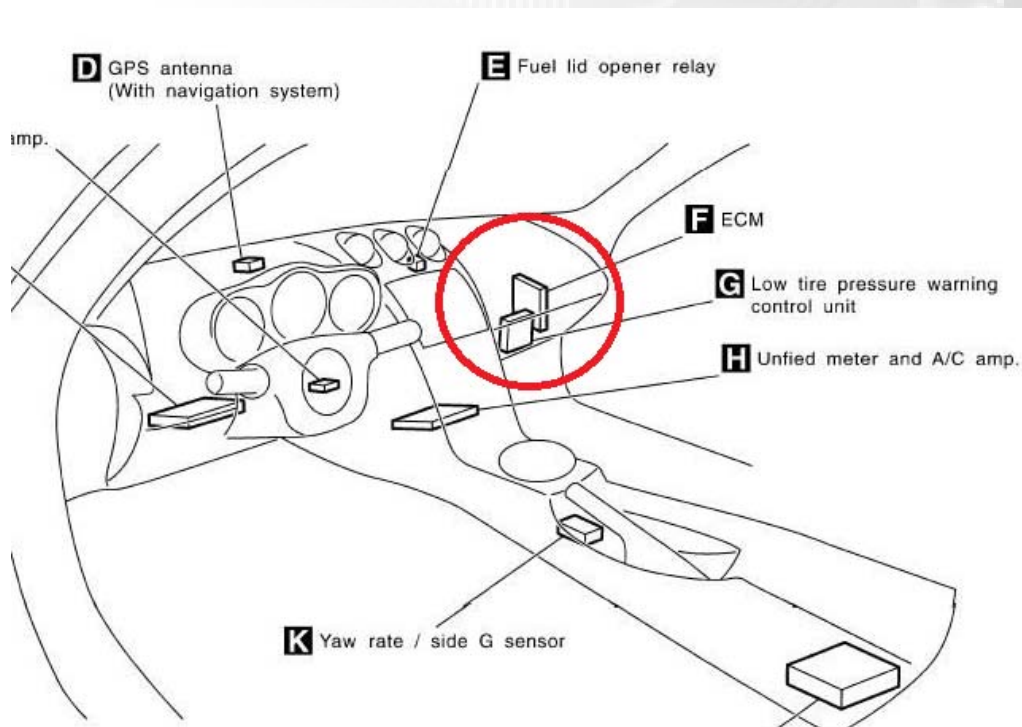
The kit comes with the following:

1 x Syvecs S7+ ECU

1 x 350z Loom adaptor

Installation

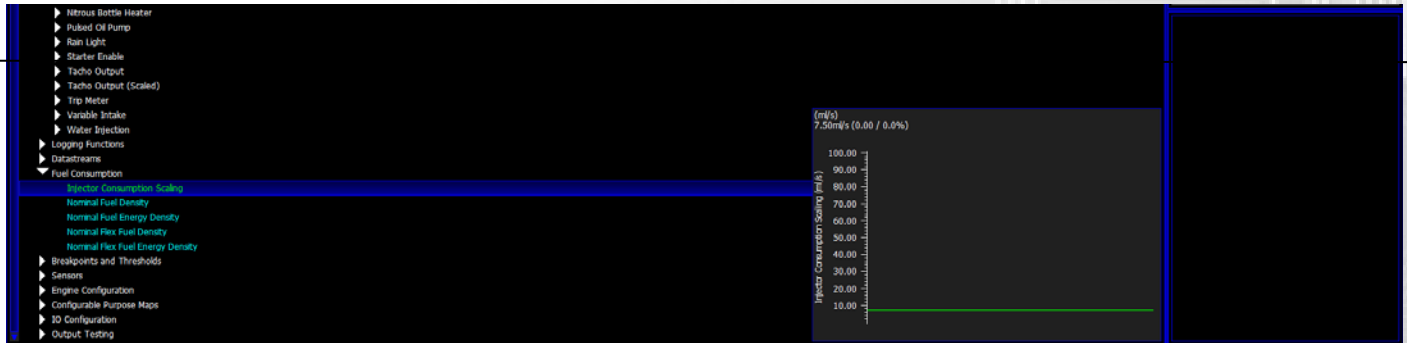
- 1.) Remove the Negative Terminal from the battery on the Vehicle
- 2.) Unplug the OEM Engine control module behind the glove box



- 3.) Remove the OEM Ecu from the holder by removing the 2 x M6 Bolts found at top and bottom
- 4.) Carefully Fit the S7-Plus ECU in the same orientation as the OEM Ecu was fitted and secure
- 5.) Next plug the PNP adaptor into the OEM connectors and into the S6-Plus
- 6.) Contact Support@Syvecs.com for a Base Calibration. Mention the Spec of the Car... Injectors, Map Sensor Etc

350z Software Options

MPG Scaling on Dash -Injector Size is set in Fuel Consumption Scaling



Map Switching

Adjusting the Calibration Switch position via the steering wheel controls is possible using the Cruise buttons, Up is Cal Up, Down is Cal Down, Pulling back is Cal Override for rolling antilag

350z FAQ and Help

Q) Do you control the OEM VVT

A) Yes, this is adjustable via Variable Valve timing calibrations, Can Change Intake and Exhaust Cam Targets

Q) Can you Adjust the Launch

A) Yes, its fully adjustable in stage and after also where a Limiter can be set based on Time or Speed

Q) Do you Supply a Base map for the Kit

A) Yes as with all our kits we supply a very good base calibration to get everything working for you

Q) What of the original features will now not work?

A) All original features will function properly

Q) Can you do 12 Injector Support?

A) Yes, 6 additional injector outputs are available, see pinouts below

Q) Can the kit do Boost control

A) Yes, it 'has' additional I/O available for boost control

Email Support@syvecs.co.uk for a base map to suit your setup.

350z DE Pinout

A	DESCRIPTION	
	PART NUMBER	
	NOTES:	

<i>Syvecs Description</i>	<i>Syvecs Pinout</i>	<i>350Z Notes</i>
PWR CTR OUT	A1	Main Relay
H-Bridge1 / SlaveOut1	A2	DBW+
H-Bridge2 / SlaveOut2	A3	DBW-
H-Bridge3 / SlaveOut3	A4	
H-Bridge4 / SlaveOut4	A5	
H-Bridge5 / SlaveOut5	A6	
H-Bridge6 / SlaveOut6	A7	
H-Bridge7 / SlaveOut7	A8	
H-Bridge8 / SlaveOut8	A9	
FUEL1	A10	CYL 1 INJECTOR
FUEL2	A11	CYL 2 INJECTOR
FUEL3	A12	CYL 3 INJECTOR
FUEL4	A13	CYL 4 INJECTOR
FUEL5	A14	Injector 5
FUEL6	A15	Injector 6
FUEL7	A16	
FUEL8	A17	
PWM1 /*FUEL9	A18	Fuel Pump
PWM2 /*FUEL10	A19	Throttle Control Relay
PWM3 /*FUEL11	A20	
PWM4 /*FUEL12	A21	
PWM5 /*FUEL13	A22	Vvti 2 -Flyback Solder Bridge Set
PWM6 /*FUEL14	A23	Vvti 1 -Flyback Solder Bridge Set
PWM7 /*FUEL15	A24	VVTEX -Flyback Solder Bridge Set
PWM8 /*FUEL16	A25	VVT2EX -Flyback Solder Bridge Set
IGN1	A26	Ign 1
IGN2	A27	Ign 2
IGN3	A28	Ign 3
IGN4	A29	Ign 4
IGN5	A30	Ign 5
IGN6	A31	Ign 6
PWRGND	A32	ECU GND
PWRGND	A33	ECU GND
PWRGND	A34	

B	DESCRIPTION	
	PART NUMBER	
	NOTES:	

PWRGND	B1	PWR GND
CAN2L	B2	
CAN2H	B3	
KNOCK	B4	KNOCK SENSOR INPUT
KNOCK 2	B5	
PVBAT	B6	
IVBAT	B7	12v from ECM
LAM1A	B8	Black Lam LSU
LAM1B	B9	RED Lam LSU
LAM1C	B10	
LAM1D	B11	LAM GND
LAM1HEATER	B12	Grey LSU
IVBAT	B13	12v from ECM
LAM2A	B14	Black Lam LSU
LAM2B	B15	RED Lam LSU
LAM2C	B16	
LAM2D	B17	LAM GND
LAM2HEATER	B18	Grey LSU
IVBAT	B19	
KLINE	B20	
RS232RX	B21	
RS232TX	B22	
LANRX-	B23	
LANRX+	B24	
LANTX-	B25	
LANTX+	B26	

C	DESCRIPTION	
	PART NUMBER	
	NOTES:	
KNOCK GROUND	C1	
ANGND	C2	SENSOR GND
ANGND	C3	Cam and Crank Ground
ANGND	C4	
5V OUT	C5	5V OUTPUT FOR SENSORS
5V OUT	C6	5V OUTPUT FOR SENSORS
5V OUT	C7	
CAN L	C8	CANL
CAN H	C9	CANH
AN01	C10	Crank
AN02	C11	Cam 1
AN03	C12	Cam2
AN04	C13	
AN05	C14	MAF SENSOR
AN06	C15	Ex Cam Pos 1

AN07	C16	Power Steering (MAP)
AN08	C17	Ex Cam Pos 2
AN09	C18	Tps1A
AN10	C19	Tps1B
AN11	C20	PPSA
AN12	C21	PPsB
AN13	C22	COOLANT TEMP INPUT
AN14	C23	AIR TEMP INPUT
AN15	C24	Steering wheel Sw
AN16	C25	Oil Temp
EGT1-	C26	
EGT1+	C27	
PWR CTR IN	C28	Ignition Sw
AN S1 / Slave An01	C29	
AN S2 / Slave An02	C30	Fuel Temp
AN S3 / Slave An03	C31	
AN S4 / Slave An04	C32	
AN S5 / Slave An05	C33	
AN S6 / Slave An06	C34	Brake Sw

350z HR Pinout

A	DESCRIPTION	CONNECTOR A	
	PART NUMBER	4-1437290-0	
	NOTES:	34 Way - Key1	

<i>Syvecs Description</i>	<i>Syvecs Pinout</i>	<i>Function</i>	<i>350z Notes</i>
PWR CTR OUT	A1	MAIN RELAY OUTPUT	Throttle and Main Relay
H-Bridge1 / SlaveOut1	A2	H-Bridge1	DBW
H-Bridge2 / SlaveOut2	A3	H-Bridge2	DBW
H-Bridge3 / SlaveOut3	A4	H-Bridge3	DBW
H-Bridge4 / SlaveOut4	A5	H-Bridge4	DBW
H-Bridge5 / SlaveOut5	A6	H-Bridge5	Boost Solenoid
H-Bridge6 / SlaveOut6	A7	H-Bridge6	Fuel Pump2
H-Bridge7 / SlaveOut7	A8	H-Bridge7	Evap
H-Bridge8 / SlaveOut8	A9	H-Bridge8	Tacho
FUEL1	A10	INJECTOR or PWM OUTPUT	Primary Injector 1
FUEL2	A11	INJECTOR or PWM OUTPUT	Primary Injector 2
FUEL3	A12	INJECTOR or PWM OUTPUT	Primary Injector 3
FUEL4	A13	INJECTOR or PWM OUTPUT	Primary Injector 4
FUEL5	A14	INJECTOR or PWM OUTPUT	Primary Injector 5
FUEL6	A15	INJECTOR or PWM OUTPUT	Primary Injector 6

FUEL7	A16	INJECTOR or PWM OUTPUT	Secondary Injector 1 Or Spare Ouput
FUEL8	A17	INJECTOR or PWM OUTPUT	Secondary Injector 2 Or Spare Ouput
PWM1 /*FUEL9	A18	PWM OUTPUT	Secondary Injector 3 Or Spare Ouput
PWM2 /*FUEL10	A19	PWM OUTPUT	Secondary Injector 4 Or Spare Ouput
PWM3 /*FUEL11	A20	PWM OUTPUT	Secondary Injector 5 Or Spare Ouput
PWM4 /*FUEL12	A21	PWM OUTPUT	Secondary Injector 6 Or Spare Ouput
PWM5	A22	PWM OUTPUT	VVT1 ex
PWM6	A23	PWM OUTPUT	VVT2 ex
PWM7	A24	PWM OUTPUT	VVT1 In
PWM8	A25	PWM OUTPUT	VVT2 In
IGN1	A26	CYL 1 IGNITION OUTPUT	Ignition 1
IGN2	A27	CYL 2 IGNITION OUTPUT	Ignition 2
IGN3	A28	CYL 3 IGNITION OUTPUT	Ignition 3
IGN4	A29	CYL 4 IGNITION OUTPUT	Ignition 4
IGN5	A30	CYL 5 IGNITION OUTPUT	Ignition 5
IGN6	A31	CYL 6 IGNITION OUTPUT	Ignition 6
PWRGND	A32	POWER GROUND	
PWRGND	A33	POWER GROUND	
PWRGND	A34	POWER GROUND	

B	DESCRIPTION	CONNECTOR B	
	PART NUMBER	3-1437290-7	
	NOTES:	26 Way - Key1	

PWRGND	B1	POWER GROUND	
EGT2 +	B2	K - TYPE THERMO	
EGT2 -	B3	K - TYPE THERMO	
KNOCK	B4	KNOCK	
KNOCK 2	B5	KNOCK 2	
PVBAT	B6	CONSTANT 12V	
IVBAT	B7	12v	
LAM1A	B8	Lamv / LamD1+/ LamLun1	2.2v
LAM1B	B9	Lami / LamD1- /LamIP1	1.8v
LAM1C	B10	LamLIA1	
LAM1D	B11	LamGND / LamLVM1	
LAM1HEATER	B12	LAMBDA HEATER	Denso Htr
IVBAT	B13	12V	
LAM2A	B14	Lamv / LamD1+/ LamLun1	2.2v
LAM2B	B15	Lami / LamD1- /LamIP1	1.8v
LAM2C	B16	LamLIA1	
LAM2D	B17	LamGND / LamLVM1	
LAM2HEATER	B18	LAMBDA HEATER	Denso Htr
IVBAT	B19	12V	

KLINE	B20	Kline	
RS232RX	B21	RS232RX	
RS232TX	B22	RS232TX	
LANRX-	B23	Cat5 Pin2	
LANRX+	B24	Cat5 Pin1	
LANTX-	B25	Cat5 Pin6	
LANTX+	B26	Cat5 Pin3	

C	DESCRIPTION	CONNECTOR C	
	PART NUMBER	4-1437290-1	
	NOTES:	34 Way - Key2	
KNOCKGND	C1	KNOCKGND	
ANGND	C2	SENSOR GND	
ANGND	C3	SENSOR GND	
ANGND	C4	SENSOR GND	
5V OUT	C5	5V OUT	
5V OUT	C6	5V OUT	
5V OUT	C7	5V OUT	
CAN L	C8	Can Low	Can Low
CAN H	C9	Can High	Can High
AN01	C10	BI-POLAR INPUTS	TPS 1A
AN02	C11	BI-POLAR INPUTS	Cam1 Ex Position Sensor
AN03	C12	BI-POLAR INPUTS	TPS 2A
AN04	C13	BI-POLAR INPUTS	Cam2 Ex Position Sensor
AN05	C14	UNI-POLAR INPUTS	Cam Position Sensor
AN06	C15	UNI-POLAR INPUTS	Crank Position Sensor
AN07	C16	UNI-POLAR INPUTS	Cam2 Position Sensor
AN08	C17	UNI-POLAR INPUTS	
AN09	C18	VOLT-INPUTS	MAP Absolute Sensor
AN10	C19	VOLT-INPUTS	PPS1
AN11	C20	VOLT-INPUTS	PPS2
AN12	C21	VOLT-INPUTS	
AN13	C22	RESISTIVE INPUTS	Intake Temp
AN14	C23	RESISTIVE INPUTS	Air Charge Temp
AN15	C24	RESISTIVE INPUTS	Coolant Temp
AN16	C25	RESISTIVE INPUTS	Cruise Control SW
EGT1-	C26	EGT1 -	
EGT1+	C27	EGT1 +	
PWR CTR IN	C28	MAIN RELAY INPUT SW	Ignition Switch
AN S1 / Slave An01	C29	UNI-POLAR INPUTS	Oil Temp
AN S2 / Slave An02	C30	UNI-POLAR INPUTS	TPS 1B
AN S3 / Slave An03	C31	UNI-POLAR INPUTS	TPS2B
AN S4 / Slave An04	C32	UNI-POLAR INPUTS	Brake Switch
AN S5 / Slave An05	C33	UNI-POLAR INPUTS	
AN S6 / Slave An06	C34	UNI-POLAR INPUTS	