TUNE-UP

Diesel Pickup

ENGINE IDENTIFICATION

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

Engine Code

Application	Code
All Models	LN40

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 Pressure Specifications①

Application	Pressure psi (kg/cm²)
Normal (New Engine)	427 (30)
Minimum	284 (20)
Maximum Variation	71 (5)

① – With engine warm.

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 Specifications①

Application	Intake In. (mm)	Exhaust In. (mm)
All Models	.010 (25)	.014 (36)

① – With engine warm.

VALVE ARRANGEMENT

All Models – E-I-E-I-E-I-E-I

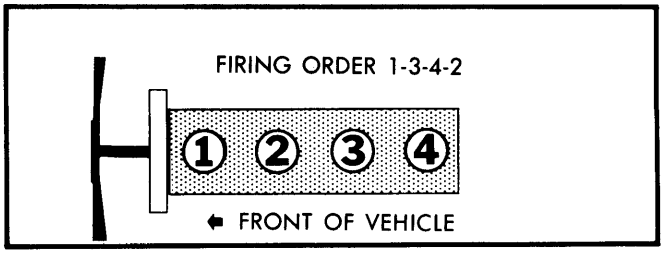

Fig. 1 Diesel Firing Order Illustration

IDLE SPEED ADJUSTMENT

1) With engine at normal operating temperature, air cleaner installed, all accessories off, and transmission in neutral, turn idle adjusting knob counterclockwise. Be sure that it 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

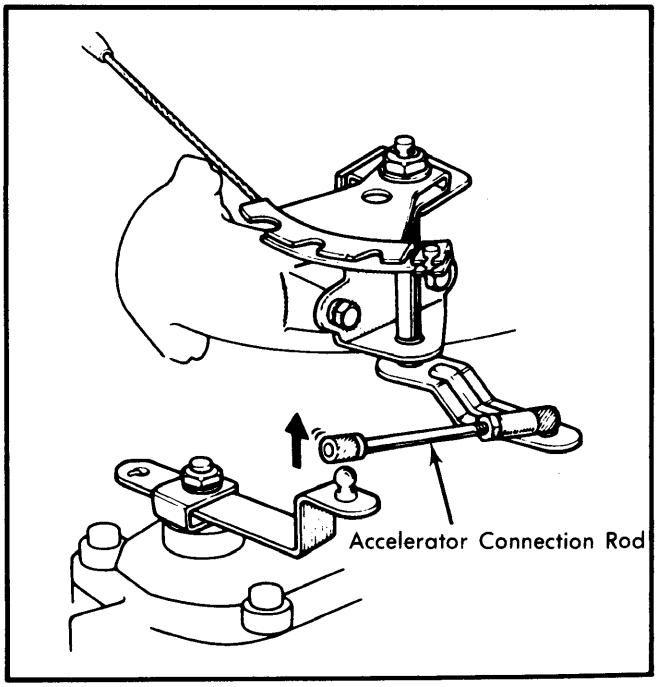

Fig. 2 Accelerator Connection Rod Removal

TUNE-UP (Cont.)

MAXIMUM SPEED ADJUSTMENT

1) Install tachometer and run engine until normal operating temperature is obtained. Remove accelerator 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 appropriate tool (09275-54020), 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.

Maximum Speed Specifications

Application	Maximum RPM
All Models	4900

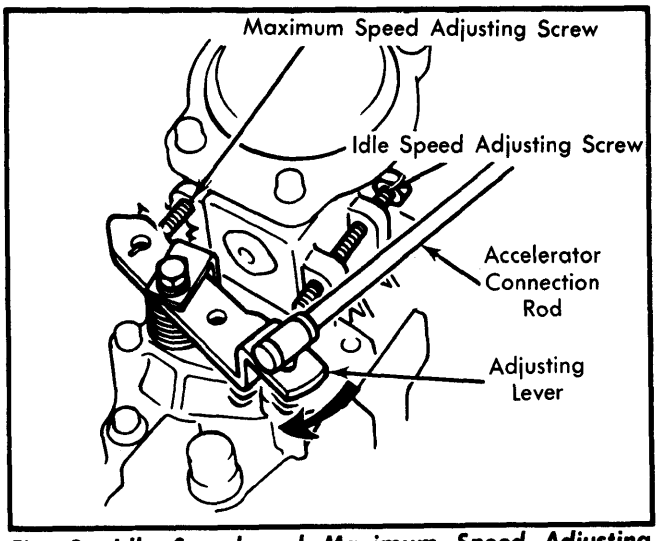

Fig. 3 Idle Speed and Maximum Speed Adjusting Screws

GENERAL SERVICING

FUEL SYSTEM

FUEL INJECTION

All Models use KIKI-Bosch mechanical fuel injection.

ELECTRICAL

BATTERY

All models use 2-12 volt batteries located under engine hood.

STARTER

All models are equipped with Bosch Starters.

ALTERNATOR

Application	Rated Amp. Output
All Models	55

ALTERNATOR REGULATOR

All models use Bosch regulator which is integral with alternator. Operating voltage is 13.8-14.4 volts.

BELT ADJUSTMENT

Tension (Lbs.) Using Strand Tension Gauge

Application	New Belt	Used Belt
Drive Belt	100-150	60-100

FILTERS

Filter	Service Interval (Miles)
Oil Filter	Replace every 3750
Air Filter	Replace every 30,000
Fuel Filter	Replace every 30,000

CAPACITIES

Application	Quantity
Crankcase (Includes Filter)	6.1 qts.
Cooling System	11.1 qts.
Man. Trans. (SAE 80W-90)	4.0 pts.
Differential (SAE 90W)	4.0 pts.
Fuel Tank	16.1 gals.