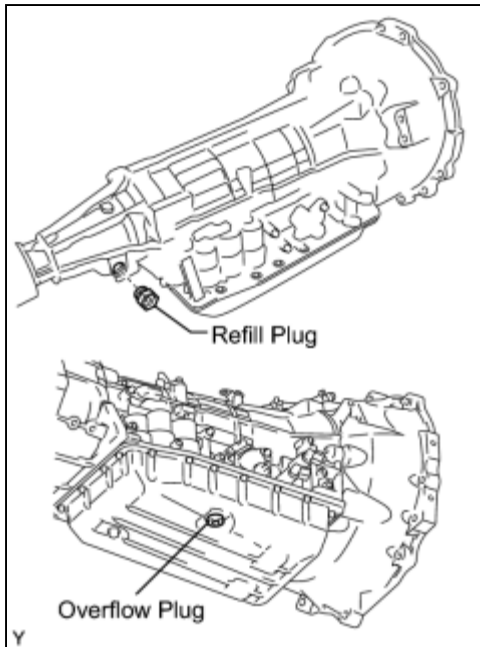


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<b>Model Year:</b> 2007	<b>Model:</b> FJ Cruiser	<b>Doc ID:</b> RM0000013BU00MX
<b>Title:</b> A750E AUTOMATIC TRANSMISSION: AUTOMATIC TRANSMISSION FLUID: ADJUSTMENT (2007 FJ Cruiser)		

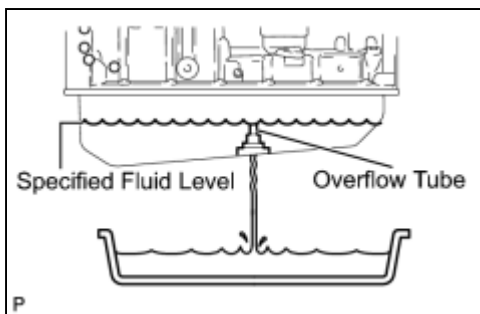
## ADJUSTMENT



### 1. BEFORE REFILL TRANSMISSION

- This transmission requires Toyota Genuine ATF WS transmission fluid.
- After servicing the transmission, you must refill the transmission with the correct amount of fluid.
- Maintain the vehicle in a horizontal position while adjusting the fluid level.
- If the transmission pan, drain plug, valve body or torque converter is replaced, proceed to the "transmission pan fill" procedures.
- If the transmission hose or output shaft oil seal is replaced, remove the refill plug and proceed to the "transmission fill" procedures.
- If the entire transmission is replaced, proceed to the "fluid circulation" procedures.

**New transmissions are already filled with transmission fluid.**



### 2. TRANSMISSION PAN FILL

- Remove the refill plug and overflow plug.
- Fill the transmission through the refill hole until fluid begins to trickle out of the overflow tube.
- Reinstall the overflow plug.

### 3. TRANSMISSION FILL

- Fill the transmission with the amount of fluid listed in the table below.
- Reinstall the refill plug to prevent the fuel from splashing.

Standard capacity:

REPAIR	FILL AMOUNT
Transmission hose and pipe removal	0.6 liters (0.63 US qts, 0.53 Imp.qts)

Output shaft oil seal replacement	0.4 liters (0.42 US qts, 0.35 Imp.qts)
Transmission pan and drain plug removal	1.7 liters (1.8 US qts, 1.5 Imp.qts)
Transmission valve body removal	4.3 liters (4.54 US qts, 3.78 Imp.qts)
Torque converter removal	5.4 liters (5.71 US qts, 4.75 Imp.qts)

If the amount of fluid listed in the table cannot be added, perform the next step.

- (c) When the amount of fluid listed in table cannot be added:
- (1) Install the refill plug.
  - (2) Allow the engine to idle with the air conditioning OFF.
  - (3) Move the shift lever through the entire gear range to circulate fluid.
  - (4) Wait for 30 seconds with the engine idling.
  - (5) Stop the engine.
  - (6) Remove the refill plug and add fluid.
  - (7) Reinstall the refill plug.

#### 4. FLUID CIRCULATION

- (a) Allow the engine to idle with the air conditioning OFF.
- (b) Move the shift lever through the entire gear range to circulate fluid.
- (c) Allow the engine to idle until the fluid temperature reaches 36°C (97°F). Proceed to the step to the next to check fluid temperature.

The fluid temperature should be less than 30°C (86°F) before starting the engine.

#### 5. FLUID TEMPERATURE CHECK

The fluid temperature can be confirmed by checking the indicator light in the meter or by using the intelligent tester. When using the intelligent tester, it is necessary to change to temperature detection mode in order to idle the vehicle appropriately.

- (a) When using the intelligent tester:
- (1) Turn the ignition switch OFF.
  - (2) Connect the intelligent tester to the DLC3.
  - (3) Turn the ignition switch ON.
  - (4) Enter the following menus: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / TC/TE1
  - (5) Enter the following menus: DIAGNOSIS / ENHANCED OBD II / DATA LIST / A/T OIL TEMP 1
  - (6) Check ATF temperature.

#### NOTICE:

- If the fluid temperature is below 46°C (115°F), proceed to the next step. (Recommended ATF temperature: 36°C (97°F) or less.)
- If the fluid temperature is 46°C (115°F) or more, turn the ignition switch OFF and wait until the

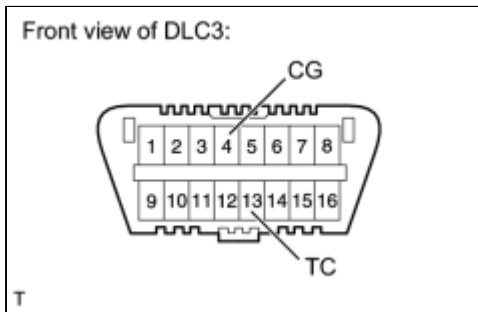
fluid temperature drops below 46°C (115°F).

(7) According to the display on the intelligent tester, perform the Active Test "TC / TE1".

**Indicator lights of the combination meter blink to output DTCs when TC and TE1 are connected.**

(8) Start the engine.

**Check that electrical systems such as the air conditioning system, audio system and lighting system are off.**



(b) When not using the intelligent tester (using indicator light):

(1) Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

**SST: 09843-18040**

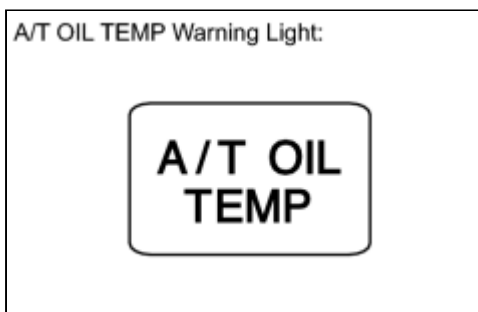
(2) Start the engine.

**Check that electrical systems such as the air conditioning system, audio system and lighting system are off.**

**Indicator lights of the meter blink to output DTCs when terminals TC and CG are connected.**

(c) Slowly move the shift lever from P to L, and then return the shift lever to P.

**Slowly move the shift lever to circulate the fluid through each part of the transmission.**



(d) Move the shift lever to D, and quickly move it back and forth between N and D (once within 1.5 seconds) for at least 6 seconds. This will activate the fluid temperature detection mode.

Standard condition:

A/T OIL TEMP warning light remains illuminated for 2 seconds and then turns off.

(e) When using the intelligent tester:

(1) Return the shift lever to P and press OFF on the Active Test display.

(f) When not using the intelligent tester:

(1) Return the shift lever to P and disconnect terminals 13 (TC) and 4 (CG).

(g) Allow the engine to idle until the fluid temperature reaches 36 to 46°C (97 to 115°F).

(h) The A/T OIL TEMP warning light will come on again when the fluid temperature reaches 36°C (97°F) and will blink when it exceeds 46°C (115°F).

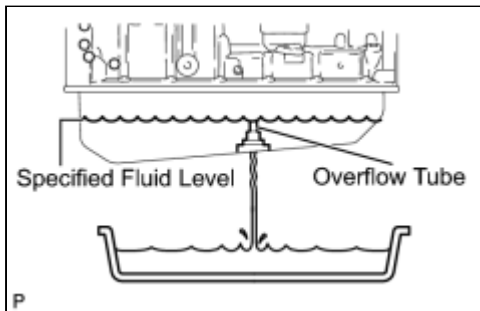
Indicator Indication of ATF Temperature:

BELOW PROPER TEMPERATURE	PROPER TEMPERATURE	HIGHER THAN PROPER TEMPERATURE
Data List: [A/T OIL TEMP 1] 36°C (97°F) or less	Data List: [A/T OIL TEMP 1] 36 to 46°C (97 to 115°F)	Data List: [A/T OIL TEMP 1] 46°C (115°F) or higher
A/T OIL TEMP warning light: Turns off	A/T OIL TEMP warning light: Turns on	A/T OIL TEMP warning light: Blinking

**Perform the fluid level inspection while the indicator light is on.**

## 6. FLUID LEVEL CHECK

- The fluid temperature must be between 36°C (97°F) and 46°C (115°F) to check the fluid level.
- Do not insert the fill nozzle into the refill hole more than 30 mm (1.2 in.), to avoid contact with the moving parts.



- Remove the overflow plug with the engine idling.
- Check that the fluid comes out of the overflow tube.
- Wait until the overflow slows to a trickle.

If fluid does not come out, perform the following.

- Install the overflow plug.
- Stop the engine.
- Remove the refill plug.
- Add 0.4 liters (0.21 US qts, 0.18 Imp qts) of fluid.
- Allow the engine to idle.
- Remove the overflow plug.
- Wait until fluid begins to trickle out of the overflow tube.

