

BTR GEN III & IV LS TRUCK CAM - STAGE 1 - V3 - BTR-LSTRUCKSTG1-V3

Specs: 201/21X, .542"/.542", 111 LSA

INTAKE LOBE LIFT @ TDC: 0.0284"

The new BTR V3 Truck Camshafts are the result of our most extensive truck cam development program ever, delivering more average torque and horsepower under the curve—perfect for trucks that need strong midrange performance & enhanced towing capability.

These cams use advanced valvetrain simulation and dynamic modeling tools, with [Spintron](#) development on both square and cathedral port heads to guarantee reliable, stable valvetrain performance across all possible platforms.

Next, we use engine and chassis dyno testing, using full-length truck single and dual exhaust systems and OEM-style intakes. High-speed exhaust and intake port sensors and in-cylinder combustion pressure measurements on the dyno give feedback on pressure wave dynamics in real time. We perform hundreds of dyno runs to fine-tune cam timing, valve overlap, and exhaust scavenging, maximizing torque and efficiency across the RPM range.

These “Truck” cams receive the same engineering rigor and combustion development as our race programs. **No old catalog lobes!** Our goal was a clean-sheet design to bring true motorsport-level engineering discipline to the street and towing world, using the same high-end analytical tools, Spintron lobe development techniques, and wave-based combustion tuning methodologies trusted in professional racing. [Plus, you're getting a 100% USA-designed & made product!](#)

BTR SKU:

BTR-LSTRUCKSTG1-V3

Camshaft Description:
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BTR LS TRUCK V3 STAGE

Engine Family:

GEN III & IV LS Applications

Recommended Engine Size:

4.8-6.2L

Recommended Valve Springs:

BTR-SK018, SP011-16

NOTE: IF YOU HAVE A 6.0 OR 6.2 TRUCK ENGINE WITH SQUARE PORT HEADS, THE BTR-SK018 SPRING KIT IS RECOMMENDED.

Recommended Lifters/Lifter Trays: **(LS7 Lifters) X12499225, (Trays) BTR95365-4**

Suggested Pushrod Length: **7.400"**

INTAKE DURATION @.050": **201°**

EXHAUST DURATION @.050": **21X°**

LOBE LIFT INTAKE: **0.319"**

LOBE LIFT EXHAUST: **0.319"**

INTAKE LOBE LIFT @ T.D.C.: **0.0284"**

ROCKER ARM RATIO: **1.7:1**

NET LIFT INTAKE: **0.542"**

NET LIFT EXHAUST: **0.542"**

LOBE SEPARATION ANGLE: **111°**

EXPECTED IDLE VAC 750RPM: **32 (kpa)**

RPM Operating Range: **1200-6000**

Idle Quality: **Minimal change in idle quality from stock**

Chop Scale: **1/10**

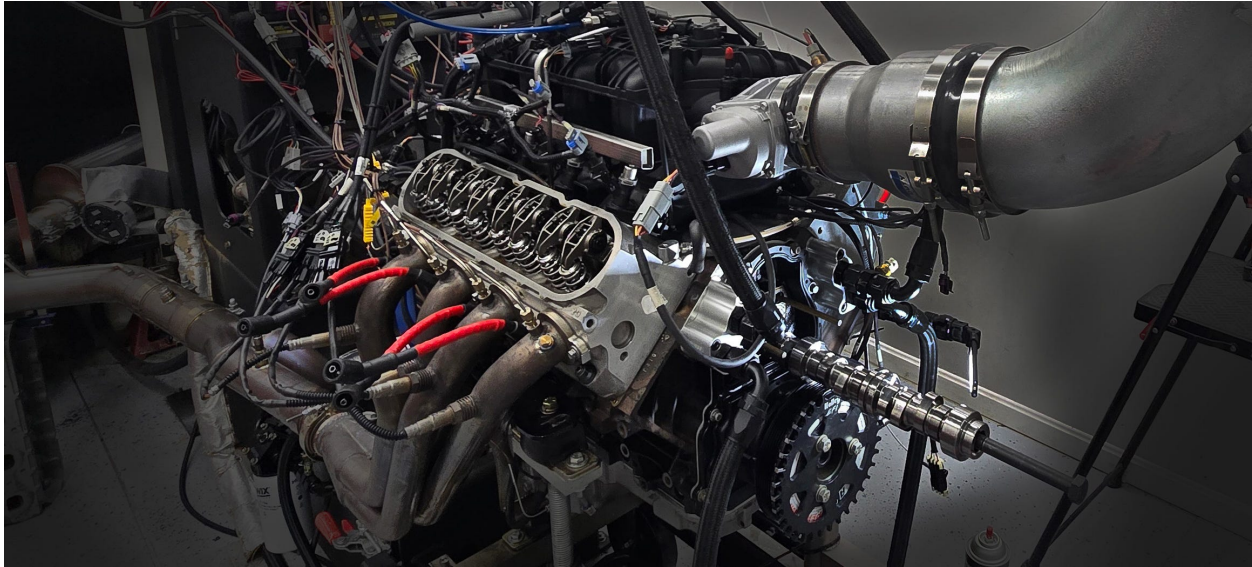
Expected Cam Swap Gains (P2P): **41+ Horsepower, 19+ lb/ft, extra**

Torque Converter Characteristics: **Works well with factory converters!**

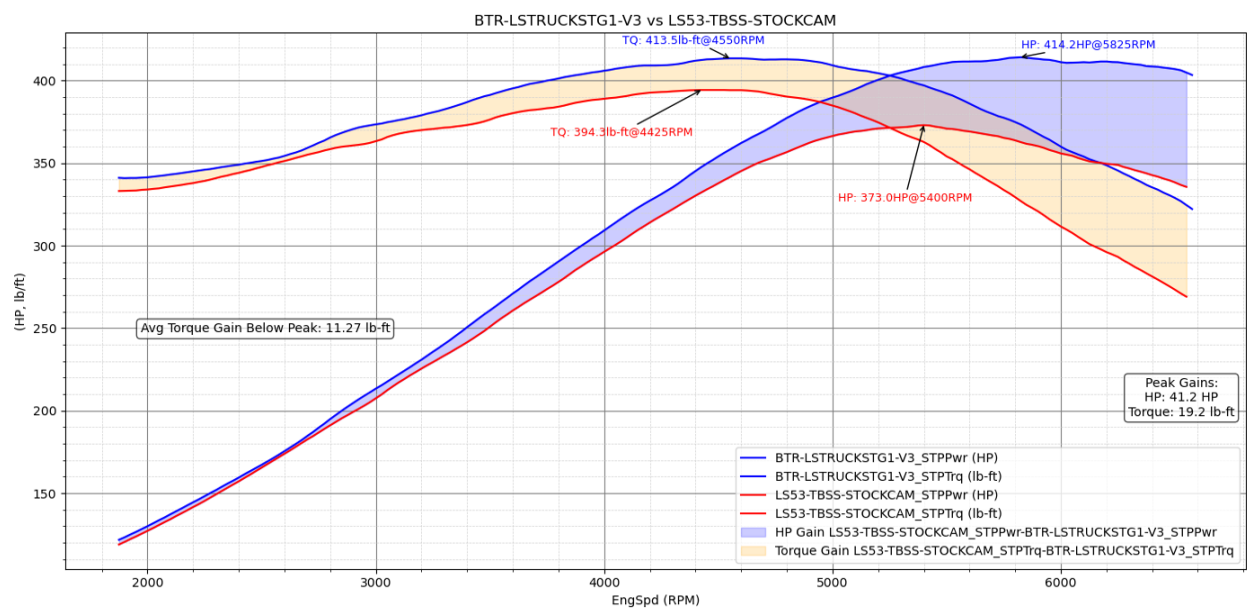
'Drivability': **Stock Drivability with added Torque**
Everywhere

DYNO TESTING CONFIGURATION:

Dyno data collected with stock GEN IV 5.3L short block with stock 243 heads, BTR98544 head gaskets, TBSS Intake, Silverado Headers, and Speed Engineering NNBS Y-Pipe, and full-length 3.5" Single Exhaust with Muffler.



COMPARING CAMS: BTR Stage 1 V3 Truck Cam to OEM 5.3 Truck Cam



PEAK TO PEAK GAINS: BTR-LSTRUCKSTG1-V3 TO OE CAM

HORSEPOWER GAIN PEAK-PEAK (HP): 41.2(HP)

HORSEPOWER % GAIN PEAK-PEAK: 11.0%

TORQUE GAIN PEAK-PEAK(lb/ft): 19.2(lb/ft)

TORQUE % GAIN PEAK-PEAK: 4.9%

AVERAGE GAINS: BTR-LSTRUCKSTG1-V3 TO OE CAM

AVG HORSEPOWER GAIN (HP): 9.4 (HP)

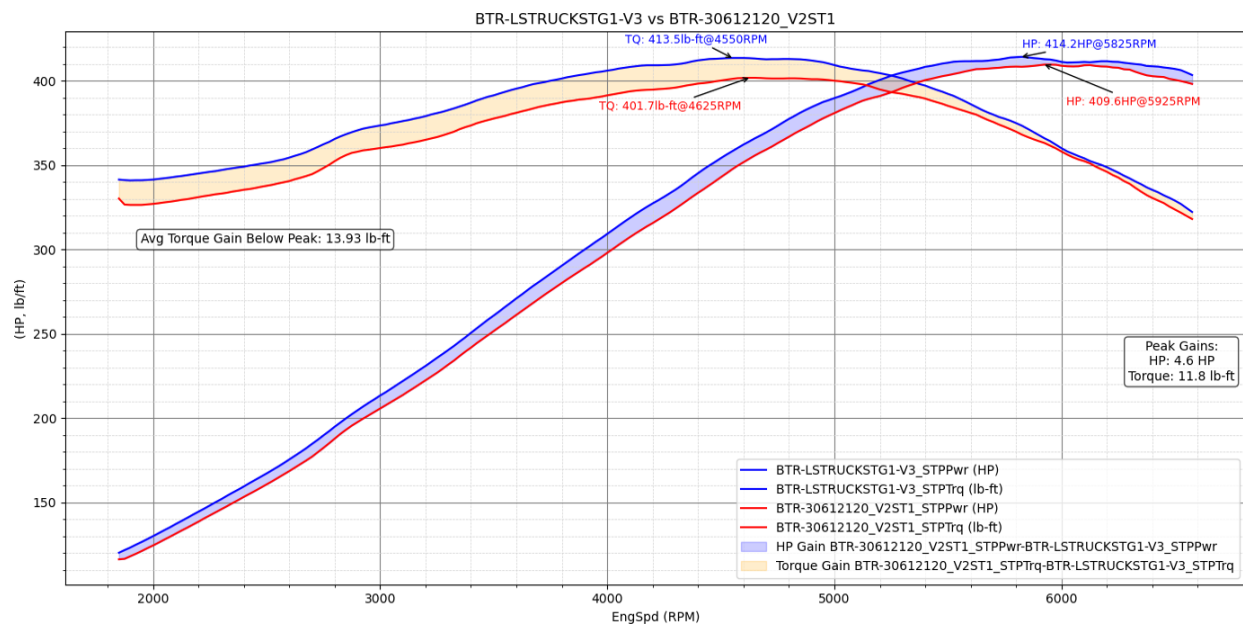
AVG HORSEPOWER % GAIN: 3.8%

AVG TORQUE GAIN (lb/ft): 12.9 (lb/ft)

AVG TORQUE % GAIN: 3.5%

RPM RANGE FOR AVERAGE: 1900-5000RPM

COMPARING CAMS: BTR Stage 1 V3 Truck Cam TO BTR Stage 1 V2 Truck Cam



PEAK TO PEAK GAINS: BTR-LSTRUCKSTG1-V3 TO BTR-30612120

HORSEPOWER GAIN PEAK-PEAK (HP): 4.6 (HP)

HORSEPOWER % GAIN PEAK-PEAK: 1.1%

TORQUE GAIN PEAK-PEAK(lb/ft): 11.8 (lb/ft)

TORQUE % GAIN PEAK-PEAK: 2.9%

AVERAGE GAINS: BTR-LSTRUCKSTG1-V3 TO BTR-30612120

AVG HORSEPOWER GAIN (HP): 8.8(HP)

AVG HORSEPOWER % GAIN: 3.6%

AVG TORQUE GAIN (lb/ft): 13.5(lb/ft)

AVG TORQUE % GAIN: 3.7%

RPM RANGE FOR AVERAGE: 1900-5000RPM

JUST FOR KICKS: BTR Stage 1 V3 Truck Cam TO BTR Truck Torque Cam

