

Initial Setup

<i>Jumper #</i>	<i>Vehicle with Air-flow meter, MAP sensor (Setting from Factory)</i>	<i>Vehicle with VTEC Engines</i>
JP1	1 — 2	←
JP2	1 — 2	←
JP3	1 — 2	2 — 3
JP4	OPEN	1 — 2
JP5	OPEN	←
JP6	OPEN	←
JP7	1 — 2	OPEN

By following the diagram on the previous page and chart on this page, set the jumper pins on the JP3, JP4, and JP7.

For the location that shows "1-2" or "2-3" in the chart, place the jumper to the pins to the indicated location so that the corresponding pin numbers are jumped (connected).

For the location that shows "OPEN" in the chart, do not jump the pins at the indicated location.

*When removing the Jumper to "OPEN" a connection, place the Jumper on to one side of the pin to prevent the Jumper from getting lost.

Mounting the Main Unit

Important!

When mounting the main unit, make sure it gets mounted in a safe area that will not interfere with the driver. Improper mounting of the unit may cause damage to the vehicle as well as the unit. It can also cause accidents.

Caution!

- **Avoid mounting the main unit in the area where there are excessive dust, and moisture. Also avoid a direct sun light, and area that will get direct heater airflow.**
- **Try not to just cover the unit up with floor mat or carpet.**

Please!

If you are using a double-sided tape, make sure you clean the surface with a cleaner to remove any oil and dust.

- Mounting procedure

By using the provided screws and some kind of brackets, secure the main unit on the floorboard.

Final Check

This completes the installation and initial settings, please check the following.

2. Make sure all the wire connections are correct and secure.
3. Make sure that the wires are neatly secured and tucked away.
4. Make sure the main unit is securely mounted.
5. Make sure all the parts that was removed to perform this installation are reinstalled.
6. Turn the ignition to "ON" position, and confirm that the ACTIVE L.E.D. lights up "GREEN". If it doesn't, check the Troubleshooting Guide" section.
7. Start the engine and confirm that the ACTIVE L.E.D. is "NOT" displaying any error code.
8. Make sure that the negative battery is securely connected, and close the hood.

About the Fuel Adjustment

This unit reads the airflow or pressure sensor input signal of the factory system, and calculates the intake air volume. Then with the front panel adjustment setting, it corrects the airflow signal to the ECU to achieve the desired fuel delivery.

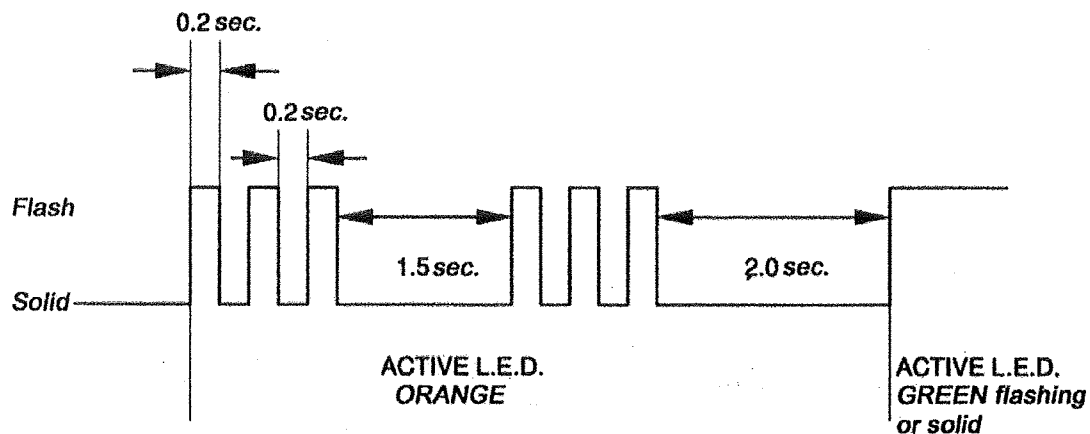
- About the AIR-FLOW ADJUST VOLUME switch (A.A.V.)
- 1. When the unit is powered up, the ACTIVE L.E.D. illuminate "GREEN" (solid)
- By using the supplied adjustment tool, turn the A.A.V. clockwise (+ adjustment) or counter clockwise (- adjustment), the unit will go in to "Adjustment Mode". The adjustment range is $\pm 20\%$ (at 1% increments).
- If you turn the A.A.V. to the desired setting, the ACTIVE L.E.D. will illuminate (solid). When the A.A.V. is turned back to 0%, the ACTIVE L.E.D. will flash "ORANGE"
- If do not make any adjustment for over 2 sec. The ACTIVE L.E.D. will flash the current setting in "ORANGE" twice. Then it will go back to "GREEN" and lock in the setting.
- To adjust to the desired setting, repeat the steps 3 ~ 4.

About the Fuel Adjustment

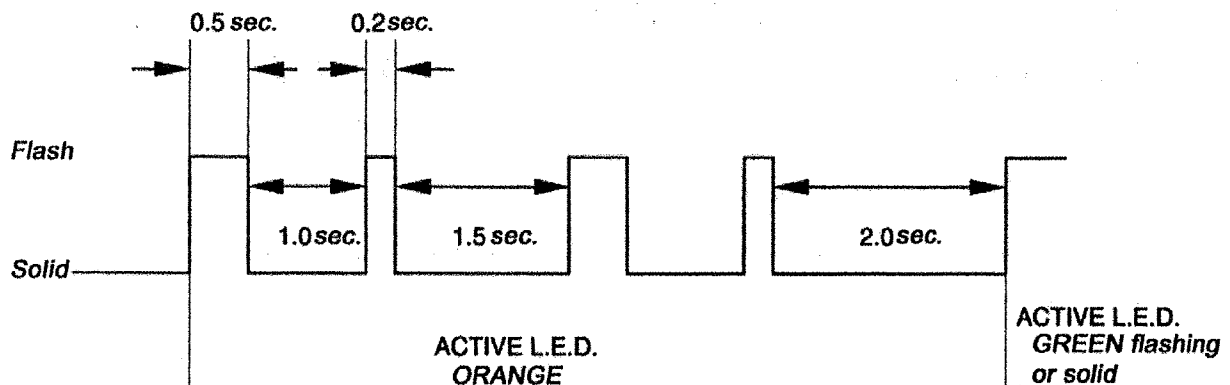
About the ACTIVE L.E.D.

1. When the engine RPM reaches the set RPM range, the "GREEN" L.E.D. will turn "ORANGE".
(At 2000, 3000, 4000, 5000, 6000 rpm, it will turn "ORANGE")
2. When in "Adjustment Mode", ACTIVE L.E.D. will flash.
When adjusting 1% ~ 10% range, it will flash.
When Adjusting 10% ~ 20% range, it will start to flash faster.

- How to read the current setting flashes
When displaying 3%



When displaying 11%

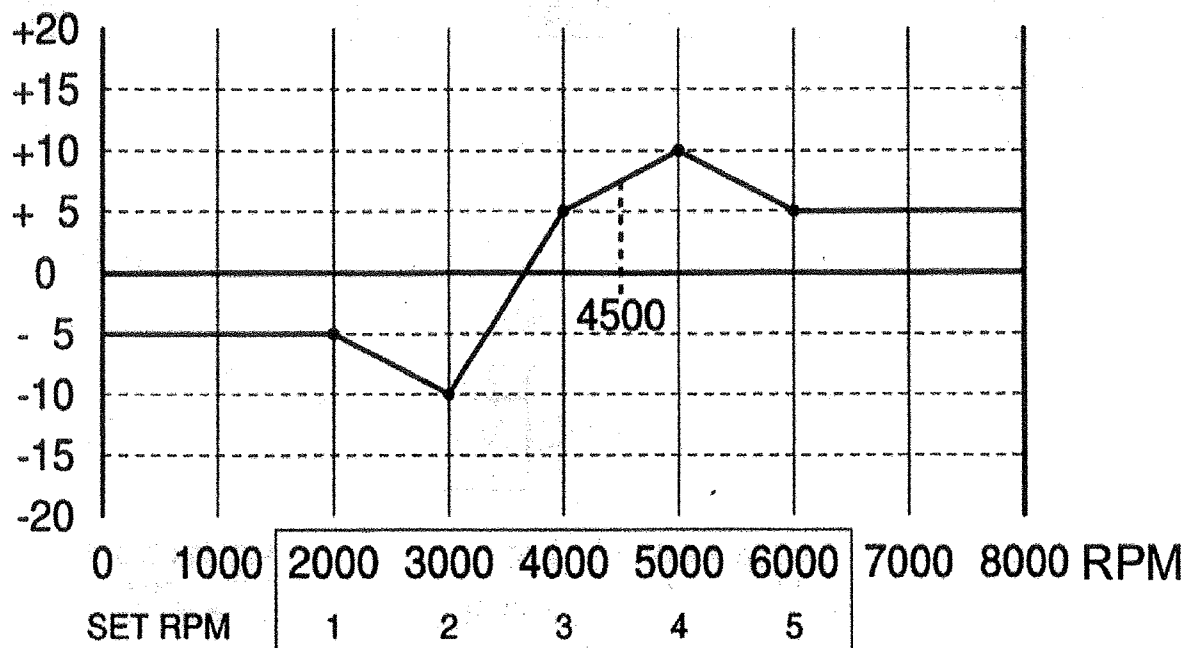


About the Fuel Adjustment

Example: When the A.A.V. SET RPM and Adjustment is set as following:

SET RPM	1	2	3	4	5
	2000rpm	3000rpm	4000rpm	5000rpm	6000rpm
Adjustment	-5%	-10%	+5%	+10%	+5%

Adjustment



The fuel adjustment will be as shown in the graph above.

The rpm between the A.A.V. Adjustment points will be calculated with the before and after of the adjustment points.

Example: From the graph above, the 4500 rpm points will be between A.A.V. 3 and A.A.V. 4. So, the adjustment point will be +7.5%.

Also, the adjustment before 2000rpm will be the A.A.V. 1 value, and above 6000rpm will be the A.A.V. 5 value.

About the Fuel Adjustment

- **Changing VTEC shift point**

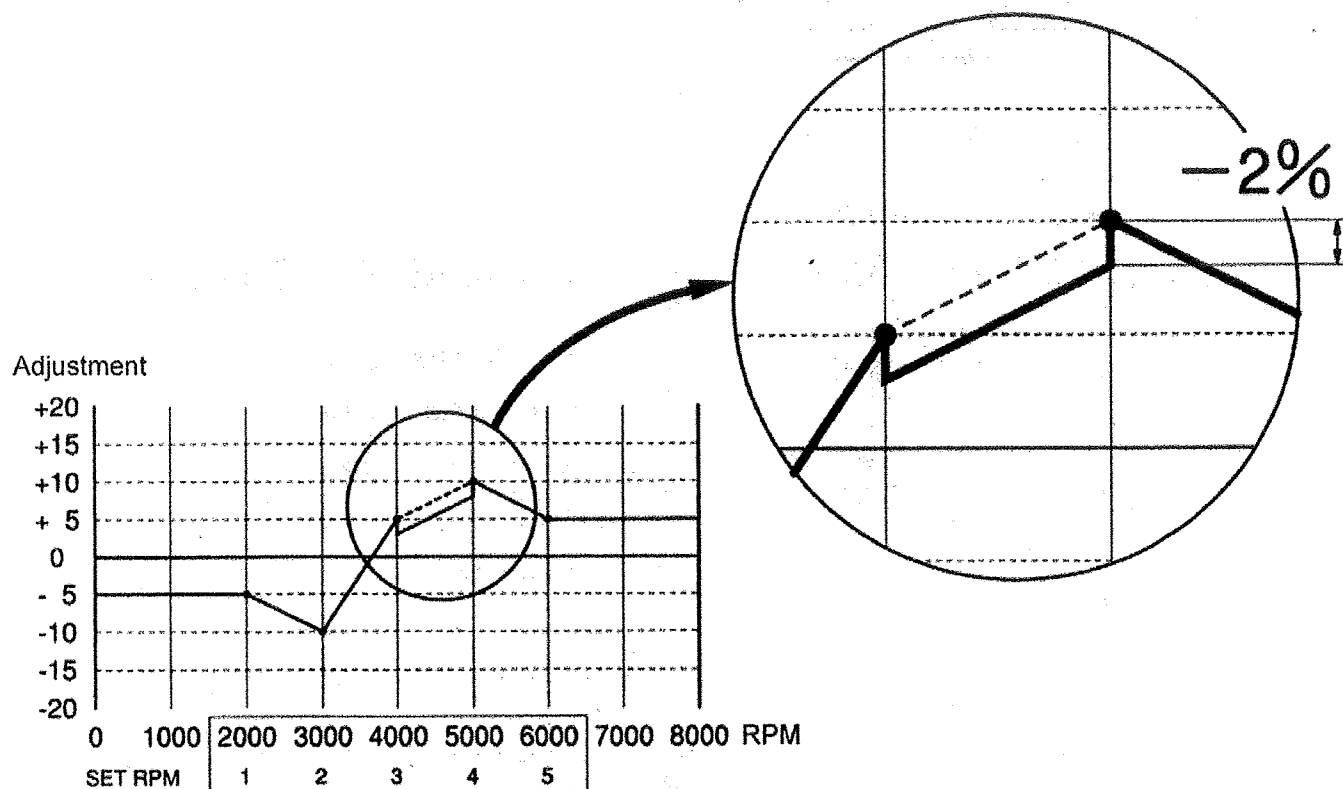
The VTEC shift point can be adjusted $\pm 1000\text{rpm}$ (100rpm increments) by turning the V.P.V. on the front panel.

- **VTEC Airflow Adjustment**

When adjusting the factory VTEC shift point, there will be a difference in the ECU VTEC signal and the actual shift signal. This difference affects the fuel injection as well. This feature can be used to fine-tune the VTEC system by adjusting fuel to compensate for the difference.

Use the V.A.A.V. to adjust $\pm 10\%$ (1% increments).

Example: Factory VTEC shift point 5000rpm
Change shift point to 4000rpm, and V.A.A.V. to -2% .
2% will be subtracted from the 4000rpm to 5000rpm of the A.A.V. (shown in dotted line)

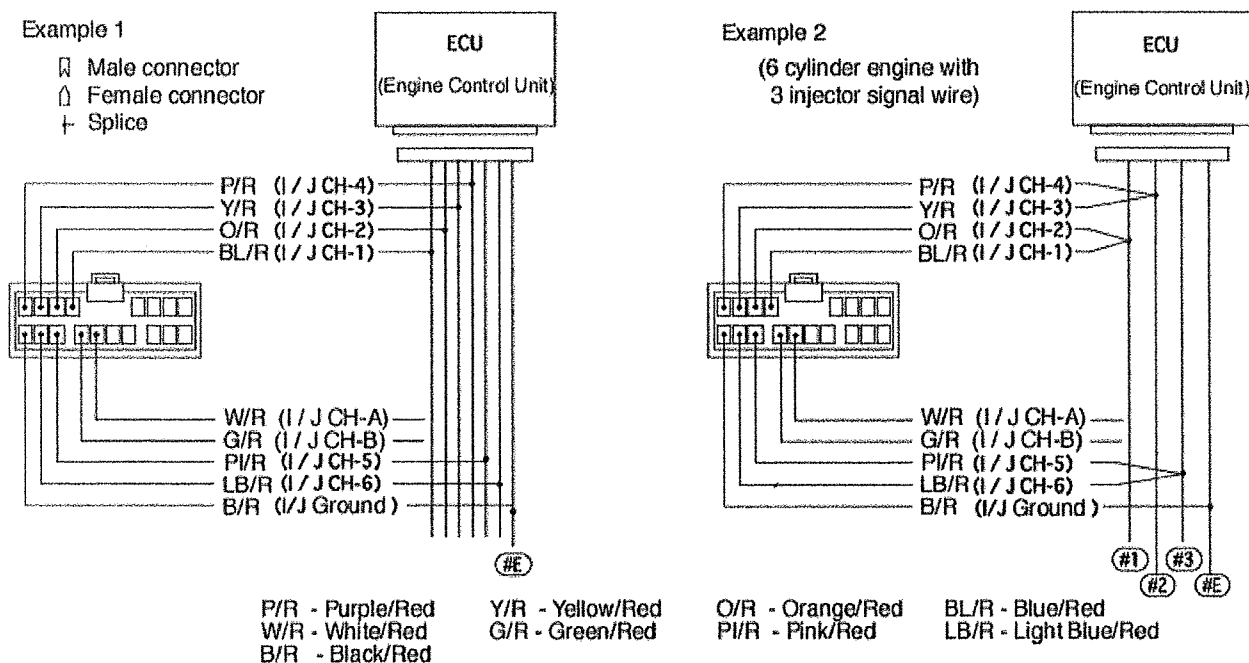


Wire Diagram for the Optional Injector Harness (sold separately)

To control the main injectors, and sub injectors, e-Manage Injector Harness is required along with the e-Manage Support Tool software, and Windows base P.C.(laptop).

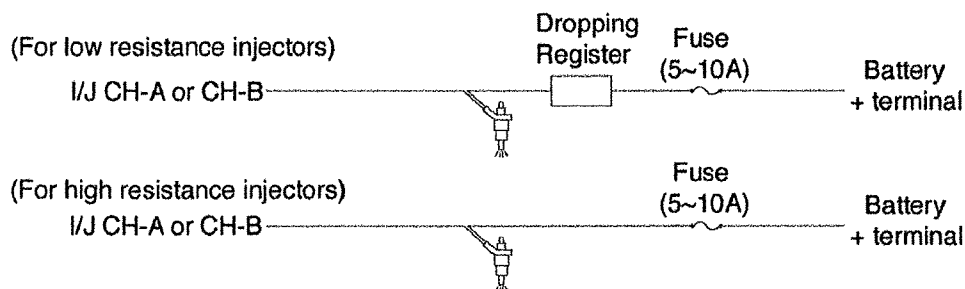
Injector Signal

- Connect to the vehicle's Injector signal wires. Refer to the "Vehicle Specific ECU wire location chart" at the end of this manual for the proper location of each wire. Make sure that you connect the same number of wires as the engine's cylinder number. (Excludes Rotary engines)
- For Rotary engines, you can wire only the primary or secondary injector signal or both.
- If the vehicle does not have the same number of injector signal wire as the number of the engine's cylinder number, group 2 wires in to one. See the example diagram below.



Sub Injector Signal

- When using the I/J CH-A, I/J CH-B for sub injectors, set the jumper JP5 and JP6 in the e-manage main unit to "1-2" from "Open".
- When using low resistance injectors dropping register is required in-line as shown below.



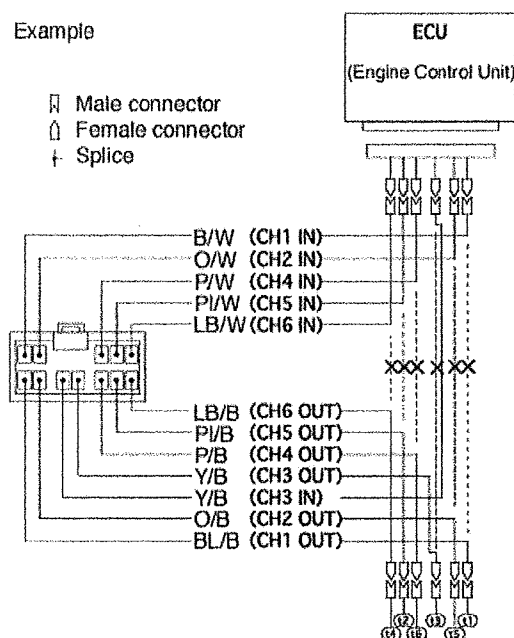
Wire Diagram for the Optional Ignition Harness (sold separately)

To control the ignition timing, e-Manage Ignition Harness is required along with the e-Manage Support Tool software, and Windows base P.C.(laptop).

Wire diagram for Ignition Signal

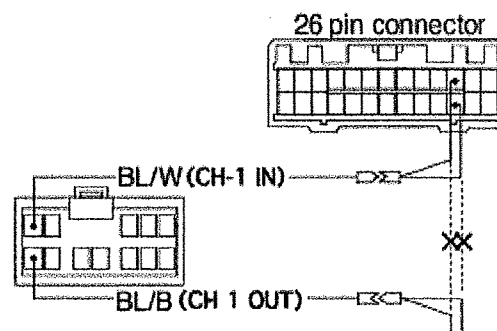
- Please read the instruction included with the Ignition harness kit, and proceed with the wiring only if you fully understand the instruction.
- Connect to the vehicle's Ignition signal wires. Refer to the "Vehicle Specific ECU wire location chart" at the end of this manual for the proper location of each wire. Connect the ignition channel wire in the engine's firing order.
- Make sure that wires are connected in the firing order and jumper setting is correct. Improper wiring and setting can damage the ignition coil.

Example



e-manage I/G Channel	CH-1	CH-2	CH-3	CH-4	CH-5	CH-6
3, 4, 6, 8 cylinder distributor	t					
Inline 4 cylinder group ignition	t1,4	t2,3				
Horizontally opposed 4 cylinder	t1,2	t3,4				
Inline 4 cylinder individual ignition	t1	t3	t4	t2		
Horizontally opposed 4 cylinder	t1	t3	t2	t4		
Inline 6 cylinder group ignition	t1,6	t5,2	t3,4			
V6 group ignition	t1,4	t2,5	t3,6			
Inline 6 cylinder individual ignition	t1	t5	t3	t6	t2	t4
V6 individual ignition	t1	t2	t3	t4	t5	t6
13B (FC3S, JC3SE)	tT	tL				
20B (JCESE)	tT			tL		
13B (FD3S)	tT1	tT2	tL			

- On Hondas set the jumper pins JP 1 and JP2 to 2-3. (see Page 14-15)
- After wiring, if the tachometer, or not firing occurs, set the jumper pin JP2 to 2-3. (Specially on Toyota)
- On Honda EG type vehicles, the bottom third pin from the right on the 26 pin is also an ignition signal. Group the 2 wire together.



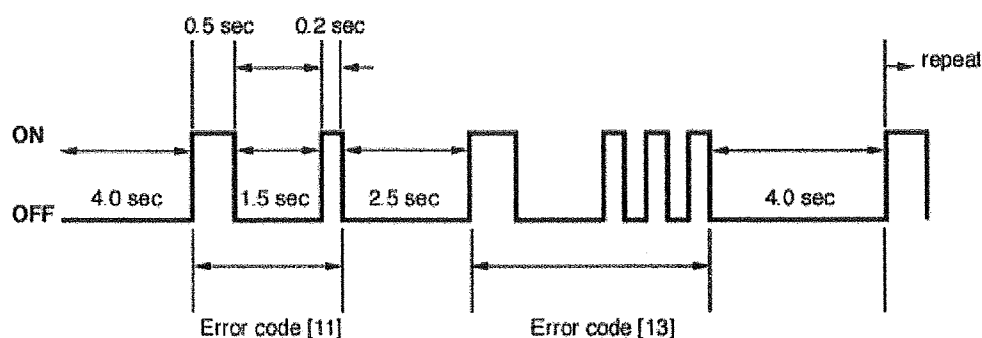
Error Code Chart

How to read the error codes

When there is a system error, the ACTIVE L.E.D. will change to RED and start flash rapidly.

1. If this occurs, shut down the engine immediately. Turn the IG key to the "ON" position to go the Check Mode.
2. While in check mode, the red flashes will start to flash all the stored codes.
3. Count the red flashes to check the code.
4. Turn the IG key to "OFF" position, and fix the problem.

* When the Support Tool (sold separately) is used to tune the e-Manage, check the Error Code Chart on the Support Tool Manual.



CODE	Error	Error description
11	Airflow Signal 1 input error	Incorrect wiring or disconnected Airflow Signal 1
12	Airflow Signal 2 input error	Incorrect wiring or disconnected Airflow Signal 2. Incorrect Jumper setting (JP3).
13	Karman Vortex sensor input error	Incorrect wiring or disconnected Karman Signal. Incorrect Jumper setting (JP4).
14	VTEC Signal input error	Incorrect VTEC signal input wiring. Incorrect Jumper setting (JP4).
15	Airflow voltage output error	Incorrect Airflow signal output wiring.
16	VTEC Signal output error	Incorrect VTEC signal output wiring. Incorrect Jumper setting (JP3).

ECU Wire Location Chart

Use the following Table and Wire Diagram to set the e-Manage initial setup and properly wire the harness.

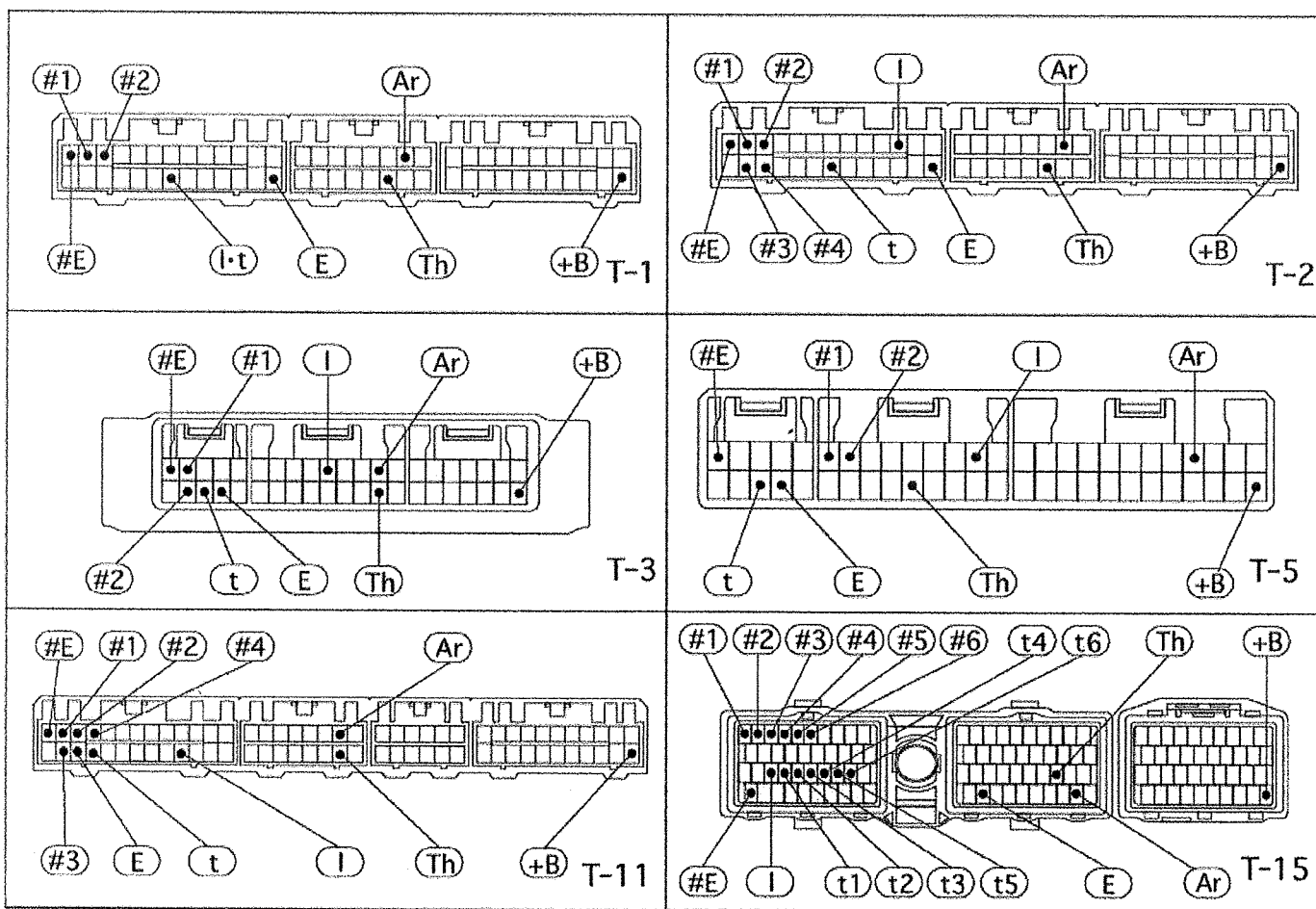
* If your vehicle is not listed in the chart, contact the GReddy Product Support Dealer near you or GReddy Performance Product.

(+B)	← Power	(#※)	← NO. ※ Injector Signal
(E)	← Ground	(t※)	← NO. ※ Ignition Signal
(I)	← RPM Signal	(I · t)	← RPM & Ignition Signal
(Th)	← Throttle Signal	(t※ · ※)	← NO. ※ & NO. ※ Ignition Signal
(Ar)	← Airflow/Pressure signal	(tL)	← Leading Ignition Signal
(VT)	← VTEC Signal	(tT※)	← NO. ※ Trailing Ignition Signal
(VM)	← VTM Signal	(#P※)	← NO. ※ Primary Injector Signal
(#E)	← Injector Ground	(#S※)	← NO. ※ Secondary Injector Signal

ECU Wire Location Chart

TOYOTA

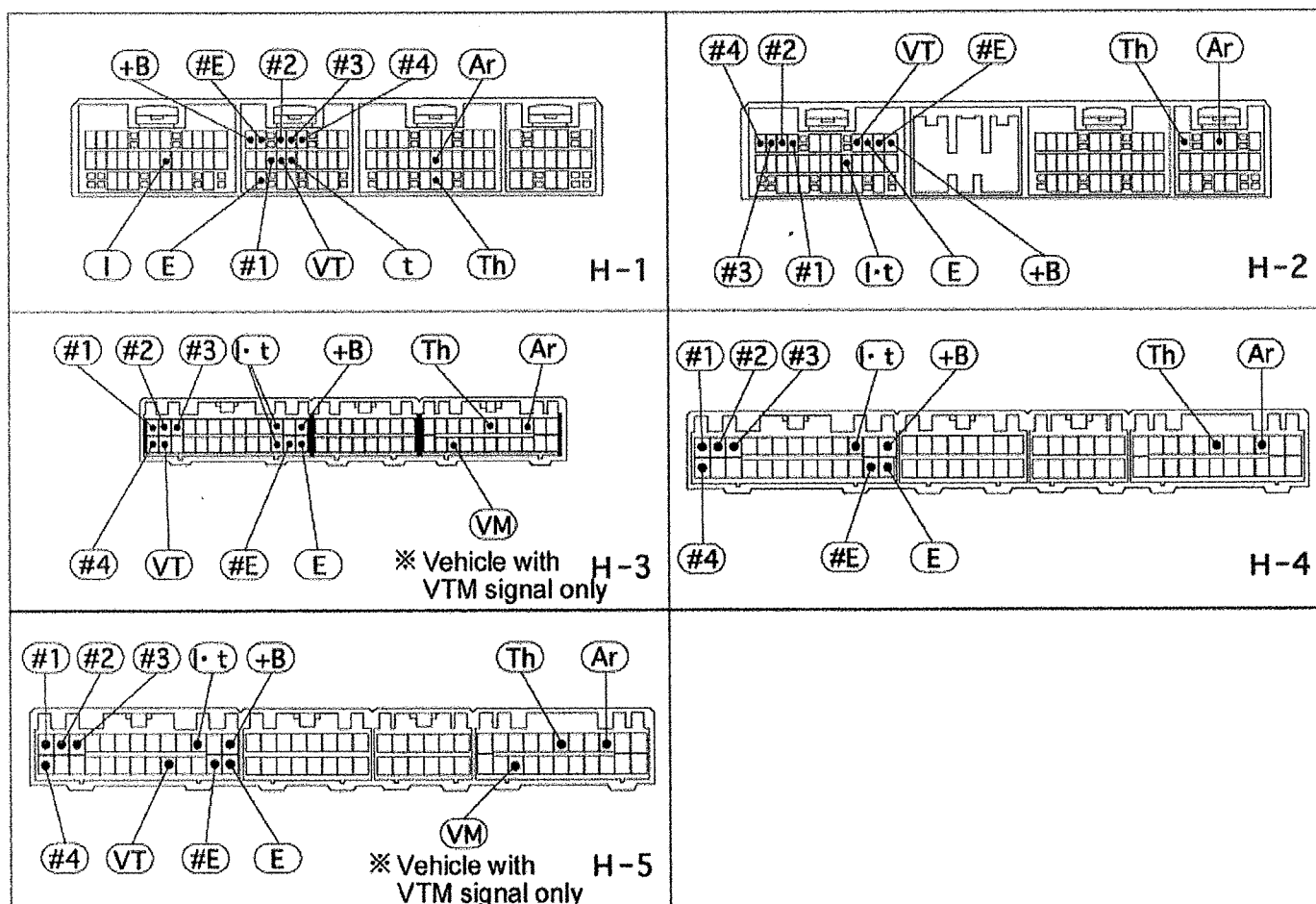
Model	Chassis Code	Year	Engine Code	Sensor Type	Switch setting			CPU #	ECU Location
					1	2	3		
Supra	JZA80	93.5~97.7	2JZ-GTE	TY_PR-1	7	4	0	T-15	5
Celica	ST205	94.2~99.7	3S-GTE	TY_PR-2	2	4	1	T-2	2
MR-2	SW20	93.10~99.7	3S-GTE	TY_PR-2	2	4	1	T-2	10
		89.10~93.9		TY_FL-2	2	4	8		
	AW11	86.8~89.9	4A-GZE	TY_FL-4	2	4	A	T-5	
		84.6~89.9	4A-GE	TY_PR-3	2	4	2	T-3	
Corolla	AE86	83.5~87.4	4A-GE	TY_PR-3	2	4	2	T-3	4



ECU Wire Location Chart

HONDA/ACURA

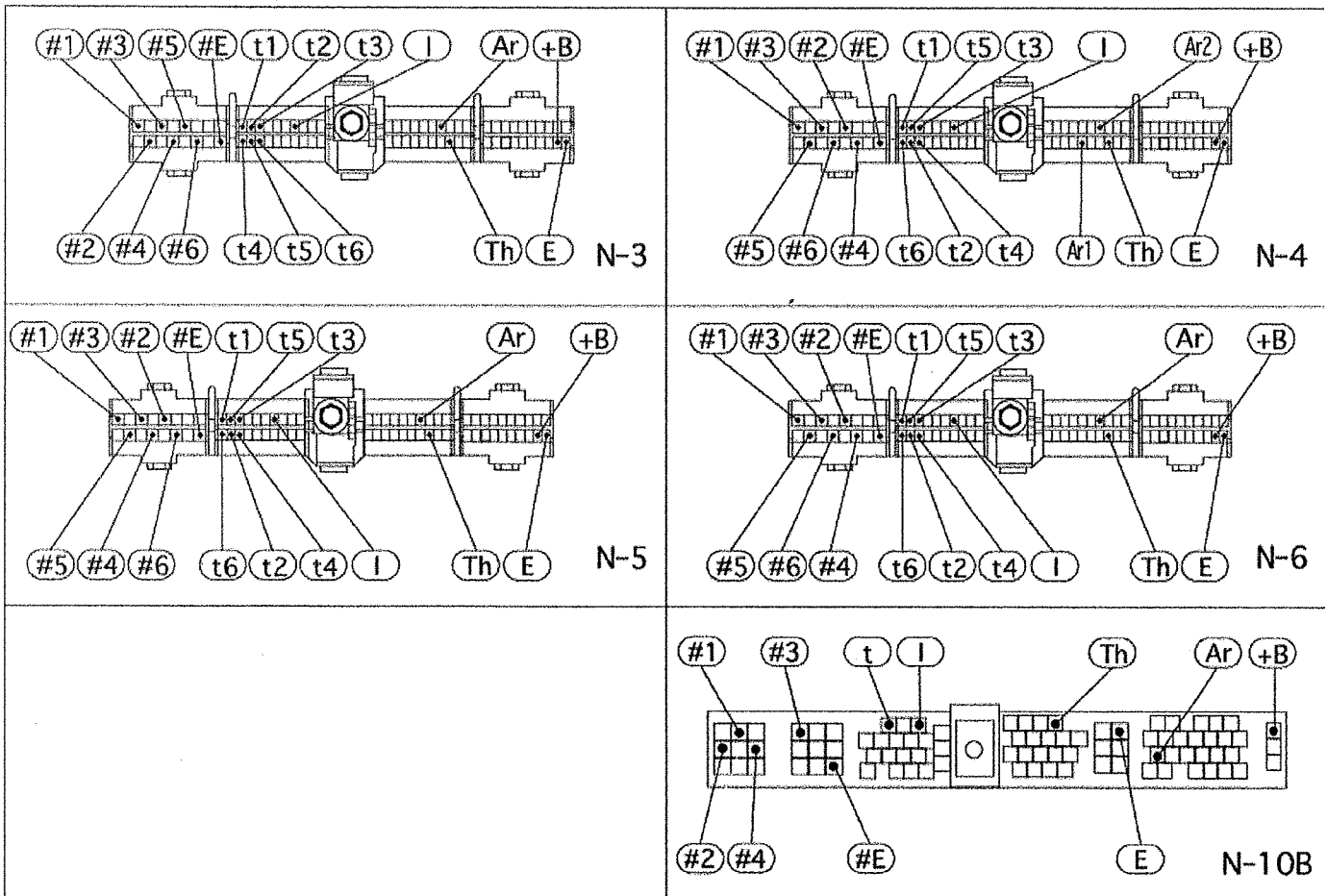
Model	Chassis Code	Year	Engine Code	Sensor Type	Switch setting			CPU #	ECU Location
					1	2	3		
Civic	EM1 (si)	99 ~ 00	B16A	HN_PR-1	2	8	A	H-1	4
	EJ6	96 ~ 00	D16Y					H-2	
	EJ7							H-3	
	EJ8								
	EJ1	92 ~ 95	D16Z						
	EH3								
	EG9								
Integra	DC2/DB8	96 ~ 01	B18C	HN_PR-1	2	8	A	H-2	4
		94 ~ 95	B18C(M/T)					H-3	
Prelude	BB6/BB8	97 ~ 01	H22A	HN_PR-1	2	8	A	H-2	5
Accord	CF4	97.9~	F20B	HN_PR-1	2	8	A	H-1	5
	CD5	93.9~97.8	F22B					H-3	



ECU Wire Location Chart

NISSAN

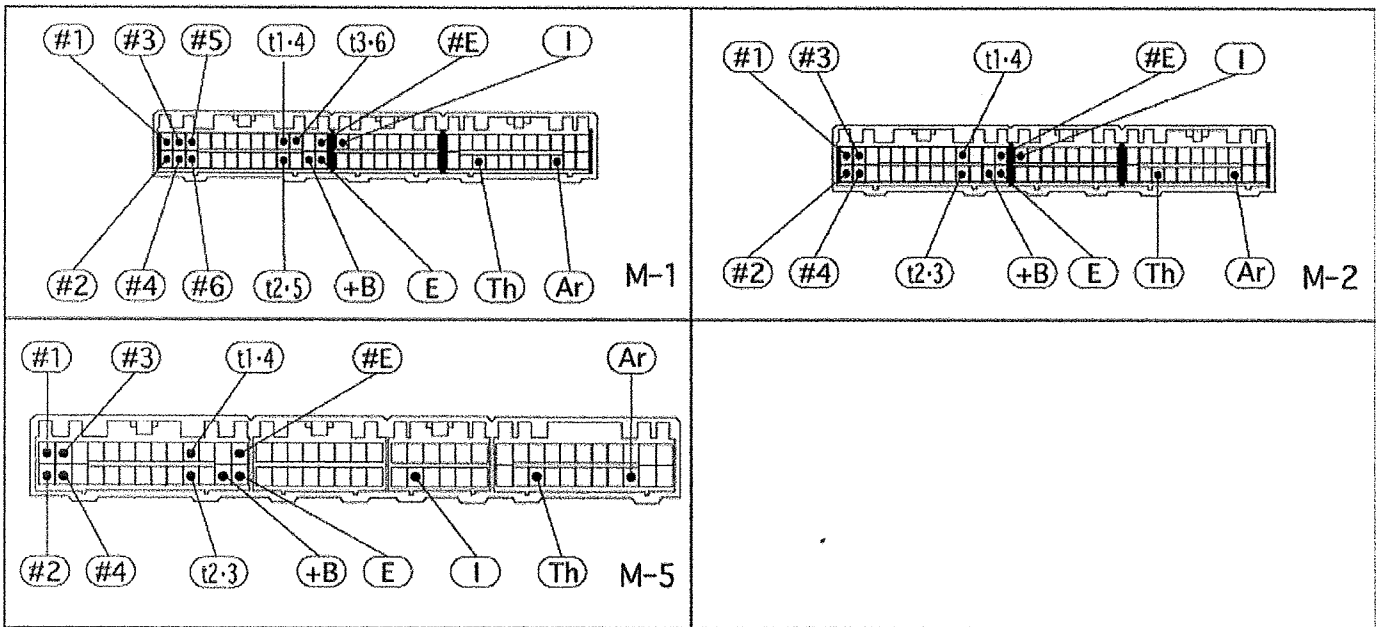
Model	Chassis Code	Year	Engine Code	Sensor Type	Switch setting			CPU #	ECU Location
					1	2	3		
300ZX	Z32	90 ~ 95	VG30DETT	NS_HW-2	7	0	1	N-3	5
			VG30DE						
SKYLINE	BNR34	99.1~	RB26DETT	NS_HW-6	7	0	5	N-4	4
	BCNR33	95.1~98.12	RB26DETT	NS_HW-6	7	0	5	N-4	
	ECR33	95.1~98.4	RB25DET	NS_HW-5	7	0	4	N-6	
		93.8~94.12		NS_HW-3	7	0	2		
	BNR32	89.8~94.12	RB26DETT	NS_HW-6	7	0	5	N-4	
	HCR32	89.5~93.7	RB20DET	NS_HW-3	7	0	2	N-5	
240SX	S14	95 ~ 98	KA24DE	NS_HW-7	2	0	6	N-10B	4



ECU Wire Location Chart

MITSUBISHI

Model	Chassis Code	Year	Engine Code	Sensor Type	Switch setting			CPU #	ECU Location
					1	2	3		
3000GT	Z16A	90 ~ 98	6G72	MT_KR-2	6	8	4	M-1	2
Eclipse	D32/D33	95 ~ 99	4G63	MT_KR-1	3	8	3	M-5	4
	D22/D27	98 ~ 94						M-2	



ECU Wire Location Chart

MAZDA

Model	Chassis Code	Year	Engine Code	Sensor Type	Switch setting			CPU #	ECU Location
					1	2	3		
RX-7	FD3S	93 ~ 96						MA-3	4
	FC3S	89 ~ 92	13B	MZ_FL-2	B	A	A	MA-6	5
MIATA	NB8C ※	98.1~00.6	BP-ZE	MZ_HW-1	3	A	0	MA-5	5
	NB6C ※	98.1~	B6-ZE						
	NA6CE	89.9~93.7		MZ_FL-4	3	A	C	MA-7	

※ Adaptor required (Japanese spec only)

