

TS 4-18 07294(R) MODIFICATION OF ENGINE CONTROL MODULE

Article Text

1992 Suzuki Swift

For Xeon

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ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

MODIFICATION OF THE ENGINE CONTROL MODULE (ECM)

Model(s): 1992-93 Suzuki Swift - All Except GT (See Description Below)
Bulletin No.: TS 4-18 07294(R)
Division: Automotive
Category: Technical
Section Title: Engine

CONDITION

Modification of target engine idle speed.

CAUSE

Factory modification.

CORRECTION

When replacing the ECM, use parts as listed in this bulletin.

REVISION

Correction in ECM part number.

This bulletin is to inform you of the modification of the ECM used in the 1993 Swift (except GT). The effective time of this modification varies depending on the vehicle specifications and the plant where the vehicle was produced. The appropriate effective dates are as follows:

December 1992 .. California and Federal specification M/T, produced in Japan.
California and Federal specification with A/T, produced in Japan and Canada.
February 1993 .. California and Federal specification with M/T, produced in Canada.

MODIFICATION DETAIL

FOR M/T VEHICLES

The target engine idle speed for the ECM with the A/C OFF has been modified as described below. However, the IAC duty cycle adjustment value has remain unchanged.

FOR A/T VEHICLES

Due to partial modification of the ECM calibration, the IAC duty cycle adjustment value with the A/C off and the gear selector in "Park" or "Neutral" has been changed, as described below. However, the engine idle speed has remained unchanged.

When checking and adjusting the idle speed and IAC duty cycle equipped with the late type ECM, be sure to turn on the headlights.

NOTE: The target idle speed of the M/T vehicle with the A/C off and the IAC duty cycle value of the A/T vehicle with the A/C off will vary depending on whether the ECM installed in the vehicle is an early type or a late type.

INSPECTION AND ADJUSTMENT

M/T VEHICLES

Use the specifications indicated on the vehicle's underhood emission control label for proper engine idle speed adjustment.

A/T VEHICLES

1. Identify whether the ECM in the vehicle is an early type or a late type by referring to the chart at the end of this bulletin.
2. Follow the adjustment procedure of the IAC that is appropriate for that ECM.

EARLY

Trans. Type	Engine Idle Speed With A/C OFF	IAC Duty At Specified Idle Speed
M/T	750 ± 50 rpm	30 ± 5% (See NOTE: 1)
A/T	850 ± 50 rpm	30 ± 5% (See NOTE: 1)

Engine Idle Speed With A/C On	IAC Duty Cycle At Specified Idle Speed
900 ± 50 rpm	20 ± 5% (See NOTE: 1)

LATE

Trans. Type	Engine Idle Speed With A/C OFF	IAC Duty At Specified Idle Speed
M/T	850 ± 50 rpm	30 ± 5% (See NOTE: 1)
A/T	850 ± 50 rpm	15 ± 5% (See NOTE: 1)

Engine Idle Speed With A/C On	IAC Duty Cycle At Specified Idle Speed
900 ± 50 rpm	20 ± 5% (See NOTE: 1)

INSPECTION AND ADJUSTMENT

Follow the procedures described in the 1993 SWIFT Service Manual (99500 64B40).

NOTE 1 With terminals "D" and "F" connected on the diagnostic connector.

INSPECTION AND ADJUSTMENT

Follow the procedures described in the 1993 SWIFT Service Manual (99500 64B40) using the values given above for inspection and adjustment.

NOTE: When adjusting the idle speed or IAC duty cycle on vehicles with A/T be sure to turn on the headlights.

PARTS SUPPLY DATA

PARTS INFORMATION TABLE

REF #	PART NAME	EARLY PART NO.	LATE PART NO.	#	SUPPLY OF SPARE PARTS
1	ECM (Federal spec. M/T vehicle made in Japan)	33920-63E12	*33900-63810	1	Late only after early stock is depleted.
	ECM (Federal spec. A/T vehicle made in Japan)	33920-63E22	33920-63E23	1	
	ECM (Calif. spec. M/T vehicle made in Japan)	33926-62E12	*33900-62810	1	
	ECM (Calif. spec. A/T vehicle made in Japan)	33920-62E22	33920-62E24	1	
	ECM (Federal spec. M/T vehicle made in Canada)	33920-63E30	*33900-63820	1	
	ECM (Federal spec. A/T vehicle made in Canada)	33920-63E40	33920-63E41	1	
	ECM (Calif. spec. M/T vehicle made in Canada)	33920-63E50	*33900-63830	1	
	ECM (Calif. spec. A/T vehicle made in Canada)	33920-63E60	33920-63E62	1	

INTERCHANGEABILITY (O:OK, X:NO) Early —X—> Late
Early <—O— Late

NOTE: The mark (*) attached to the ECM part number means that a late type emission control label is included. When you place an order for these ECM's designated with this mark, the late-type ECM is supplied with a late-type emission control label. Therefore, if the ECM you're replacing is the early type, replace it with the late type ECM and install the new emission control label included with the new ECM.

Please note that these Emission Control Labels are not to be supplied "over-the-counter" by Service Technicians.

Bulletin SA-08, "Sale of Emission Control Labels" for more details.

When replacing the early type ECM with the late type, be sure to check the idle speed and IAC duty cycle as described in this bulletin. If any of the readings vary with those listed in this bulletin, follow the adjustment procedure as described in the Service Manual to obtain the values listed in this bulletin.

EARLY/LATE TYPE IDENTIFICATION

To identify the type of ECM that you need, follow these procedures:

M/T VEHICLE

Engine idle speed listed on the emissions label should be 750 ± 50 rpm.

A/T VEHICLE

Refer to the ECM name plate part number given in the list below. This method is also applicable to the M/T vehicle whose emission control label is illegible. Refer to Fig. 1 for the ECM name plate location.

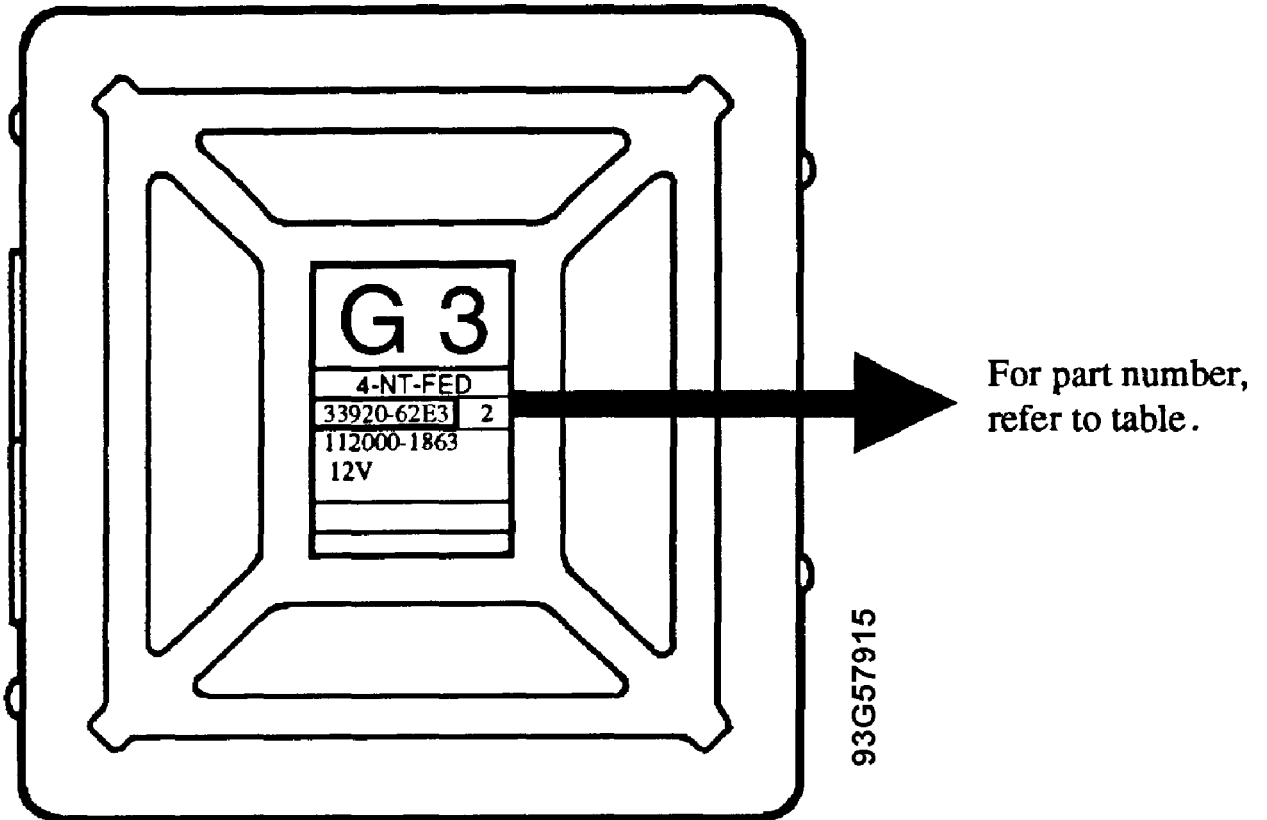


Fig. 1: ECM Name Plate Location

ECM APPLICATION CHART

Vehicle Specification			Early Type ECM No.	Late Type ECM No.
Made In Japan	Federal	M/T	33920-63E12	33900-63810
		A/T	33920-63E22	33920-63E23
	California	M/T	33920-63E12	33920-62E14
		A/T	33920-63E22	33920-62E24
Made In Canada	Federal	M/T	33920-63E30	33920-63E31
		A/T	33920-63E40	33920-63E41
	California	M/T	33920-63E50	33920-63E52
		A/T	33920-63E60	33920-63E62

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