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› Comp Cams HRT Stage 3 Camshaft User Manual for '09+ Dodge 5.7L/6.4L HEMI (Model 201-305-17)

Comp Cams 201-305-17

Comp Cams HRT Stage 3 Camshaft User Manual

Model: 201-305-17

1. PRODUCT OVERVIEW

This manual provides essential information for the installation, operation, and maintenance of your Comp Cams HRT Camshaft. Please read this manual thoroughly before proceeding with any installation or operation.

The Comp Cams HRT (Hydraulic Roller Tappet) Camshaft, specifically the Stage 3 for '09+ 5.7L/6.4L HEMI engines, is engineered to maximize horsepower by leveraging the high-lift airflow capabilities of Gen IV cylinder heads. It is designed for optimal performance within the 3000-7000 RPM range, with LST lobe profiles and compatible valve springs allowing for higher RPMs.

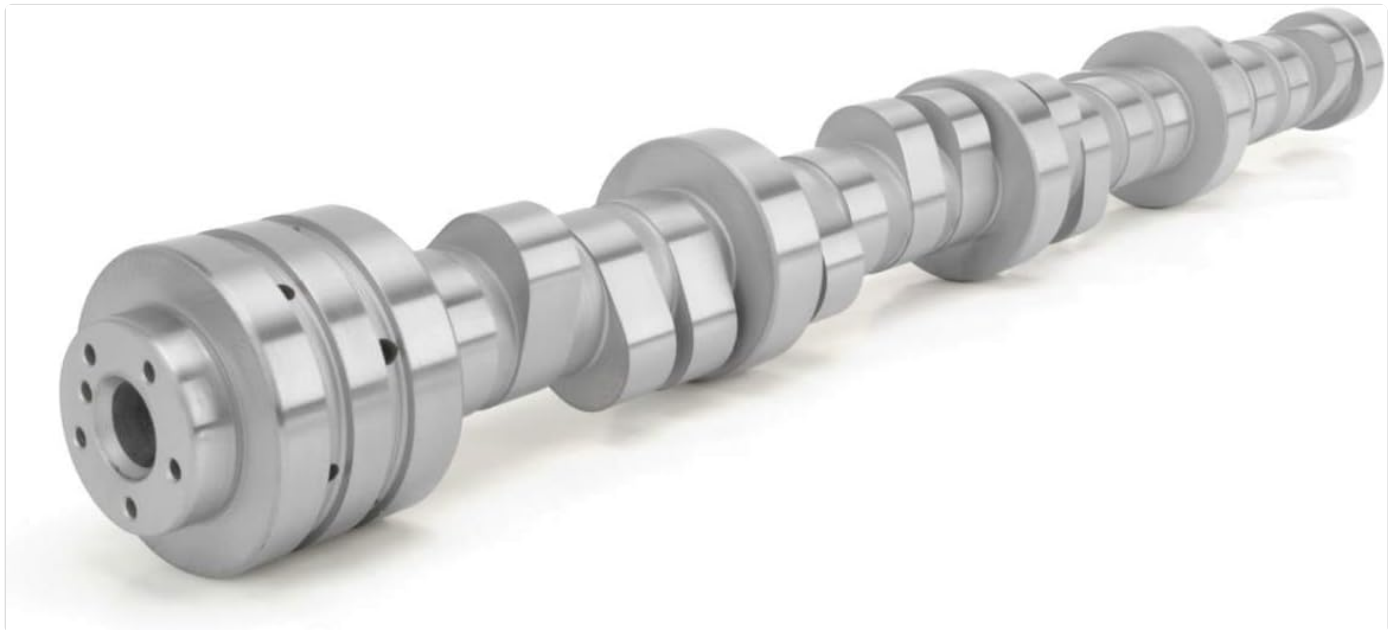


Figure 1: The Comp Cams HRT Camshaft (Model 201-305-17). This image displays the precision-machined camshaft, highlighting its various lobes and journals designed for optimal engine performance.

2. PACKAGE CONTENTS

Upon opening the package, verify that all components are present and undamaged. The standard package for this product includes:

- 1 x Comp Cams HRT Camshaft (Model 201-305-17)

For comprehensive installation, additional components such as phaser limiters, pushrods, valve springs, retainers, locks, seats, and seals may be required. Comp Cams offers CK/MK Kits that include these necessary parts for a complete installation.

3. INSTALLATION AND SETUP

Installation of a performance camshaft requires advanced mechanical knowledge and specialized tools. It is highly recommended that installation be performed by a certified professional. Improper installation can lead to severe engine damage and void product warranty.

3.1 Pre-Installation Checks

- Ensure the engine is at room temperature.
- Verify compatibility with your specific engine model (09'+ 5.7L/6.4L HEMI).
- Inspect the camshaft for any shipping damage or manufacturing defects.
- Gather all necessary tools and supplementary components (e.g., new lifters, pushrods, valve springs, timing chain).

3.2 Installation Procedure (Summary)

This is a generalized overview. Refer to a detailed service manual for your specific vehicle for precise steps.

1. Disconnect the battery and drain engine fluids.
2. Remove necessary engine components to access the camshaft (e.g., intake manifold, valve covers, timing cover, cylinder heads if required).
3. Remove the old camshaft and lifters.
4. Lubricate the new Comp Cams HRT Camshaft with appropriate camshaft lubricant.
5. Carefully install the new camshaft, ensuring proper alignment and avoiding damage to bearings.
6. Install new lifters, pushrods, and valve springs as required.
7. Reassemble engine components, ensuring all fasteners are torqued to manufacturer specifications.
8. Refill engine fluids and reconnect the battery.

3.3 Post-Installation Break-in

A proper break-in procedure is crucial for the longevity and performance of your new camshaft. Follow the camshaft manufacturer's recommended break-in guidelines, which typically involve running the engine at varying RPMs (above idle) for a specified period to ensure proper lobe and lifter seating.

4. OPERATING CHARACTERISTICS

The Comp Cams HRT Stage 3 camshaft is designed to deliver significant performance gains, particularly in the mid to high RPM range (3000-7000 RPM). Users may notice a more aggressive idle and increased engine responsiveness.

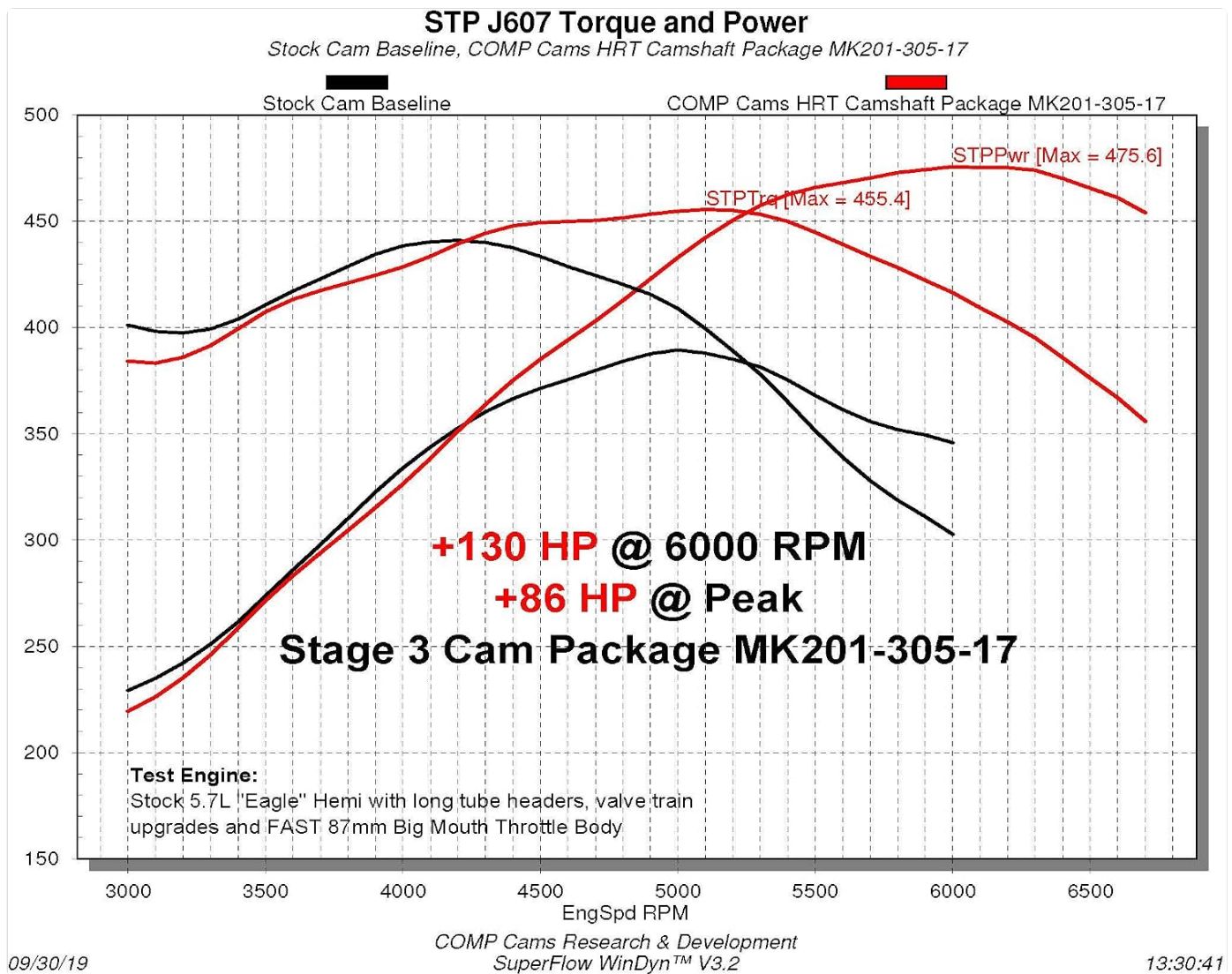


Figure 2: Dyno chart illustrating the performance gains of the Comp Cams HRT Camshaft (MK201-305-17) compared to stock. This graph shows significant increases in both horsepower and torque across the RPM range, with peak gains of +130 HP at 6000 RPM and +86 HP at peak.

Engine tuning may be required after camshaft installation to optimize performance and ensure proper engine operation. Consult with a professional tuner for best results.

5. MAINTENANCE

Proper engine maintenance is critical for the longevity of your camshaft and overall engine health. Adhere to your vehicle manufacturer's recommended service intervals.

- **Oil Changes:** Regularly change engine oil and filter using high-quality lubricants as specified by your engine manufacturer.
- **Valve Train Inspection:** Periodically inspect valve train components (lifters, pushrods, rocker arms) for wear or damage.
- **Engine Tuning:** Ensure engine tuning remains optimized for the camshaft to prevent excessive wear or stress on components.

6. TROUBLESHOOTING

If you experience issues after camshaft installation, consider the following common troubleshooting steps. For complex issues, consult a qualified mechanic.

Symptom	Possible Cause	Solution
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Symptom	Possible Cause	Solution
Rough Idle / Stalling	Improper engine tuning; vacuum leak; incorrect camshaft timing.	Perform engine re-tune; check for vacuum leaks; verify camshaft timing.
Reduced Performance	Insufficient fuel delivery; ignition issues; incorrect valve spring pressure.	Check fuel system; inspect ignition components; verify valve spring specifications.
Unusual Noises (e.g., ticking)	Improper lifter preload; worn lifters or rocker arms; insufficient oil pressure.	Adjust lifter preload; inspect and replace worn components; check oil pressure.

7. SPECIFICATIONS

Attribute	Detail
Brand	Comp Cams
Model	HRT Stage 3 Cam for '09+ 5.7/6.4L HEMI
Item Model Number	201-305-17
Manufacturer Part Number	201-305-17
OEM Part Number	53022372AA
Item Weight	10.63 pounds
Product Dimensions	2.76 x 1.97 x 2.76 inches
Country of Origin	USA
Exterior Finish	Machined

Note: Specifications are subject to change without notice.

8. WARRANTY AND SUPPORT

Comp Cams products are manufactured to high standards. For specific warranty information and terms, please refer to the official Comp Cams website or contact their customer support directly. Keep your purchase receipt as proof of purchase.

Contact Information:

- **Manufacturer:** COMP Cams
- **Website:** www.compcams.com (Example link, actual link not provided in data)
- **Support:** Refer to manufacturer's website for contact details and technical support.

Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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This manual is for informational purposes only. Always consult a qualified professional for installation and service.

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Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question