

# AVC TYPE-R

## Vehicle Specific Wiring Diagrams



ELECTRONICS TECHNOLOGY

- This manual lists vehicle applications and ECU wiring diagrams for the AVC-R ( Product Code : 420-A004 ). Please read the instructions and safety precautions in the instruction manual.
- Both this manual and the instruction manual are needed to install this unit.
- Although this manual lists vehicle specific wiring diagrams, there may be some special models and applications that have not been included. This manual was printed on JULY 1, 1999. Please contact your dealer of purchase to obtain wiring diagrams for specified vehicles produced after this date.
- This manual is intended for Japanese specification vehicles ONLY. Japanese vehicles sold in other countries MAY have different wiring diagrams and specifications. The Super AVC-R may not work properly in these cases.

## ■ To Begin

Please be sure to read the safety precautions in the instruction manual before installation.

Please refer to the signal words and their meanings in the instruction manual.

“ECU” stands for Electric Control Unit in this manual.



### **CAUTION**

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● **Installation should only be performed by an experienced installer.**

Please forward this manual, instruction manual and warranty card to the customer (user).

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● **Do not pull the harness of the vehicle and this product.** Failure to do so may cause product damage and vehicle damage caused by electrical shorts.

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● **Be sure to release the lock of connector when handling.**

**Also be sure to free the fixing bolt when releasing the connector.**

Failure to do so may result connector damage.

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● **Do not expose the connector to direct water, sunlight or heat.**

Failure to do so may result in electrical shorts that cause product damage and vehicle damage .

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● **Keep the product and vehicle harness away and from sharp objects. Do not press the harnesses together**

Failure to do so may cause electrical shorts resulting in product damage and vehicle damage.

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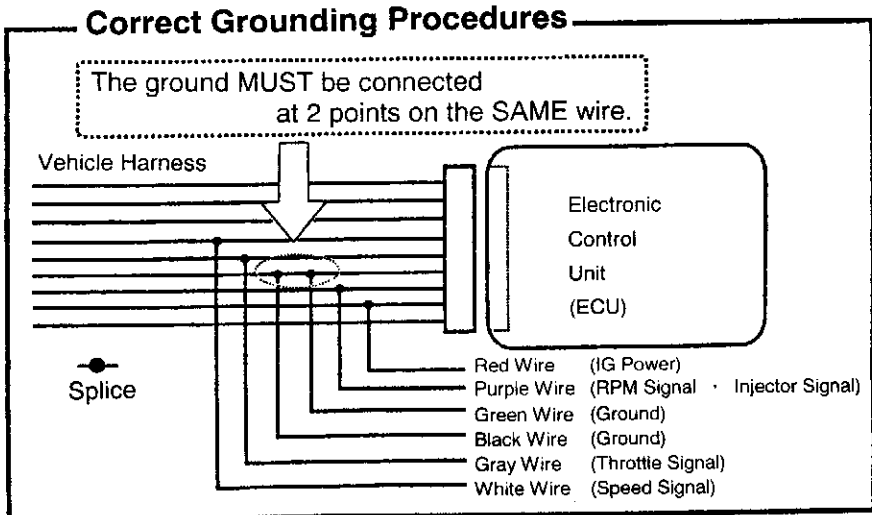
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## ■ Precautions for Installation

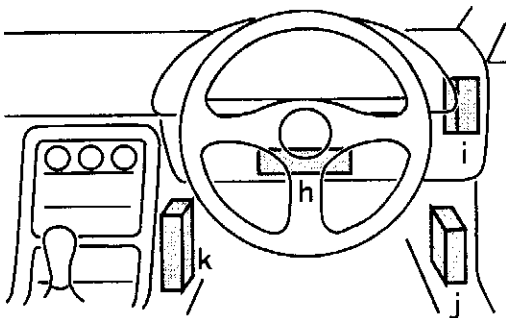
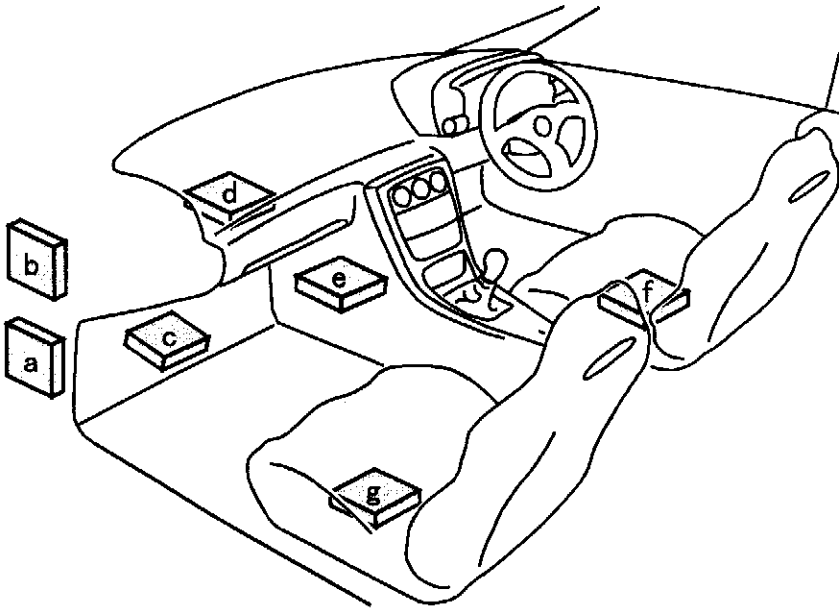
● **Never use the electro-taps to install this product.** Electro-taps may cause an unstable electric connection. Improper connections may cause the unit to function incorrectly causing severe damage to the vehicle. Be sure to use attached splitting caps and secure them with pliers.

● Be sure to cover all exposed connections with electrical tape

● It is very important to keep the voltage precise. Be sure to have the 2 separate Ground Wires (Black Wire and Green Wire). Be sure to connect the Ground Wires exactly as shown below. Failure to do so may cause to damage not only to this product but also to the engine of installed vehicle.

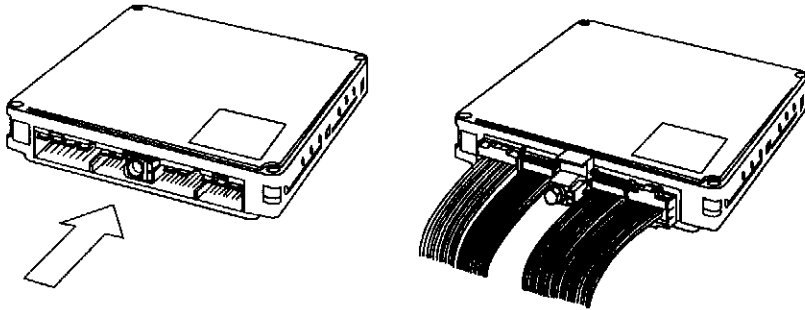


## ECU Location Diagram



- a Passenger Side Lower Dash
- b Left of the Glove Box
- c Passenger Side Foot Rest
- d Behind the Glove Box
- e Behind the Center Console
- f Under the Driver Seat
- g Under the Passenger Seat
- h Near the Steering Column
- i Right of the Meter Panel
- j Driver Side Lower Dash
- k Right of the Center Console
- l Engine room
- m Front Side of the Rear Trunk
- n Back of the Driver Seat

## ■ Angle of View for ECU Wiring Diagram



View the ECU Wiring Diagram from this angle.

Some vehicles may have the computer unit mounted backwards. Please be sure to count the number of pins before proceeding with installation.



### **WARNING**

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If any unusual odor or sound comes from the unit, discontinue use immediately and return the unit to the dealer of purchase.

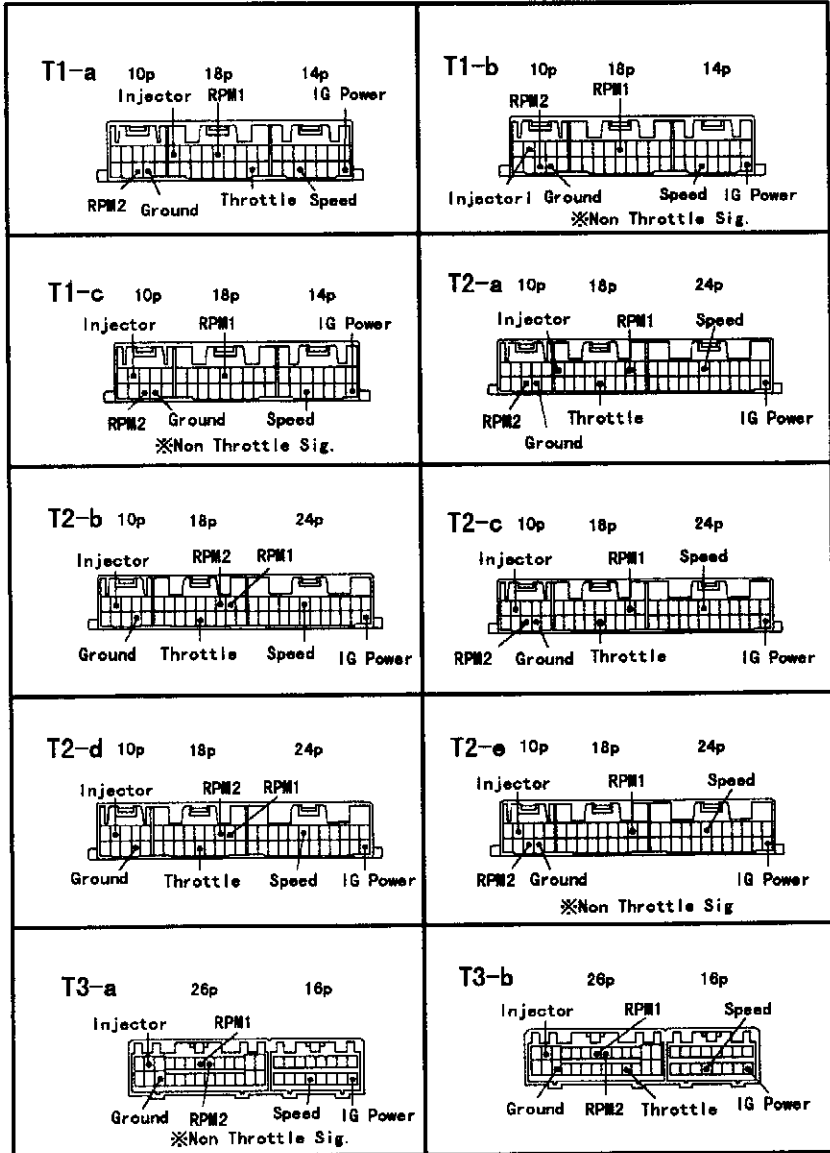
Continued use may result in electrical shorts and electrical fires.

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# ■ Vehicle Application Table(TOYOTA)

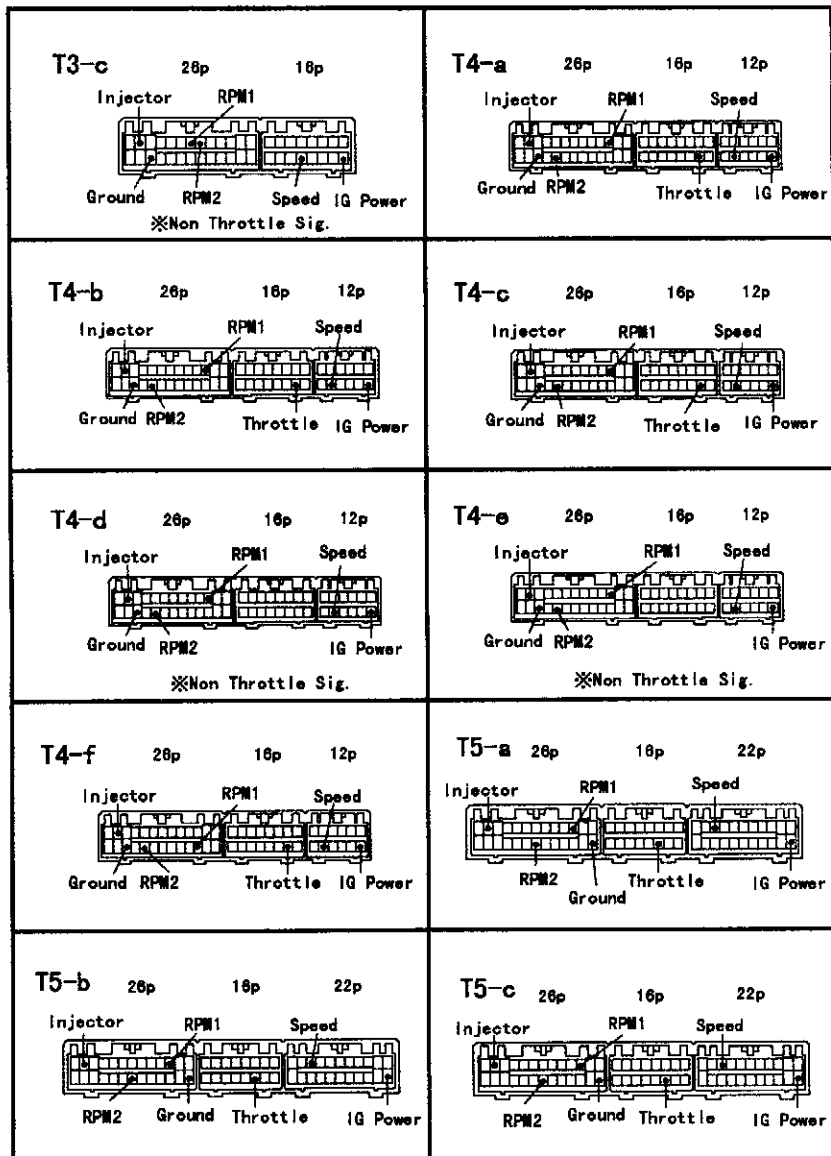
Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram
ARISTO	JZS147	2JZ-GTE	'91.10~'97.7	c		T7-c
SOARE	JZZ30	1JZ-GTE	'96.8~*	c	M/T Only	T8-d
			'91.5~'96.7			T8-a
	MZ20	7M-GTE	'88.1~'91.4	d		T5-a
			'86.1~'87.12		T2-b	
			'88.1~'91.4		T5-a	
GZ20	1G-GTE	'86.1~'87.12		T2-e		
SUPRA	JZA80	2JZ-GTE	'97.8~*	c	M/T Only	T10-a
			'93.5~'97.7			T7-d
	JZA70	1JZ-GTE	'90.8~'93.4	d		T6-a
			'88.9~'90.7		T5-a	
	MA70	7M-GTE	'86.2~'88.8		T2-b	
			'88.8	Turbo A	T5-a	
	GA70	1G-GTE	'88.9~'93.4		T5-a	
			'86.2~'88.8		T2-e	
MARK II CRESTA CHASER	JZX100	1JZ-GTE	'96.9~*	e	M/T Only	T8-d
	JZX90	1JZ-GTE	'94.9~'96.8			T8-g
			'92.10~'94.8			
	JZX81	1JZ-GTE	'90.8~'92.9	d		T6-a
	GX81	1G-GTE	'88.8~'92.9		T5-a	
MR2	SW20 III ~ V	3S-GTE	'93.10~*	m		T5-b
	SW20 I、II	3S-GTE	'89.10~'93.9		T5-b	
CELICA	ST205	3S-GTE	'94.2~*	e		T5-b
	ST185	3S-GTE	'91.9~'93.9		T5-a	
			'89.10~'91.8		T5-a	
	ST165	3S-GTE	'85.8~'89.9		T2-a	
CARDINA	ST215W	3S-GTE	'97.8~*	d		T9-a
	EP91	4E-FTE	'95.12~*	d		T4-d
STARLET	EP82	4E-FTE	'89.12~'95.11	e	M/T	T3-a
			'92.1~'95.11			T4-a
			'89.12~'91.12			T3-a
	EP71	2E-TE	'86.1~'89.12			A/T

# ECU Wiring Diagram (TOYOTA)



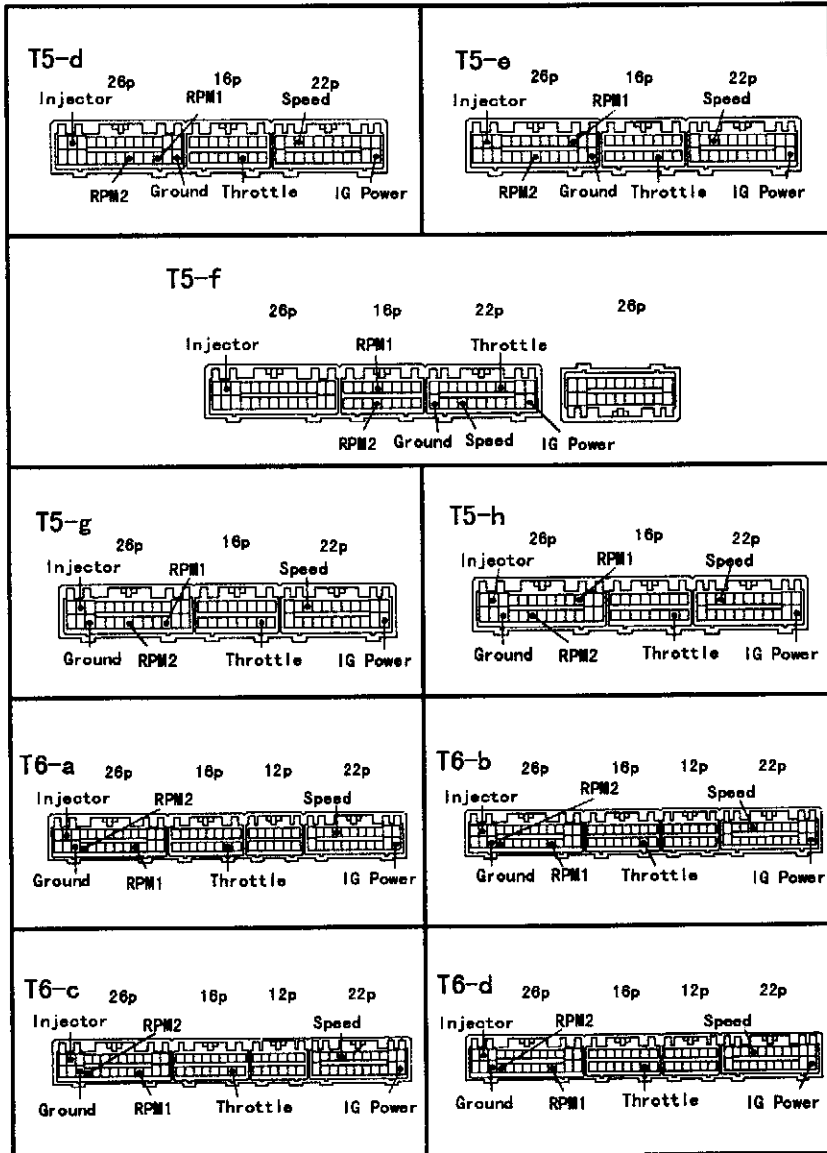
※Regular Connection : RPM Signal 1  
Plural Connection : RPM Signal 2



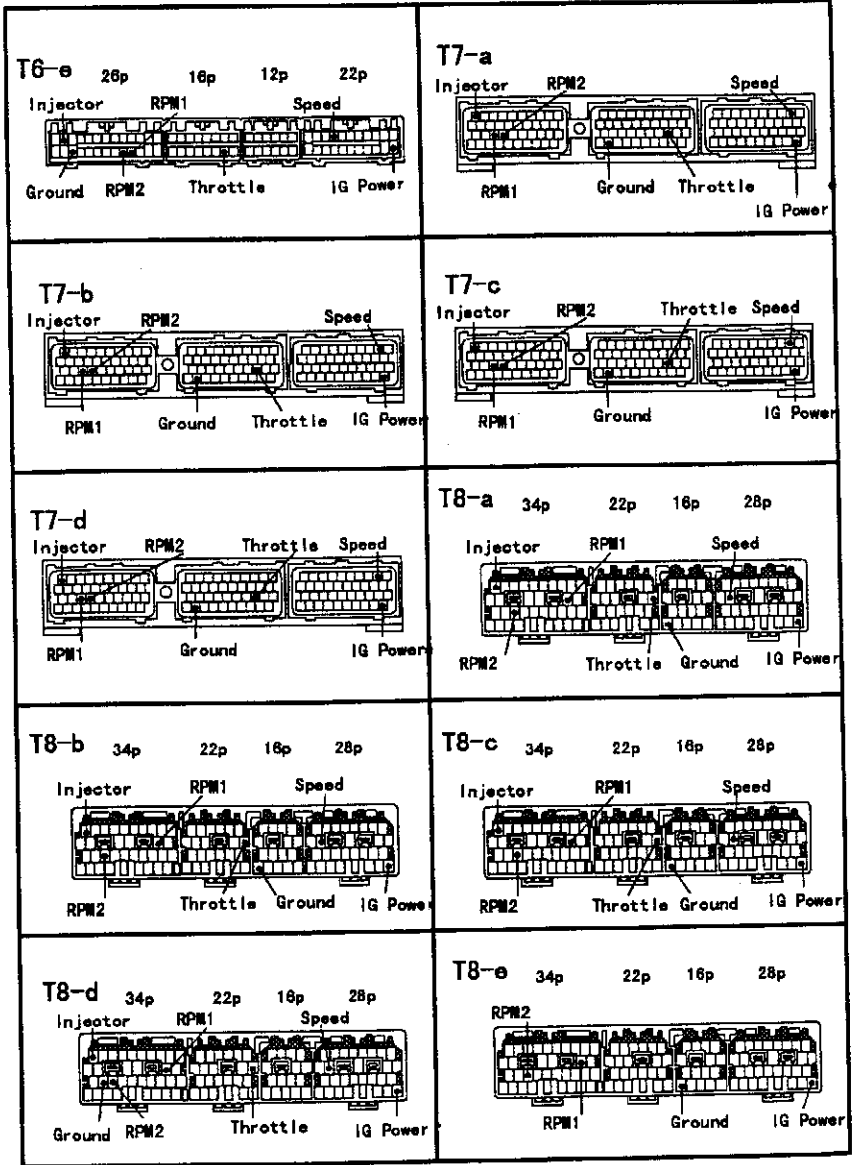


※Regular Connection : RPM 1

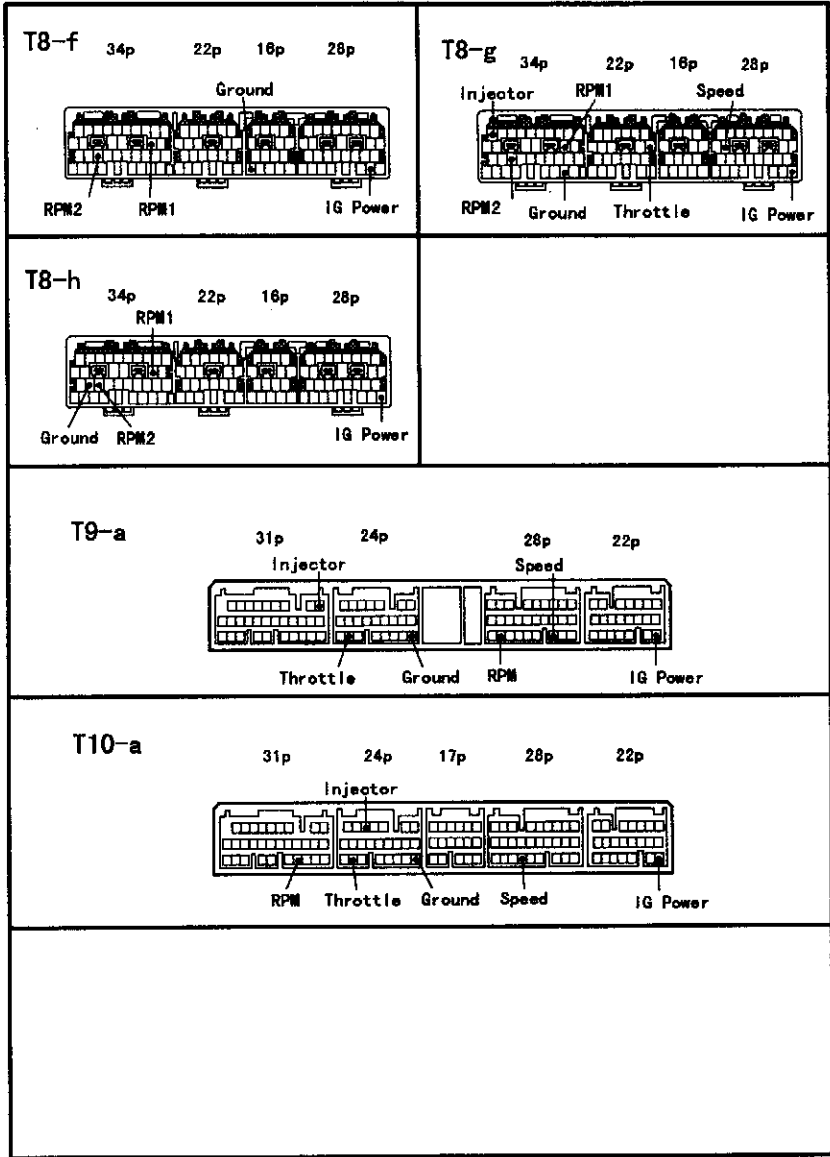
Plural Connection : RPM 2



※Regular Connection : RPM1  
Plural Connection : RPM2



※Regular Connection : RPM1  
 Plural Connection : RPM2



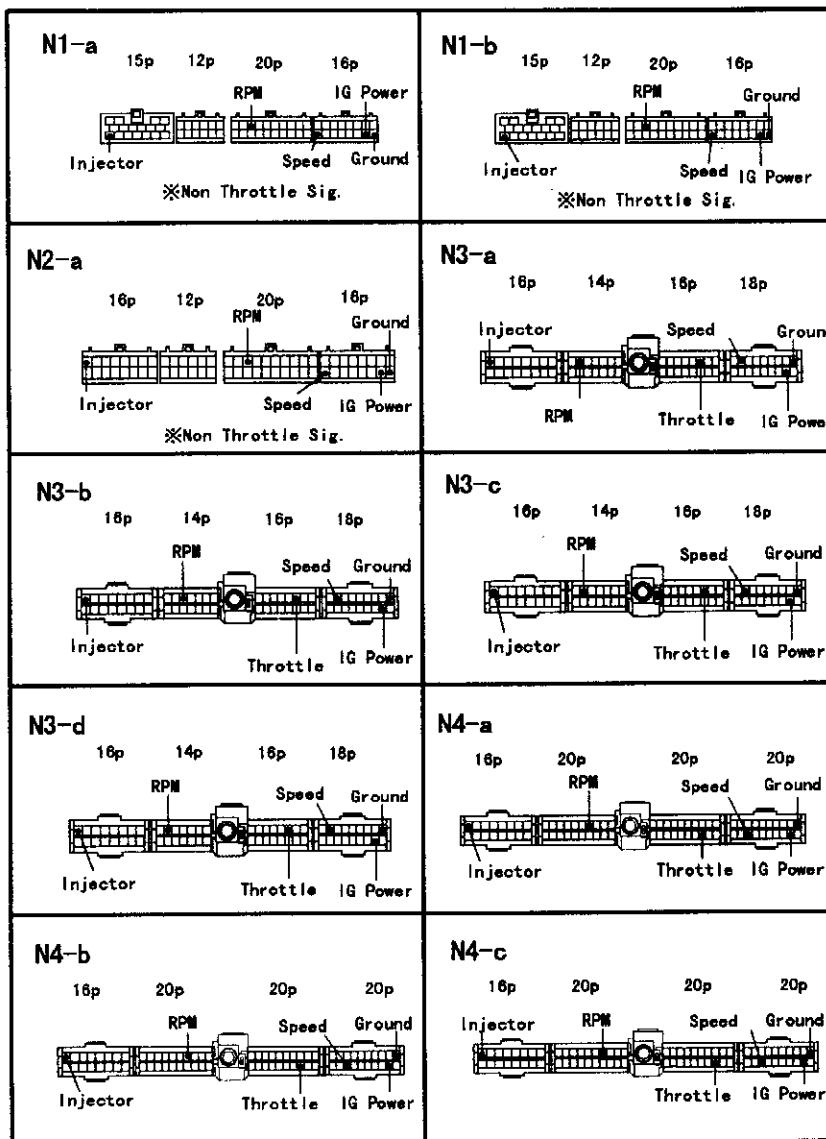
※Regular Connection : RPM 1  
 Plural Connection : RPM 2

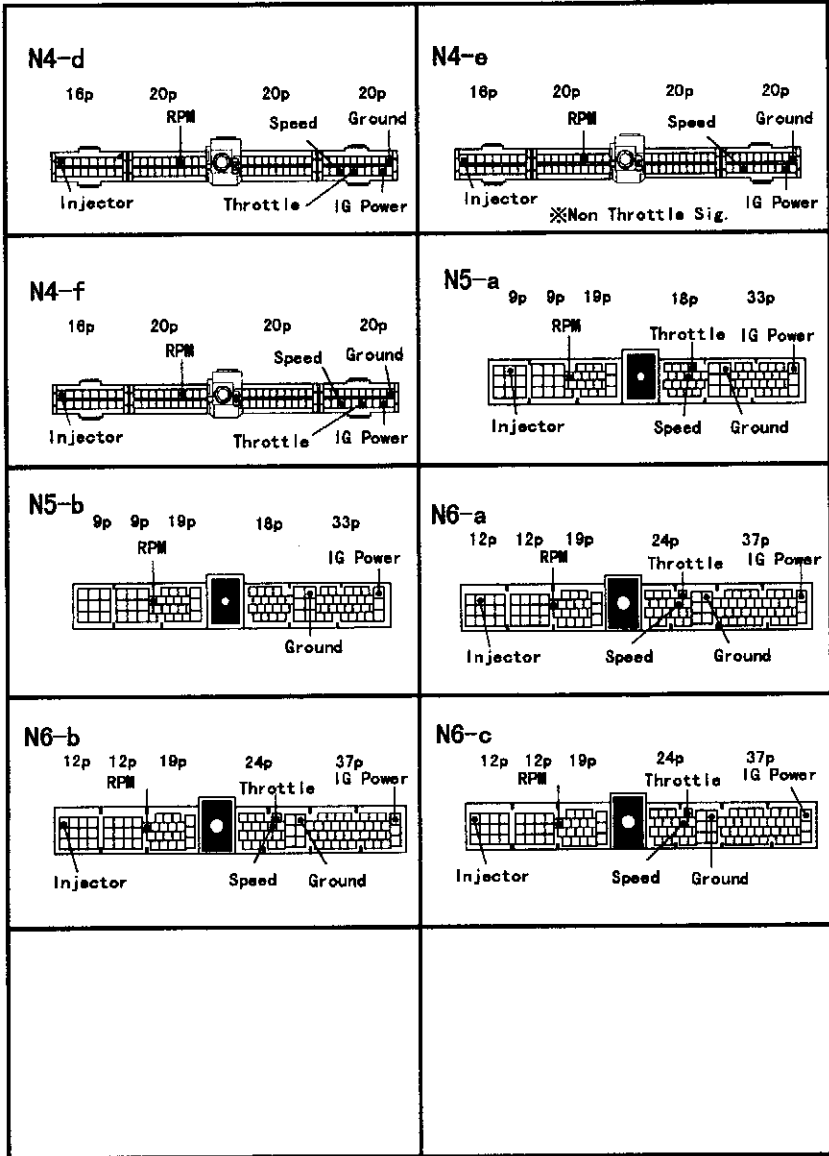
## ■ Vehicle Application Table (NISSAN)

Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram	
CIMA III	FHY33	VQ30DET	'96.6~'98.9	a		N5-a	
CIMA II	FPY32	VG30DET	'93.9~'96.5	a		N4-d	
CIMA I	FPY31	VG30DET	'89.8~'91.7	a		N4-e	
			'88.1~'89.7			N2-a	
FAIRLADY Z	Z32	VG30DETT	'89.7~*	c		N4-a	
	Y33	VQ30DET	'96.3~*	a		N5-a	
LEOPARD	UF31	VG30DET	'88.8~'92.5	a		N4-f	
	GF31	VG20DET				N2-a	
	Y33	VQ30DET				N5-a	
CEDRIC GLORIA	Y32	VG30DET	'91.6~'95.5	a		N4-d	
	Y31	VG20DET	'89.6~'91.5			N4-e	
	A31	RB20DET	'88.9~'94.7			a	N4-a
LAUREL	C35	RB25DET	'97.6~*	a		N6-b	
	C34	RB25DET	'94.1~'97.5			N4-a	
	C33	RB20DET	'89.1~'92.12			N4-a	
SKYLINE	R34	RB26DETT	'99.1~*	a		N4-b	
		RB25DET	'98.5~*			N6-c	
		RB26DETT	'95.1~'98.12			N4-b	
	R33	RB25DET	'96.1~'98.4			N4-c	
			'93.8~'95.12			N4-a	
	R32	RB26DETT	'89.8~'94.12			a	N4-b
		RB20DET	'89.5~'93.7				N4-a
R31	RB20DET	'87.8~'89.5	N1-a				
STAGEA	W#C34	RB25DET	'96.8~*	a		N6-c	
STAGEA (AUTECH Ver.)	WGNC34	RB26DETT	'97.10~*			N4-b	
BLUE BIRD	U13	SR20DET	'91.9~'95.12	e		N3-a	
	U12	SR20DET	'89.10~'91.8				
		CA18DET	'87.9~'89.9		N4-a		
SILVIA	S15	SR20DET	'99.1~*	a		N3-a	
	S14	SR20DET	'96.6~'98.12			N3-a	
			'93.10~'96.5			N4-a	
	PS13	SR20DET	'91.1~'93.9			N3-b	
S13	CA18DET	'88.5~'91.1	N4-a				
180SX	RPS13	SR20DET	'96.8~'98.12	a		N3-d	
			'91.1~'96.7			N3-b	
	RS13	CA18DET	'89.3~'90.12			N4-a	
PULSAR	N14	SR20DET	'90.8~'94.12	e		N3-a	
AVENEIR	W11	SR20DET	'98.8~*	e		N3-a	
	W10	SR20DET	'95.8~'98.7				

**CAUTION:** Do not connect injector wiring for CA18DET.

# ECU Wiring Diagram (NISSAN)



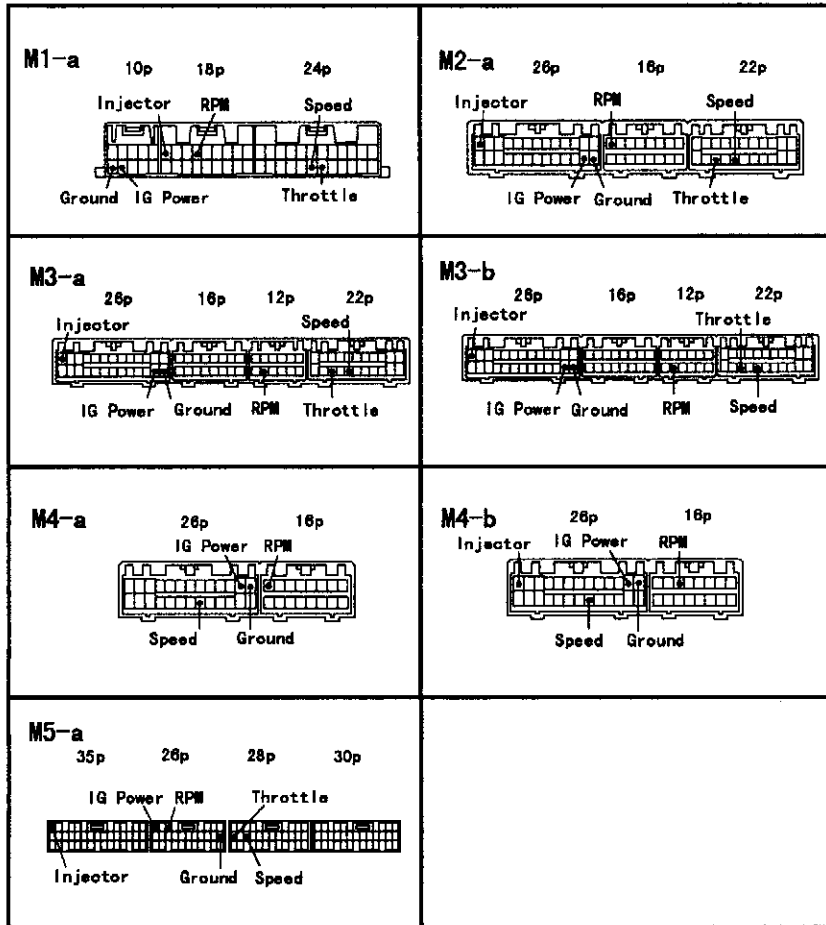


# ■ Vehicle Application Table (MITSUBISHI)

Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram
GTO	Z16A	6G72	'90.10~*	e		M2-a
LEGNUM	EC5W	6A13	'96.8~*	e	DOHC	M3-a
GALANT	EC5A	6A13	'96.8~*	e		M3-a
	E84A	6A12	'92.5~'96.7		DOHC	M2-a
	E39A	4G63	'87.10~'92.4	b	DOHC	M1-a
ECLIPSE	D32A	4G63	'95.6~*	e		M3-a
	D27A		'89.11~'95.6			M1-a
LANCER	CM5A	4G93	'95.10~*	b		M3-a
	CP9A	4G63	'99.1~*			M3-a
			'98.1~'98.12			
			'96.8~'97.12			
	GN9A		'93.10~'96.7			M2-a
	CE9A		'92.10~'93.9			
CD9A						
LIBERO	CD5W	4G93	'92.5~*	b		M2-a
MIRAGE	CM5A	4G93	'95.10~*	b		M3-a
PAJERO	V25W	6G74	'93.7~*	a		M2-a
	V23W	6G72	'91.1~*			M1-a
RVR	N73W	4G63	'97.10~*	b	M/T	M3-a
	N23W	4G63	'92.10~'97.9		A/T	M5-a
						M2-a



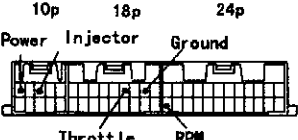

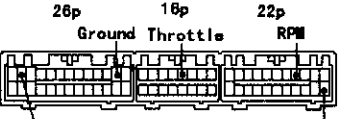







# ECU Wiring Diagram (MITSUBISHI)



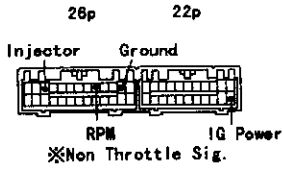
## ■ Vehicle Application Table(MAZDA)

Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram
EUNOS COSMO	JC3S	20B-REW	'94.3~'95.8	c		Z3-a
	JC3SE		'90.3~'94.3			
	JCES	13B-REW	'94.3~'95.8			
	JCESE		'90.3~'94.3			
RX-7	FD3S	13B-REW	95.12~*	a	280ps also	Z4-a
			'91.12~'95.11			Z3-b
	FC3S	13B	'88.9~'91.11	c		Z2-a
			'85.19~'88.8			Z1-a
AZ-WAGON	MD21S	K6A T/C	'98.10~*	l		Z7-a
	MD11S	F6A T/C				Z7-a

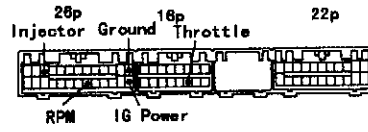
# ECU Wiring Diagram (MAZDA)

<p><b>Z1-a</b></p> <p>10p 18p 24p</p> <p>IG Power Injector Ground</p>  <p>Throttle RPM</p> <p>※Speed Sig. is in Cruise Control (Z1-CC).</p>	<p><b>Z1-CC</b></p>  <p>Speed</p> <p>Cruise Control Unit</p>
<p><b>Z2-a</b></p> <p>26p 16p 22p</p> <p>Ground Throttle RPM</p>  <p>Injector IG Power</p> <p>※Speed Sig. is in Cruise Control (Z2-CC).</p>	<p><b>Z2-CC</b></p>  <p>Speed</p> <p>Cruise Control Unit</p>
<p><b>Z3-a</b></p> <p>26p 16p 12p 22p</p> <p>Ground Throttle</p>  <p>Injector IG Power</p> <p>※RPM - Speed is in EC-AT (Z3-AT).</p>	<p><b>Z3-AT</b></p> <p>26p 16p</p>  <p>Speed RPM</p> <p>EC-AT</p>
<p><b>Z3-b</b></p> <p>26p 16p 12p 22p</p> <p>Ground Throttle Speed</p>  <p>Injector RPM IG Power</p>	<p><b>Z4-a</b></p> <p>34p 22p 28p</p> <p>RPM Throttle Injector</p>  <p>Speed IG Power Ground</p>
<p><b>Z5-a</b></p> <p>26p 22p</p> <p>Injector Ground</p>  <p>Throttle RPM IG Power</p>	<p><b>Z5-b</b></p> <p>26p 22p</p> <p>Injector Ground RPM</p>  <p>Throttle IG Power</p>

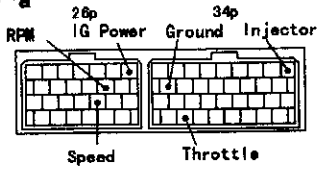
Z5-c



Z6-a



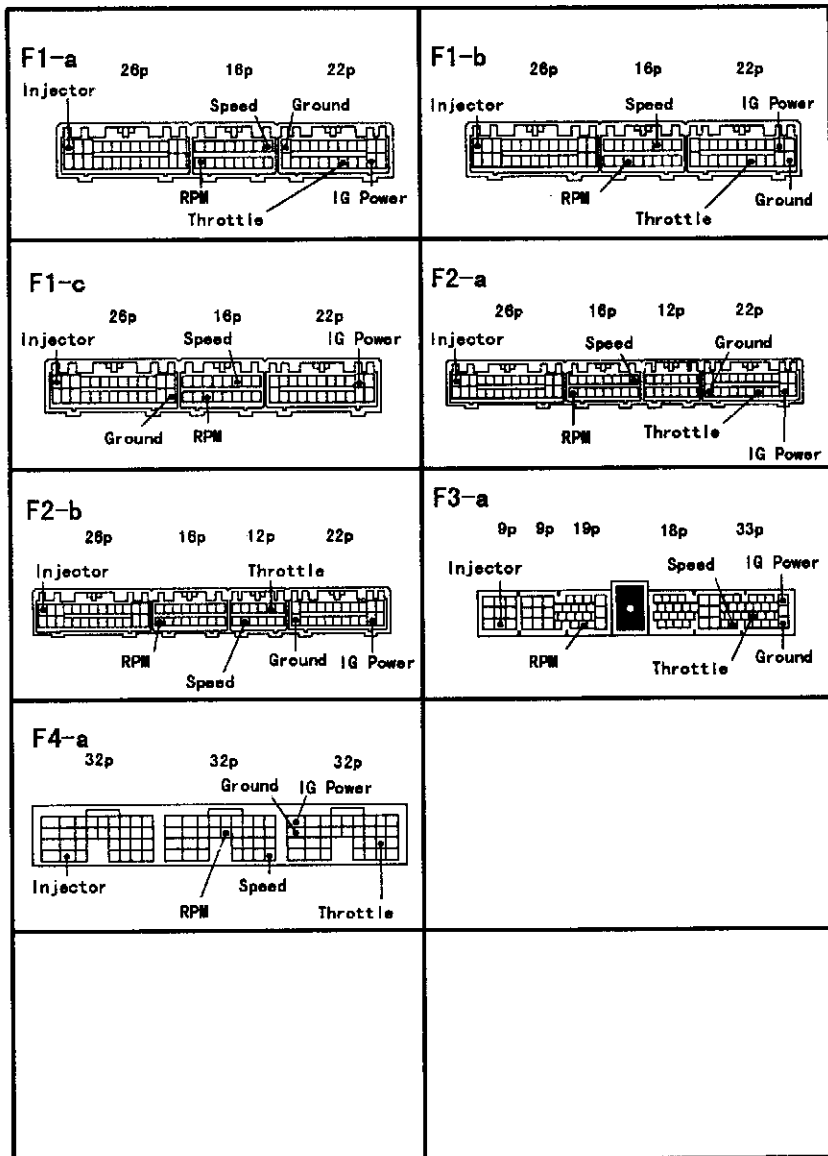
Z7-a



## ■ Vehicle Application Table(SUBARU)

Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram
LEGACY	BH5	EJ208	'98.6~*	c		F4-a
		EJ206				
	BD5 BG5	EJ20R	'96.6~'98.5			F1-b
		EJ20H			M/T	F3-a
					A/T	F2-a
	BC5 BF5	EJ20G	'89.2~'93.9		h	
IMPREZA	GC8 GF8	EJ207	'98.9~*	c		F4-a
		EJ205				
	GC8 GF8	EJ20K	'96.9~'98.8			F1-b
	GC8 GF8	EJ20G	'92.11~'96.8			F2-b
			'96.9~'98.8			F1-b
		'93.10~'96.8		F2-b		
FORESTER	SF5	EJ205	'98.9~*	c		F4-a
		EJ20G	'97.2~'98.8			F1-b

# ■ ECU Wiring Diagram (SUBARU)



## ■ Vehicle Application Table(SUZUKI)

Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram
ALTO WORKS	HA22S	K6A T/C	'98.10~*	l	Excluding VVT	S6-a
	HA12S	F6A T/C				
	HA21S	K6A T/C	'94.11~'97.4	b		S3-a
	HB21S					
HA11S	F6A T/C	M/T			S2-a	
HB11S		A/T			S4-a	
CAPUCHINO	EA21R	K6A	'95.5~'98.8	k		S5-a
	EA11R	F6A	'91.11~'95.10	b		S1-a
WAGON-R	MC21S	K6A T/C	'98.10~*	l		S6-a
	MC11S	F6A T/C				
	CT51S	K6A T/C	'97.4~'98.9	b		S5-a
	CV51S					
	CT21S	F6A T/C	'95.11~'98.9		M/T	S2-a
	CV21S		'95.2~'95.10		A/T	S4-a
	M/T				S1-a	
WAGON-R WIDE	MA61S	K10A T/C	'97.2~*		b	
	MB61S					
KEI	HN21S	K6A T/C	'98.10~*	l		S6-a
	HN11S	F6A T/C				
GIMNY	JB23W	K6A T/C	'98.10~*	l		S6-a

# Vehicle Application Table(SUZUKI)

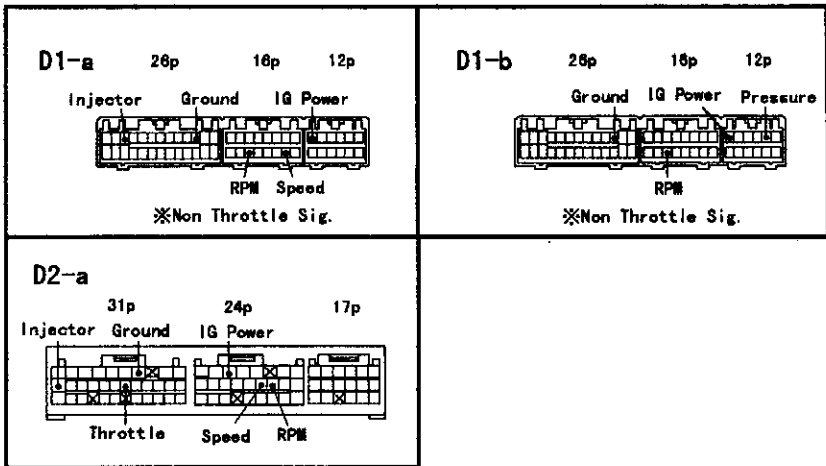
<p>S1-a</p> <p>12p 22p</p> <p>RPM IG Power Ground</p> <p>Injector Speed Pressure *Non Throttle Sig.</p>	<p>S2-a</p> <p>26p 16p</p> <p>RPM IG Power Ground</p> <p>Injector Speed *Non Throttle Sig.</p>
<p>S3-a</p> <p>26p 22p</p> <p>RPM Ground IG Power</p> <p>Injector Speed Throttle</p>	<p>S4-a</p> <p>26p 16p 12p</p> <p>RPM Ground IG Power Speed</p> <p>Injector Throttle</p>
<p>S5-a</p> <p>26p 16p 22p</p> <p>RPM Ground Throttle IG Power</p> <p>Injector Speed</p>	<p>S6-a</p> <p>26p 34p</p> <p>IG Power Ground Injector</p> <p>Speed RPM Throttle</p>



## ■ Vehicle Application Table(DAIHATSU)

Vehicle Name	Model Type	Engine	Year	ECU Location	Note	Wiring Diagram
MIRA	L700S	EF-DET	'98.10~*	d		D2-a
	L710S					
	L502S	JB-JL	'94.9~'98.9			D1-a
	L512S					
	L500S	EF-JL				
L510S						
MOVE	L902S	JB-DET		'98.10~*	d	
	L910S	EF-DET				
	L602S	JB-JL	'95.8~'98.9			D1-a

# ECU Wiring Diagram (DAIHATSU)



## ■ Manual Information

No.	Press Date	Product Code	Version
1	07/01/99	7607-0120-00	No.1

This instruction manual is subject to change without prior notification.

### Sales Office \_\_\_\_\_

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APEX Integration Inc. (USA)

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TEL.714-444-4378 FAX.714-444-4379

### Authorized Agencies \_\_\_\_\_

AAI MOTORSPORTS (Taiwan) Overseas dept.

No. 324 Sec. 2 Chien Kuo South Rd. Taipei

TEL.22-3651699 FAX.22-3652766

G.P. CLUB (Hong Kong)

Unit D, G/F, Wei Yin Centre 123, Tung Chau Street, Tai Kok Tsui, Kowloon

TEL.2391-9331 FAX.2393-0162

J.A.P. Trading Pty., Ltd. (Australia)

Factory 3/34 Palmerstone Rd., East, Ringwood 3132, Vic

TEL.3-9879-7799 FAX.3-9879-7798

SPEEDWORKS (M) Sdn. Bhd. (Malaysia)

Lot 2, Lorong 51A/227B, Section 51A, 46100 Petaling Jaya, Selangor

TEL.755-5533 FAX.755-7745