



Revision
01/24/19

(85-95) 22R/22RE NEW Cylinder Head
(Part #1021024 & #1021027)

Thank you for purchasing one of LC Engineering's performance cylinder heads. The head you have purchase is hand built by our technicians from all new components.

These instructions are intended to aid a professional mechanic in the installation of the cylinder head. If you do not feel competent in doing the installation yourself, seek the assistance of a professional. If you have any questions, contact our technical department at 520-505-2501. 12:00 - 5:00pm M-F.

Refer to your Toyota technical manual for additional information on installation procedures. Please read and follow these guidelines closely.

Preparing the Head. Install the new exhaust studs in the cylinder head using a small amount of medium strength thread lock on each stud during assembly. Remove and install the intake studs from your old cylinder head as necessary. Install the camshaft using assembly lube on all new camshafts. Torque cam bearing cap bolts to 12 lbs.

Installing the Head. Remove all old gasket material and clean block surface. Install head gasket using a small amount of silicon at the block and timing cover mating location. Pre-lube cam lobes with assembly lube before installing the rocker assembly. Install head, rocker assembly, intake manifold, carburetor (EFI Intake), exhaust manifold, etc. per factory recommendations. Follow factory torque specifications.

Install Spark Plugs. Proper spark plug installation is important. Use a small amount of anti seize on the threads. For 14mm x .750 reach plugs, torque to 18-22 ft lbs. or 3/8" to 1/2" of a turn after the plug seats. Do not over tighten.

Ground Strap. Make sure you install the ground strap on the back of the cylinder head to the firewall. Failure to hook up this ground strap could cause electrolysis, damaging the cylinder head. **Electrolysis damage will not be covered under warranty.**

Install Distributor. Set ignition timing to factory recommendations. Double check your ignition wiring and firing order (Firing Order 1-3-4-2). Improper ignition timing can damage your engine. Set the timing carefully.

Note: When setting timing on an EFI engine, you have to jump the terminal in the diagnostic box. Follow Toyota Factory shop manual for procedure.

Coolant. Fill cooling system with the proper amount of coolant. Do not start engine with low coolant in the system. Excessive heat build-up could result, damaging your new cylinder head.

Cam Card and Valve Adjustment. If you purchased a new cam with this cylinder head, the Cam Card will be included with this packet of instructions. Keep this cam card. It contains information on the camshaft timing and valve lash requirements for that camshaft.



For new camshafts, follow the camshaft break-in procedure detailed on the Cam Card. Failure to break-in the camshaft could result in pre-mature cam failure.

On Street Performer engines and camshafts, lash valves as per factory recommendations. Always check valve lash with the engine hot. Valve lash should be checked after initial engine break-in at 500 miles. Check valve lash again at 5000 miles. Then follow factory recommendations.

Torque Guide

Intake Manifold Bolts	14	Exhaust Studs	33
Camshaft Bearing Cap Bolts	14	Camshaft Timing Gear Bolt	58
Cylinder Head Bolts - Stock	62	LC Cylinder Head Studs	90

FOR TECHNICAL ASSISTANCE PLEASE CALL 928-505-2501