



FREEDOM SERIES CAMSHAFTS

A premium line of camshafts engineered, tested and built in the USA for track, offroad, and vintage car swap builds



Engineered and manufactured in Fostoria, OH
Callies Performance Products · 419-435-2711 · www.callies.com

Table of Contents

Detailed Callies Camshaft Descriptions & Characteristics

LS N/A	Pages 2 - 3
LS Centrifugal	Pages 3 - 4
LS Whipple	Pages 4 - 5
LS Turbo	Pages 5 - 6
LT N/A	Page 7-8
LT Centrifugal	Page 8-9
LT Whipple	Page 9-10
LT Turbo	Page 10-11
Duramax	Page 11
6.0L Power Stroke	Page 11-12
6.7L Power Stroke	Page 12
Godzilla N/A	Page 13-14
Godzilla Centrifugal	Page 14-15
Godzilla Whipple	Page 15-16
Godzilla Turbo	Page 16
Gen III Hemi N/A	Page 17-18
Gen III Hemi Whipple	Page 18-19
Gen III Hemi Turbo	Page 19



LS N/A 210

Part #: 180-009

Specs: 210°/218° @ .050", .553"/.553" lift, 108°+3 LSA

Powerband: 1800–6000 RPM

Notes:

- Great for pick-ups or heavy cars wanting a subtle idle and strong midrange gain.
- Optimized for applications using stock converter and OEM heads.
- Very fast valve action improves cylinder filling over stock without idle instability.
- Excellent throttle response and off-idle torque.
- Works well with factory intake and exhaust manifolds or mild long-tube headers.
- **Idle Quality:** Smooth with light lope.
- **Gain vs Stock:** +25–35 HP, +20 ft-lb midrange torque.

LS N/A 214

Part #: 180-010

Specs: 214°/222° @ .050", .553"/.553" lift, 110°+3 LSA

Powerband: 2000–6200 RPM

Notes:

- Maintains near-stock manners with enhanced torque curve.
- Slightly broader overlap increases breathing efficiency.
- Ideal for 9.5–10.5:1 compression setups, 91+ octane recommended.
- Works well with short or long-tube headers and stock converter.
- **Idle Quality:** Mild performance lope, smooth cruising vacuum.
- **Gain vs Stock:** +30–40 HP, +25 ft-lb.

LS N/A 218

Part #: 180-057

Specs: 218°/226° @ .050", .553"/.553" lift, 108°+3 LSA

Powerband: 2400–6400 RPM

Notes:

- Noticeable lope at idle with aggressive exhaust tone.
- Tight 108° LSA sharpens midrange torque but trades a little idle vacuum.
- Excellent in 6.0–6.2L builds with upgraded valve springs and long-tube headers.
- Pairs well with 2600–3000 stall converter for automatic applications.
- **Idle Quality:** Distinct lope, strong response above 2,500 RPM.
- **Gain vs Stock:** +40–50 HP, +30 ft-lb at 4000 RPM.

LS N/A 227

Part #: 180-044

Specs: 227°/237° @ .050", .621"/.604" lift, 113°+4 LSA

Powerband: 2800–6800 RPM

Notes:

- Major jump in airflow capability with .620"+ lift — benefits from CNC-ported LS3 heads.
- High-efficiency lobe profile maintains valvetrain stability at high RPM.
- Excellent for 10.5:1–11.5:1 compression and high-flow intake systems.
- Responsive in the upper RPM range, yet wide LSA provides smoother transition.
- **Idle Quality:** Noticeably lopey but crisp.
- **Gain vs Stock:** +55–70 HP with supporting mods.

LS N/A 234

Part #: 180-085

Specs: 234°/242° @ .050", .626"/.626" lift, 113°+3 LSA

Powerband: 3400–7400 RPM

Notes:

- Designed for maximum high-RPM stability and extended torque curve.
 - Wide 113° LSA maintains fair vacuum and idle for its size.
 - Requires 3400+ stall (auto) or close-ratio manual trans.
 - Ideal with ported heads, free-flowing exhaust, and performance intake.
 - Excellent dynamic balance between midrange torque and upper-RPM horsepower.
 - **Idle Quality:** Aggressive but controlled, classic “strip-ready” sound.
 - **Gain vs Stock:** +65–85 HP on 6.2L with full bolt-ons.
-

LS N/A 242

Part #: 180-086

Specs: 242°/250° @ .050", .632"/.632" lift, 112°+2 LSA

Powerband: 3800–7600 RPM

Notes:

- Competition-grade camshaft for maximum RPM airflow.
- Tighter 112° LSA delivers aggressive scavenging and idle.
- Requires 3800+ stall (auto) or close-ratio manual trans.
- Works great with CNC ported LS3 heads.
- Excellent mid to upper-RPM horsepower.
- **Idle Quality:** Rough, competition-style chop.
- **Gain vs Stock:** +75–100 HP on 6.2L with ported heads and all the bolt-ons.

LS N/A 248

Part #: 180-087

Specs: 248°/256° @ .050", .629"/.629" lift, 113°+4 LSA

Powerband: 4200–7800 RPM

Notes:

- High-rpm naturally aspirated cam designed for maximum airflow and power above 4000 RPM.
 - Strong .629" lift fully utilizes high-flow aftermarket or CNC-ported LS3 heads.
 - Excellent for 10.8:1–12.0:1 compression and high-flow intake systems.
 - Requires 4000+ stall converter for automatic applications
 - **Idle Quality:** Deep, lopey, and distinctly race-inspired.
 - **Gain vs Stock:** +80–100+ HP with supporting mods.
-

LS Centrifugal 218

Part #: 180-092

Specs: 218°/230° @ .050", .553"/.553" lift, 112°+4 LSA

Powerband: 1800–6400 RPM

Notes:

- Torque-focused boost cam offering strong low-end response and broad midrange.
 - Tight 112° LSA enhances cylinder pressure under boost.
 - Ideal for mild street builds using stock converter.
 - Excellent vacuum characteristics.
 - **Idle Quality:** Clean idle for daily use.
-

LS Centrifugal 226

Part #: 180-093

Specs: 226°/238° @ .050", .600"/.600" lift, 114°+5 LSA

Powerband: 2600–6800 RPM

Notes:

- Well-balanced street/strip cam for midrange punch and efficient boost management.
 - 114°+5 LSA helps reduce overlap for stronger cylinder pressure under boost.
 - Ideal for 6–12 psi builds with ported heads and forged internals.
 - Requires 2600+ stall converter.
 - **Idle Quality:** Good idle with some lope.
-

LS Centrifugal 232

Part #: 180-056

Specs: 232°/244° @ .050", .612"/.605" lift, 115°+5 LSA

Powerband: 3200–7200 RPM

Notes:

- Designed for maximum efficiency in the 7-15 psi boost range.
- Boost Friendly wide 115° LSA improves vacuum and idle smoothness for its size.
- Requires 3200+ stall converter.
- Ideal with ported LS3/L92 heads, free-flowing exhaust, and performance intake.
- Excellent dynamic balance between midrange torque and upper-RPM horsepower.
- **Idle Quality:** High performance lope.

LS Centrifugal 238

Part #: 180-094

Specs: 238°/250° @ .050", .626"/.626" lift, 116°+5 LSA

Powerband: 3600–7600 RPM

Notes:

- Designed for street/strip builds focused on top-end horsepower.
 - Wide 116°+5 LSA minimizes overlap, increasing boost retention and efficiency.
 - Best suited for 10.0:1–11.0:1 compression and high-flow CNC-ported heads.
 - Requires 3600 stall converter.
 - Excels above 4500 RPM where boost builds aggressively.
 - **Idle Quality:** Aggressive
-

LS Whipple 222

Part #: 180-095

Specs: 222°/234° @ .050", .600"/.600" lift, 114°+4 LSA

Powerband: 1800–6400 RPM

Notes:

- Designed for instant torque response and smooth boost integration.
- 114°+4 LSA enhances low-end cylinder pressure for quick throttle and midrange pull.
- Excellent for stock bottom end 6.2L engines or mild street builds.
- Retains near-stock drivability with crisp idle and strong vacuum signal.
- Ideal for 6–9 psi boost with factory supercharger systems.
- **Idle Quality:** Decent Idle with a bit of lope.

LS Whipple 230

Part #: 180-096

Specs: 230°/242° @ .050", .600"/.600" lift, 116°+5 LSA

Powerband: 2400–6800 RPM

Notes:

- Optimized for street/strip Whipple builds targeting broad torque and clean top-end.
 - Wide 116°+5 LSA reduces overlap, increasing boost retention and efficiency.
 - Ideal with 8–12 psi boost, ported heads, and high-flow intercooler setups.
 - Smooth idle with powerful midrange surge under boost.
 - Excellent balance between street manners and race-level output.
 - **Idle Quality:** Mild performance idle.
-

LS Whipple 236

Part #: 180-097

Specs: 236°/248° @ .050", .626"/.626" lift, 117°+5 LSA

Powerband: 3000–7200 RPM

Notes:

- High-efficiency cam for advanced Whipple or TVS supercharger systems.
- 117°+5 LSA provides outstanding boost control and wide, usable torque curve.
- Thrives in 10–15 psi setups with forged internals and ported heads.
- Responsive through the midrange with strong, clean pull to redline.
- **Idle Quality:** Noticeable lope.

LS Whipple 242

Part #: 180-098

Specs: 242°/254° @ .050", .626"/.626" lift, 118°+5 LSA

Powerband: 3200–7600 RPM

Notes:

- Max-effort Whipple cam for peak power and high boost applications.
 - 118°+5 LSA minimizes overlap, maximizing boost retention and top-end airflow.
 - Designed for 10.5:1–11.5:1 compression with 12–18 psi of boost.
 - Requires strong valvetrain and high-flow induction system.
 - **Idle Quality:** aggressive, race-oriented character.
-

LS Turbo 210

Part #: 180-088

Specs: 210°/218° @ .050", .553"/.553" lift, 112.5°+3.5° LSA

Powerband: 1800–6300 RPM

Notes:

- Optimized for fast-spooling street builds.
- Tight 112.5°+3.5° LSA increases exhaust energy to help spool smaller turbos quickly.
- Excellent low- and midrange torque with strong throttle response.
- Maintains stable idle and drivability for daily-driven turbo setups.
- **Idle Quality:** Smooth with a hint of lope.

LS Turbo 220

Part #: 180-042

Specs: 220°/226° @ .050", .600"/.600" lift, 115°+4 LSA

Powerband: 2500–6800 RPM

Notes:

- Balanced design for broad power under boost with excellent drivability.
- Wider 115°+4 LSA reduces overlap for clean boost response and stable idle.
- Ideal for 5.3–6.2L street/strip combinations running 10–14 psi.
- Provides strong midrange torque while maintaining efficient top-end power.
- **Idle Quality:** Decent idle with a bit of lope.

LS Turbo 231

Part #: 180-090

Specs: 231°/239° @ .050", .612"/.602" lift, 114.5°+4 LSA

Powerband: 3200–7600 RPM

Notes:

- High-efficiency turbo cam for aggressive street/strip and race applications.
- Increased duration and lift promote airflow for larger turbine housings.
- Slightly tighter LSA improves transient response and spool under load.
- Supports 1000–1100+ HP with proper fueling and tuning.
- **Idle Quality:** Noticeable lope.

LS Turbo 226

Part #: 180-089

Specs: 226°/234° @ .050", .600"/.600" lift, 115°+4 LSA

Powerband: 2800–7200 RPM

Notes:

- Proven twin-turbo grind for 6.0–6.2L engines targeting 900+ HP.
- Maintains turbo efficiency and prevents boost bleed at higher RPM.
- Excellent combination of boost control and airflow for large-frame turbos.
- 115°+4 LSA supports smooth boost transition and stable idle.
- **Idle Quality:** Mild performance idle.

LS Turbo 236

Part #: 180-091

Specs: 236°/244° @ .050", .626"/.626" lift, 115.5°+4 LSA

Powerband: 3600–8000 RPM

Notes:

- Maximum-effort turbo camshaft for 6.0–6.2L twin-turbo race builds.
- Broad 115.5°+4 LSA ensures clean boost delivery and stable high-RPM operation.
- Designed for fully built engines with upgraded valve springs and fuel system.
- Excellent top-end power retention at 18–25 psi.
- **Idle Quality:** High performance lope.

LT N/A 210

Part #: 181-025

Specs: 210°/220° @ .050", .585"/.585" lift, 108.5°+3.5 LSA

Powerband: 1800–5600 RPM

Notes:

- Ideal “OEM-plus” upgrade for LT1/L86 engines seeking stronger low–midrange torque.
- Tight 108.5° LSA with advance boosts cylinder pressure and throttle response.
- Excellent for stock converters and daily-driven applications.
- Smooth idle with a slightly deeper tone compared to stock.
- **Power Gains vs. Stock:** ~20–30 HP with intake, headers, and tune.
- Great choice for trucks or street cars prioritizing drivability.

LT N/A 218

Part #: 181-026

Specs: 218°/230° @ .050", .585"/.585" lift, 113°+5 LSA

Powerband: 2200–6200 RPM

Notes:

- Versatile all-around N/A cam for LT1/L86 engines with bolt-ons.
- 113° LSA improves idle stability and widens the usable powerband.
- Advanced 5° for enhanced midrange torque and throttle response.
- Smooth but performance-oriented idle note; maintains strong vacuum.
- Works well with stock displacement and stock converter (or mild upgrade).
- **Power Gains vs. Stock:** ~30–45 HP with supporting intake/exhaust mods.

LT N/A 224

Part #: 181-027

Specs: 224°/238° @ .050", .630"/.639" lift, 114.5°+5.5 LSA

Powerband: 2600–6600 RPM

Notes:

- Strong mid/top-end N/A cam optimized for high-flow heads and long-tube headers.
- .630" + lift increases cylinder filling capability across the upper RPM range.
- 114.5° LSA offers smooth idle quality for the duration size.
- Advanced 5.5° to improve midrange recovery and drivability.
- Works best with a mild-to-moderate stall converter in autos.
- **Power Gains vs. Stock:** ~45–60 HP with bolt-ons and tuning.

LT N/A 227

Part #: 181-028

Specs: 227°/245° @ .050", .648"/.639" lift, 113°+2.5 LSA

Powerband: 3000–6900 RPM

Notes:

- Aggressive N/A cam for LT builds focused on high-RPM airflow.
- High lift (.648") maximizes gains from ported heads and free-flow exhaust.
- 113° LSA adds midrange punch while maintaining a broad top-end window.
- Noticeably choppy idle with a strong performance tone.
- Requires good airflow support (ported heads, headers, intake).
- **Power Gains vs. Stock:** ~55–75 HP depending on engine combination.

LT N/A 232

Part #: 181-029

Specs: 232°/251° @ .050", .648"/.637" lift, 112.5°+2.5 LSA

Powerband: 3300–7200 RPM

Notes:

- Max-effort N/A cam for LT engines requiring extreme airflow and high-RPM power.
- Tight 112.5° LSA increases midrange intensity and aggressive scavenging.
- Rowdy, unmistakably performance-oriented idle tone.
- Best suited for ported heads, high compression, and free-flowing exhaust.
- Requires upgraded valve springs and supporting mods.
- **Power Gains vs. Stock:** ~70–90+ HP depending on compression and airflow.

LT Centrifugal 216

Part #: 181-030

Specs: 216°/230° @ .050", .585"/.585" lift, 113°+3.5 LSA

Powerband: 2400–6400 RPM

Notes:

- Ideal entry-level centrifugal-supercharger cam offering improved airflow and boost efficiency without compromising drivability.
- 113° LSA + advance sharpens torque onset and strengthens midrange where centri setups tend to lag.
- .585" lift works well with stock LT heads and factory valvetrain geometry.
- Maintains excellent vacuum and stable idle—perfect for daily-driven or towing-capable boosted builds.
- Optimized for 6–12 psi systems such as ProCharger P-1SC, D-1SC, and similar units.
- **Power Gains vs. Stock:** +45–60 HP depending on boost level and intercooler efficiency.

LT Centrifugal 220

Part #: 181-031

Specs: 220°/236° @ .050", .585"/.585" lift, 115°+4 LSA

Powerband: 2600–6700 RPM

Notes:

- Balanced street/strip centrifugal-supercharger cam designed to broaden the torque curve and increase top-end airflow.
- 115° LSA reduces reversion and stabilizes boost pressure, improving efficiency across the pull.
- Advanced 4° to enhance low–midrange torque recovery and throttle response.
- Maintains clean idle with a mild performance tone.
- Works exceptionally well with LT1/L86 builds running 8–14 psi.
- **Power Gains vs. Stock:** +60–75 HP with typical bolt-ons and proper fueling.

LT Centrifugal 226

Part #: 181-032

Specs: 226°/244° @ .050", .621"/.621" lift, 116.5°+4.5 LSA

Powerband: 3000–7000 RPM

Notes:

- Mid-size cam for high-output centrifugal systems seeking strong midrange and significantly improved high-RPM efficiency.
- .621" lift increases airflow and high-boost stability, ideal for ported heads or higher-flow LT1/LT4 setups.
- 116.5° LSA provides wide powerband and excellent boost control.
- Idle quality: noticeable lobe but still street-manageable with tuning.
- Recommended for builds running 10–16 psi and free-flowing exhaust systems.
- **Power Gains vs. Stock:** +75–100 HP depending on blower size and compression.

LT Centrifugal 231

Part #: 181-033

Specs: 231°/248° @ .050", .648"/.630" lift, 116.5°+3.5 LSA

Powerband: 3400–7300 RPM

Notes:

- High-performance centrifugal-supercharger cam optimized for aggressive street/strip or competition builds.
- High lift (.648"/.630") maximizes cylinder fill at elevated boost and RPM.
- 116.5° LSA manages reversion while supporting powerful top-end acceleration.
- Idle is aggressive with pronounced chop—performance-oriented.
- Requires upgraded valve springs and adequate fuel system capacity.
- **Power Gains vs. Stock:** +95–130 HP depending on blower size (D-1X, P-1X, YSi, etc.).

LT Centrifugal 239

Part #: 181-034

Specs: 239°/257° @ .050", .637"/.639" lift, 117.5°+4 LSA

Powerband: 3800–7600 RPM

Notes:

- Maximum-effort centrifugal-supercharger cam for high-RPM, high-boost LT engines.
- 117.5° LSA widens the powerband and stabilizes airflow under extreme boost levels (15–25+ psi).
- Large 239/257 duration set delivers exceptional top-end boost utilization and high-speed airflow.
- Idle quality: very choppy, unmistakably race-inspired—intended for serious builds.
- Best paired with forged internals, ported heads, large intercoolers, and high-flow fuel systems.
- Power gains vs. stock: +120–160+ HP depending on blower configuration and boost.

LT Whipple 220

Part #: 181-035

Specs: 220°/238° @ .050", .612"/.612" lift, 118°+4.5 LSA

Powerband: 2000–6000 RPM

Notes:

- Designed for positive-displacement Whipple systems seeking strong low and midrange torque.
- Wide 118° LSA reduces overlap and stabilizes boost, maximizing rotor efficiency.
- .612" lift improves airflow without sacrificing valve control—ideal for stock or mildly ported LT heads.
- Excellent drivability with a smooth, near-OEM idle character.
- Works exceptionally well for trucks, SUVs, or street cars that prioritize instant torque.
- **Power Gains vs. Stock:** +55–75 HP depending on boost, intercooler efficiency, and exhaust flow.

LT Whipple 226

Part #: 181-036

Specs: 226°/242° @ .050", .635"/.639" lift, 118°+4 LSA

Powerband: 2400–6400 RPM

Notes:

- Midrange-optimized cam for Whipple-equipped LT engines targeting stronger airflow and improved boost utilization.
- .635"/.639" lift increases cylinder fill at both moderate and high boost levels.
- 118° LSA retains excellent blower efficiency while improving top-end pull.
- Idle quality: mild performance lope while still maintaining strong vacuum.
- Great match for 2.9L and 3.0L Whipple systems running 8–14 psi.
- **Power Gains vs. Stock:** +70–95 HP with proper fueling and supporting mods.

LT Whipple 234

Part #: 181-037

Specs: 234°/250° @ .050", .648"/.630" lift, 118.5°+3.5 LSA

Powerband: 2800–6900 RPM

Notes:

- High-performance Whipple cam for aggressive street/strip builds demanding strong mid-to-high-RPM airflow.
- High lift setup (.648"/.630") enhances cylinder charge density, especially at elevated boost.
- 118.5° LSA maintains blower efficiency and reduces reversion while supporting deep top-end power.
- Idle is noticeably choppy with a strong performance tone-tune required for best manners.
- Ideal for 10–17 psi 2.9L/3.0L/3.8L Whipple systems with ported heads and long-tube headers.
- **Power Gains vs. Stock:** +90–125 HP depending on boost and airflow combination.

LT Whipple 242

Part #: 181-038

Specs: 242°/258° @ .050", .648"/.630" lift, 118.5°+4 LSA

Powerband: 3200–7200 RPM

Notes:

- Maximum-effort Whipple cam designed for high-RPM airflow and strong high-boost power delivery.
- Large 242/258 duration greatly increases cylinder filling at peak rotor speed.
- 118.5° LSA provides a wide, stable power curve and minimizes overlap for optimal blower efficiency.
- Idle is aggressive, race-inspired, and very lopey intended for serious performance builds.
- Best suited for forged 6.2-liter engines running 12–22+ psi with upgraded intercooling and fueling.
- **Power Gains vs. Stock:** +115–160+ HP depending on boost level and supporting modifications.

LT Turbo 216

Part #: 181-039

Specs: 216°/224° @ .050", .585"/.585" lift, 113°+4 LSA

Powerband: 2200–6500 RPM

Notes:

- Optimized for early turbo spool and strong midrange torque.
- Moderate lift and duration deliver excellent street manners with minimal turbo lag.
- Smooth, responsive idle ideal for daily-driven turbo builds.
- Works well with stock or lightly upgraded Gen 5 LT internals.
- Advanced 4° improves throttle response and midrange cylinder pressure.
- LSA provides a balance between low-end torque and top-end power under boost.
- **Power Gains vs. Stock:** +50–70 HP with supporting mods (intake, intercooler, tune).

LT Turbo 224

Part #: 181-040

Specs: 224°/234° @ .050", .612"/.612" lift, 114.5°+3.5 LSA

Powerband: 2300–6800 RPM

Notes:

- Designed for higher-output turbo applications with a slightly broader powerband.
- Increased lift promotes stronger airflow and more aggressive throttle response.
- Idle remains smooth for street use while delivering robust midrange pull.
- Ideal for street/strip builds seeking balance between drivability and top-end power.
- 3.5° advance sharpens throttle response and improves midrange cylinder pressure.
- 114.5° LSA balances spool efficiency with top-end horsepower potential.
- **Power Gains vs. Stock:** +65-85 HP with supporting mods (headers, intercooler, tune).

LT Turbo 231

Part #: 181-041

Specs: 231°/242° @ .050", .648"/.635" lift, 115.5°+3 LSA

Powerband: 2500–7200 RPM

Notes:

- High-lift, long-duration cam engineered for aggressive turbocharged LT applications.
- Maximizes airflow and top-end horsepower while maintaining usable boost response.
- Ideal for larger turbo setups or engines with ported heads and supporting mods.
- Strong mid- to high-RPM torque curve perfect for track or heavy-duty performance builds.
- 3° advance enhances throttle response and cylinder pressure under boost.
- 115.5° LSA allows wide powerband while keeping spool and drivability reasonable.
- **Power Gains vs. Stock:** +80–110 HP with supporting mods (porting, intake, intercooler, tune).

Duramax Stage 1

Part #: 270-009

Specs: 185°/187° @ .050", .418"/.423" lift, 108° +4 LSA

Powerband: 2,000–4,000 RPM

Notes:

- A more **balanced street/performance** profile with a wider 108° LSA for cleaner top-end airflow.
- Increased separation helps reduce exhaust reversion on higher-boost fixed-geometry turbo systems.
- Ideal for 600–750 HP builds with upgraded injectors, built trans, and stronger tuning.
- Improves torque curve width—less falloff past 3,200 RPM
- **Idle Quality:** Smooth, mildly authoritative under load.
- **Expected Gains:** 15–30 HP depending on turbo and fuel system.

Duramax Stage 2

Part #: 270-008

Specs: 185°/187° @ .050", .471"/.475" lift, 110° +4 LSA

Powerband: 2,000–4,200 RPM

Notes:

- Higher-lift diesel cam aimed at **higher-flow cylinder heads** or engines using larger singles/compounds.
- .471"/.475" lift increases valve curtain area for better mass flow under boost.
- 110° LSA broadens powerband and reduces overlap for clean, efficient burn.
- Works well on 700–900 HP builds with upgraded fueling.
- Valve relief required on pistons.
- **Idle Quality:** Very clean; suitable for towing despite increased performance.
- **Gains:** Improved high-RPM power retention and faster turbo acceleration.

Ford 6.0L Power Stroke Stage 1: Street / Tow Upgrade

Part #: 280-001

Specs: 166°/180° @ .050", .321"/.329" lift, 104.5° +2.5 LSA

Powerband: 1,200–3,200 RPM

Notes:

- Ideal entry-level upgrade improving spool, throttle response, and towing efficiency.
- Shorter duration increases low-rpm cylinder pressure for better off-idle torque.
- Mild .321"/.329" valve lift supports improved airflow while maintaining valvetrain longevity.
- +2.5° advance sharpens bottom-end power and transient response under load.
- Excellent for daily-use trucks, work vehicles, and mild tuning.
- **Idle Quality:** Smooth, slightly more authoritative than stock.
- **Gains vs. stock:** +20–30 HP/TQ with tune and exhaust.

Ford 6.0L Power Stroke Stage 2: Street Performance / Tow Hybrid

Part #: 280-002

Specs: 180°/200° @ .050", .321"/.329" lift, 107° +4 LSA

Powerband: 1,600–3,800 RPM

Notes:

- Balanced cam for daily-driven trucks that tow but also run performance tuning.
- Added duration supports upgraded injectors and mild turbo upgrades.
- +4° advance boosts low/mid torque and throttle recovery between shifts.
- Works extremely well with 155–190cc injectors and stock or slightly larger turbos.
- **Idle Quality:** Smooth with a slight rolling character.
- **Gains vs. stock:** +30–40 HP with better drivability and throttle response.

Ford 6.0L Power Stroke Stage 2: Street Performance Cam for Tuned Trucks

Part #: 280-003

Specs: 180°/202° @ .050", .353"/.361" lift, 107.5° +4 LSA

Powerband: 1,700–4,000 RPM

Notes:

- Increased lift (.353"/.361") and exhaust duration help support higher fueling and airflow.
- Excellent option for 175–205cc injectors, ported heads, and stock-based performance setups.
- Broader exhaust flow helps maintain EGT control during sustained heavy throttle.
- Quick-spooling character due to 4° advance and moderate 107.5° separation.
- **Idle Quality:** Mild lope, performance-oriented but still street-friendly.
- **Gains vs. stock:** +35–45 HP with improved midrange pull.

Ford 6.7L Power Stroke Stage 1

Part #: 281-001

Specs: 176°/196° @ .050", .357"/.362" valve lift, 106°+2 LSA

Powerband: 1,200–4,200 RPM

Notes:

- Mild upgrade designed to enhance low-end torque and turbo spool response.
- Tight 106°+2 LSA increases cylinder pressure for improved throttle response and pulling power.
- Short duration keeps drivability smooth with strong vacuum and clean idle characteristics.
- Ideal for towing, daily driving, and stock turbo applications.
- Works well with factory fuel system and minimal supporting mods.
- **Gains vs. stock:** Improved throttle response, quicker spool, and broader usable torque curve.

Ford 6.7L Power Stroke Stage 2:

Part #: 281-002

Specs: 179°/200° @ .050", .343"/.341" valve lift, 104°+5 LSA

Powerband: 1,400–4,500 RPM

Notes:

- Slightly larger profile for increased airflow and stronger midrange performance.
- Tighter effective LSA (104°+5) builds cylinder pressure quickly for aggressive spool characteristics.
- Maintains good street manners with a subtle increase in idle presence.
- Noticeable improvement in midrange torque and passing power.
- Best suited for tuned trucks with upgraded turbo or fueling enhancements.
- **Gains vs. stock:** Stronger midrange pull with quicker turbo response and improved drivability under load.

Godzilla N/A 220

Part #: 175-002

Specs: 220°/226° @ .050", .630"/.621" lift, 111°+6 LSA

Powerband: 1,800–5,700 RPM

Notes:

- Mild NA cam designed for strong low-end and midrange torque in street and tow-oriented builds.
- Early intake closing from +6 advance produces excellent throttle response and off-idle punch.
- High lift profiles take advantage of the Godzilla's robust valvetrain and factory-style ported heads.
- Ideal for heavy vehicles, work trucks, and daily-driven swaps needing vacuum stability.
- 111° LSA creates a light performance lobe without compromising drivability.
- Works with stock converter; gains increase with long-tubes and a performance tune.
- **Power Gains vs. Stock: +25–35 HP** with supporting bolt-ons.

Godzilla N/A 222

Part #: 175-017

Specs: 222°/238° @ .050", .635"/.639" lift,

111.5°+5.5 LSA

Powerband: 2,200–6,200 RPM

Notes:

- Balanced street/strip profile that boosts midrange grunt and extends top-end breathing.
- Staggered duration improves exhaust scavenging—useful for the Godzilla's high-displacement NA airflow needs.
- High-lift lobes maximize cylinder fill when paired with ported heads or upgraded intakes.
- Slightly choppy idle with strong midrange torque for performance trucks and muscle-car swaps
- Prefers a mild converter in heavy vehicles (2400–2800 RPM).
- Responds well to full exhaust and 10.5:1–11.5:1 compression.
- Power gains vs. stock: **+35–45 HP** with typical NA mods.

Godzilla N/A 230

Part #: 175-009

Specs: 230°/242° @ .050", .662"/.662" lift, 111°+5 LSA

Powerband: 2,800–6,700 RPM

Notes:

- Aggressive hot-street cam delivering excellent high-RPM airflow while retaining strong midrange torque.
- .662" lift takes full advantage of well-ported 7.3 heads and large-bore induction systems.
- Tight 111° LSA enhances low- and midrange torque while maintaining punchy top-end power.
- Noticeably lopey idle; best with a 2800–3200 stall converter for heavier vehicles.
- Benefits greatly from long-tube headers, upgraded springs, and free-flow intake systems.
- Suitable for 10.8:1–11.8:1 compression NA builds.
- **Power Gains vs. Stock: +45–60 HP** with supporting engine mods.

Godzilla N/A 234

Part #: 175-013

Specs: 234°/246° @ .050", .662"/.662" lift, 112°+5 LSA

Powerband: 3,000–7,000 RPM

Notes:

- High-RPM naturally aspirated cam engineered for aggressive street/strip applications.
- 112° LSA broadens the powerband slightly while maintaining crisp midrange strength.
- Excellent pairing for CNC-ported heads, long-tubes, and high-flow intake manifolds.
- Rough, deep idle; requires converter (3000+) and proper gearing in heavy vehicles.
- Optimized for 11.0:1–12.0:1 compression ratios to maintain dynamic cylinder pressure.
- Strong gains from 5000–7000 RPM with stable valvetrain setup.
- **Power Gains vs. Stock: +55–70 HP** depending on airflow mods.

Godzilla N/A 244

Part #: 175-014

Specs: 244°/256° @ .050", .662"/.659" lift, 114°+5 LSA

Powerband: 3,400–7,300 RPM

Notes:

- Max-effort street/strip profile intended for high-compression, fully supported NA builds.
- Broad 114° LSA improves top-end stability and widens the usable RPM band.
- Stronger exhaust duration enhances scavenging at high RPM—ideal for ported heads.
- Produces a very aggressive idle character with a deep, choppy cadence.
- Requires 3200–3600+ stall and performance gearing for optimal acceleration.
- Best paired with 11.2:1+ compression, large intake plumbing, and long-tubes.
- **Power Gains vs. Stock: +65–80 HP** in well-matched NA builds.

Godzilla N/A 252

Part #: 175-018

Specs: 252°/264° @ .050", .629"/.629" lift, 115°+4 LSA

Powerband: 3,800–7,600 RPM

Notes:

- Competition-oriented high-RPM cam for road race, drag, or max-effort NA setups.
- Wide 115° LSA enhances RPM stability and maintains a broad, extended top-end.
- Increased duration heavily favors airflow above 5000 RPM—ideal for ported heads and high-flow intakes.
- Very rough idle with a sharp, race-inspired tone; not intended for stock converters or near-stock vehicles.
- Requires upgraded springs, valvetrain, compression (11.5:1+), and proper oil control.
- Holds power deep into the 7k+ range with correct supporting components.
- **Power Gains vs. Stock: +70–90 HP** in fully developed NA applications.

Godzilla Centrifugal 226

Part #: 175-023

Specs: 226°/238° @ .050", .630"/.621" lift, 114°+4 LSA

Powerband: 2,400–6,400 RPM

Notes:

- Mild–medium boost cam designed for strong midrange torque and clean airflow integration with centrifugal units.
- 114° LSA with +4 advance increases boost recovery and maintains crisp throttle response.
- High-lift lobes improve cylinder fill, especially useful with intercooling and efficient compressor maps.
- Excellent for street-driven ProCharger / Vortech setups making 6–12 psi.
- Strong idle quality with a noticeable but controlled performance lope.
- Works well with stock bottom end; ideal for 550–750 HP builds depending on blower size.

Godzilla Centrifugal 232

Part #: 175-005

Specs: 232°/244° @ .050", .630"/.621" lift, 115°+5 LSA

Powerband: 2,800–6,800 RPM

Notes:

- Midrange and top-end focused supercharger cam designed for higher boost levels and stronger airflow above 4500 RPM.
- 115° LSA expands the powerband and reduces overlap, keeping boost in the manifold instead of out the exhaust.
- +5° advance improves low-speed response and spools centrifugal units more efficiently.
- Excellent choice for forged-bottom-end builds making 10–16 psi.
- Choppy, aggressive idle suitable for performance street/strip applications.
- Benefits greatly from ported heads, long-tube headers, and upgraded intercooling systems.

Godzilla Centrifugal 238

Part #: 175-012

Specs: 238°/246° @ .050", .635"/.635" lift, 116°+5 LSA

Powerband: 3,200–7,200 RPM

Notes:

- High-rpm centrifugal supercharger cam engineered for maximum top-end horsepower and stable boost delivery.
- Wide 116° LSA minimizes overlap to preserve boost pressure while extending the upper-range powerband.
- +5° advance keeps midrange torque acceptable while pushing peak power well into the 6500–7200 range.
- Strong pairing with larger head units (D-1X, V-7, NOVI 2500) and built engines targeting 800–1100+ HP.
- Idle is rough and noticeably race-oriented, especially with open exhaust.
- Requires upgraded valve springs, free-flowing exhaust, strong fueling, and intercooling.

Godzilla Whipple 222

Part #: 175-021

Specs: 222°/234° @ .050", .635"/.635" lift, 114°+2 LSA

Powerband: 2,000–6,000 RPM

Notes:

- Mild boost cam tailored for positive-displacement superchargers where instant torque and strong low–mid RPM airflow are critical.
- 114° LSA with +2 advance increases cylinder pressure without excessive overlap—ideal for Whipple’s immediate boost delivery.
- High-lift lobes improve charge density and low-RPM torque, especially useful in trucks and heavy vehicles.
- Smooth but authoritative idle; maintains good street manners and accessory vacuum.
- Excellent choice for 5–10 psi builds on stock bottom ends or towing/utility applications.

Godzilla Whipple 230

Part #: 175-022

Specs: 230°/242° @ .050", .635"/.635" lift, 115°+2 LSA

Powerband: 2,400–6,500 RPM

Notes:

- Midrange-focused Whipple cam for street/strip builds wanting a broad torque curve with extended top-end horsepower.
- Wider 115° LSA reduces overlap and keeps more boost in the chambers, improving efficiency under moderate to high boost.
- +2° advance sharpens throttle response and improves drivability in larger-pulley street setups.
- Mildly aggressive idle with strong midrange punch—excellent for performance trucks and muscle-car swaps.
- Ideal for 8–14 psi and engines with upgraded fuel, long-tubes, and intercooling.

Godzilla Whipple 239

Part #: 175-015

Specs: 239°/250° @ .050", .675"/.670" lift, 116°+0 LSA

Powerband: 3,000–7,000 RPM

Notes:

- High-output positive-displacement blower cam designed for large Whipple units and forged-bottom-end builds.
- Massive .675"/.670" valve lift exploits high-flow ported heads and increases charge volume across the entire upper RPM band.
- 116° LSA minimizes overlap to maintain boost pressure and reduce reversion under high cylinder pressure.
- Produces a deep, noticeable lobe at idle—race-influenced but manageable on street builds.
- Ideal for 12–18 psi, E85, and heavily upgraded fuel systems.

Godzilla Whipple 246

Part #: 175-016

Specs: 246°/258° @ .050", .666"/.659" lift, 119°+0 LSA

Powerband: 3,400–7,400 RPM

Notes:

- Max-effort positive-displacement supercharger cam for high-RPM horsepower and extreme airflow efficiency.
- Ultra-wide 119° LSA dramatically reduces overlap, ensuring maximum boost retention and stable combustion at high boost levels.
- High-duration lobes support 7k+ RPM blower combinations, especially with aggressive pulleys or large Whipple units (3.0L–3.8L).
- Very choppy, race-oriented idle—recommended only for fully built engines with upgraded valvetrain, fuel, and intercooling.
- Ideal for 15–25+ psi, high compression on E85, and drag-oriented power curves.

Godzilla Turbo 220

Part #: 175-001

Specs: 220°/226° @ .050", .630"/.621" lift, 115°+6 LSA

Powerband: 1,800–5,600 RPM

Notes:

- Small turbo cam designed for fast spool, excellent street manners, and strong low-rpm torque.
- Wide 115° LSA with +6 advance increases dynamic cylinder pressure off boost while keeping overlap minimal for turbo efficiency.
- High-lift lobes help maintain airflow in the 5–10 psi range while improving throttle response in heavy vehicles.
- Ideal for single or twin small-frame turbos aiming for quick boost recovery and early torque.
- Smooth idle with only a hint of performance lope—perfect for daily-driven or tow-capable turbo builds.
- Works well with stock converters and unported heads.

Godzilla Turbo 228

Part #: 175-019

Specs: 228°/234° @ .050", .630"/.621" lift, 115.5°+4.5 LSA

Powerband: 2,200–6,100 RPM

Notes:

- Midrange-focused turbo cam for builds targeting balanced spool characteristics and strong top-end power.
- 115.5° LSA reduces overlap, keeping more boost in the chambers at higher mass flow rates.
- +4.5° advance maintains responsiveness off boost while still pushing peak power into the upper midrange.
- Excellent match for 66–78 mm singles or smaller twin-turbo setups.
- Slightly choppy idle, but still very street-friendly and stable with proper tuning.
- Benefits greatly from upgraded intercooling, free-flowing exhaust, and modest head porting.

Godzilla Turbo 238

Part #: 175-020

Specs: 238°/244° @ .050", .639"/.621" lift, 115.5°+4 LSA

Powerband: 2,800–6,700 RPM

Notes:

- High-output turbo cam engineered for top-end airflow and stable boost at high RPM.
- 115.5° LSA limits overlap, maximizing turbo efficiency and preventing reversion under high backpressure.
- +4° advance keeps midrange torque usable while extending power well past 6500 RPM.
- Works exceptionally well with 76–88 mm turbos or high-flow twin setups on forged engines.
- Notable, aggressive idle but still controllable with proper fueling and tuning.
- Requires upgraded valve springs, strong intercooling, and free-flowing charge piping.

Gen III Hemi NA 210

Part #: 141-020

Specs: 210°/216° @ .050", .589"/.589" lift, 112.5°+3 LSA

Powerband: 2,500–6,000 RPM

Notes:

- Naturally aspirated cam optimized for smooth midrange torque and street-friendly performance.
- Moderate lift and duration provide excellent throttle response and idle quality.
- 3° advance enhances midrange cylinder pressure and overall engine responsiveness.
- 112.5° LSA balances low-end torque with a wide usable powerband.
- Ideal for lightly modified Gen 3 Hemi with stock or mildly ported heads.
- **Idle Quality:** Smooth, but distinctly performance-oriented.
- **Power Gains vs. Stock:** +35–50 HP with supporting mods (intake, headers, tune).

Gen III Hemi NA 216

Part #: 141-021

Specs: 216°/222° @ .050", .589"/.589" lift, 114°+3 LSA

Powerband: 2,600–6,200 RPM

Notes:

- Broader midrange power for naturally aspirated builds seeking strong street and strip performance.
- Maintains smooth idle with improved throttle response across the RPM range.
- 3° advance optimizes midrange cylinder pressure for quicker spool-free torque.
- 114° LSA enhances power delivery without sacrificing drivability.
- Excellent choice for mildly ported heads and moderate compression setups.
- **Power Gains vs. Stock:** +40–55 HP with supporting mods (intake, cam, tune).

Gen III Hemi NA 222

Part #: 141-022

Specs: 222°/230° @ .050", .589"/.589" lift, 115°+3.5 LSA

Powerband: 2,800–6,400 RPM

Notes:

- Designed for higher-RPM naturally aspirated performance while retaining street-friendly manners.
- Slightly higher LSA and advance provide strong mid- to upper-RPM torque.
- Ideal for ported heads and increased airflow applications.
- Good idle with a bit of lope.
- **Power Gains vs. Stock:** +50–65 HP with supporting mods (intake, headers, tune).

Gen III Hemi NA 230

Part #: 141-023

Specs: 230°/238° @ .050", .589"/.589" lift, 115.5°+3.5 LSA

Powerband: 3,000–6,600 RPM

Notes:

- Aggressive naturally aspirated cam optimized for top-end power and wide RPM usability.
- 3.5° advance increases midrange torque while supporting strong high-RPM performance.
- Best suited for ported heads, high-flow intake, and higher compression ratios.
- Idle: Noticeable lope but still streetable for performance enthusiasts.
- **Power Gains vs. Stock:** +55–70 HP with supporting mods (headers, intake, tune).

Gen III Hemi NA 238

Part #: 141-024

Specs: 238°/246° @ .050", .616"/.616" lift, 116.5°+3.5 LSA

Powerband: 3,200–6,800 RPM

Notes:

- Maximum naturally aspirated airflow and top-end performance for Gen 3 Hemi builds.
- High lift (.616") fully utilizes ported heads and aggressive intake/exhaust systems.
- 3.5° advance ensures strong midrange torque while extending top-end horsepower.
- **Idle Quality:** Lopey and aggressive, race-inspired.
- Ideal for high-RPM street or track-oriented naturally aspirated builds.
- **Power Gains vs. Stock:** +65–85 HP with supporting mods (ported heads, intake, headers, tune).

Gen III Hemi Whipple 240

Part #: 141-003

Specs: 240°/250° @ .050", .616"/.616" lift, 120°+10 LSA

Powerband: 3,200–7,000 RPM

Notes:

- High-lift, long-duration cam optimized for supercharged Gen 3 Hemi builds seeking maximum top-end power.
- 10° advance sharpens throttle response under boost while maintaining strong midrange torque.
- 120° LSA provides an aggressive, wide powerband for street or strip applications.
- Works exceptionally well with large Whipple superchargers and ported cylinder heads.
- **Idle Quality:** Lopey, aggressive, and distinctly race-inspired.
- **Power Gains vs. Stock:** +130–160 HP with supporting mods.

Gen III Hemi NA 236

Part #: 141-002

Specs: 236°/246° @ .050", .616"/.616" lift, 118°+10 LSA

Powerband: 3,000–6,800 RPM

Notes:

- Designed for boosted applications to maximize airflow and power throughout the mid- and upper-RPM range.
- 0.616" lift fully utilizes ported heads and Whipple supercharger efficiency.
- 10° advance improves boost response and midrange cylinder pressure for instant throttle reaction.
- 118° LSA balances high-RPM horsepower with street-friendly spool and drivability.
- Lopey idle for performance street/strip builds.
- Ideal for Gen 3 Hemi engines with supporting upgrades: intake, intercooler, headers, and tune.
- **Power Gains vs. Stock:** +120–150 HP with supporting mods.

Gen III Hemi Whipple 242

Part #: 141-004

Specs: 242°/252° @ .050", .624"/.624" lift, 119°+10 LSA

Powerband: 3,400–7,200 RPM

Notes:

- Aggressive supercharged cam designed for maximum airflow and top-end horsepower.
- Increased lift (.624") ensures the supercharger's airflow potential is fully realized.
- 10° advance maintains strong boost response and midrange torque.
- 119° LSA balances spool characteristics with high-RPM performance for track or street builds.
- Ideal for Gen 3 Hemi engines with ported heads, upgraded intercooler, and high-flow exhaust.
- Idle: Lopey and performance-oriented without being overly harsh.
- **Power Gains vs. Stock:** +140–170 HP with supporting mods.

Gen III Hemi Whipple 246

Part #: 141-005

Specs: 246°/256° @ .050", .624"/.624" lift, 121°+10 LSA

Powerband: 3,500–7,400 RPM

Notes:

- Maximum-performance cam for Whipple supercharged Gen 3 Hemi engines.
- High lift and long duration fully exploit the supercharger and high-flow head combination.
- 10° advance delivers instantaneous midrange boost and improved cylinder filling at high RPM.
- 121° LSA provides a wide, aggressive powerband while maintaining streetable idle characteristics.
- Best suited for large Whipple superchargers with supporting intake, intercooler, and exhaust upgrades.
- Idle: Lopey, aggressive, and distinctly race-inspired.
- **Power Gains vs. Stock:** +150–180 HP with supporting mods.

Gen III Hemi Turbo 222

Part #: 141-025

Specs: 222°/228° @ .050", .589"/.589" lift, 115.5°+3 LSA

Powerband: 2,800–6,500 RPM

Notes:

- Designed for turbocharged Gen 3 Hemi engines to maximize midrange torque and spool efficiency.
- Moderate lift and duration deliver strong cylinder filling under boost with minimal turbo lag.
- 3° advance improves midrange cylinder pressure for instant throttle response.
- 115.5° LSA provides a balance between spool efficiency and high-RPM power.
- Ideal for street turbo builds with lightly ported heads or supporting mods.
- **Idle Quality:** A bit lopey, and streetable.
- **Power Gains vs. Stock:** +80–100 HP with supporting mods (intercooler, headers, tune).

Gen III Hemi Turbo 230

Part #: 141-026

Specs: 230°/236° @ .050", .589"/.589" lift, 115.5°+4.5 LSA

Powerband: 3,000–6,700 RPM

Notes:

- Designed for stronger mid- to upper-RPM torque with slightly broader powerband.
- 4.5° advance sharpens throttle response under boost and improves spool characteristics.
- Moderate lift maintains smooth idle while enhancing top-end airflow.
- 115.5° LSA balances drivability with performance for street/strip turbo builds.
- Works well with ported heads, larger turbo setups, and supporting mods.
- **Idle Quality:** Street-friendly lope with aggressive throttle response.
- **Power Gains vs. Stock:** +90–115 HP with supporting mods.

Gen III Hemi Turbo 238

Part #: 141-027

Specs: 238°/244° @ .050", .616"/.616" lift, 118.5°+3.5 LSA

Powerband: 3,200–7,000 RPM

Notes:

- High-lift, long-duration cam optimized for large turbo setups and maximum top-end power.
- 0.616" lift fully exploits ported heads and high-flow intake/exhaust systems under boost.
- 3.5° advance enhances midrange torque and maintains strong high-RPM cylinder filling.
- 118.5° LSA provides a wide powerband for aggressive street and track applications.
- Best suited for Gen 3 Hemi engines with large turbos, supporting intake, and high-flow exhaust.
- **Idle Quality:** Lopey and aggressive, performance-oriented.
- **Power Gains vs. Stock:** +110–140 HP with supporting mods (intercooler, headers, tune).