



Revision
12/20/10

2RZ/3RZ Crankshaft Underdrive Pulley – Part # 1016107

LC Engineering strongly recommends that a qualified technician or individual with strong mechanical skills perform this installation.

- Remove lower skid plate if your vehicle has one
- Remove fan shroud
 - This may require removal of upper radiator hose in some models if so drain just enough coolant from radiator to remove hose without leaking coolant.
- Loosen the nuts holding the fan to the water pump while the belts are still tight (this will help to keep the fan from turning). Do not remove nuts completely yet.
- Remove all belts. Be sure to remember which belt goes where.
- Remove crank pulley bolt and remove crank pulley. You may have to remove the radiator in order to get a puller on the pulley if it is tight coming off.
- Clean around the crankshaft snout and surrounding areas. **We recommend replacing the front seal at this point.**
- Install new pulley by inserting it onto the crankshaft snout and rotating the pulley until it seats in fully. Be sure to seat the pulley in completely, it will usually seat in part way while rotating then as you keep rotating it the pulley will seat in the rest of the way.
- Torque front crank pulley bolt to factory spec (193 ft lbs). You may have to put vehicle in gear and set emergency brake to keep the engine from rotating while doing this. You could also have an assistant hold a long screwdriver or pry bar in the u-joint to hold it from rotating.
- Install belts back on to new pulley – do not tighten belts yet.
 - **NOTE** – On some models it may be necessary to change belt sizes. Due to the various belt configurations LCE does not know what belts all applications will need to use. In test fitting this pulley on a 1995 3rz Tacoma 4x4 LCE found that 2 of the stock belts could be retained and one needed to be shorter but we used shorter belts on all three to obtain more adjustability.
- Install fan and tighten belts.
- Install fan shroud
- Install upper radiator hose and top off with coolant as needed.
- Install lower skid plate.
- Be sure to inspect all belts for proper alignment prior to initial start-up.
- Start vehicle and check for any coolant leaks.
- **ENJOY YOUR NEW LC ENGINEERING UNDERDRIVE PULLEY!!**