

### HARROP TVS2300 SUPERCHARGER KIT

RAM HEMI 5.7L V8 with eTorque  
(RAM 1500 LARAMIE, LARAMIE SPORT and LIMITED)



ENGINEERING PERFORMANCE SINCE 1955

### Harrop Supercharger kit – RAM HEMI 5.7L V8 with eTorque

Harrop Engineering develops and manufactures premium supercharger kits for customers globally. Since 1955 Harrop have successfully designed and manufactured components for OEM's, Motorsport Teams, Car Builders and Enthusiasts. Harrop Engineering Australia and USA is certified to ISO 9001 standards with superior quality, performance and vehicle integration the foundation of Harrop Performance Products.

#### Overview:

Harrop TVS2300 FDFI Supercharger Tuner Kit for RAM HEMI 5.7L V8 engines equipped with eTorque mild hybrid technology.

Tuner kit includes all components required for installation into RAM 1500 trucks with 5.7L V8 Engines equipped with eTorque mild hybrid technology.

- Supercharger intake manifold
- Harrop TVS2300 FDFI Supercharger with RH inlet cover – RAM Throttle bolt pattern
- eTorque relocation brackets
- 8PK Supercharger drive belt
- Replacement high flow injectors – Bosch 650cc
- Plug-in wiring looms for all necessary engine sensors – IAT breakout from MAF sensor, Throttle loom extension and Intercooler pump loom
- Front-mount intercooler radiator, Electric Intercooler pump, Coolant Reservoir and moulded hoses
- PCV system including catch can.
- Interfaces with OE throttle body, FEAD and Air-box.
- Retains all factory ancillaries including A/C, Viscous engine fan, Power Steering, etc.
- Detailed installation instructions.
- The average installation time for an experienced installer is 5-6 hours.

### Technical specifications:

- Eaton TVS2300 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 28mm thick. Overall size is 539x420mm
  - In-manifold intercooler: Close pitch dual pass core with high density fin at 55mm thick
- Kit Includes Ø100mm Supercharger pulley – 8PK.
- Minimum 98-RON (93-AKI) fuel must be used.
- Re-calibration of the ECU is required.

| Supercharger Pulley Ø | Harrop part number | Supercharger Belt |
|-----------------------|--------------------|-------------------|
| 100                   | 99-PLY16090        | 8PK2220           |

### Performance:

Over 50% gains in Engine Power and Torque are achievable with 5-PSI boost while maintaining the OE RPM limit, depending on Calibration and other modifications such as Exhaust system and Airbox/snorkel.

The Harrop TVS2300 Supercharger is proven to be capable of producing over 1000hp with further supporting modifications including suitable intake and throttle, supercharger drive, built engine, fuel, exhaust and custom calibration.

Note: Please note that all performance results – unless stated otherwise - are measured on Harrop Engineering's in-house Hub Dynamometer. Results may vary depending on vehicle type, condition and performance upgrade. All dynamometers are different and cannot be compared.

| RAM 1500 Laramie with eTorque  <br>Harrop TVS2300 |             |                     |                          |
|---|-------------|---------------------|--------------------------|
| Boost   | Pulley Ø mm | Wheel Power kW (hp) | Wheel Torque Nm (lbf-ft) |
| 0 (STOCK)   | -           | 226(308)            | 392(289)                 |
| 5 PSI*  | 100         | 358(480)            | 622(459)                 |

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

Boost upgrade kit is available

Watch Supercharged RAM 1500 with eTorque on the Harrop Hub Dyno:

<https://youtu.be/W-t4CT3wnho>

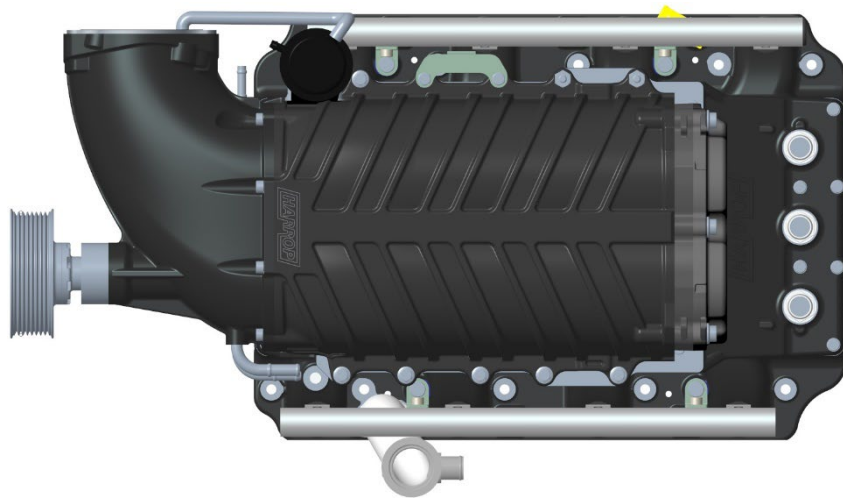
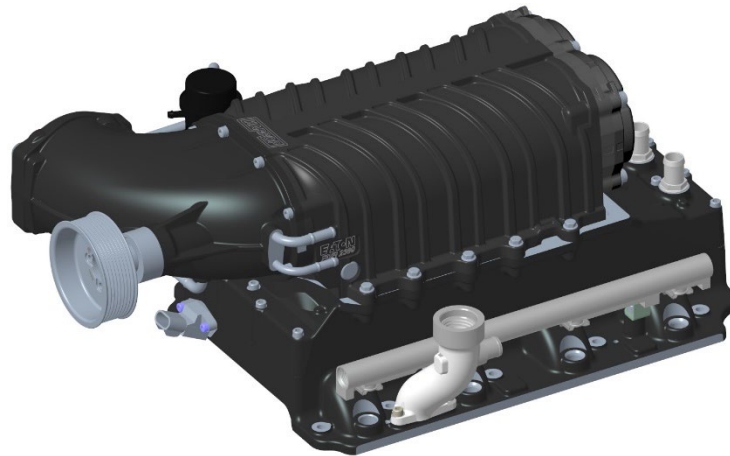
# Tech Guide

## RAM 1500 5.7L eTorque Supercharger Kit



Variants:

| Harrop Part Number | Harrop Supercharger kit – RAM HEMI 5.7L V8 with eTorque |
|--------------------|---|
| 99-KSM79K56        | FDI2300 Supercharger kit – RAM 1500 with eTorque        |



Harrop TVS2300 HEMI 5.7L with eTorque Supercharger Manifold Assembly

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### Calibration of RAM HEMI 5.7L V8 Engine ECU for Harrop Supercharged engines

Before commencing installation, the following process must be completed in order to gain access to the ECU:

1. Install a smart access cable to the vehicle, available at:  
<https://www.hptuners.com/product/dodge-2018-smart-access-cable/>
2. Read and save the original file from the ECU using HP Tuners software
3. Send the Vehicle's ECU to HP Tuners for modification. Refer to:  
<https://www.hptuners.com/product/pcm-modification-service/>
4. Once the ECU has been modified and returned, re-install it to the vehicle and commence the Supercharger installation.