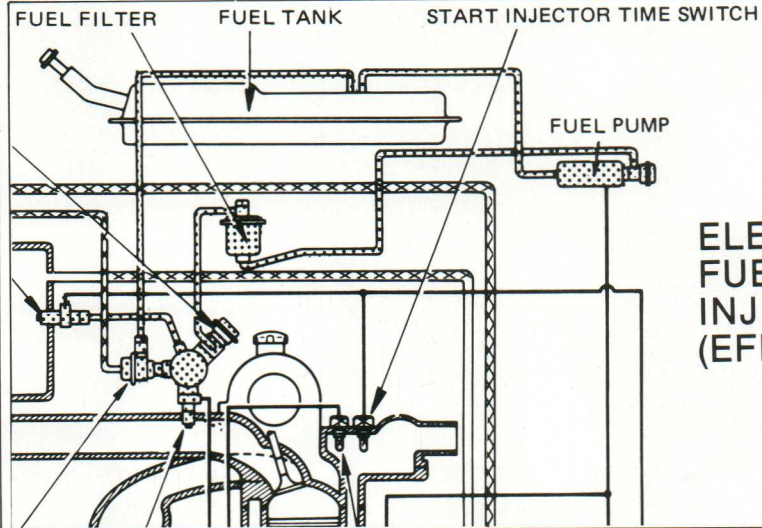
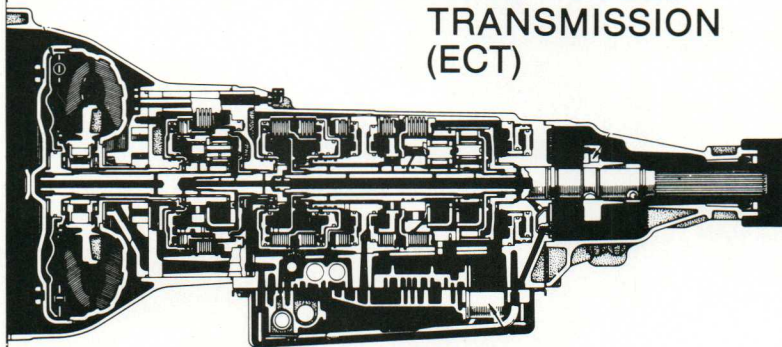




TOYOTA
GENUINE PARTS
WHOLESALE



**ELECTRONIC
FUEL
INJECTION
(EFI)**

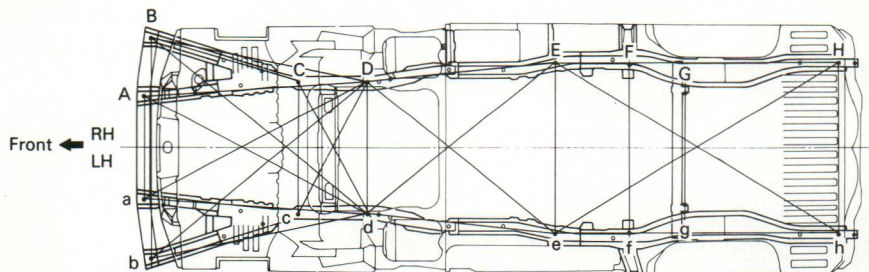


**ELECTRONICALLY
CONTROLLED
TRANSMISSION
(ECT)**



TOYOTA
REPAIR MANUAL FOR COLLISION DAMAGE
COROLLA FF, FR
(SPRINTER)
AEBD EC29G/C190 series App. 1984

**1984 FRAME AND UNDERBODY
DIMENSION CHARTS**



HEY! NIASE HAS A NEW NICKNAME



Don't get shook up! Not much has changed. The Corporate name remains the same. Certified Mechanics will be called Certified Technicians — that's good. And Certified General Mechanics will be Certified Master Technicians — and that's good too.

Actually, it's all in keeping with the Institute's goal of letting the consumer know where to find excellence in automotive repair. The new logo is easier to read and the new "call letters" are easier to say.

"the blue seal of excellence . . . on you it will look good!"

TOYOTA SERVICE NEWS

Bulletin No. 11

February 1984

Toyota Service News is published by Toyota Motor Sales, U.S.A., Inc., as a service to the independent automotive service industry. There are no expressed or implied warranty implications. All procedures, specifications and part numbers were in effect at the time of printing. Toyota Motor Sales, U.S.A., Inc., reserves the right to

change procedures and/or specifications at any time, without prior notice and without incurring obligation. For complete specifications and procedural information, please refer to the appropriate repair manuals. As for part number changes, consult your local Toyota Dealer.

ARTICLE NO.	DESCRIPTION	PAGE
119	Troubleshooting an Electronically Fuel Injected Engine (EFI)	11-2
120	Toyota's Leading the Way with Electronically Controlled Transmission	11-5
121	Automatic Transmission Fluid Standardization	11-7
122	Current Toyota Transmission Applications.....	11-8
123	Outer Door Panel (Door Skin) Availability Chart	11-10
124	Toyota Touch-Up Paint Quick Reference Chart.....	11-11
125	1984 Toyota Pickup Frame and Van Underbody Dimension Charts.....	11-12
126	Repair Manuals for Collision Damage	11-15



Toyota Service News is published by the Corporate Service and Parts Departments of Toyota Motor Sales, U.S.A., Inc. Contents may be reprinted. Address all correspondence and inquiries to Editor, Toyota Service News, P.O. Box 2991, Torrance, CA 90509, Telephone (213) 618-4000.

TROUBLESHOOTING AN ELECTRONICALLY FUEL INJECTED ENGINE (EFI)

REQUIREMENTS FOR TROUBLESHOOTING AN EFI ENGINE.

EFI is currently available on the Starlet, Celica Supra, Camry, Cressida, Van and select late model Trucks. The following are the requirements for fast and accurate troubleshooting of an EFI engine.

MUST HAVE A GOOD UNDERSTANDING OF GASOLINE ENGINES

An EFI engine is a gasoline engine just as a conventional carburetor engine is. Consequently, the basic troubleshooting essentials are the same. A gasoline engine will not run properly if the following three conditions are not met:

- (1) Strong compression
- (2) Proper ignition timing and hot spark
- (3) Proper air-fuel mixture

MUST KNOW THE DIFFERENCE BETWEEN A CARBURETOR ENGINE AND EFI ENGINE

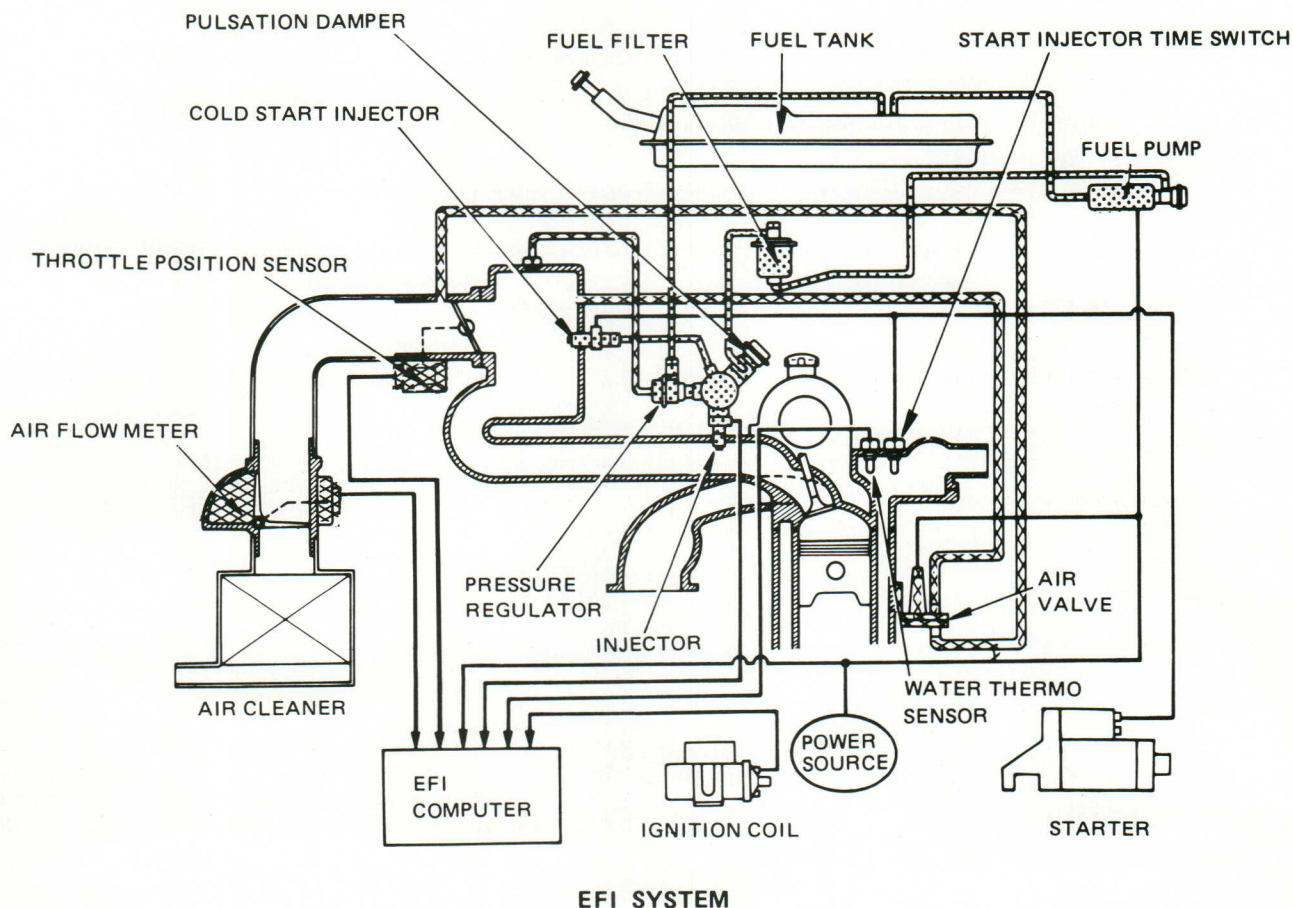
The mechanisms for providing a strong compression and pressure, proper ignition timing and hot spark

are the same for either the carburetor or EFI engine, but the mechanisms for producing the proper air-fuel mixture are not the same.

Troubleshooting to find if the cause lies with the engine itself, starting system or ignition system, inspection procedures are similar for either type engine. Knowledge of the EFI system is required only if the cause is within the EFI system and a proper air-fuel mixture is not being obtained. Thus, it is necessary to know the difference between a carburetor engine and an EFI engine in respect to the process of producing the proper air-fuel mixture.

MUST HAVE A GOOD GRASP OF EFI ENGINE TROUBLESHOOTING SYMPTOMS, THEIR CAUSE AND REASON

It is necessary to have sufficient knowledge as to the relationship between how EFI system troubles occur, their symptoms and causes. It is also necessary to have the technical ability to determine which system to inspect in accordance with the trouble symptoms.



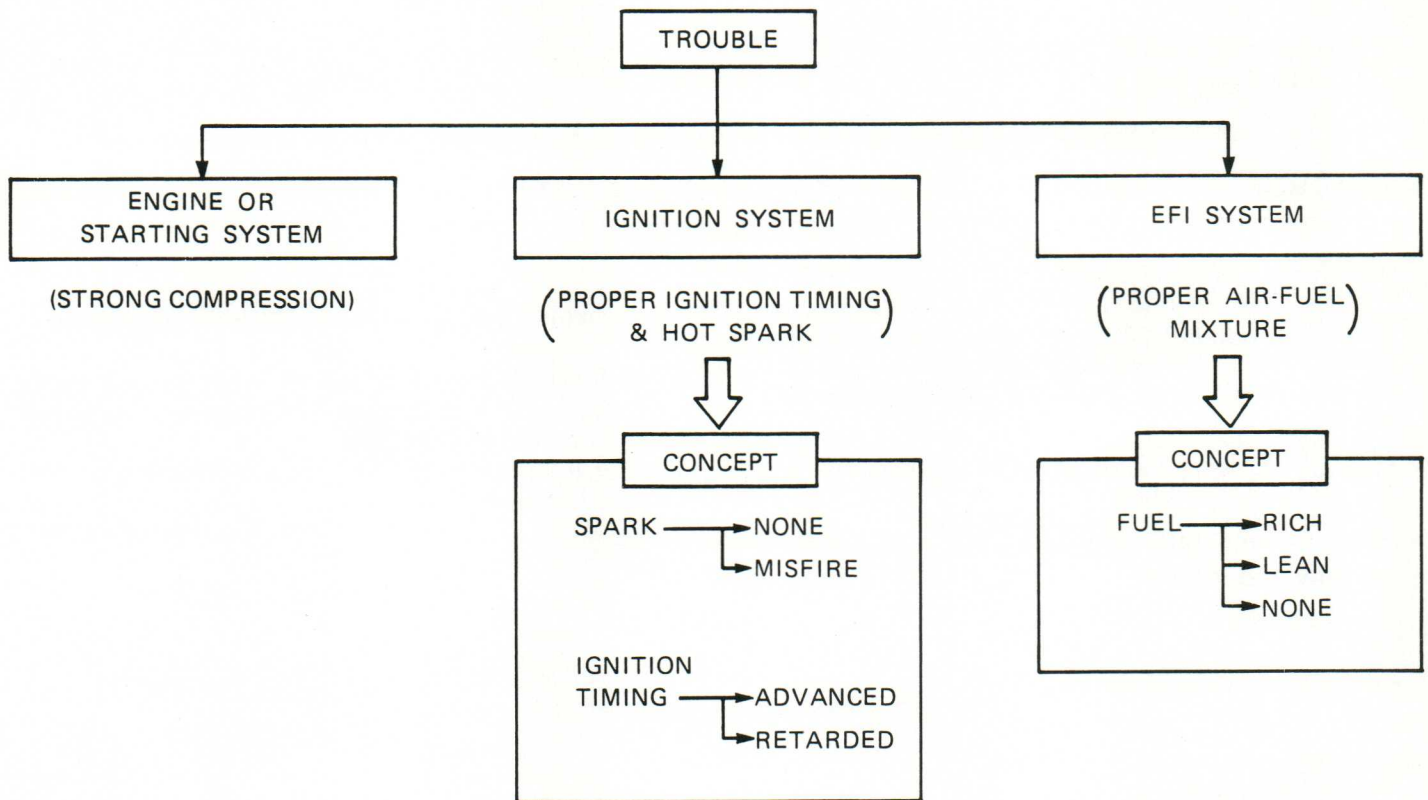
CONCEPT OF TROUBLESHOOTING AN EFI ENGINE

The troubleshooting of an EFI engine is no different from that of a conventional gasoline engine. Inspection of each system should proceed in relation to the 3 essentials listed previously. That is, "strong compression," "proper ignition timing & hot spark" and "proper air-fuel mixture."

One thing which must particularly be kept in mind is the necessity to determine whether or not the cause of a trouble actually lies with the EFI system.

Therefore, inspection should proceed by first determining if the trouble lies with the starting system or engine itself which controls "strong compression," or with the ignition system which effects "proper ignition timing & hot spark." Then the inspection should proceed to the EFI system which controls "proper air-fuel mixture."

Inspection of the starting system engine or ignition system is the same as for a carburetor engine and one should proceed by trying to locate the trouble area. Inspection of the EFI system differs from that for a carburetor engine.



MAIN INSPECTION ITEMS FOR TROUBLESHOOTING OF EFI TROUBLE SYMPTOMS

If the cause of a trouble cannot be located even after the preliminary inspection and inspection of the

systems not related to the EFI system (except compression & ignition), perform the inspection of the EFI system in accordance with the items described in the chart below.

EFI SYSTEM INSPECTION ITEMS MAIN SYMPTOMS	ELECTRIC POWER SOURCE SYSTEM	FUEL PRESSURE	INJECTOR OPERATION NOISE	COMPUTER INPUT & OUTPUT SIGNAL	COLD START SYSTEM	AIR VALVE	INDIVIDUAL INJECTOR
DIFFICULT OR IMPOSSIBLE STARTING	●	●	●	●	●	●	
ROUGH IDLE		●	●	●	●	●	●
LACK OF POWER		●	●	●			●
HESITATION ON ACCELERATION		●	●	●			●
BACKFIRE		●	●	●	●		●
AFTER FIRE				●	●		
HUNTING				●		●	
ENGINE STALL	●	●		●			

TROUBLESHOOTING PRECAUTIONS

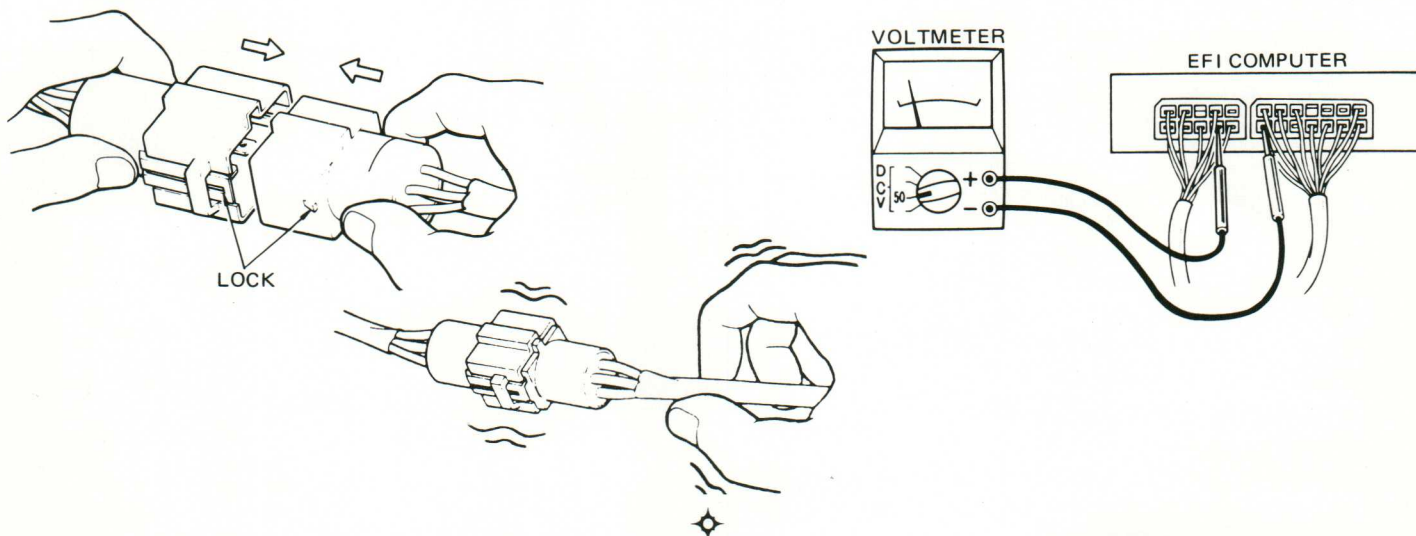
1. The most frequent cause of a problem is simply a bad connection in wiring connectors. Therefore, always make sure that the connections are secure.

When making an inspection, pay particular attention to the following:

- (1) Check that terminals are not bent.
- (2) Check that the connectors are pushed in fully and locked.

- (3) Check that there is not a signal change when the connector is lightly wiggled or tapped.

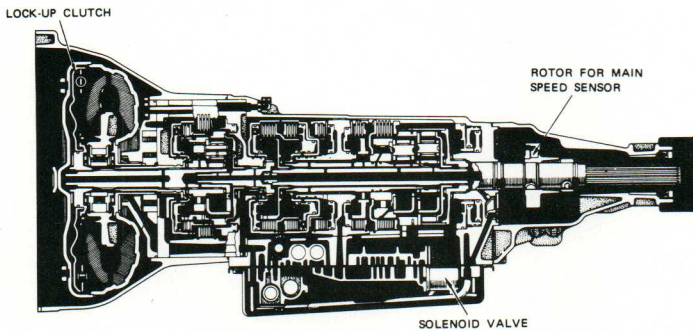
2. Sufficiently troubleshoot for other causes before replacing the computer. The computer is of high quality and is expensive.
3. Use a volt/ohmmeter for troubleshooting of electrical components.
4. Refer to the repair manual for troubleshooting procedures.



Toyota's leading the way with ELECTRONICALLY CONTROLLED TRANSMISSION

Toyota has continued its tradition of technological advancement by developing the Electronic Control Transmission, or ECT. This micro-computer controlled transmission was first seen in the United States on the 1983 Supra and Cressida. More recently, it was introduced in a modified form in the all-new front-wheel-drive Camry.

The use of micro-computer electronics in the automatic transmission permits more precise control of shift points and torque converter lock-up operation. It also allows improved response to driver demands, road characteristics and engine conditions and, perhaps best of all, provides improved fuel economy.



MODEL A43DE: CUTAWAY VIEW

Transmissions Have Been Wasteful

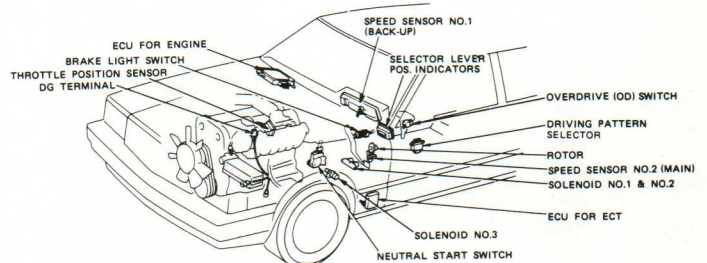
Before getting into the details of ECT operation, let's take a moment to review how an automatic transmission operates. Almost all automatic transmissions utilize hydraulic pressure to lock rotating components together to transmit power from the engine to the driveline. Specific gear ranges are selected by moving the shift lever to the appropriate position. This allows gear changes, up or down, to occur automatically. To determine when a gear shift should occur, the transmission contains a "control system." This, however, is the point where the ECT differs from conventional automatics.

The conventional system uses two hydraulic pressures applied against each other to control the movement of the shift valves. The first of these, governor pressure, represents vehicle speed and increases in direct proportion to how quickly the car is moving. The other is throttle pressure, which indicates how far the accelerator pedal is pushed down.

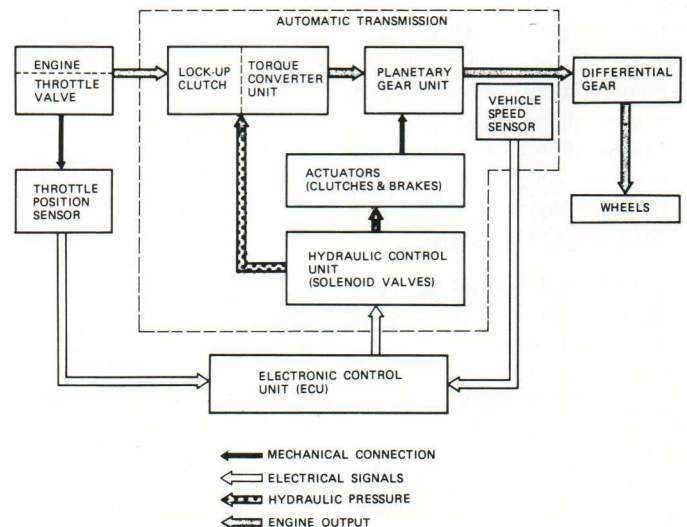
Here's an example of the operation: When a vehicle is traveling at a high speed, say at 55 m.p.h., the governor pressure is relatively high. It is applied to

the shift valve and is essentially trying to make the transmission upshift. If the throttle pedal is applied very lightly (low throttle pressure), as when cruising on a level road, the shift valve moves over because of the high governor pressure, and the transmission upshifts to the next higher gear.

If the throttle were pressed to the floor, however, the throttle pressure would be high and resist the upshift movement. In this case, the vehicle would remain in the lower gear and continue to accelerate. Eventually, as speed increased, the governor pressure would rise to a point at which it would overcome the throttle pressure, and the transmission would upshift, but at a much higher speed.



This system has worked satisfactorily for many years, but not very precisely. The imprecise balance of hydraulic pressure results in less than optimal performance and economy. Additionally, it restricts the shift operation to one inflexible shift pattern that is predetermined in a laboratory, instead of on the road, and which must be used in every driving condition. As we'll see in a moment, the ECT systems solves both problems — precision and flexibility.



ECT Improves Precision, Flexibility

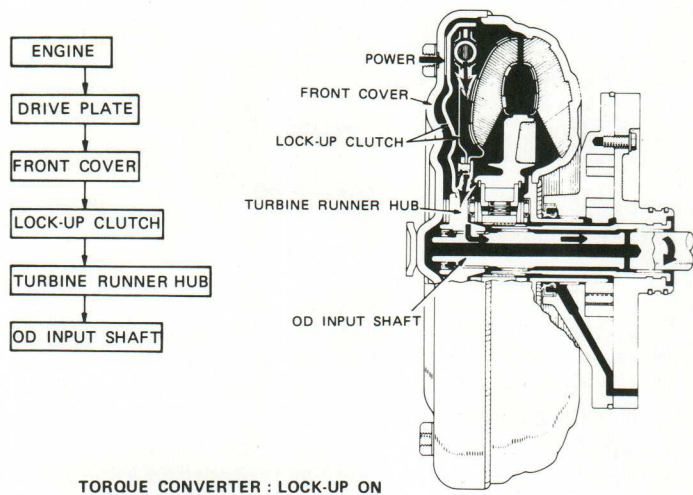
The ECT system electronically measures the vehicle speed and the exact angle of the fuel injection throttle valve to permit precise control of shifting sequences. These two critical measurements are fed to the ECT computer, which analyzes them and then selects the proper gear and shift speed to best match all needs and conditions.

Also, beyond just speed and throttle data, the ECT computer monitors engine temperature, shift lever position, brake pedal position and the ECT shift pattern select switches (chosen by the driver) to allow slight modifications of the "shifting programs."

Those inputs further expand the precision and flexibility of the ECT system, and they permit the use of the lock-up torque converter in second, third and fourth gears for improved fuel economy.

Torque Converter Clutch Saves Energy

Let's look a little more closely at the lock-up torque converter and the ECT shift pattern select switches to more clearly understand their advantages.



The torque converter is a fluid drive coupling between the engine and transmission. It is used instead of a mechanical clutch, and allows the elimination of the clutch pedal with automatic transmissions. Basically, it is designed to slip at low speeds, such as when the vehicle idles, and then, as engine speed builds, to progressively engage the engine to the transmission. Although it works beautifully, the drawback of its design is that the slipping wastes energy. Engine power is lost, and fuel economy suffers.

To eliminate power loss and fuel waste, Toyota has added a mechanical clutch inside the torque converter. It firmly locks the engine to the transmission with virtually no slippage, and that means top fuel efficiency. Controlled by the ECT computer, the clutch is applied in second, third or fourth gears.

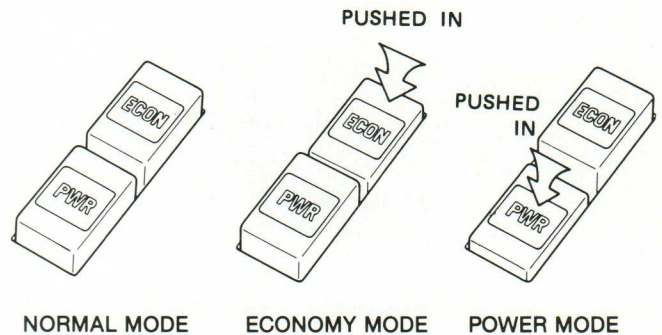
That's a brief, simple description — just enough to give you an idea of how it works.

Shift Patterns Meet Different Needs

Finally, there's the ECT shift pattern select switches. These make up a really exciting part of the ECT system, and their function was made possible only by the use of micro-computer electronics. Located on the dash or console of the Supra, Cressida and Camry, the switches allow drivers to select normal, power and economy shift patterns to suit their immediate driving needs. (The Supra does not have the economy pattern, because it's destined for sportier driving.)

When in the normal pattern, the ECT shifts according to a computer program developed by Toyota engineers to best satisfy the average driver under normal conditions.

If, however, the driver is more interested in fuel economy than engine performance, the economy pattern may be selected. This instructs the computer to introduce a modified lock-up torque converter schedule, causing the torque converter clutch to "lock-up" at a lower RPM level, or lower vehicle speed. In this way, less slippage occurs during city driving, resulting in better fuel economy.



The driver is clearly aware of this fuel-saving activity, because one can feel the "lock-up" action during acceleration while using the normal and economy patterns of an ECT equipped vehicle.

When the power pattern is selected, the ECT computer adopts an entirely different shift pattern, one which concentrates more on the driver's throttle demand than on vehicle speed. The result is later upshifts and more responsive downshifts to better respond to the driver's commands. Lock-up operation occurs just as in the normal pattern, but only very sensitive drivers will notice its engagement. One important note to remember is that the ECT provides identical fuel economy in all three patterns when cruising on the open highway. Its effect is only noticeable during around-town and city driving.

Well, that summarizes our fantastic new ECT transmission. And it adds up to a great formula: top precision, flexibility and fuel efficiency all in one package. The ECT is the kind of innovation that has kept Toyota on the cutting edge of automotive technology. And you can bet that Toyota will continue to sharpen it.



AUTOMATIC TRANSMISSION FLUID STANDARDIZATION

For worldwide standardization, Dexron II Automatic Transmission Fluid has been used instead of Type F for all 1984 Toyota models equipped with automatic transmissions starting with July 1983 production.

For confirmation purposes on specific models the drain plugs have been marked as illustrated below.



- NOTE:**
- 1) This drain plug change is for A40 series transmissions only (Rear wheel drive models).
 - 2) Dexron II is also indicated on the oil level gauge of all the vehicles (both front wheel drive and rear wheel drive) equipped with automatic transmissions beginning with August 1983 production (shown below).



- 3) Do not mix Type F and Dexron II. If mixed, shift quality will be affected.

DEXRON II APPLICABILITY IN TOYOTA VEHICLES

1982	1983	1984
COROLLA A40 ^{3 SPD} AUTO.	COROLLA A41 ^{3 SPD} AUTO.	ALL AUTOMATIC TRANSMISSIONS
	TERCEL A55 ^{3 SPD} AUTO.	Including all automatic transaxles (transmission & differential)
	CAMRY S51 ^{5 SPD} MAN.	
	(trans. & diff.) A140E ^{4 SPD} AUTO.	
		COROLLA DIESEL S50 ^{5 SPD} (trans. & diff.) MAN.
		CAMRY ^{GAS &} DIESEL S51 ^{5 SPD} (trans. & diff.) MAN.



CURRENT TOYOTA TRANSMISSION APPLICATIONS

MODEL		ENGINES	APPLICABLE YEARS	AVAILABLE TRANSMISSION	TYPE	LUBRICATION
STARLET		3K-C	81, 82	K-51	5M	80W-90
		4K-E	83, 84	K-40	4M	80W-90
			83, 84	K-50	5M	80W-90
TERCEL		1A-C	80	Z-41	5M	80W-90
			80	Z-51	4M	80W-90
			80	A-55	3A	ATF TYPE F
		3A-C	81, 82	Z-41	4M	80W-90
			81, 82	Z-51	5M	80W-90
			81, 82	A-55	3A	ATF TYPE F
			83, 84	A-55	3A	DEXRON II
			83, 84	Z-44	4M	80W-90
			83, 84	Z-52	5M	80W-90
			83, 84	Z-52F	6M	80W-90
COROLLA	RWD	3T-C	80, 81, 82	T-40	4M	80W-90
			80, 81, 82	A-40	3A	ATF TYPE F
			82	A-40D	4A	ATF TYPE F
			80, 81, 82	T-50	5M	80W-90
		4A-C	83	T-41	4M	80W-90
			83	A-41	3A	DEXRON II
	FWD	4A-C	83, 84	T-50	5M	80W-90
			83	A-40D	4A	ATF TYPE F
		84	A-42DL	4A	DEXRON II	
		4A-C	84	A-131L	3A	DEXRON II
			84	C-51	5M	80W-90
		1-C	84	A-130L	3A	DEXRON II
84	S-50		5M	DEXRON II		
CORONA		22R	80	A-40	3A	ATF TYPE F
			80	T-40	4M	80W-90
			80, 81, 82	A-40D	4A	ATF TYPE F
			80, 81, 82	W-55	5M	80W-90
CAMRY	2S-E	83, 84	S-51	5M	DEXRON II	
		83, 84	A-140E	4A	DEXRON II	
	1C-T	83, 84	S-51	5M	DEXRON II	

CURRENT TOYOTA TRANSMISSION APPLICATIONS (Continued)

MODEL	ENGINES	APPLICABLE YEARS	AVAILABLE TRANSMISSION	TYPE	LUBRICATION	
CELICA	22R	80	T-40	4M	80W-90	
		80	A-40	3A	80W-90	
		80, 81	W-58	5M	80W-90	
		80, 81	A-40D	4A	ATF TYPE F	
	22R & 22R-E	82, 83, 84	W-58	5M	80W-90	
		82, 83	A-40D	4A	ATF TYPE F	
		84	A-40D	4A	DEXRON II	
SUPRA	5M-E	80, 81	W-50	5M	80W-90	
		80, 81	A-40D	4A	ATF TYPE F	
	5M-GE	82	A-43DL	4A	ATF TYPE F	
		82, 83, 84	W-58	5M	80W-90	
		83	A-43DE	4A	ATF TYPE F	
		84	A-43DE	4A	DEXRON II	
CRESSIDA	4M-E	80	A-40D	4A	ATF TYPE F	
	5M-E	81, 82	A-40D	4A	ATF TYPE F	
	5M-GE	83	A-43DE	4A	ATF TYPE F	
		84	A-43DE	4A	DEXRON II	
		83, 84	W-58	5M	80W-90	
VAN	3Y-E	84	G-53	5M	80W-90	
		84	A-44DL	4A	DEXRON II	
TRUCKS	22R	80	L-45	4M	80W-90	
		80	W-50	5M	80W-90	
		80	A-40	3A	ATF TYPE F	
		81, 82	L-52	5M	80W-90	
		81, 82	L-48	4M	80W-90	
		81, 82	W-50	5M	80W-90	
		81, 82	A-40D	4A	ATF TYPE F	
	22R & 22R-E	83	L-52	5M	80W-90	
		83	A-40D	4A	ATF TYPE F	
		84	A-43D	4A	DEXRON II	
		83, 84	W-42	4M	80W-90	
			83, 84	W-52	5M	80W-90
	L & 2L	83, 84	G-52	5M	80W-90	
84		G-40	4M	80W-90		
LANDCRUISER	2F	80, 81	H-42	4M	80W-90	
		82, 83, 84				

IMPORTANT NOTE:

- Extreme cold weather manual transmission viscosity: SAE 75W-90
- All manual transmissions that do not require Dexron II ATF must use gear oil that meets API GL5 specifications.



TOYOTA TOUCH-UP PAINT QUICK REFERENCE CHART

To aid you in obtaining proper touch-up paint application for those minor nicks and scratches your customers tend to receive, we are presenting the Toyota Touch-Up Paint Quick Reference Chart. This chart includes pertinent information needed when ordering Genuine Toyota Touch-Up Paint from your Toyota parts dealer. For your information we have included the paint color year of applicability; however,

do not use this solely to determine the paint color code number or part number. The paint color code number listed in column 1 is stamped on the body identification plate which is located in the Toyota vehicle's engine compartment. **Please Note:** Touch-Up paint is available only for those colors shown in this Quick Reference Chart.

COLOR #	COLOR	PART #	76	77	78	79	80	81	82	83	84	COLOR #	COLOR	PART #	76	77	78	79	80	81	82	83	84
030	White	00050-77030		X	X	X						4A4	Beige Met	00258-81A44						X	X		
033	White	00050-80033					X	X	X		X	4A6	Beige Met	00258-81A46						X	X	X	
035	Super White	00258-82035								X	X	4A8	Beige	00258-82A48								X	
038	White	00258-83038									X	4A9	Cinnamon Met	00258-82A49								X	
125	Silver Met	00258-81125					X	X	X	X		4B4	Brown Met	00258-82B44					X	X	X		
128	Silver Met	00050-76128	X	X	X	X						4B5	Brown Met	00258-83B45								X	X
135	Taupe Gray	00050-80135					X	X				4B7	Light Brown Met	00258-83B47								X	X
137	Silver Met	00050-80137					X	X	X		X	4C1	Brown Met	00258-83C41								X	X
138	Silver Met	00258-83138								X		4C3	Light Brown Met	00258-83C43								X	
140	Gray Met	00258-82140							X	X		4C4	Dark Brown Met	00258-83C44								X	
141	Silver Met	00258-82141							X	X		4C5	Brown Met	00258-84C45									X
142	Silver Met	00258-82142							X			4C6	Ivory	00258-84C46									X
143	Gray Met	00258-82143							X	X	X	4C7	Copper Met	00258-83C47								X	
145	Ash Grey Met	00250-83145							X			4C8	Orange Met	00258-83C48								X	
147	Silver Met	00258-83147							X	X		4D1	Shell	00258-83D41								X	
148	Silver Met	00258-83148								X	X	4D2	Beige Met	00258-83D42								X	X
202	Black	00050-77202		X	X	X	X	X	X	X	X	4D3	Camel Met	00258-84D34									X
336	Red	00050-76336	X	X	X	X	X					4D5	Brown Met	00258-84D45									X
348	Maroon Met	00050-77348		X								4E1	Light Topaz Met	00258-84E41									X
350	Deep Red	00050-77350		X	X							532	Yellow	00050-76532	X	X	X	X					X
358	Orange	00050-78358			X	X						534	Pure Yellow	00050-76534	X	X	X	X					
372	Red Met	00050-79372				X	X					541	Yellow	00050-78541			X	X	X	X	X	X	
373	Lipstick Red	00050-79373				X	X					546	Yellow	00050-79546				X	X				
379	Maroon Met	00258-83379								X	X	557	Creme	00258-83557								X	X
380	Red	00050-80380					X					558	Light Yellow	00258-83558								X	X
391	Red	00050-80391					X	X	X	X	X	560	Light Yellow	00258-84560									X
394	Orange Met	00258-81394					X	X				679	Light Green Met	00050-76679	X	X	X						
395	Red Met	00258-81395					X					681	Green	00258-81681					X	X	X		X
396	Maroon Met	00258-81396					X	X				6A1	Yellow Green	00050-78A61			X						
3A1	Red Met	00258-81A31					X					6A5	Black Met	00258-81A65					X	X			
3A5	Red Met	00258-84A35									X	6A8	Black Met	00050-78A68			X	X	X	X			
3A7	Terra Cotta	00258-82A37							X	X		6B8	Mint Green Met	00050-79B68				X	X				
3A8	Apricot Met	00258-82A38							X			6C5	Pure Green	00050-79C65				X	X				
3A9	Red Met	00258-82A39							X			6E8	Green	00258-82E68							X		
3B1	Deep Red Met	00258-82B31							X	X		6G5	Light Green Met	00258-84G65									X
3B2	Deep Red Met	00258-82B32							X	X	X	720	Dark Blue Met	00258-84720									X
3B5	Red Met	00258-83B35							X	X		721	Turquoise Met	00258-82721								X	
3C2	Mahogany Met	00258-83C32							X	X		854	Blue	00050-76854	X	X	X	X	X				
3C3	Shell Met	00258-83C33							X	X		857	Medium Blue	00050-76857	X	X	X	X	X	X	X		X
3C5	Coral Met	00258-83C35							X			861	Light Blue Met	00050-77861		X	X	X	X	X	X		X
3C6	Apricot Met	00258-83C36							X			865	Dark Blue Met	00258-82865							X		
3C7	Rose Gray Met	00258-83C37							X			877	Dark Blue	00258-82877							X	X	
3C8	Wine Red Met	00258-83C38							X			879	Dark Blue Met	00050-80879					X	X	X	X	X
3D1	Super Red	00258-83D31							X	X		884	Dark Blue Met	00258-83884								X	X
3D4	Rose Beige Met	00258-84D34								X		888	Light Blue Met	00258-81888					X	X			
3D5	Red Met	00258-84D35								X		889	Light Blue Met	00258-81889					X	X	X		
3D6	Dark Orange Met	00258-84D36								X		892	Light Blue Met	00258-82892							X		
3D7	Red	00258-84D37								X		894	Light Blue Met	00258-83894								X	X
3D9	Wine Met	00258-84D39								X		896	Blue Met	00258-83896								X	X
3E3	Champagne Met	00258-84E33								X		8A1	Blue	00258-83A81								X	X
464	Beige	00050-76464	X	X	X	X	X				X	8A4	Dark Blue Met	00258-83A84								X	
472	Gold Met	00050-78472			X	X	X					8A8	Light Blue Met	00258-84A88									X
474	Copper Met	00050-77474		X	X	X	X	X	X		X	8A9	Blue Met	00258-84A89									X
484	Orange Met	00050-79484				X	X					8B1	Deep Blue	00258-84B81									X
489	Beige	00050-80489					X	X				8B3	Light Blue Met	00258-84B83									X
496	Beige	00258-81496						X				8B4	Dark Blue Met	00258-84B84									X



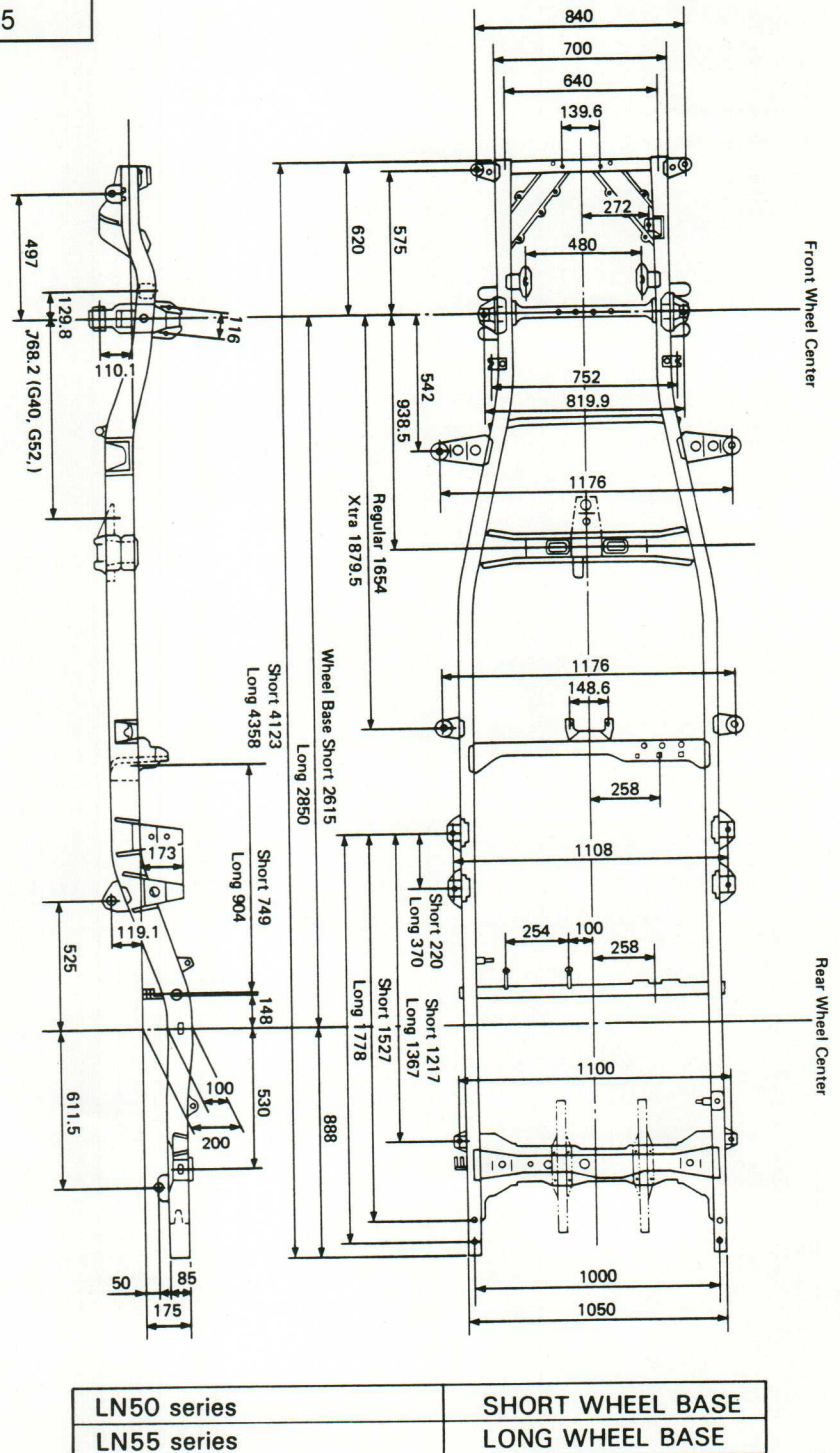
1984 TOYOTA PICKUP FRAME AND VAN UNDERBODY DIMENSION CHARTS

1984 PICKUP (2WD)

The following body dimension charts are included for your reference. More detailed information can be found in the following Repair Manuals:

'84 MODEL	MANUAL #	PRICE
PICKUP		
— DIESEL	36226-A	29.95
— GAS	36225-A	29.95
VAN		
— ALL	36227-A	29.95

Conversion table			
mm	in.	mm	in.
50	1.97	1,108	43.62
85	3.35	1,176	46.30
100	3.94	1,217	47.91
110.1	4.33	1,367	53.82
116	4.57	1,527	60.12
119.1	4.69	1,654	65.12
129.8	5.11	1,778	70.00
139.6	5.50	1,879.5	74.00
148	5.83	2,615	102.95
148.6	5.85	2,850	112.20
173	6.81	4,123	162.32
175	6.89	4,358	171.57
200	7.87		
220	8.66		
254	10.00		
258	10.16		
272	10.71		
370	14.57		
480	18.90		
497	19.57		
525	20.67		
530	20.87		
542	21.34		
575	22.64		
611.5	24.07		
620	24.41		
640	25.20		
700	27.56		
749	29.49		
752	29.61		
768.2	30.24		
819.9	32.28		
840	33.07		
888	34.96		
904	35.59		
938.5	36.95		
1,000	39.37		
1,050	41.34		
1,100	43.31		

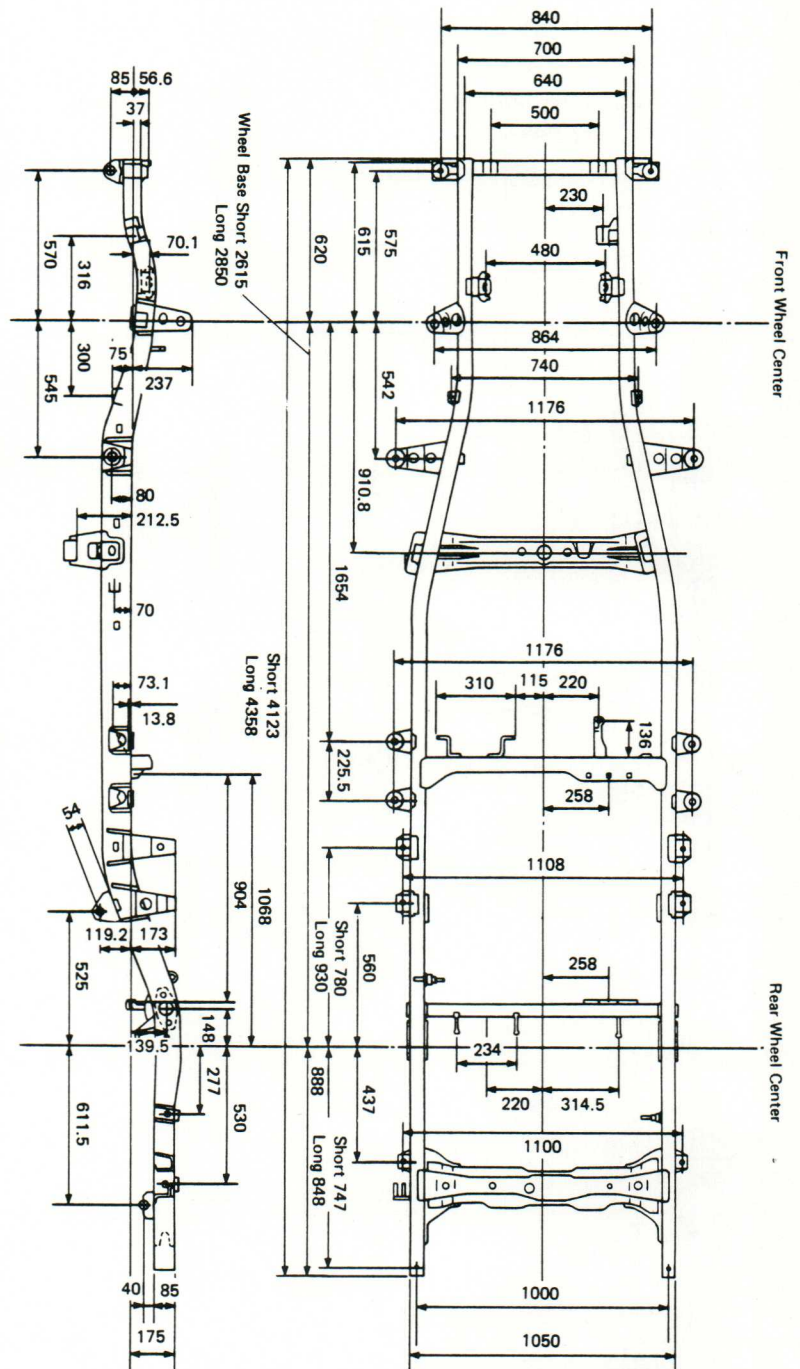


1984 TOYOTA PICKUP FRAME AND VAN UNDERBODY DIMENSION CHARTS

(Continued)

1984 PICKUP (4WD)

Conversion table			
mm	in.	mm	in.
13.8	0.54	575	22.64
37	1.46	611.5	24.07
40	1.57	615	24.21
54	2.13	620	24.41
56.6	2.23	640	25.20
70	2.76	700	27.56
70.1	2.76	740	29.13
73.1	2.88	748	29.41
75	2.95	780	30.71
80	3.15	840	33.07
85	3.35	848	33.39
115	4.53	864	34.02
119.2	4.69	888	34.96
136	5.35	904	35.59
139.5	5.49	910.8	35.86
148	5.83	930	36.61
173	6.81	1,000	39.37
175	6.89	1,050	41.34
212.5	8.37	1,068	42.05
220	8.66	1,100	43.31
225.5	8.88	1,108	43.62
230	9.06	1,176	46.30
234	9.21	1,654	65.12
237	9.33	2,615	102.95
258	10.16	2,850	112.20
277	10.91	4,123	162.32
300	11.81	4,358	171.57
310	12.20		
314.5	12.38		
316	12.44		
437	17.20		
480	18.90		
500	19.69		
525	20.67		
530	20.87		
542	21.34		
545	21.46		
560	22.05		
570	22.44		



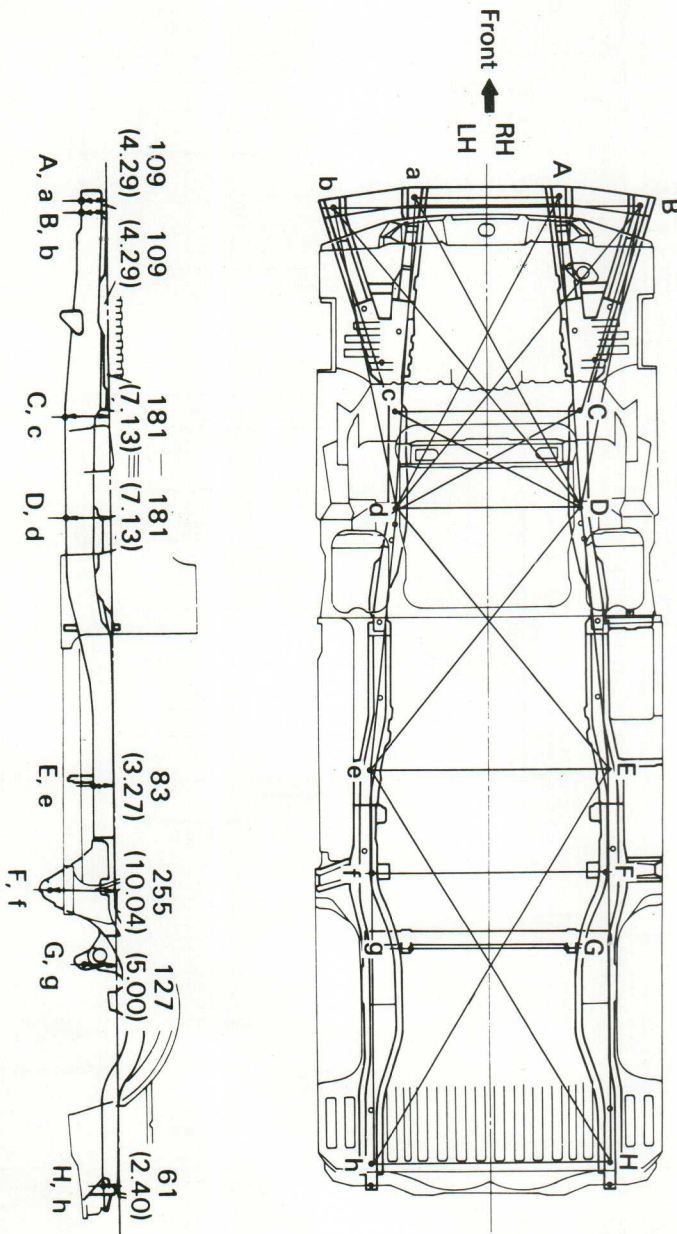
LN60, series	SHORT WHEEL BASE
LN65, series	LONG WHEEL BASE

1984 TOYOTA PICKUP FRAME AND VAN UNDERBODY DIMENSION CHARTS

(Continued)

1984 VAN

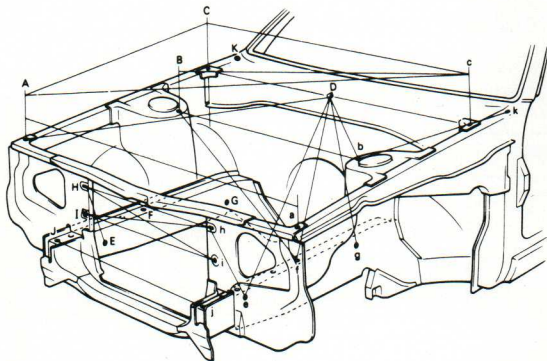
Symbol	Nomenclature	Hole dia.	Symbol	Nomenclature	Hole dia.
A, a	Front bumper installation hole	17φ	E, e	Front side member standard hole	18φ
B, b	Front bumper installation hole	17φ	F, f	Lower control link inner bracket hole	15φ
C, c	Front side member working hole	18φ	G, g	Upper control link inner bracket hole	14.5φ
D, d	Engine support member front installation hole	13φ	H, h	Rear floor side member bumper installation nut	12φ



Point Symbol	Reference length mm (in.)
A - a	612 (24.09)
A - D a - d	1,291 (50.83)
A - d a - D	1,463 (58.00)
B - b	1,289 (50.75)
B - D b - d	1,263 (49.72)
B - d b - D	1,611 (63.43)
C - c	786 (30.94)
C - d c - D	879 (34.61)
D - d	775 (30.51)
D - E d - e	1,086 (42.76)
D - e d - E	1,401 (55.16)
E - e	1,010 (39.76)
E - H e - h	1,625 (63.98)
E - h e - H	1,914 (75.35)
F - f	993 (39.09)
G - g	635 (25.00)
H - h	1,013 (39.88)

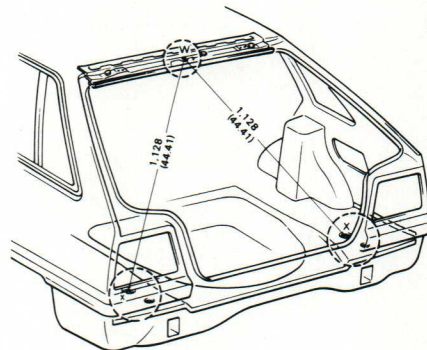
TOYOTA

FOUR ALL NEW REPAIR MANUALS FOR COLLISION DAMAGE



FEATURING:

- Factory recommended repair procedures
- Weld locations & types
- Body dimensions
- Body sealing points
- Plastics type & locations



MODEL	MODEL YEAR	PUBLICATION NO.		QTY.	PRICE
Starlet	1981, 82, 83, 84	36158		6.95	
Tercel	1980, 81, 82	98367		6.95	
Tercel	1983, 84 (New)	36431E		6.95	
Tercel 4 x 4	1983, 84 (New)	36432E		6.95	
Corolla	1980, 81, 82, 83	36001		6.95	
Corolla (RWD & FWD)	1984 (New)	36434E		8.95	
Celica & Supra	1982, 83, 84	36182		6.95	
Camry	1983, 84 (New)	36433E		6.95	
Cressida	1981, 82, 83, 84	36118		6.95	

SUB-TOTAL

California Residents add 6% (L.A. County 6½%) SALES TAX

TOTAL

INSTRUCTIONS: Remove this page, complete form — Fold — Seal — Send.

- CHECK (Payable to Toyota Service Publications)
 MONEY ORDER VISA MASTERCARD

THIS IS YOUR SHIPPING LABEL, PLEASE PRINT CLEARLY

Credit Card No. _____

Company Name _____

Expiration Date _____

Attention _____

Signature _____

(REQUIRED IF USING CREDIT CARD)

Address _____

Allow 4-6 weeks for delivery.

City _____ State _____ Zip _____

POSTAGE PREPAID, SEE FOLLOWING PAGE.

NOW IT'S YOUR TURN!

TO TELL US WHAT ARTICLES YOU WOULD LIKE TO SEE IN TOYOTA SERVICE NEWS

GENERAL REPAIR

- Engine Repair (— Gas — Diesel)
- Transmission/Transaxle Repair
- Brake Repair
- Suspension and Steering
- Electrical Systems
- Heating and Air Conditioning Repair
- (Other) _____

COLLISION REPAIR

- Refinishing Information
- Corrosion Protection Restoration
- High Strength Steel Locations
- Underbody Dimensions
- Welding Procedures
- Electrical Diagrams
- (Other) _____

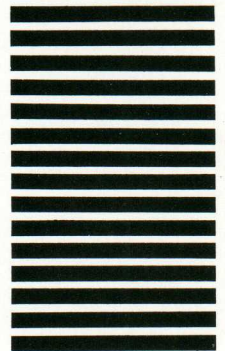
PLEASE CIRCLE
PRIMARY TYPE
OF BUSINESS HERE

TYPE	
A — Brake Shops	E — Body Shops
B — Garages (General Repair Shops)	F — Radiator Repair Shops
C — Gasoline Service Stations	G — Parts Stores
D — Muffler Shops	H — Transmission Repair Shops

FOLD HERE



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
First class Permit No. 449 Torrance, CA

POSTAGE WILL BE PAID BY ADDRESSEE

TOYOTA MOTOR SALES, U.S.A., INC.
P.O. BOX 2991
TORRANCE, CA 90509

ATTN: A112 TECHNICAL RESEARCH

FOLD HERE

You can't beat the fit and price of Genuine Toyota Body Parts.

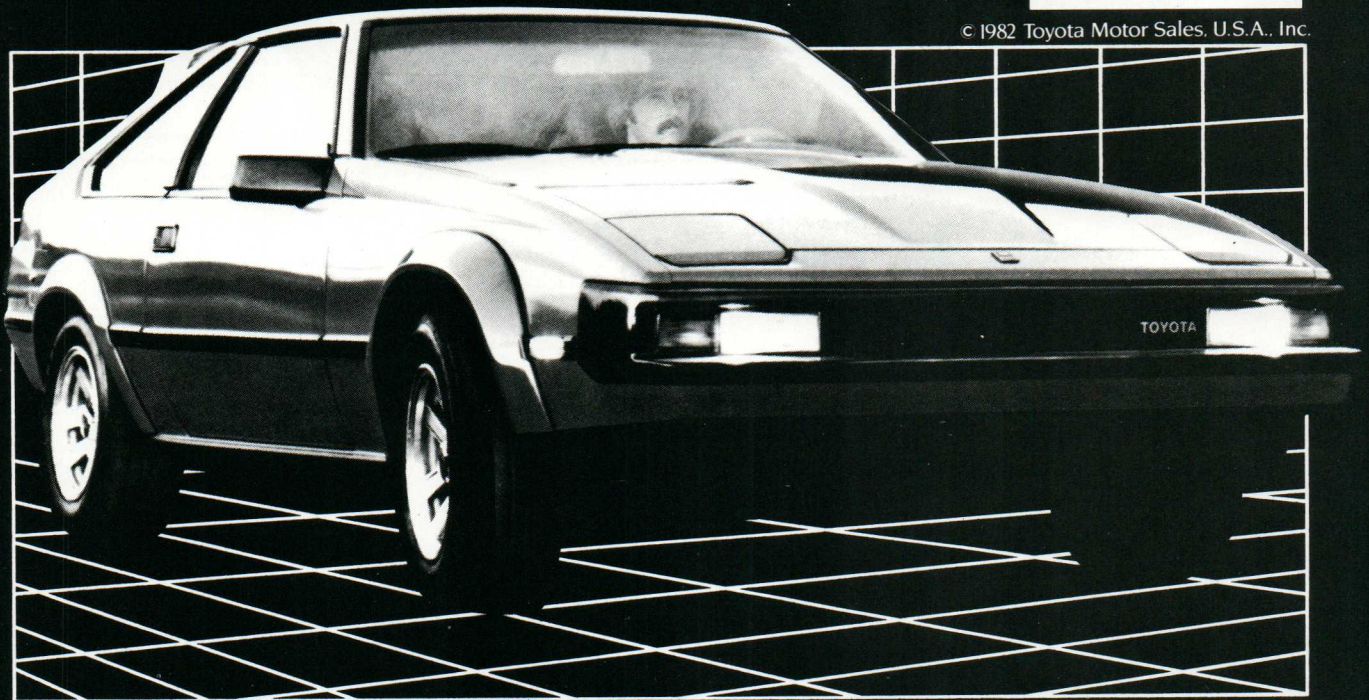
Genuine Toyota Body Parts are quality-built. They're the same as OE installed body parts, which guarantees they'll fit right every time. With Genuine Toyota Body Parts, your bodymen will spend less time fitting parts and more time finishing jobs.

Your Toyota dealer backs Genuine Toyota Body Parts with a 90-day or 4,000-mile warranty to guarantee customer satisfaction and extra protection for your shop. Can you say the same for any other supplier?

Don't take chances with imitation body parts that may not fit. Stay with the original—Genuine Toyota Body Parts available only from your Toyota dealer.

TOYOTA
GENUINE PARTS

© 1982 Toyota Motor Sales, U.S.A., Inc.



IGNITE YOUR PROFITS THROUGH THE
TOYOTA 1984 SPARK PLUG PROGRAM



COMING SOON

ASK YOUR DEALER FOR DETAILS

WE REALLY CARE
ABOUT YOU



PLEASE
BUCKLE UP

Parts Marketing Department
TOYOTA MOTOR SALES, U.S.A., INC.
19001 S. Western Avenue
Torrance, California 90509
ADDRESS CORRECTION REQUESTED

BULK RATE
U.S. POSTAGE
PAID
Compton, CA 90220
Permit 40

STAR **TOYOTA**
GENUINE PARTS
WHOLESALE