

TOYOTA

SERVICE BULLETIN

TOYOTA MOTOR SALES, U.S.A., INC.

VOLUME

10

PRODUCT GENERAL

REFERENCE INFORMATION

NUMBER 027

DATE 04-06-90

MODEL '91 SW, AC, FJ

Page 1 of 12

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE

NEW 1991 PDS REQUIREMENTS (MR2, PREVIA & LAND CRUISER)

We are introducing PDS procedures for three new 1991 models introduced in the spring of 1990.

Pre-delivery service is more than a procedure - it's a commitment to Toyota owners that their vehicle will be delivered in perfect condition.

PDS forms the basis of your customers' impressions of your service department, your dealership and Toyota. One squeak, one burned-out taillight or one non-functioning accessory reflects poorly on everyone. But those problems can be easily avoided by following the thorough PDS procedures outlined in this bulletin.

First of all, determine which Toyota model you are servicing. Check to see what extra features, factory options or accessories, and dealer options or accessories are installed. Remember, every unit is slightly different from others.

One of the most important - and most neglected - tasks is testing the electrical system and accessories. A substantial number of Toyota models delivered, have electrical or accessory problems, yet this is one of the easiest sections of the PDS checklist!

The test drive is another important part of a thorough PDS. Listen for squeaks and rattles, and if you hear any, find and fix them! Check the wheel alignment. If the vehicle is equipped with an automatic transmission, check the automatic transmission fluid level after the test drive. Make sure that all of the systems are operating properly. Think of this vehicle as your new car. Wouldn't you want everything to be perfect?

Proper Use of PDS Form

Customer satisfaction is greatly influenced by the condition of the vehicle at the time of delivery and in the way it's delivered. Proper use of the PDS form will help create a positive image for your dealership.

Once you feel secure that everything is in working order, fill out and sign the PDS form. Don't check off any item until the repair work has been completed. If you check off something as "OK" and it's not, the dealership is responsible for that item.

- Use existing PDS from (Non-Parts #00408-02010).

TECHNICAL ASSURANCE DEPARTMENT

PG027-90

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

FIRST PAGE

- The first page of the two-part form remains unchanged.
- After completing page two of the form, the seven pre-delivery preparation boxes on page one should be checked off and both the technician and the Service Manager must sign the form and print their names on the lines indicated for this purpose.

SECOND PAGE

- The inspection procedures for the 1991 models have only a few minor changes.
- The new requirements are:
C07 Install the fuse. The fuse is removed at the factory to reduce current draw during the transit and storage period.

Model	Fuse for:	Stored in:
FJ	Dome Light	Fuse Block Cover
SW	" "	" " "
AC	Dome Light & Cigarette Lighter	Ash Tray

E07 Inspect Transmission/Transaxle/Differential lubricant levels. This item was dropped from PDS form #00408-02010 by error, but this inspection is still required on both 1990 and 1991 models.

- Perform and check off every inspection item on the second page of the form, including the road test and final inspection. Indicate any need to make adjustments, additions, repairs, or replacements to the specific check item in the space to the right of the boxes entitled "Explanation."
- When the PDS is performed, the correct box must be checked off to indicate one of the following:
 - Box 1 OK - The indicated item(s) checked OK and no additional operation was required.
 - Box 2 Adjust/Add - A minor correction was performed or an addition such as fluid was required.
 - Box 3 Repair/Replace - A corrective operation was necessary, requiring a repair and/or replacement.
- Explanation If an adjustment, addition, repair or replacement was required, briefly explain what was done on the line to the right of the boxes checked.

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

Note: - The items marked with an asterisk -* indicate optional equipment/item may or may not be on some models.

COMPLETED PDS FORM

- The salesperson should then go over the form with the customer informing him or her of the pre-delivery service performed. Finally, the salesperson and the customer should both sign the form.

Note: The form should also be signed by the Dealer or General Manager.

- The first or top page of the completed and signed form should be given to the customer. The second page must be kept in the customer/vehicle service history file.
- This process shows your customers that your entire dealership staff wants them to be fully satisfied. It demonstrates a collective effort to treat customers with an extra special touch – THE TOYOTA TOUCH!

ORDERING INFORMATION FOR PDS FORM

- Reordering information is printed on the bottom right corner of the first page of the PDS form.
- Additional forms can be ordered through the NON-PARTS ordering system. When ordering, keep in mind that forms (00408-02010) come in packages of 100 forms each. For large volume dealers, Toyota accepts a maximum of 20 packages (2000 forms per order) for additional supply.

WARRANTY POLICY

- If additional repairs or adjustments are noted during the pre-delivery service, the required service should be performed under warranty and reimbursement should be requested via regular warranty claim channels.
- The 1990 Warranty Policy and Procedure Manual requires that you maintain the original copy of completed PDS forms in the customer file. For these three 1991 models, the same warranty policy and procedures apply. If you cannot produce a completed form for each vehicle retailed, upon TMS and/or Region/Distributor audit, the PDS payment amount will be subject to debit.
- The repair order completed in conjunction with the PDS must have time punch flags for service. If repairs are performed, separate time flags must be punched for each repair.

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

1991 FLAT RATE TIME (HR)

AREA	MODEL	(3) AC	SW	FJ
General Area (1)		0.9	1.0	0.9
High Altitude Areas (2)		0.9	1.0	0.9

- (1) General Area – Vehicles operating below 4,000 feet
- (2) High Altitude Areas – Vehicles operating above 4,000 feet in specified counties (see attached listing)
- (3) Including Previa ALL-TRAC model

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

A.	<u>VEHICLE EXTERIOR</u>	<u>INSPECTION</u>					
A01	Inspect Paint Finish for Rust, Dents, Scratches, etc.	<ul style="list-style-type: none"> ● Inspect for any abnormal condition, operation, loose or missing parts. 					
A02	Inspect Exterior Body Parts for Installation, Damage, Rust, Alignment, etc.						
A03	Hood, Deck Lid, Back Door, Fuel Door Operation						
A04	Door Lock System and Door Lamp Operation						
A05	Install the Outside Rear View Mirror *						
B.	<u>VEHICLE INTERIOR</u>	<u>INSPECTION</u>					
B01	Inspect All Interior Parts for Dirt, Damage, Fit, Alignment, etc.	<ul style="list-style-type: none"> ● Inspect for any abnormal condition, operation, loose or missing parts. 					
B02	Seats, Seat Belt Operation						
B03	Window Regulator Operation						
B04	Inspect Carpet Fit/Alignment						
C.	<u>UNDERHOOD</u>	<u>INSPECTION</u>					
C01	Engine Oil Level Check	<ul style="list-style-type: none"> ● Inspect dipsticks or visually inspect see-through reservoirs. ● Inspect connections and condition as required. ● The fuse is removed at the factory to reduce current draw during transit. The fuse is stored in the fuse block cover on AW/FJ models and in ash tray on AC models. ● Check engine operation while cold and after warm-up. (Check idle rpm, fast idle rpm, noise, engine vibration and rough idle, etc.) If adjustments are required, always refer to VEHICLE EMISSION CONTROL INFORMATION LABEL AND/OR ENGINE REPAIR MANUAL. 					
C02	Brake & Clutch Fluid Level Check *						
C03	Power Steering Fluid Level Check*						
C04	Coolant and Washer Fluid Level Check						
C05	Battery Terminal Tightness						
C06	Wiring and Hose Condition						
C07	Install the Fuse *						
	<table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: left;"><u>MODEL</u></th> <th style="text-align: left;"><u>FUSE FOR</u></th> </tr> </thead> <tbody> <tr> <td>SW, FJ</td> <td>Dome Light</td> </tr> <tr> <td>AC</td> <td>Dome Light & Cigarette Lighter</td> </tr> </tbody> </table>	<u>MODEL</u>	<u>FUSE FOR</u>	SW, FJ	Dome Light	AC	Dome Light & Cigarette Lighter
<u>MODEL</u>	<u>FUSE FOR</u>						
SW, FJ	Dome Light						
AC	Dome Light & Cigarette Lighter						
C08	Engine Cold						
C09	During/After Warm-up						

* Inspect or install when equipped

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

C. UNDERHOOD (Cont'd)

NOTE 1) VEHICLE EMISSION CONTROL INFORMATION LABEL

INSPECTION

- The Emission Control Information Label is always located on the underside of the hood.
- The information on the label will vary with each model and engine specification.

2) IDLE MIXTURE ADJUSTMENTS *

- Do not attempt to adjust idle setting, as it is preset and sealed at the factory.

C10 High altitude vehicle inspection and/or adjustments. * (High altitude areas only). Federally designated high altitude counties are listed on page 12.

Inspect the following items after warm-up using a tachometer and timing light according to the VEHICLE EMISSION CONTROL LABEL.

- Ignition Timing
- Idle RPM *
- Fast Idle RPM *
- Throttle Positioner RPM *

C11 Inspect for fuel, oil, coolant, or other fluid leaks.

- Check fluid level and look for fuel, oil, coolant or other fluid leaks under the hood.

C12 Inspect automatic transmission fluid level. *

- Inspect ATF levels on the dipstick with engine idling and transmission at operating temperature with shift lever in 'P' position.

* Inspect or install when equipped

D. LUGGAGE COMPARTMENT

INSPECTION

D01 Light Operation

- Visually inspect for any abnormal conditions.

D02 Trim Appearance/Trunk Mat Fit

D03 Spare Tire Pressure Check

* Inspect or install when equipped

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)**E. UNDER VEHICLE (ON HOIST)****INSPECTION**

- | | | |
|-----|---|--|
| E01 | Remove Disc Brake Anti-Rust Covers * | ● Visually check for rust. |
| E02 | Inspect for Fuel, Oil, Coolant, or Other Fluid Leaks | ● Visually inspect for coolant, fuel, oil (engine, transmission, rear axle) and other fluid leaks. |
| E03 | Install Rubber Body Plugs * | ● Install the 2 rubber plugs provided in the glove box into the torque box holes. |
| E04 | Check Wheel Lug Nut Torque | ● Torque Specification - All Models |
| | | 900 to 1200 kg-cm
(66 to 86 ft-lb)
(88 to 118 Nm) |
| E05 | Wheel Covers/Caps Installation | |
| E06 | Inspect Tires for Defects or Damage/Adjust Air Pressure | |

RECOMMENDED TIRE AIR PRESSURE

Tire pressure must be checked "cold," meaning the car must not have been driven for at least three hours.

All Toyota Vehicles

The recommended tire inflation pressure changes with tire size, driving conditions and vehicle model. For precise tire pressures, refer to the Owner's Manual and the tire information label located on the vehicle.

Note:

- Compact spare – – 60 psi (4.2 kg/cm²)
- Tire sidewall "Maximum" cold tire inflation pressure should not be used for normal driving conditions.

- E07 Inspect Transmission/Transaxle/
Differential Lubricant Levels *

* Inspect or install when equipped

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

E. UNDER VEHICLE (ON HOIST Cont'd)

INSPECTION

- E08 Install Front Spoiler, Mudguards and/or Tail-Pipe Diffusers ● as Required *
- E09 Remove front spring spacers ● as Required *

**F. ROAD TEST
ELECTRICAL SYSTEM/ACCESSORY
OPERATION**

INSPECTION

- F01 Headlight Operation/Headlight Aim ● Inspect for proper operation.
- F02 Instrument **, Dome, Courtesy Map, Sunvisor Lights * ** Assure that SRS (Air Bag) equipped model's warning light turns off after approximately 10 seconds from start.
- F03 Warning Lights and Gauges
- F04 Parking, Tail, License, Sidemarker and Instrument Lights
- F05 Brake and Backup Lights
- F06 Turn Signal, Emergency Flashers, and Horn
- F07 Heater and A/C Operation *
- F08 Rear Defogger and Cigar Lighter *
- F09 Wipers, Washers, Head Lamp Washers *
- F10 Sunroof/Convertible Top (Open/Close) * ● The convertible top will not operate while the car is moving if the speed sensor is operating properly.
- F11 Audio System and Clock * ● The fuse for the radio circuit on some models may be removed at the factory to reduce current draw during transit.
- F12 Outside/Inside Rear View Mirror Operation

* Inspect or install when equipped

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

E. ROAD TEST (Cont'd)

INSPECTION

VEHICLE OPERATION

- | | | |
|-----|---|--|
| F13 | Cruise Control Operation * | <ul style="list-style-type: none"> ● Check cruise control setting, accel and decel functions. |
| F14 | Check Brake and Clutch Pedal Height, Freeplay, and Reserve Stroke | |
| F15 | Engine Operation | <ul style="list-style-type: none"> ● Check engine performance over a broad range of driving conditions including: <ul style="list-style-type: none"> – Idle quality, acceleration, cruise and deceleration. – Ensure that engine performance is normal, smooth and responsive. |
| F16 | Clutch and Transmission Operation | <ul style="list-style-type: none"> ● Clutch:
Inspect clutch pedal free-play, height and reserve stroke after disengagement. Check clutch engagement, disengagement, chatter noise. ● Transmission
Manual transmission: <ul style="list-style-type: none"> – Check shift lever operation, noise, etc. Automatic transmission: <ul style="list-style-type: none"> – Check shifting operation in each range, and neutral start switch. |
| F17 | Brake and Parking Brake Function | <ul style="list-style-type: none"> ● Check brake operation and inspect brake pedal for free-play, height and reserve height when depressed. ● Check brake function, noise, parking brake indicator light function. |
| F18 | Steering Off-Center and Operation | <ul style="list-style-type: none"> ● Check for steering wheel off-center and turning operation. ● Check for abnormal noise from suspension. |

* Inspect or install when equipped

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

F. ROAD TEST (Cont'd)

INSPECTION

- | | | |
|-----|---|--|
| F19 | Inspect for any Abnormal Noise or Vibration | ● Check Exhaust System for leaks. |
| F20 | Inspect for Squeaks and Rattles | ● Inspect for abnormal noises from body or interior. |

G. FINAL INSPECTION

INSPECTION

- | | | |
|-----|--|---|
| G01 | Remove Interior Protective Covers/Remove Unnecessary Labels, Tags, Stickers, etc. | <ul style="list-style-type: none"> ● Remove plastic covers from side panels, seats, head-restraint and sun-visors as required. ● Also remove caution labels and other tags, labels as required. |
| G02 | Install in Glove Compartment Owner's Manual/Owner's Guide/Tire Warranty/Audio System Guide | <ul style="list-style-type: none"> ● Make sure that Owner's Manual, Owner's Guide, Tire Warranty, Radio/Audio system guide, etc., are placed in the appropriate location. |
| G03 | Spare Wheel, Jack and Tool Installation | |
| G04 | Wash and Clean Vehicle | <ul style="list-style-type: none"> ● Thoroughly clean the vehicle's interior and exterior to present the best possible image. |
| G05 | Inspect Automatic Seatbelt system. * | <ul style="list-style-type: none"> ● Inspect and assure that seatbelt is operational. Also, make sure that the belts are not twisted. |

* Inspect or install when equipped

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

The following counties have been designated High Altitude by the Federal EPA. If a vehicle is to be used principally within this area, follow the high altitude (above 4,000 ft) vehicle inspection instructions of this bulletin.

State of Colorado

Adams	Kit Carson
Alamosa	Lake
Arapahoe	La Plata
Archuleta	Larimar
Boulder	Las Animas
Chaffee	Lincoln
Cheyenne	Mesa
Clear Creek	Mineral
Conejos	Moffat
Costilla	Montezuma
Crowley	Montrose
Custer	Morgan
Delta	Otero
Denver	Ouray
Dolores	Park
Douglas	Pitkin
Eagle	Pueblo
Elbert	Rio Blanco
El Paso	Rio Grande
Fremont	Routt
Garfield	Saguache
Gilpin	San Juan
Grand	San Miguel
Gunnison	Summit
Hindsdale	Teller
Huerfano	Washington
Jackson	Weld
Jefferson	

State of Nevada

Carson City	Lyon
Douglas	Mineral
Elko	Nye
Esmeralda	Pershing
Eureka	Storey
Humboldt	Washoe
Lander	White Pine
Lincoln	

State of New Mexico

Bernalillo	Mora
Cantron	Rio Arriba
Colfax	Roosevelt
Curry	Sandoval
De Baca	San Juan
Grant	San Miguel
Guadalupe	Santa Fe
Harding	Sierra
Hidalgo	Socorro
Lincoln	Taos
Los Alamos	Torrance
Luna	Union
McKinley	Valancia
Otero	

State of Utah

Beaver	Morgan
Box Elder	Piute
Cache	Rich
Carbon	Salt Lake
Daggett	San Juan
Davis	Sanpete
Duchesne	Savner
Emery	Summit
Garfield	Tooele
Grand	Uintah
Iron	Utah
Juab	Wasatch
Kane	Wayne
Millard	Weber

1991 NEW MR2, PREVIA & LAND CRUISER PRE-DELIVERY SERVICE (CONT'D)

MODEL	ENGINE	EMISSION	T/M	IDLE R.P.M.	F/IDLE R.P.M.	T/P R.P.M.	VALVE CLEARANCE		CYLINDER HEAD BOLT TORQUE ENGINE COLD
							INTAKE ENGINE HOT	EXHAUST ENGINE HOT	
SW(2WD)	5S-FE	ALL	ALL	----	----	----	0.19-0.29 mm (.007-.011")	0.28-0.38 mm (.011-.015")	1st:500kg-cm (36 ft-lb) 2nd:+90° (1/4 turn)
SW(4WD)	3S-GTE	ALL	M/T	----	----	----	0.15-0.25 mm (.006-.010")	0.20-0.30 mm (.008-.012")	1st:550kg-cm (40 ft-lb) 2nd:+90° (1/4 turn)
AC	2TZ-FE	ALL	ALL	----	----	----	0.15-0.25 mm (.006-.010")	0.25-0.35 mm (.010-.014")	1st: 400 kg-cm (29ft-lb) 2nd: +90° (1/4 turn) 3rd: +90° (1/4 turn)
FJ	3F-E	ALL	ALL	----	----	----	0.20 mm(.008")	ENGINE HOT 0.35 mm(.014")	1250 kg-cm (90 ft-lb)

*850 rpm for 4X4 Truck w/Auto trans.