



**IMPORTANT SERVICE  
INFORMATION FOR:**

- ✓ SERVICE MANAGER
- ✓ SERVICE ADVISOR
- ✓ TECHNICIAN
- ✓ PARTS DEPARTMENT
- ✓ WARRANTY PERSONNEL

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GROUP:  
**ENGINE**

## REPLACEMENT LONG BLOCKS & INSTALLATION TIPS

### AFFECTED VEHICLES

- 2012 - 2020MY Isuzu N-Series Vehicles  
Equipped with 6.0L Gasoline or RPO KL8 Alternative Fuel Capable Engines
- 2022MY Isuzu N-Series Vehicles  
Equipped with 6.0L Gasoline Engines

### INFORMATION

In the past, replacement 6.0L gasoline and RPO KL8 Alternative Fuel Capable engines came as a complete assembly. These engines are now provided as long block assemblies. The new configurations do not include many of the components that were provided with or pre-installed on the complete engine assemblies previously sold as replacement parts.

**NOTE: Before installing the replacement long blocks, be sure to carefully read and understand completely all documentation included with the replacement blocks (e.g., bulletins, installation instructions, and warnings).**

The following components must be transferred from the old engine or replaced with new components as necessary:

I = Included with engine assembly

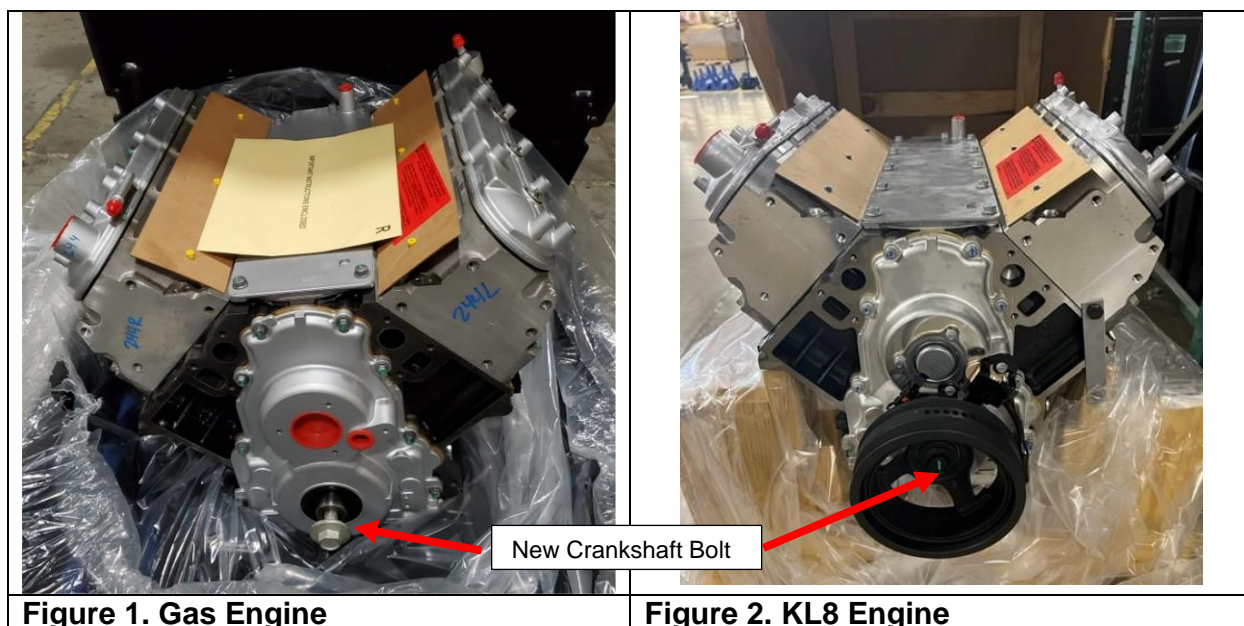
T=Transfer from original engine if undamaged and clean

R=Replace with new

Components		
	Gas	KL8
Crankshaft Pulley Bolt	I	I
Crankshaft Pulley	T	I
Crankshaft Position Sensor	T	I
Camshaft Position Sensor and Wiring Harness	T	I
Camshaft Position Actuator Magnet	T	I
Engine Oil Pressure Sensor	T	T
Engine Coolant Temperature Sensor	T	T
Knock Sensors	T	T
Oil Filler Cap	T	T
Oil Level Indicator, Indicator Tube	T	T
Water Pump	T	T
Cylinder Heads Bypass Pipe	T	T
Exhaust Manifolds	T	T

Motor Mounts	T	T
Ignition Coils, Spark Plugs and Wires	T	T
Engine Oil Filter	R	I
Intake Manifold Assembly	T	T
Fuel injectors and rail, the throttle body, the PCV hoses, attached sensors, and vacuum hoses	T	T
All drive belt driven components and brackets (e.g., cooling fan, generator, vacuum pump, power steering pump, drive belt tensioner, etc.)	T	T
The flex plate	T	T
The transmission bellhousing adapter (2022MY Only)	T	T
Oil Pan and oil pickup/screen *	T	T
Gaskets, all	R	R

**\*NOTE: If the old oil pan, oil pickup/screen assembly, or oil pan baffle are damaged or contaminated with failed engine debris that cannot be completely removed, they must be replaced with new components.**



### **Crankshaft Pulley Installation Tips**

There are specific procedures related to removing and reinstalling the crankshaft pulley. Please refer to the appropriate Workshop Manual for the detailed repair procedure. Additionally, to properly remove and reinstall the crankshaft pulley, the following essential service tools are required:

[J 45059](#) Angle Meter

[J 41816](#) Crankshaft Balancer Remover

[J 41816-2](#) Crankshaft End Protector

[J 42386-A](#) Flywheel Holding Tool

[J 41665](#) Crankshaft Balancer and Sprocket Installer

[J 41478](#) Crankshaft Front Oil Seal Installer

Essential service tools may be purchased from [isuzutrucks.service-solutions.com](http://isuzutrucks.service-solutions.com).

### **Serial Number Locations**

Refer to Figures 3 and 4 for the locations of the replacement Engine Serial Number (ESN).

For all 6.0L (gasoline and KL8) engines the ESN must be programmed into the ECM.



Figure 3. Gas Only

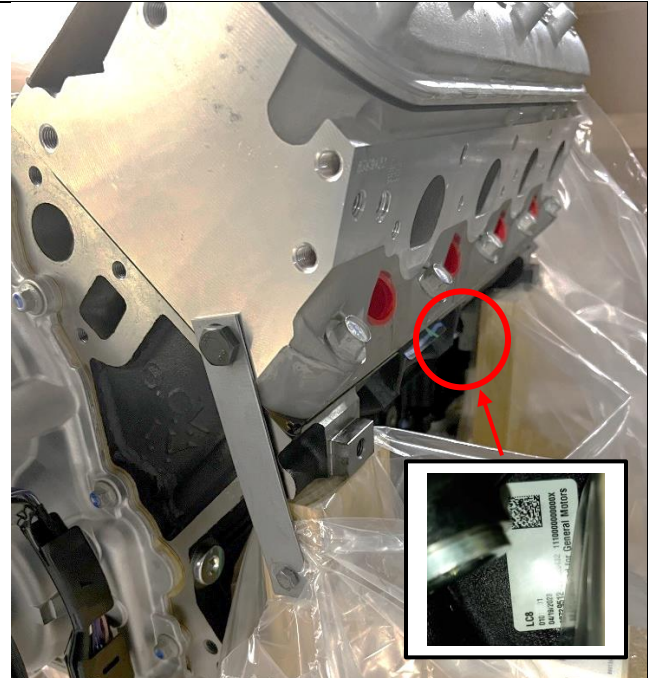


Figure 4. KL8

**Note:** for replacement KL8 engines, the ESN can be found on labels on the oil pan and on the cylinder head and also on a label on the packaging material for the new engine.

### PARTS INFORMATION

Part Number	Description	Application
8-12729-512-0	ENGINE ASM; GAS 6.0L	2012-2020MY NPR/NPRHD with 6.0L RPO KL8 'Alternative Fuel Capable' option
8-19260-746-0	ENGINE ASM; GAS 6.0L	2012-2020MY NPR/NPRHD 6.0L without RPO KL8 'Alternative Fuel Capable' option 2022 6.0L NQR/NRR GAS