

Tech Guide

Toyota 1UR-FE TVS1900 Supercharger



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Harrop Supercharger Kit – Toyota 1UR-FE 4.6L V8 (Land-Cruiser 200 MY2012)



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Harrop engineering develops and manufactures premium supercharger kits in Melbourne, Australia. Through 65 years of automotive performance Engineering, Harrop Engineering have successfully manufactured and supplied Superchargers to Automotive OEM programmes including TRD, Lotus Cars and Ford Australia.

Harrop Engineering is certified to meet ISO 9001 standards of quality. OEM Quality, performance and vehicle integration are the fundamental foundation of Harrop Supercharger System.

Overview:

Harrop TVS1900 Supercharger Tuner Kit for Toyota 1UR-FE V8 engines found in the LC200. This kit has passed Australian IM240 emissions testing when installed on a MY2012 Landcruiser.

Note that this is a Tuner kit with no calibration provided and is not compatible with North American 1UR-FE V8 vehicles fitted with the EGR cooler in the valley on the engine.

Tuner kit includes all components required for installation into Toyota LC200 vehicles with 4.6L V8 Engines.

- Supercharger intake manifold including charge-air intercooler
- Harrop TVS1900 FDFI Supercharger with RH inlet cover – Toyota Throttle bolt pattern
- 8PK FEAD idler bracket, Coolant cross-over pipe, 8PK Supercharger drive belt
- Plug-in wiring looms for all necessary ancillaries – Intercooler pump loom
- Front-mount intercooler radiator, Electric Intercooler pump, Coolant Reservoir and moulded hoses
- Interfaces with OE throttle body including, FEAD and Air-box.
- Retains all factory ancillaries including A/C, Viscous engine fan, Power Steering, etc.
- Detailed installation instructions

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Technical specifications:

- Eaton TVS1900 Supercharger Technology.
- Integrated Supercharger Bypass system which relieves boost under light load conditions, reducing drive loss and improving fuel economy
- High density water to air intercooler system:
 - Front mount heat exchanger: Close pitch core matrix at 27mm thick. Overall size is 540x292mm
 - In-manifold intercooler: High density fin at 36mm thick.
- Kit Includes \varnothing 75mm Supercharger pulley.
- Minimum 98-RON (93-AKI) fuel must be used.
- Re-calibration of the ECU is required.
- Kit excludes ECU calibration file or support. Please enquire with your workshop/tuner on availability and capability of tuning prior to purchase.

Supercharger Pulley \varnothing	Harrop part number	Supercharger Belt
75	99-PLY14971	8PK2910

Performance:

- **Power and Torque gains of around 30-40% are typical for the standard TVS1900 kit, with a boost pressure of 8.0 psi with \varnothing 75 Drive Pulley.**
- OE power was measured at 155 kW (208 hp) @5200 RPM and 350 Nm (258 lbf-ft) @3800 RPM

Landcruiser 200 series MY2012 Harrop TVS1900			
Boost	Pulley \varnothing mm	Wheel Power kW (hp)	Wheel Torque Nm (lbf-ft)
8 PSI*	75	240 (321)	465 (343)

*Boost pressure can vary 1.0-1.5 PSI depending on ambient conditions and other modifications

Variants:

Harrop Part Number	Toyota LC200 - 1UR-FE 4.6L V8
99-KSM57K39	S/Chrg Kit FDFI1900 Toyota 1UR

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