

# MAINTENANCE INFORMATION

## 1988 Toyota Celica

1986-89 MAINTENANCE  
Toyota Maintenance Information  
Celica

### \* PLEASE READ THIS FIRST \*

NOTE: For scheduled maintenance intervals and the related fluid capacities, fluid specifications and labor times for major service intervals, see SCHEDULED SERVICES article in this section. Warranty information and specifications for fluid capacities, lubrication specifications, wheel and tire size, and battery type are covered in this article.

### MODEL IDENTIFICATION

#### VIN LOCATION

The Vehicle Identification Number (VIN) is located on the left side of the dash panel at the base of the windshield. The VIN chart explains the code characters.

#### VIN CODE ID EXPLANATION

Numbers preceding the explanations in the legend below refer to the sequence of characters as listed on VIN identification label. See VIN example below.

(VIN)	J	T	2	S	T	6	8	M	2	K	1	1	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

- 1 - Manufacturing Country
  - J \* Japan
- 2 - Manufacturer
  - T \* Toyota
- 3 - Vehicle Type
  - 2 \* Passenger Vehicle (Japan)
  - 5 \* Incomplete Vehicle (Celica Convertible)
  - X \* Passenger Vehicle (USA)
- 4 - Engine
  - S \* 2S-E 2.0L 4-Cylinder EFI (1986)
  - S \* 3S-GE 2.0L DOHC EFI (1986-89)
  - S \* 3S-FE 2.0L DOHC EFI (1987-89)
  - S \* 3S-GTE 2.0L Turbo DOHC EFI (1988-89)
- 5 - Line
  - T \* Celica
- 6 - Model
  - 6 \* Celica
- 7 - Series/Grade
  - 2 \* GT (Convertible)

- 3 \* ST
  - 4 \* GT
  - 5 \* GT-S
  - 6 \* ST
  - 7 \* GT
  - 8 \* All-Trac/4WD (Turbo)
- 8 - Body Type & Restraint System
- C \* 2-Door Coupe
  - K \* Incomplete Vehicle (Convertible Conversion)
  - L \* 3-Door Liftback
  - M \* 3-Door Liftback 4WD (Turbo)
- 9 - VIN Check Digit
- 2 \* Manufacturer's Internal Code
- 10 - Vehicle Model Year
- G \* 1986
  - H \* 1987
  - J \* 1988
  - K \* 1989
- 11 - Assembly Plant
- 1 \* Toyota, Japan
  - 2 \* Motomachi, Japan
  - 0-9 \* Japan
  - C \* Canada
  - U \* Georgetown, USA
  - Z \* USA
- 12-17 - Serial Number
- \* Sequential Production Number

## **MAINTENANCE SERVICE INFORMATION**

### **SEVERE & NORMAL SERVICE DEFINITIONS**

Service is recommended at mileage intervals based on vehicle operation. Service schedules are based on the following primary operating conditions:

#### Normal Service

- \* Driven More Than 10 Miles Daily
- \* No Operating Conditions From Severe Service Schedule

#### Severe Service (Unique Driving Conditions)

- \* Towing A Trailer, Using A Camper Or Car Top Carrier
- \* Repeated Short Trips Less Than 5 Miles When Temperatures Are Below Freezing
- \* Extensive Idling Conditions (Taxi Or Delivery Type Service)
- \* Operating On Dusty, Rough, Muddy Or Salt Spread Roads

### **CAMSHAFT TIMING BELT**

**CAUTION:** Failure to replace a faulty camshaft timing belt may result in serious engine damage.

The condition of camshaft drive belts should always be checked on vehicles which have more than 50,000 miles. Although some manufacturers do not recommend belt replacement at a specified

mileage, others require it at 60,000-100,000 miles. A camshaft drive belt failure may cause extensive damage to internal engine components on most engines, although some designs do not allow piston-to-valve contact. These designs are often called "Free Wheeling".

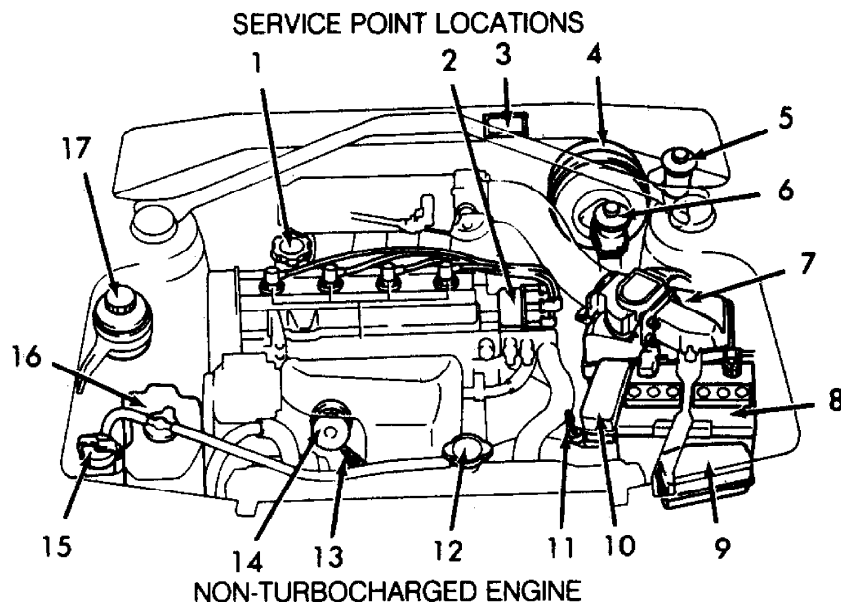
Many manufacturers changed their maintenance and warranty schedules in the mid-1980's to reflect timing belt inspection and/or replacement at 50,000-60,000 miles. Most service interval schedules in this manual reflect these changes.

Belts or components should be inspected and replaced if any of the following conditions exist:

- \* Cracks Or Tears In Belt Surface
- \* Missing, Damaged, Cracked Or Rounded Teeth
- \* Oil Contamination
- \* Damaged Or Faulty Tensioners
- \* Incorrect Tension Adjustment

For vehicles under severe service conditions, replace camshaft timing belt every 60,000 miles. For vehicles under normal service conditions, inspect the camshaft timing belt at 72 months or 60,000 miles, and then every 12 months or 10,000 miles thereafter.

## SERVICE POINT LOCATIONS

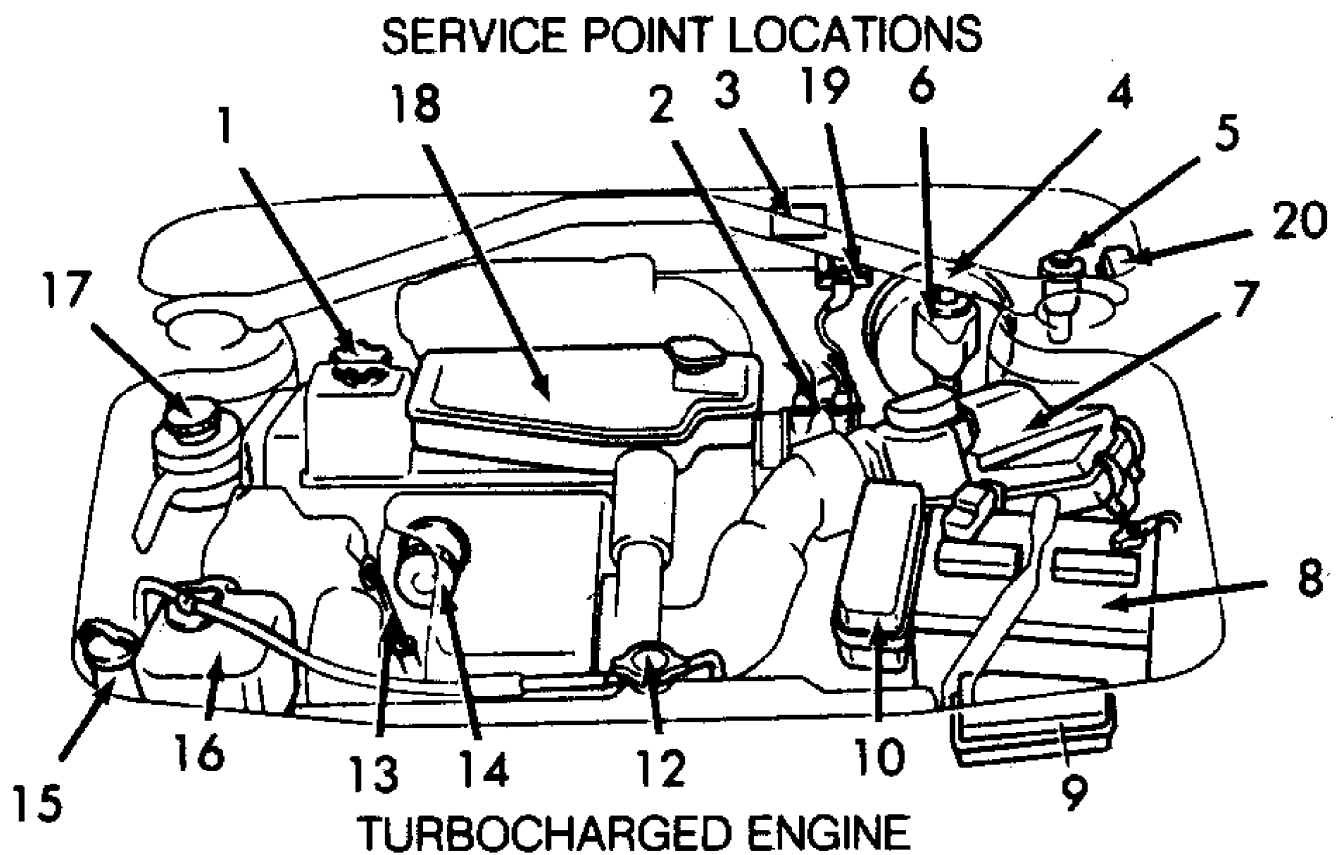


NON-TURBOCHARGED ENGINE

- |                           |                                    |
|---------------------------|------------------------------------|
| 1. Engine Oil Filler Cap  | 11. A/T Fluid Level Dipstick       |
| 2. Distributor            | 12. Radiator Cap                   |
| 3. Manufacturer's Plate   | 13. Engine Oil Level Dipstick      |
| 4. Brake Booster          | 14. Engine Oil Filter              |
| 5. Clutch Fluid Reservoir | 15. Washer Fluid Reservoir         |
| 6. Brake Fluid Reservoir  | 16. Engine Coolant Reservoir       |
| 7. Air Cleaner            | 17. Power Steering Fluid Reservoir |
| 8. Battery                | 18. Intercooler                    |
| 9. Relay Block            | 19. Ignition Coil                  |
| 10. Fuse Block            | 20. Connector Box                  |

93J45756

Fig. 1: Service Point Locations (Non-Turbocharged Engine)  
 Courtesy of Toyota Motor Sales, U.S.A., Inc.

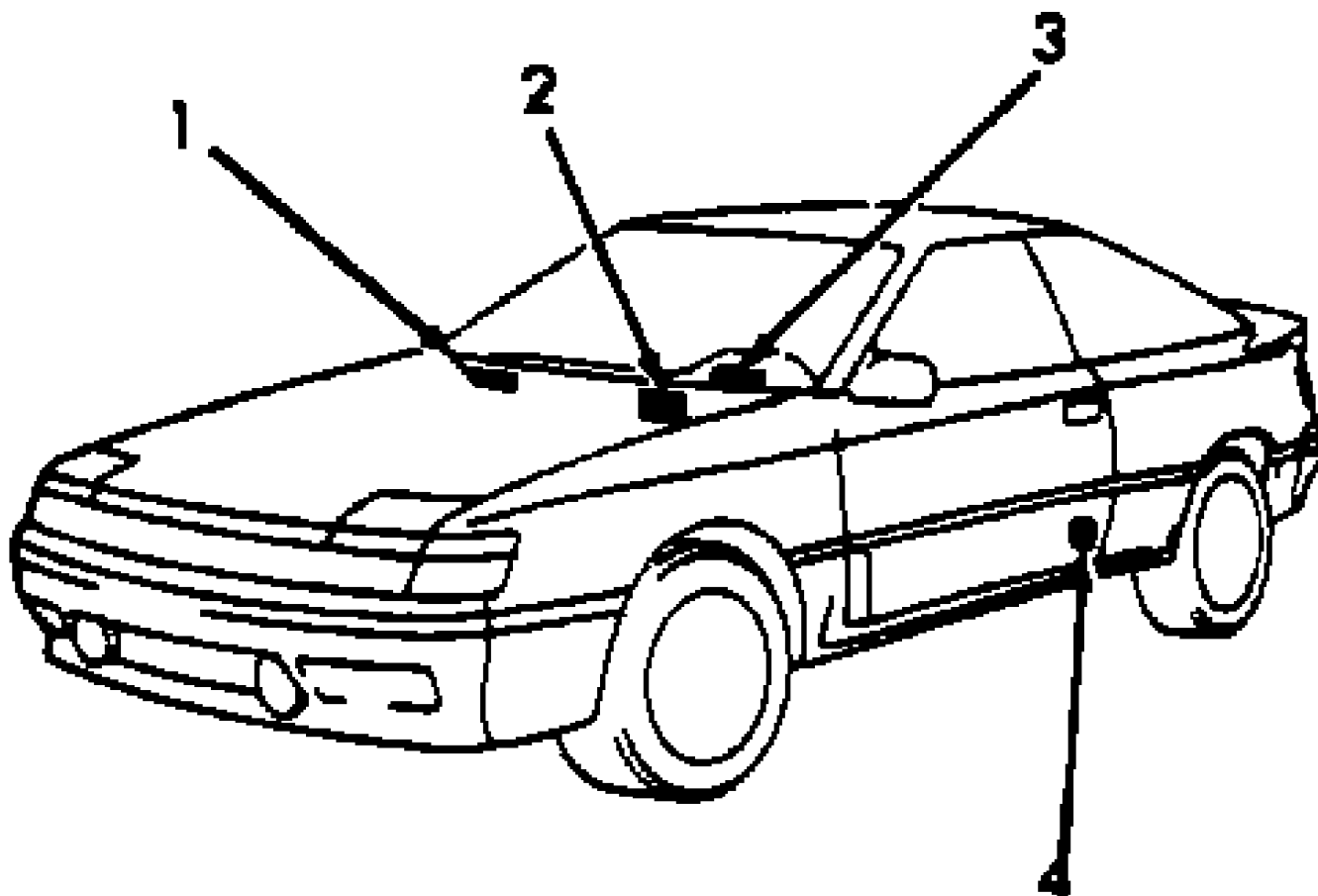


- |                           |                                    |
|---------------------------|------------------------------------|
| 1. Engine Oil Filler Cap  | 11. A/T Fluid Level Dipstick       |
| 2. Distributor            | 12. Radiator Cap                   |
| 3. Manufacturer's Plate   | 13. Engine Oil Level Dipstick      |
| 4. Brake Booster          | 14. Engine Oil Filter              |
| 5. Clutch Fluid Reservoir | 15. Washer Fluid Reservoir         |
| 6. Brake Fluid Reservoir  | 16. Engine Coolant Reservoir       |
| 7. Air Cleaner            | 17. Power Steering Fluid Reservoir |
| 8. Battery                | 18. Intercooler                    |
| 9. Relay Block            | 19. Ignition Coil                  |
| 10. Fuse Block            | 20. Connector Box                  |

**93A45757**

Fig. 2: Service Point Locations (Turbocharged Engine)  
 Courtesy of Toyota Motor Sales, U.S.A., Inc.

**INFORMATION LABEL LOCATIONS**



1. Vehicle Identification Number (VIN)
2. Manufacturer's Plate
3. Vehicle Identification Number (VIN) Plate
4. Certification Regulation Plate

Fig. 3: Information Label Locations  
 Courtesy of Toyota Motor Sales, U.S.A., Inc.

### SERVICE LABOR TIMES

SERVICE LABOR TIMES TABLE (HOURS)

Application	20,000 Mile Service	30,000 (60,000) Mile Service
2.0L 2S-FE EFI		
Automatic Transaxle .....	1.5	1.0 ((1) 3.7)
Manual Transaxle .....	1.5	1.0 ((1) 3.7)
2.0L 3S-GE EFI		
Automatic Transaxle .....	1.6	.8 ((2) 4.9)
Manual Transaxle .....	1.6	.8 ((2) 4.9)
2.0L 3S-FE EFI		
Automatic Transaxle .....	1.5	1.0 ((3) 4.9)
Manual Transaxle .....	1.5	1.0 ((3) 4.9)
2.0L Turbo 3S-GTE		

Manual Transaxle ..... 1.6 ..... .8 ((2) 6.0)

- (1) - Add 2.3 hrs. to replace camshaft timing belt.
- (2) - Add 2.1 hrs. to replace camshaft timing belt.
- (3) - Add 1.9 hrs. to replace camshaft timing belt.

## LUBRICATION SPECIFICATIONS

LUBRICATION SPECIFICATIONS TABLE

Application	Fluid Specifications
Engine Oil	
Minimum Temperature	
Greater Than 0° F (-18°C)	SAE 10W-30 API/SF Or SG
Less Than 0° F (-18°C)	SAE 5W-30 API/SF Or SG
Brake & Clutch Fluid	FMVSS No. 116 Or DOT 3 Brake Fluid
Power Steering Fluid	Dexron-II ATF
Rear Differential (4WD)	
Minimum Temperature	
Greater Than 0° F (-18°C)	SAE 90 API GL-5
Less Than 0° F (-18°C)	SAE 80W Or 80W-90 API GL-5
Differential	Dexron-II ATF
Transaxle	
Automatic Transaxle	Dexron-II ATF
Manual Transaxle	
3S-GTE Engines	SAE 75W-90 Or 80W-90 API GL-5
3S-FE, 3S-GE & 2S-E Engines	Dexron-II ATF

## FLUID CAPACITIES

FLUID CAPACITIES TABLE

Application	Quantity
1986-89 Celica	
A/C R-12 Refrigerant	24-27 Ozs.
Cooling System	
1986 & 1987 3S-GE	7.4 Qts. (7.0L)
1987-89 3S-FE & 1988-89 3S-GE	
With Manual Transaxle	6.6-6.8 Qts. (6.2-6.4L)
With Automatic Transaxle	6.4-6.7 Qts. (6.1-6.3L)
1988-89 3S-GTE	6.8 Qts (6.4L)
Engine Oil	
1986 2S-E & 1987-89 3S-FE	(1) 4.1-4.3 Qts. (3.9-4.1L)
1986 3S-E & 1987-89 3S-GE	(1) 4.1 Qts. (3.9L)
1988-89 3S-GTE	(1) 3.8 Qts. (3.6L)
Fuel Tank	15.9 Gals. (60L)
Transmission Fluid	
Automatic	
1986-87	2.5 Qts (2.4L)
1988-89 (Electronic & Conventional)	2.6 Qts (2.5L)
Manual	
1986-87	2.7 Qts. (2.6L)
1988-89 3S-FE & 3S-GE	2.7 Qts. (2.6L)
1988-89 3S-GTE	5.1 Qts. (4.8L)

(1) - Including filter change.

## WHEEL & TIRE SPECIFICATIONS

WHEEL & TIRE SPECIFICATIONS TABLE

Wheel Size	Tire Size
13 x 5-J" .....	165SR13
13 x 5.5" .....	P185 x 70SR
14 x 6-JJ" .....	P205 x 60R

## TIRE INFLATION

TIRE INFLATION PRESSURES TABLE

Tire Size	Front		Rear	
	psi	(kg/cm <sup>2</sup> )	psi	(kg/cm <sup>2</sup> )
165SR13 .....	30	(2.1)	26	(1.8)
185/70SR13				
Except Convertible .....	28	(2.0)	26	(1.8)
Convertible .....	29	(2.0)	29	(2.0)
205/60R14				
Non-Turbo Models .....	26	(1.8)	26	(1.8)
Turbo Models .....	30	(2.1)	30	(2.1)

## WHEEL TIGHTENING

Tighten all wheel lug nuts to 76 ft. lbs. (103 N.m).

## BATTERY SPECIFICATIONS

**CAUTION:** When battery is disconnected, vehicles equipped with computers may lose memory data. When battery power is restored, driveability problems may exist on some vehicles. These vehicles may require a relearn procedure. See COMPUTER RELEARN PROCEDURES article in the GENERAL INFORMATION section.

All years and models use batteries with BCI group number 24F.

## CAUTIONS & WARNINGS

### RADIATOR FAN & CAP

To avoid injury, stay clear of radiator fan when ignition switch is in ON position. Fan is thermostatically controlled and may come on suddenly. DO NOT loosen or remove radiator cap when cooling system is hot.

### CATALYTIC CONVERTER

To prevent catalytic converter overheating and possibly creating a fire hazard, DO NOT allow engine to idle for more than 20 minutes. Avoid spark jump test and prolonged engine compression measurement.

## SUPPLEMENTAL RESTRAINT SYSTEM (SRS) EQUIPPED VEHICLES

When servicing vehicles equipped with Supplemental Restraint System (SRS), always allow at least 20 seconds after turning ignition switch to LOCK position and disconnecting negative terminal cable before working on SRS. System has a back-up power supply and may deploy air bag.

## **WARRANTY INFORMATION**

CAUTION: Always refer to customer copy of warranty information for specific model application and/or coverage limitations.

### **NEW VEHICLE LIMITED WARRANTY**

Covers any repair or replacement of parts which becomes necessary due to defects in materials or workmanship under normal use for 36 months or 36,000 miles from in-service date.

### **CORROSION PERFORATION**

Covers any repair or replacement to body sheet metal which develops corrosion perforation (hole through panel), in normal use, due to defects in material or workmanship for a period of 5 years, regardless of mileage.

### **BATTERY**

Covers replacement of defective original battery for first 12 months or 12,000 miles. After first 12 months or 12,000 miles, warranty covers a pro-rated amount based on months in service, up to 36 months.

### **AIR CONDITIONER REFRIGERANT CHARGE**

Covers air conditioner refrigerant for first 12 months, regardless of mileage, unless done as a warranty repair.

### **ADJUSTMENTS**

Service adjustments are covered for first 12 months or 12,500 miles, whichever occurs first.

### **EMISSION DEFECT WARRANTY (EXCEPT CALIFORNIA)**

Warrants to retail purchaser and subsequent purchaser that vehicle was designed, built and equipped to conform with applicable emission regulations at time of sale and that vehicle is free of defects in materials and workmanship which may cause vehicle to fail to conform with applicable regulations for 5 years or 50,000 miles, whichever occurs first.

### **EMISSION PERFORMANCE WARRANTY (EXCEPT CALIFORNIA)**

Covers all repairs, adjustments and replacements if vehicle fails to conform to applicable emission standards and such failure results or will result in vehicle owner bearing any penalty or other sanctions under local, state or federal law for 5 years or 50,000 miles, whichever comes first. After 24 months or 24,000 miles, manufacturer will make necessary adjustments, repairs and replacements at no cost to owner when noncompliance is caused by a failure of any of following parts.



- \* Cold Start Enrichment System
- \* Deceleration Control
- \* Air/Fuel Ratio Feedback Control System
- \* HAC Valve
- \* Automatic Hot Air Intake
- \* Heat Control Valve
- \* Mixture Control Valve
- \* Cold Mixture Heater
- \* Spark Control Devices
- \* PCV Valve Or Orifice
- \* Charcoal Canister
- \* Vapor Liquid Separator
- \* EGR Valve And Associated Parts
- \* Air Pump
- \* Airflow Control Valves
- \* Air Injection Manifold
- \* Catalytic Converter
- \* Fuel Filler Neck Restrictor
- \* Sensors, Switches, Valves And Electronic Controls Used In Above Systems
- \* Hoses, Clamps, Belts, Pulleys, Tubes, Fittings And Gaskets Used In Above Systems

#### EMISSION DEFECT WARRANTY (CALIFORNIA)

Warrants to the retail purchaser, and subsequent purchaser that vehicle was designed, built, and equipped so as to conform at the time of sale with applicable U.S. and California emission regulations and that it is free from defects in materials or workmanship which may cause the vehicle to fail to conform with applicable regulations. The following components are covered for 24 months or 24,000 miles:

- \* Carburetor And Internal Parts
- \* EFI Components
- \* Cold Start Enrichment System
- \* Distributor And Internal Parts
- \* Spark Plugs
- \* Ignition Wires
- \* Hoses, Clamps, Fittings, Tubing, Sealing Gaskets Or Devices, And Mounting Hardware Used In Above Systems
- \* Pulleys, Belts And Idlers Used In Above Systems

Following components are covered by California Emission Defect Warranty for 5 years or 50,000 miles, whichever occurs first.

- \* Deceleration Control
- \* Air/Fuel Ratio Feedback Control System
- \* HAC Valve
- \* Automatic Hot Air Intake
- \* Heat Control Valve
- \* Mixture Control Valve
- \* Cold Mixture Heater
- \* Intake Manifold
- \* Spark Control Devices
- \* Ignition Coil And Ignitor
- \* PCV Valve Or Orifice
- \* Oil Filler Cap
- \* Charcoal Canister
- \* Vapor Liquid Separator
- \* Fuel Tank And Filler Cap
- \* EGR Valve And Associated Parts
- \* Air Pump

- \* Airflow Control Valves
- \* Air Injection Manifold
- \* Catalytic Converter
- \* Fuel Filler Neck Restrictor
- \* Exhaust Manifold
- \* Exhaust Pipe
- \* Sensors, Switches, Valves And Electronic Controls Used In Above Systems
- \* Hoses, Clamps, Belts, Pulleys, Tubes, Fittings And Gaskets Used In Above Systems

## FUSES & CIRCUIT BREAKERS

### FUSE PANEL LOCATION

There are 3 fuse panels on this vehicle. The driver's side fuse box is located behind the driver's kick panel. The passenger's side fuse box is behind the passenger's side kick panel. The main fuse and relay block is in the engine compartment.

### PASSENGER COMPARTMENT FUSE BOXES IDENTIFICATION

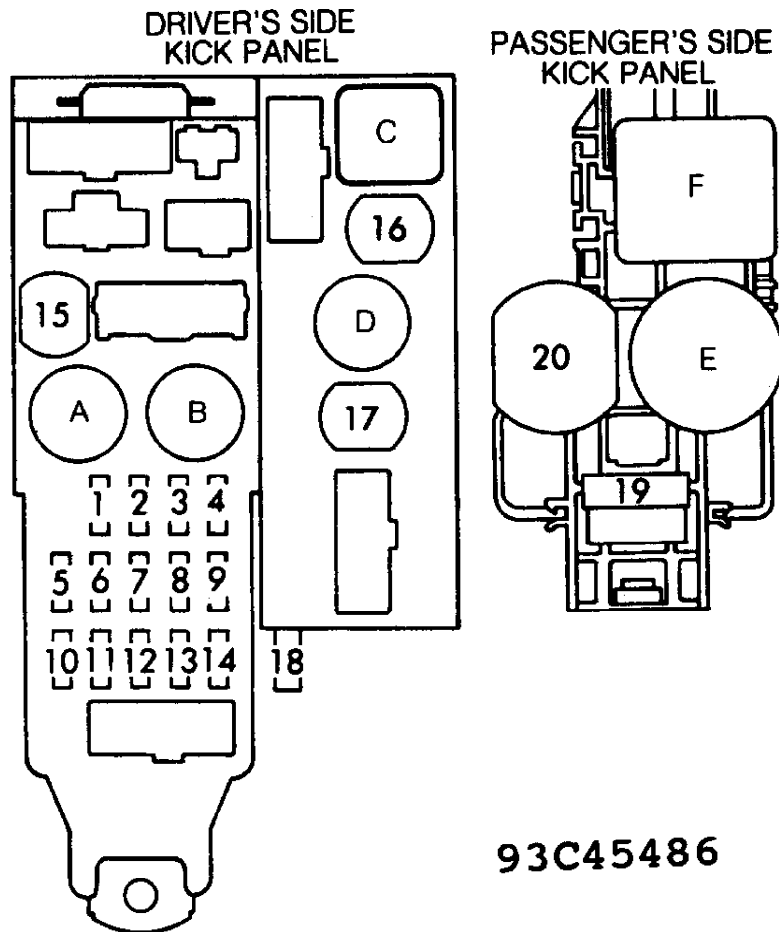


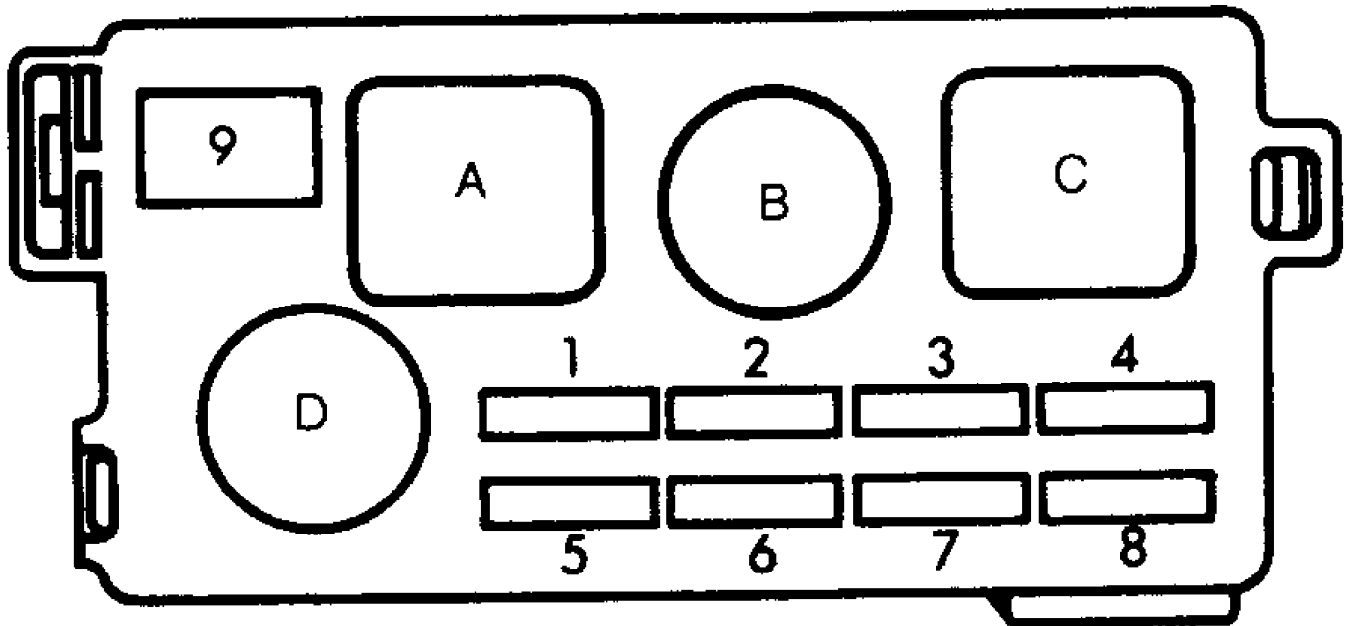
Fig. 4: Passenger Compartment Fuse Boxes Identification  
 Courtesy of Toyota Motor Sales, U.S.A., Inc.

- 1 - 15 Amp  
Gauges, Warning Lights & Buzzer, Back-Up Lights & A/T  
Overdrive System, Rear Window Defogger & Power Antenna
- 2 - 7.5 Amp  
Clock & Open Door Warning Light (1987), Interior, Personal &  
Door Courtesy Lights (1987), Trunk & Ignition Switch Lights  
(1987)
- 3 - 15 Amp  
Stoplights & Cruise Control Cancel Device
- 4 - 15 Amp  
Tail, Park, License & Side Marker Lights, Glove Box Light &  
Instrument Illumination
- 5 - 15 Amp  
Cigarette Lighter & Digital Clock
- 6 - 7.5 Amp  
Radio & Cassette Player
- 7 - 10 Amp  
Turn Signal Lights
- 8 - 10 Amp  
Outside Mirror Defogger
- 9 - Blank
- 10 - 10 Amp  
Charging System
- 11 - 20 Amp  
Wipers & Washers
- 12 - 15 Amp  
Electric Sun Roof
- 13 - Blank
- 14 - 7.5 Amp  
Charging System & Discharge Warning Light, Electronic Fuel  
Injection & Electric Cooling Fans
- 15 - 30 Amp (Circuit Breaker)  
Defogger
- 16 - 14 Amp (Circuit Breaker 1986)  
30 Amp (Circuit Breaker 1987-89)  
Power Door Locks
- 17 - 30 Amp (Circuit Breaker)  
Power Windows
- 18 - 15 Amp  
Anti-Lock Brake System & Foglights (1988-89)
- 19 - 10 Amp  
Air Conditioning System
- 20 - 30 Amp (Circuit Breaker)  
Heater

Relay Identification

- A - Defogger
- B - Taillight Control
- C - Turn Signal Flasher
- D - Clutch Start
- E - Horn
- F - Heater

**ENGINE COMPARTMENT FUSE & RELAY BLOCK IDENTIFICATION**



## ENGINE COMPARTMENT FUSE & RELAY BLOCK

**93D45487**

Fig. 5: Engine Compartment Fuse & Relay Block Identification  
 Courtesy of Toyota Motor Sales, U.S.A., Inc.

### Fuse & Circuit Breaker Identification

- 1 - 15 Amp  
Headlights (Left)
- 2 - 15 Amp  
Emergency Flashers & Horns
- 3 - 15 Amp  
EFI System
- 4 - 7.5 Amp  
Charging System & Discharge Warning Light
- 5 - 15 Amp  
Headlights (Right)
- 6 - 30 Amp  
Retractable Headlight System
- 7 - 15 Amp (1986-87)  
20 Amp (1988-89)  
Radio, Cassette Player & Power Antenna, Interior, Trunk,  
Personal & Courtesy Lights (1988-89), Ignition Switch & Door  
Warning Lights (1988-89), Clock (1988-89)
- 8 - Blank
- 9 - 30 Amp  
Fan

### Relay Identification

- A - Engine Main
- B - EFI Main
- C - Headlight Control
- D - Fan No. 1