

## TUNE-UP

Pickup

### ENGINE IDENTIFICATION

Engine code is located on decal at front edge of valve cover.

#### ENGINE CODE

Application	Code
All Models .....	LN44D

### COMPRESSION PRESSURE

With engine at normal operating temperature, remove all glow plugs. Install special tool (Toyota 09992-00021) in glow plug mounting hole and attach a compression gauge. Disconnect wire at fuel cut solenoid. Crank engine at 250 RPM and measure compression.

**CAUTION:** Make sure glow plug wiring does not ground.

**NOTE:** Count number of revolutions it took for No. 1 cylinder to reach maximum compression reading and use same number of revolutions to determine compression on remaining cylinders.

#### COMPRESSION SPECIFICATIONS

Min. Compression Pressure .....	284 psi (20 kg/cm <sup>2</sup> )
Max. Variation Between Cylinders ...	71 psi (5 kg/cm <sup>2</sup> )

### VALVE CLEARANCE

1) With engine at normal operating temperature, remove valve cover and rotate crankshaft until No. 1 cylinder is at TDC on compression stroke.

**NOTE:** If No. 1 cylinder is at TDC on compression stroke, rocker arms will be loose on No. 1 cylinder and tight on No. 4 cylinder.

2) Adjust intake valves on cylinder No.1 and 2, and exhaust valves on cylinder No. 1 and 3. Rotate crankshaft 360°. Adjust intake valves on cylinder No. 3 and 4, and exhaust valves on cylinder No. 2 and 4.

3) Recheck clearance. There should be a slight drag on feeler gauge as it is pulled between rocker arm and valve stem. Replace valve cover.

#### VALVE CLEARANCE SPECIFICATIONS

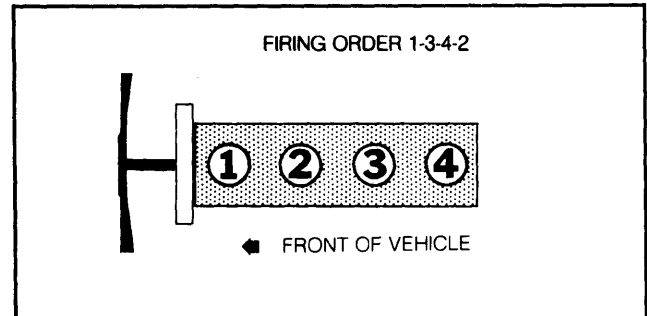
Application	<sup>1</sup> Clearance In. (mm)
Intake .....	.010 (25)
Exhaust .....	.014 (36)

<sup>1</sup> — With engine warm.

### VALVE ARRANGEMENT

E-I-E-I-E-I-E-I (Front to rear)

Fig. 1: Firing Order



### IDLE SPEED ADJUSTMENT

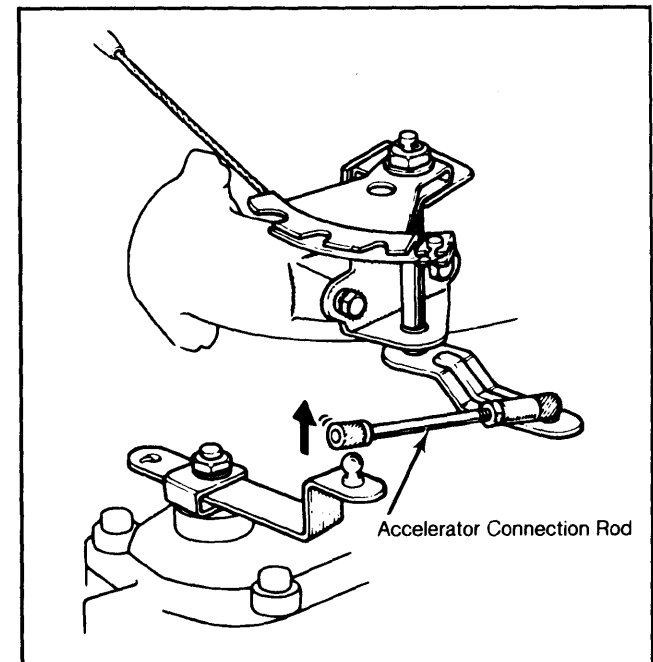
1) With engine at normal operating temperature, air cleaner installed, turn all accessories off. Place transmission in neutral and turn idle adjusting knob counterclockwise. Be sure that idle knob fully returns to the unlocked position.

2) Remove the accelerator connection rod. See Fig. 2. Connect a tachometer to engine. Start engine and check idle speed. If necessary, adjust by turning idle speed adjusting screw on injection pump. See Fig. 3. Then check maximum speed adjustment.

#### IDLE SPEED SPECIFICATIONS

Application	Idle RPM
All Models .....	700

Fig. 2: Accelerator Connection Rod Removal



### MAXIMUM SPEED ADJUSTMENT

1) Install tachometer and run engine until normal operating temperature is obtained. Remove acce-

# 1982 Toyota Diesel 4 Tune-Up

## TUNE-UP (Cont.)

erator connection rod, if not previously removed. Move adjusting lever fully clockwise. See Fig. 3.

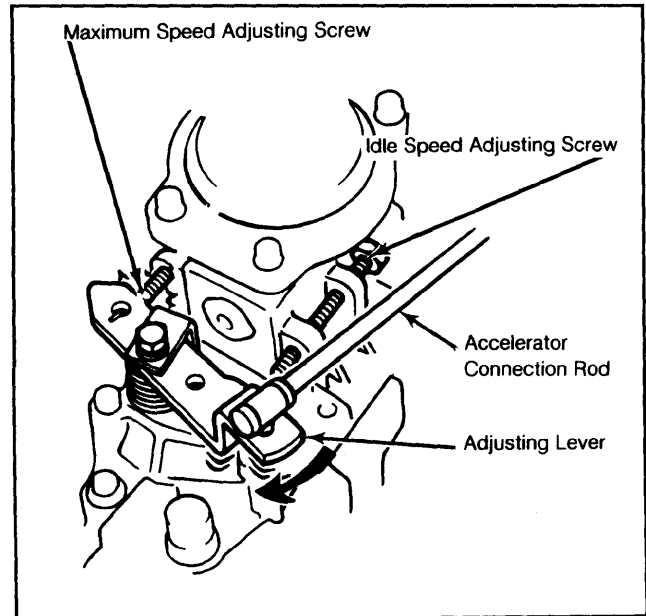
2) Remove wire seal on maximum speed adjusting screw, if seal is present. Using special socket tool (09275-54020) or equivalent, loosen lock nut on adjusting screw and adjust maximum speed by turning adjusting screw. See Fig. 3.

3) Install accelerator connection rod and adjust so there is no slack in accelerator cable. Fully depress accelerator pedal, checking to see that adjusting lever is stopped by maximum speed adjusting screw. Adjust accelerator pedal with the stop bolt.

**NOTE:** Be sure engine speed increases when idle adjusting knob is pulled out and turned clockwise and returns to idle when turned fully counterclockwise.

4) Tighten lock nut at adjusting screw, and remove tachometer.

Fig. 3: Idle Speed and Maximum Speed Adjusting Screws



### MAXIMUM SPEED SPECIFICATIONS

Application	Maximum RPM
All Models .....	4900

## GENERAL SERVICING

### FUEL SYSTEM

#### FUEL INJECTION

All Models use KIKI-Bosch mechanical pump-type fuel injection.

### ELECTRICAL

#### BATTERY

#### BATTERY SPECIFICATIONS

Application	Amp. Hr. Rating
All Models .....	65

#### STARTER

All models are equipped with Bosch starters.

#### ALTERNATORS

All models are equipped with Bosch alternators.

#### ALTERNATOR SPECIFICATIONS

Application	Rated Amp. Output
All Models .....	55

#### ALTERNATOR REGULATOR

All models use Bosch regulator which is integral with alternator.

#### REGULATOR OPERATING VOLTAGE@68°F (20°C)

Application	Voltage
All Models .....	13.8-14.4

### SERVICE SPECIFICATIONS

#### BELT ADJUSTMENT

#### Lbs. (Kg) of Tension Using Strand Tension Gauge

Application	New Belt	Used Belt
Drive Belt .....	125 (57)	80 (36)

#### REPLACEMENT INTERVALS

Component	Miles
Oil Filter .....	3750
Air Filter .....	30,000
Fuel Filter .....	30,000

#### FLUID CAPACITIES

Application	Quantity
Crankcase (Includes Filter) .....	6.1 qts. (5.8L)
Cooling System .....	11.1 qts. (10.5L)
Man. Trans. (SAE 80W-90) .....	4.0 pts. (1.9L)
Differential (SAE 90W) .....	4.0 pts. (1.9L)
Fuel Tank .....	16.0 gals. (60.5L)