

ENGINE KITS

From humble beginnings in a converted backyard shed, Zipper's was officially incorporated in 1981 and used results from the race track to build our reputation for fast, reliable engines. In the 43+ years since then, Zipper's mission has been to provide the highest level of performance through the use of quality equipment and the best available components, and most importantly, staffing Zipper's with the best in the business to execute this plan. Zipper's has, and continues to, invest in the highest quality CNC automation and manufacturing techniques to accurately reproduce the components and results we develop through thorough extensive research & development testing.

Buy with confidence from a small company that has always produced big results!



























M8

ENGINE KITS

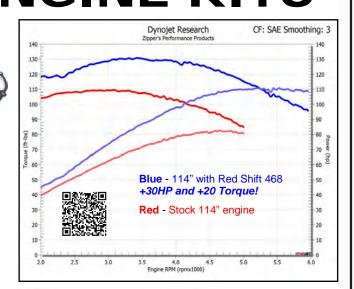
RED SHIFT

CAM ZIP KITS

The biggest bang for your M8 powered bike is found in the cam chest! Adding a Red Shift Cam

Instantly transforms your engine - it sounds different, and It runs completely different. Acceleration is instant, with more power everywhere! Our Zip Kits include the cam, full compliment bearing, quikee pushrods and chrome or black covers, quality USA lifters and gaskets.

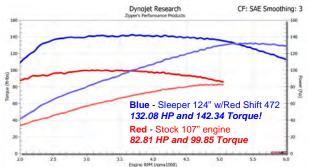
517-318/B Cam Zip Kit with Red Shift 468 Cam # 517-319/B Cam Zip Kit with Red Shift 472 Cam

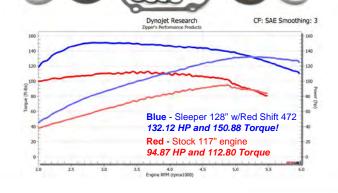


124/128 SLEEPER BIG BORE KITS

No replacement for displacement, right?
Our Sleeper kits easily turn your 107 M8 into a 124, or your 114/117 M8 into a 128 inch powerhouse! Kit includes new 4.25" bore cylinders fitted with Zippers-designed forged pistons, Red Shift 468 or 472 cam, Red Shift dual piston tensioner with offset drive gears, quikee pushrods and chrome or black covers, new cam bearing and gaskets. Incredible power gains with stock heads, even more if you add our Stage II headwork!

517-980 Sleeper 124 kit for 107 engines # 517-984 Sleeper 128 kit for 114/117 engines







Zipper's Performance Products Elkridge, MD, 21075 - USA Phone: (410) 579-2828

M8 PERFORMANCE PRODUCTS THE POWER OF EXPERIENCE 124/128 SPORT-TOUR KIT

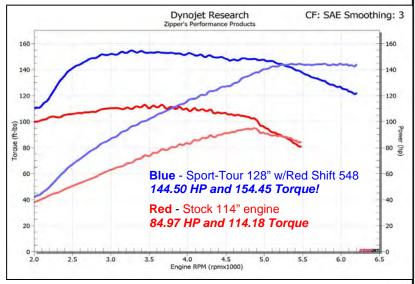


The Sport-Touring Kit is a great choice between our popular Sleeper and Muscle kits!

Developed for the experienced rider that wants touring reliability and the widest power curve in its class! The Sport-Touring kit matches our Stage II CNC M8 headwork with our Red Shift 548 camshaft and 4.25" cylinder kit that results in big power across the entire RPM range. Twist the throttle at nearly any RPM and you're rewarded with immediate, seemingly effortless forward motion! The key to this great power is the carefully engineered combination of airflow, camshaft timing, compression, displacement and Zipper's legendary commitment to testing and machining detail. All of these components are produced in-house at Zipper's so you can be assured of the highest quality and reliable results!

#517-982 Sport-Touring 124 Kit for 107" M8 engines **#517-986** Sport-Tour 128 Kit for 114-117" M8 engines

No Cost Options - Chrome or Black pushrod covers



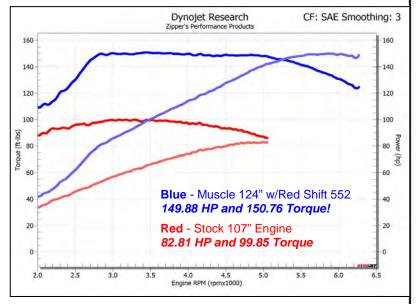


M8 PERFORMANCE PRODUCTS THE POWER OF EXPERIENCE 124/128 MUSCLE KIT



Zipper's Muscle 124 & 128" Kits for the M8 produce great power across a wide RPM range! Our 4.250" bore drop-on cylinders are fitted with Zipper's-designed forged pistons and topped off with Zipper's Stage III CNC-ported headwork featuring +1mm stainless valves and hi-lift springs. Our Red Shift 552 cam delivers HUGE torque as soon as you open the throttle, and carries it across the RPM range to provide instant acceleration from any Compression is set to a relatively modest 11:1. It has an amazing sound at idle and under load, with torque and horsepower at the 150's level. Peak torque starts at 2,800 rpm - 50 pounds more than stock, staying at nearly 150 ft/lbs for over 2,000 RPM, right where you ride! This performance is achieved with a 62mm throttle body, 7.1 injectors and performance exhaust. Tire life not guaranteed!

517-990 Muscle 124 kit for 107 M8 engines # 517-992 Muscle 128 kit for 114/117 M8 engines No Cost Options - Chrome or Black Pushrod Covers





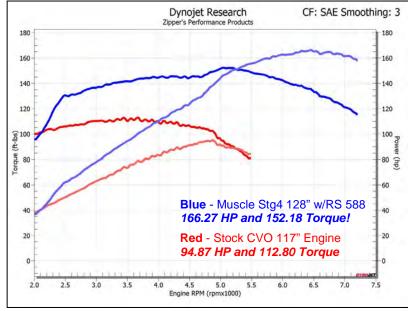
124/128" STAGE 4 MUSCLE



This is it, horsepower junkies - The Big Gun! Our engineering team developed Zipper's Muscle 124 and 128 Stage 4 kits for riders who want to win, every time. Careful testing of the latest technologies and components yields incredible power from the M8 platform on pump gas. Cylinder heads are CNCmachined for maximum flow using +2mm oversize stainless valves, and Zipper's 4.250" bore cylinders are fitted with 12:1 thermal and friction coated pistons. Our Red Shift 588 cam optimizes the output of these powerful components, and careful selection of intake, exhaust and tuning delivers impressive results to 6500 RPM. This is not a bolt-on kit. It requires strengthening of the engine base and drive line upgrades - not unexpected when you are almost doubling the factory output - and should be executed by an experienced professional. "Walk softly, but carry a Big Gun!"

517-993 Muscle 124 Stg 4 kit for 107" M8 engines # 517-994 Muscle 128 Stg 4 kit for 114/117" M8 engines

No Cost Options - Chrome or Black Pushrod Covers

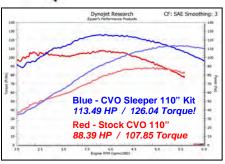




ppersPerformance.com **SLEEPER 110**

Wake up your CVO 110 with Our Sleeper 110 Kit. The 255 cams the factory installed in the 110 have a narrow profile that limits horsepower. Adding a broader profile cam allows the engine to rev more freely but also lowers the dynamic compression ratio and can hurt low end torque. We studied the

TC CVO



issue and found that our Red Shift 576 grind, coupled with a small

bump in compression (10:1) should boost power across the board - and it did, quite nicely! The Sleeper 110 kit includes forged, +4.2cc pistons, Red Shift 576 cams and Dual-Piston tensioners, Pro-Taper pushrods and E-Z Adjust covers (your choice, chrome or black finish), necessary gaskets. Result: 28% gain in HP, 17% in torque!

517-970 Sleeper 110 kit for '07-'17 CVO TC engines

This kit uses your factory cylinder cores sent in for modification.



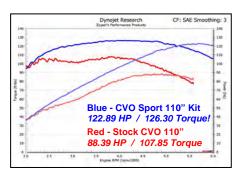
ZIPPER'S BLUEPRINTED CAM CHEST UPGRADE

CVO engines are known for oil related issues, so our blueprinted cam chest upgrade is highly recommended. Our cam plate is fully machined from billet instead of a low grade, porous die-casting. The cams ride in bronze bushings, and the bypass valve is hand-fitted to ensure a full seal for improved hot, low RPM oil pressure. A high flow pump with oversize gerotors and full-compliment cam bearings are supplied with Fueling HP+ lifters. Along with Red Shift Dual-Piston cam tensioners and gaskets included with each engine kit, you'll have everything you'll need!

417-498 Cam Chest Upgrade for '07-'17 TC Zipper's Engine Kits

TC CVO SPORT 110

Zipper's Sport 110 kit greatly improves the 110's power all across the board. Like the Sleeper 110, cam timing and compression are both increased for impressive power gains. We chose the popular Red Shift 577 cams, a more aggressive grind that responds well to compression.



After decking the gasket surface on your supplied cylinders, forged

+10cc domed pistons (10.65:1) are precision-fitted to the cylinders using the latest Sunnen honing techniques. The kit also includes Red Shift Dual-Piston tensioners, Pro-Taper pushrods and E-Z Adjust covers (your choice of chrome or black finish), and all necessary gaskets. Result: 39% gain in HP, 17% in big, broad torque!

517-971 Sport 110 kit for '07-'17 CVO TC engines

This kit uses your factory cylinder cores sent in for modification





TC 110" VCVO MUSCLE KIT



Does your CVO 110 seem to run flat after 4,500 RPM?

It's true - the factory 110 engine is better at producing torque than HP. Zipper's Muscle 110 kit starts producing more torque at 2,500, then just when the factory engine starts leveling out at 4,250, the Muscle 110 takes a deep breath and charges hard to 6,200 RPM - making an astonishing 40 HP more! Peak torque occurs at 5,100 RPM, 34 ft/lbs more than stock, contributing to the hard pull felt on your arms. How do we do it? Stage 3 CNC CVO headwork, proprietary +10cc pistons and Red Shift 657 cams provide everything needed to produce the power. Valve springs and Red Shift Dual-Piston tensioners with Pro-Taper pushrods add stability and life to the unstable factory valve train.

CVO engines are known for lifter and oil system issues, so our blue-printed cam chest upgrade is highly recommended. #417-498

Whether you ride in short hops or long trips, you'll fall in love with your CVO again with the Muscle 110!

517-972 Muscle 110 kit for '07-'17 CVO TC engines
No Cost Options - Chrome or Black Pushrod Covers
417-498 Plate/pump/bearings/lifters upgrade

This kit uses your factory head and cylinder cores sent in for modification.





TC 113" V CVO MUSCLE KIT

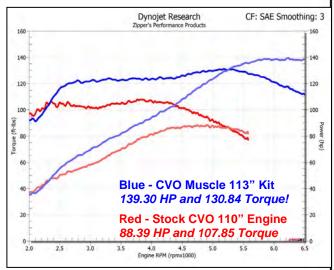


What could be better than our Muscle 110 kit?

Adding 3 magical cubic inches to it, of course! By adding .060" to the bore and 2cc's to the pistons, a sweet spot was identified, and the *Muscle 113* was born - with nearly 11 more HP and 9 more ft/lbs of torque. The Muscle 113 has a very similar power curve when compared to the Muscle 110, just more of it, everywhere. 50 more horsepower and 42 ft/lbs of torque than stock! Stage 3 CNC CVO headwork, proprietary +12cc pistons and Red Shift 657 cams provide everything needed to produce the power. Upgraded valve springs and Red Shift Dual-Piston tensioners with Pro-Taper pushrods add stability and life to the unstable factory valve train, up through 6,500 RPM. CVO engines are known for lifter and oil system issues, so our blueprinted cam chest upgrade is highly recommended.

Big Power awaits the CVO owner with this powerful top end and cam kit! M8 owners will respect the Twin Cam® Muscle 113!





517-974 Muscle 113 kit for '07-'17 CVO TC engines
No Cost Options - Chrome or Black Pushrod Covers
417-498 Plate/pump/bearings/lifters upgrade

This kit uses your factory head and cylinder cores sent in for modification.



Zipper's Performance Products Elkridge, MD, 21075 - USA Phone: (410) 579-2828

www.ZippersPerformance.com Zippers@ZippersPerformance.com

Products on this page are not for sale or use on pollution controlled vehicles.



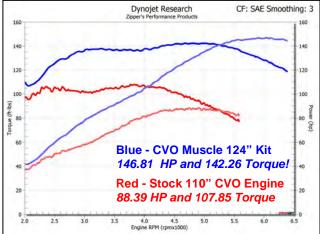
TC 124" VCVO MUSCLE KIT



Raise the bar to the top level on your CVO Twin Cam®! Zipper's CVO Muscle 124 engine kit improves the high-breathing CVO head with CNC porting and oversize valves, while our proprietary +7cc domed pistons raise compression to 10.75:1. A new 4-5/8" crankshaft adds a ¼" more stroke, while new stress-relieved cylinders add an 1/8" more to the bore. Our Red Shift 657 cams are perfectly matched with the heads and piston to provide big torque & HP across the entire RPM range. Red Shift Dual-Piston cam tensioners are included with Pro-Taper pushrods and EZ-Adjust covers for a stable valve train, with all the gaskets needed for assembly. Case boring required for 4-1/8" cylinders; Timken®

bearing conversion and cam chest/oil system upgrade highly recommended to improve durability and reliability. *Make your CVO run even faster than it looks!*





517-976 Muscle 124 kit for '07-'17 CVO TC-A engines # 517-978 Muscle 124 kit for '07-'17 CVO TC-B engines No Cost Options - Chrome or Black Pushrod Covers

This kit uses your factory head cores sent in for modification.

417-498 Plate/pump/cam bearings/lifters upgrade





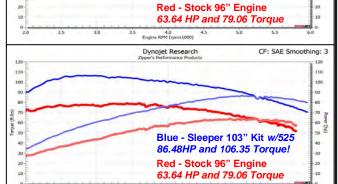
TC 103" SLEEPER KIT



Zipper's Sleeper 103 kit is an easy and affordable upgrade for 2007-up 96" Twin Cam® engines. Your cylinders are precision-bored from 3.750" to 3.875" with forged 10.25:1 pistons to boost displacement to 103", while your stock cams are replaced with your choice of our Red Shift 525 or 528 grinds. The 525's are designed for heavily loaded bikes and build huge torque just off idle with less top end power, while the 528 cams shift power and torque to the right, across the entire RPM range with stock heads. Gain even more power with (1) Zipper's optional Stage 1 headwork and (2) improve longevity with critical oil system blueprinting by adding our cam chest upgrade that includes our billet cam plate, dual-piston cam tensioners, full-compliment cam bearings and quality USA lifters.

With power peaking at 5,000 RPM, this kit is a great choice for the rider who rarely pegs the throttle

to red line, but rather enjoys the superstrong pull of low & mid-range torque!



Blue - Sleeper 103" Kit w/5

96.74HP and 110.00 Torque!

517-960 Sleeper 103 kit '07-'13 96" Twin Cam® # 517-751 Stage 1 Twin Cam® Headwork # 417-499 Blueprinted '07-'17 TC Cam Chest Kit

This kit uses your factory cylinder (and heads if Stage 1 option is chosen) cores sent in for modification. An exchange may be possible once your cores are cleaned, inspected and qualified for exchange.



CF: SAE Smoothing: 3

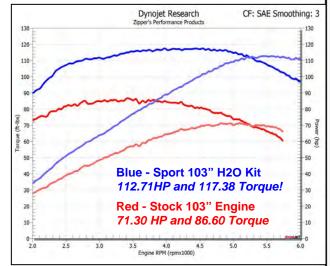


103" TC SPORT KIT



Zipper's Sport 103" kit greatly improves the all-around power output of the 96 or 103" Twin Cam® engine. A great choice for the rider who rides 2-up on a loaded bagger, who short-shifts and rarely revs the engine past 5,000 RPM. Over 100 ft/lbs of torque is available from 2,400 to 5,200 RPM, peaking at 115+ ft/lbs by 4,250. Horsepower is a linear line to 110+, peaking at just over 5,200 RPM. Your cylinders are decked and sized for 3.875" forged pistons, while your heads are modified with Zipper's high velocity Stage II CNC porting. Our Red Shift 575 cams and Dual-Piston Tensioners ensure valve train stability; Pro-Taper pushrods with EZ-Adjust covers are included with top quality gaskets. This kit delivers excellent results with the factory throttle body and injectors, keeping costs down. Highly recommended option: our 417-498 blueprinted

cam chest/oil system upgrade for improved oil delivery, increasing reliability #417-498 and durability. With the Sport 103, you won't have to run the RPM's around the dial to move your big bike quickly and efficiently!



517-961 Sport 103 for '07-'17 Twin Cam® engines No Cost Options - Chrome or Black Pushrod Covers

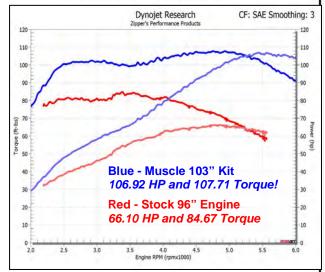
417-498 Plate/HV pump/bearings/lifters upgrade kit





Boost the power of your 96" Twin Cam® with our Muscle 103 kit! The Muscle 103 is a top end and cam kit that gets its displacement boost by increasing the cylinder bore size to 3.875", while retaining the factory 4-3/8" stroke. Your cylinder tops are decked for trueness and new 10.5:1 forged pistons are precision-fit using the latest Sunnen equipment, while your heads receive Zipper's high-breathing Stage III treatment with CNC porting, new guides, oversize valves and performance springs. Zipper's Red Shift 577 cams are perfectly matched with the heads and piston to provide big torque & HP across the entire RPM range. Red Shift Dual-Piston cam tensioners are included with Pro-Taper pushrods for a stable valve train and EZ-Adjust covers, with all gaskets needed for assembly. Highly recommended option: Zipper's #417-498 blueprinted cam chest/oil system upgrade for improved oil delivery, increasing reliability and durability. #417-498

This kit is also great for TC 103 owners that want to boost their power but wish to retain the 103" factory displacement.



517-962 Muscle 103 kit for '07-'17 Twin Cam® engines
No Cost Options - Chrome or Black Pushrod Covers
417-498 Plate/HV pump/bearings/lifters upgrade kit





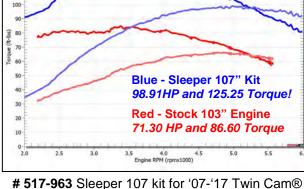
TC 107" SLEEPER KIT



The Sleeper 107 kit is an easy and affordable upgrade for 2007-up 96 or 103" Twin Cam® engines. Your cylinders are precision-bored from 3.750" (96") or 3.875" (103") to 3.937" to boost displacement to 107", while your stock cams are replaced with our Red Shift 528 grind. The forged flat-top pistons used boost compression to 10.25:1, while the 528 cams yield impressive power and torque gains across the entire RPM range with stock heads. Gain even more power with (1) our optional Stage 1 headwork and (2) improve longevity with critical oil system blueprinting by adding our cam chest upgrade that includes our billet cam plate, dual-piston cam tensioners, full-compliment cam bearings and Feuling lifters.

With power peaking at 5,000 RPM, this kit is a great choice for the rider who rarely pegs the throttle

to red line, but rather enjoys the super-strong pull of low and mid-range torque!



Dynojet Research

517-963 Sleeper 107 kit for '07-'17 Twin Cam® # 517-751 Stage 1 Twin Cam® Headwork # 417-499 Blueprinted '07-'17 TC Cam Chest Kit

This kit uses your factory cylinder (and heads if Stage 1 option is chosen) cores sent in for modification. An exchange may be possible once your cores are cleaned, inspected and qualified for exchange.



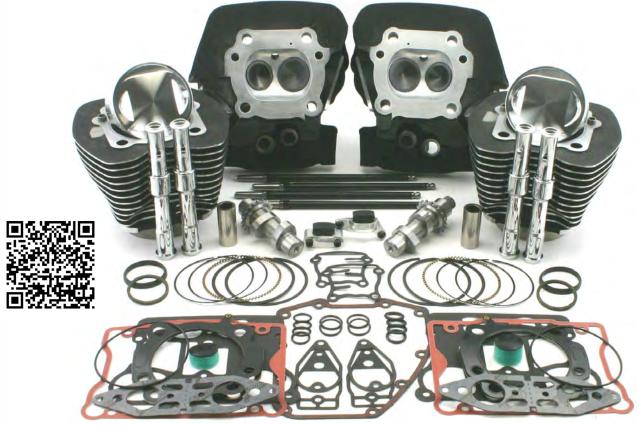
CF: SAE Smoothing: 3

120

110



107" TC SPORT KIT

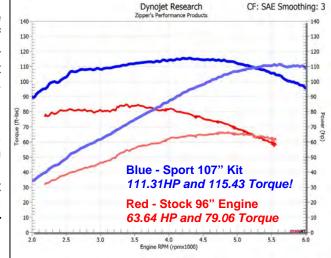


Our Sport 107" kit greatly improves the all-around power output of the 96 or 103" Twin Cam® engine. A great choice for the rider looking for strong acceleration. Over 100 ft/lbs of torque is available from 2,400 to 5,200 RPM, peaking at 115+ft/lbs by 4,250. Horsepower is a linear line to 110+, peaking at just over 5,200 RPM - meaning you don't have to run the RPM's around the dial to move your big bike quickly and efficiently. Your cylinders are decked and sized for 3.937" forged pistons, while your heads are modified with our high velocity Stage 2 CNC portwork. Our Red Shift 575 cams and Dual-Piston Tensioners ensure valve train stability; Pro-Taper pushrods with EZ-Adjust covers are included with top quality gaskets. This kit delivers excellent results with the factory throttle body and injectors, keeping costs down. Highly recommended option: our 417-498 blueprinted cam chest/oil system

The Sport 107 puts way more 'Sport' in your riding experience!

upgrade for improved oil delivery,

increasing reliability and durability.



517-964 Sport 107 for '07-'17 Twin Cam® engines No Cost Options - Chrome or Black Pushrod Covers

417-498 Plate/HV pump/bearings/lifters upgrade kit

This kit uses your factory head & cylinder cores sent in for modification. An exchange may be possible once your cores are cleaned, inspected and qualified for exchange.

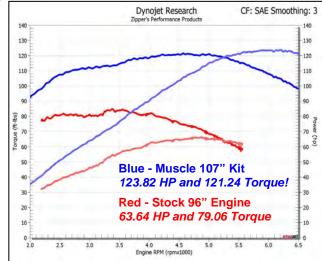


#417-498



Zipper's Popular Muscle 107" Kit for Twin Cam® 96/103" engines boost torque and horsepower north of 120! The Muscle 107 is a top end and cam kit that gets its displacement boost by increasing the cylinder bore size to 3.937", while retaining the factory 4-3/8" stroke. Your cylinder tops are decked for trueness and new 10.6:1 forged pistons are precision-fit using the latest Sunnen equipment, while your heads receive our highbreathing Stage 3 treatment with CNC-porting, new guides, oversize valves and performance springs. Our Red Shift 577 cams are perfectly matched with the heads and piston to provide big torque & HP across the entire RPM range. Red Shift Dual-Piston cam tensioners are included with Pro-Taper pushrods for a stable valve train and EZ-Adjust covers, with all gaskets needed for assembly. Highly recommended option: our 417-498 blueprinted cam chest/oil system upgrade for improved oil delivery, increasing reliability and durability. #417-498

This kit is for the aggressive rider that likes to regularly twist the wick and run up front!



517-965 Muscle 107 kit for '07-'17 Twin Cam® engines
No Cost Options - Chrome or Black Pushrod Covers
417-498 Plate/HV pump/bearings/lifters upgrade kit



TC 117" ZippersPerformance.com PERFORMANCE PRODUCTS THE POWER OF EXPERIENCE

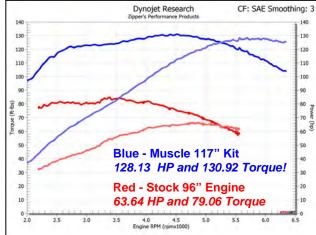


Zipper's Muscle 117" Kit for Twin Cam® 96/103" engines increases displacement with new 4-1/8" bore cylinders while retaining the factory 4-3/8" stroke. New cylinders are stress-relived before being precision fit with 10.6:1 forged pistons using the latest Sunnen equipment, while your heads receive our high-breathing Stage 3 treatment with CNC-porting, new guides, oversize valves and performance springs. Our Red Shift 577 cams are perfectly matched with the heads and piston to provide big torque & HP across the entire RPM range. Red Shift Dual-Piston cam tensioners are included with Pro-Taper pushrods for a stable valve train and EZ-Adjust covers, with all the gaskets needed for assembly. Case

boring required for 4-1/8" cylinders; Timken® bearing conversion and cam chest/oil system upgrade recommended.

Amazing increase in Power and Torque!





517-967 Muscle 117 kit for '07-'17 TC engines
No Cost Options - Chrome or Black Pushrod Covers
417-498 Plate/pump/bearings/lifters upgrade



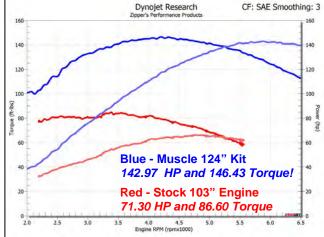


Zipper's Muscle 124 Kit combines Big Bore with Big Stroke! At the bottom, a 4-5/8" stroke crankshaft paired with 4-1/8" cylinders establishes the base for 124" of Big Power. An engine this size needs specialized cylinder heads, our ultra-high flow Stage 4 CNC-porting and highly modified chambers along with oversize, unshrouded valves delivers just that. New stress-relieved cylinders are precision-fit with durable forged pistons supplied with high quality 1-1-3mm rings. Red Shift 657 cams and dual-piston tensioners, Pro-Taper pushrods, longer head bolts and E-Z Adjust pushrod covers are provided with all the gaskets needed for assembly. Case boring required for 4-1/8" cylinders; Timken® bearing conversion,

our blueprinted cam chest oil system upgrade for rock solid stability and durability are highly recommended.

Show 'em your rapidly fading tail light every pass, every time!

#417-498



517-968 Muscle 124 kit for '07-'17 TC-A engines # 517-969 Muscle 124 kit for '07-'17 TC-B engines No Cost Options - Chrome or Black Pushrod Covers # 417-498 Plate/pump/bearings/lifters upgrade



'99-'06 TC SLEEPER 95

Still riding that stock 88" TC? Give it a wake-up call with Zipper's Sleeper 95 Kit! 95" kits are certainly nothing new, but we took another look at this popular mod and added Zipper's newly designed Red Shift 511 grind, along with a bore size increase to 3.875". The results are fantastic - power is increased

persPerformance.com

across the board, with horsepower well over 90 and torque breaking

the century mark with stock size valves and no head porting! The Sleeper 95 kit includes forged 3-7/8" pistons precision-fit to your decked & trued cylinders, Red Shift 511 cams and all gaskets. Add our optional cam chest upgrade kit to update aging components with modern hydraulics. *Result: 60% gain in HP, 49% in torque!*

517-940 Sleeper 95 kit for '99-'06 TC engines

This kit uses your factory cylinder cores sent in for modification.



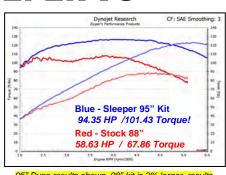
ZIPPER'S BLUEPRINTED CAM CHEST UPGRADE

The spring-loaded cam chain tensioners used in '99-'06 TC engines run under such high spring tension that the pads tend to wear pretty quickly, so it becomes a gamble on just how long before they wear down to the metal and spread shrapnel throughout your engine. Our blueprinted cam chest upgrade includes our cam plate fully machined from billet and set up to accept our patented Red Shift Dual-Piston hydraulic chain tensioners. The bypass valve is hand-fit to ensure a full seal for improved hot, low RPM oil pressure. A high flow pump with oversize gerotors and new inner & outer cam bearings are supplied with quality USA lifters. A worthy update for the venerable TC! # 417-495 Cam Chest Upgrade for '99-'06 TC Zipper's Engine Kits

'99-'06 TC SLEEPER 98

Zipper's Sleeper 98" kit adds 10 more cubic inches through an increase of the stock 88" 3.750" bore size to 3.937"! This is a similar kit to the 95" Sleeper kit, just 3 cubic inches

Sleeper kit, just 3 cubic inches larger via the bore size. Dyno sheet not available at press time, the curve will look nearly identical, just a bit more power everywhere. The Sleeper 98 kit



"Dyno results shown. 98" kit is 3% larger, results will be approximately 97+ HP, 105 torque



includes forged 3.937" pistons precision-fit to your decked & trued cylinders, Red Shift 511 cams and all gaskets. Add Zipper's optional cam chest upgrade kit to update aging components with modern hydraulics.

517-941 Sleeper 98 kit for '99-'06 TC engines

This kit uses your factory cylinder cores sent in for modification

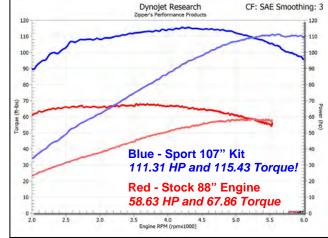




Zipper's Sport 107" Kit for '99-'06 Twin Cam® 88" engines greatly improves the all-around power output of the 88" Twin Cam® engine. The Sport 107 is a great choice for the rider looking to give new life to a tired or failed engine. Over 100 ft/lbs of torque is available from 2,400 to 5,200 RPM, while Horsepower is a linear line to 110+. A new 4-3/8" stroke crankshaft replaces your factory 4" stroke crank. Your cylinders are decked and sized for 3.937" forged pistons, while your heads are modified with Zipper's high velocity Stage II CNC porting. Our Red Shift 575 cams and Dual-Piston Tensioners ensure valve train stability; Pro-Taper pushrods with EZ-Adjust covers are included with top quality gaskets. This kit delivers excellent results with the factory throttle body and injectors, keeping costs down. Highly recommended option: our # 417-495 blueprinted cam chest upgrade with our patented Red Shift Dual Piston

hydraulic cam chain tensioners, blueprinted billet plate, HV oil pump, cam bearings and quality USA lifters for improved #417-495 reliability and durability.

Exciting New Life for the 88" Engine!



517-946 Sport 107 kit for '99-'06 Twin Cam® 'A' engines # 517-947 Sport 107 kit for '99-'06 Twin Cam® 'B' engines No Cost Options - Chrome or Black Pushrod Covers

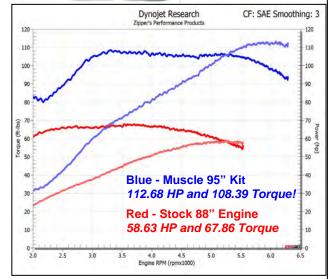
417-495 Blueprinted cam chest upgrade kit including Plate/HV pump/RS dual piston tensioners/bearings/lifters





Zipper's Original Muscle 95" Kit for '99-'06 Twin Cam® 88" engines has been providing great service for over 25 years! The Muscle 95 gets its displacement boost by increasing the cylinder bore size to 3.875" when paired with the factory stock 4" stroke crankshaft. Your cylinder tops are decked for trueness and new 10.5:1 forged pistons are precision-fit using the latest Sunnen equipment, while your heads receive Zipper's highbreathing Stage III treatment with CNC porting, new guides, oversize valves, performance springs and manual compression releases. Zipper's Red Shift 577 cams provide big torque & HP gains across the entire RPM range. Also included are Pro-Taper pushrods and EZ-Adjust covers, with all gaskets needed for Highly recommended option: Zipper's #417-495 assembly. blueprinted cam chest upgrade with our patented Red Shift Dual Piston hydraulic cam chain tensioners, blueprinted billet plate, HV oil pump, cam bearings and quality USA lifters for improved reliability and durability. # 417-495

Zipper's Muscle 95" kit produces excellent, reliable Horsepower and Torque gains - year after year, mile after mile!



517-950 Muscle 95 kit for '99-'06 Twin Cam® engines No Cost Options - Chrome or Black Pushrod Covers
417-495 Blueprinted cam chest upgrade kit including
Plate/HV pump/RS dual piston tensioners/bearings/lifters
This kit uses your factory head & cylinder cores sent in for modification. An exchange

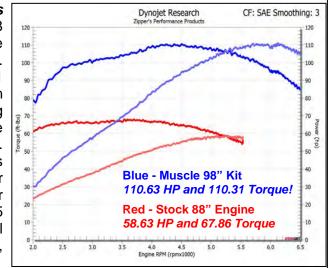
may be possible once your cores are cleaned, inspected and qualified for exchange





Zipper's Muscle 98" Kit for '99-'06 Twin Cam® 88" engines boost torque and horsepower north of 110! The Muscle 98 gets its displacement boost by increasing the cylinder bore size to 3.937" when paired with the factory stock 4" stroke crankshaft. Your cylinder tops are decked for trueness and new 10.5:1 forged pistons are precision-fit using the latest Sunnen equipment, while your heads receive Zipper's high-breathing Stage III treatment with CNC porting, new guides, oversize valves, performance springs and manual compression releases. Zipper's Red Shift 577 cams provide big torque & HP gains across the entire RPM range. Also included are Pro-Taper pushrods and EZ-Adjust covers, with all gaskets needed for assembly. Highly recommended option: Zipper's # 417-495 blueprinted cam chest upgrade with our patented Red Shift Dual Piston hydraulic cam chain tensioners, blueprinted billet plate, HV oil pump, cam bearings and quality USA lifters for improved reliability and durability. # 417-495

The Muscle 98" kit produces 33% more Horsepower and 10% more Torque than a factory-stock 107" M8!



517-952 Muscle 98 kit for '99-'06 Twin Cam® engines
 No Cost Options - Chrome or Black Pushrod Covers
 # 417-495 Blueprinted cam chest upgrade kit including
 Plate/HV pump/RS dual piston tensioners/bearings/lifters

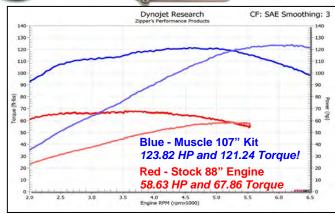


'99-'06 TC W MUSCLE 107"



Looking for a Big Power Boost for your '99-'06 Twin Cam? Zipper's Muscle 107 kit will double the HP of a TC 88" engine - all while looking stock from the outside! A new 4-3/8" stroke crankshaft replaces the original 4" crank, while your cylinders are decked and precision fit with 3.937" 10.6:1 pistons. Your heads receive Zipper's Stage III CNC porting with new guides, oversize valves, performance springs and manual compression releases. Our Red Shift 577 cams provide big torque & HP gains across the entire RPM range. Also included are Pro-Taper pushrods and EZ-Adjust covers, with all gaskets needed for assembly. Highly recommended option: Zipper's #417-495 blueprinted cam chest upgrade with our Red Shift Dual Piston hydraulic cam chain tensioners, blueprinted billet plate, HV oil pump, cam bearings and quality

HV oil pump, cam bearings and quality
USA lifters for improved reliability #417-495
and durability. *Amazing New Life*for the 1st Generation Twin Cam® M8's BEWARE!



517-954 Muscle 107 kit '99-'06 Twin Cam® 'A' engines # 517-955 Muscle 107 kit '99-'06 Twin Cam® 'B' engines No Cost Options - Chrome or Black Pushrod Covers

417-495 Blueprinted cam chest upgrade kit including Plate/HV pump/RS dual piston tensioners/bearings/lifters





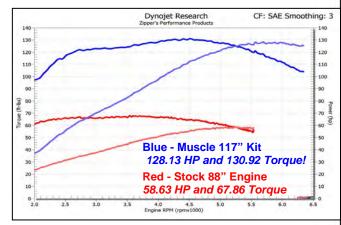
'99-'06 TC W MUSCLE 117"
KIT



Take your 88" Twin Cam to 117" with Zipper's Muscle 117 kit! A new 4-3/8" stroke crankshaft replaces the original 4" crank; new stress-relieved 4-1/8" bore cylinders are precision fit with forged pistons set for 10.6:1 compression. Your heads receive Zipper's Stage III CNC porting with new guides, oversize valves, performance springs and manual compression releases. Our Red Shift 577 cams provide big torque & HP gains across the entire RPM range. Also included are Pro-Taper pushrods and EZ-Adjust covers, with all gaskets needed for assembly. Highly recommended option: our # 417-495 blueprinted cam chest upgrade with our Red Shift Dual Piston hydraulic cam chain tensioners, blueprinted billet plate, HV oil pump, cam bearings and quality USA lifters for

improved reliability and durability. #417-495
Case boring required, Timken recommended.

Enjoy Big, Broad Power at every throttle position with the Muscle 117!



517-956 Muscle 117 kit '99-'06 Twin Cam® 'A' engines # 517-957 Muscle 117 kit '99-'06 Twin Cam® 'B' engines No Cost Options - Chrome or Black Pushrod Covers

417-495 Blueprinted cam chest upgrade kit including Plate/HV pump/RS dual piston tensioners/bearings/lifters



PERFORMANCE PRODUCTS

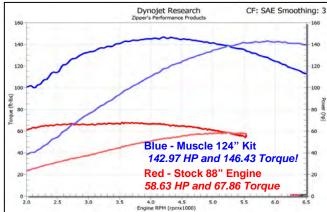
'99-'06 TC W ''
MUSCLE 124"





Zipper's Muscle 124 kit delivers 140+ Twin Cam® HP & Torque! A new 4-5/8" stroke crankshaft replaces the original 4" crank; new stress-relieved 4-1/8" bore cylinders are precision fit with forged pistons set for 10.75:1 compression. Your heads receive Zipper's Stage IV CNC porting with highly modified chambers, 2.0" intake, 1.630" exhaust valves, performance springs. Our Red Shift 657 cams provide stunning torque & HP gains across the entire RPM range. Also included are Pro-Taper pushrods and EZ-Adjust covers, with all gaskets needed for assembly. Highly recommended option: Zipper's #417-495 blueprinted cam chest upgrade with our Red Shift Dual Piston hydraulic cam chain tensioners, blueprinted billet plate, HV oil pump, cam bearings and quality USA lifters for improved reliability and durability. #417-495 Case boring, Timken conversion required.

CVO? M8? Make them all believers with Zipper's Muscle 124 Twin Cam®!



517-958 Muscle 124 kit '99-'06 Twin Cam® 'A' engines # 517-959 Muscle 124 kit '99-'06 Twin Cam® 'B' engines No Cost Options - Chrome or Black Pushrod Covers

417-495 Blueprinted cam chest upgrade kit including Plate/HV pump/RS dual piston tensioners/bearings/lifters





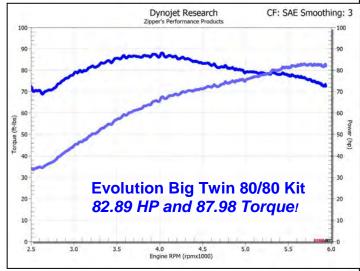
80/80 EV BIG TWIN KIT



Zipper's 80/80 kit for Evolution Big Twins is still as popular as ever! Its roots go back to the 80's, and we named it 80/80 due to the fact that it easily delivers over 80 HP from 80". Your cylinder base and head gasket surfaces are both decked true to stop those pesky leaks that EV's are known for. We precision-fit forged 10.5:1 pistons to them. Your heads receive CNC porting to Zipper's Stage III with 1.900" intake and 1.630" exhaust valves riding in Step-Lock guides with new valve springs and viton seals. Our Red Shift 559 cam is included with a new full compliment cam bearing; a steel breather gear replaces the factory plastic gear, and shims are included to set the end play on the cam and breather gear. Pro-taper pushrods control the valves and a top end/cam chest gasket set is included.

Processing note: Due to casting variations on early 80's heads, we may elect to add and dress a little welding to the spark plug side of the heads to prevent porting cut-through.

This kit has remained a popular choice because it flat-out WORKS!



#517-930 '92-'99 Evolution® Big Twin 80/80 kit **#517-931** '84-'91 Evolution® Big Twin 80/80 kit

This kit uses your factory head & cylinder cores sent in for modification.



'91-'22 XL883 Sportster®

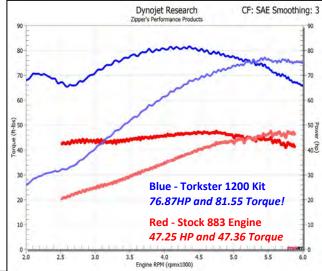
TORKSTER 1200 KIT



Zipper's Torkster 883-1200 kit Increases Your 883's Horsepower output by 63% and its Torque by 72%! The key to this huge increase is Zipper's High Velocity Stage II CNC headwork and carefully matched forged piston design. Your cylinders are decked on both ends, bored from 3" to 3.5" then honed on a state-of-the-art Sunnen SV-30. Heads receive CNC porting to Stage II specs and fitted with new Step Lock valve guides, stainless steel valves and upgraded valve springs. This combination promotes a great power curve, with torque topping 80 ft/lbs and HP over 75 - with factory camshafts! Supplied with a quality top end gasket set. Easy to install, fantastic results!

Note regarding late 2009-up 883 cylinders: Since the 883 was introduced in 1986, HD® used a thick iron insert in the casting that allowed the 3" bore 883 cylinder to be safely bored to 3.5" for 1200cc displacement. Mid-year 2009, this changed. Less cast iron was used, and the cylinders can no longer be bored to 1200 (see cutaway photo). If you can see aluminum on the outside of the cylinder spigot (arrow), your cylinders can not be bored to 1200 due to the step circled in red. We try to keep used, earlier versions

in stock that we can use for these applications, but this is subject to availability and finish. Contact our sales department for availability. An exact color may not be available and you may need to paint to match your engine. H-D® sells color-matching spray paint you can use for this. We do not recommend powder coating as the heat required to cure the PC will alter the precision-bored finish of the cylinders.



#517-910 '91-'E09 XL883 Torkster 1200 kit **#517-912*** 'L09-'22 XL883 Torkster 1200 kit

*Includes reconditioned '04-'E09 cylinders

This kit uses your factory head & cylinder* cores sent in for modification.



'91-'22 XL883 Sportster®

MUSCLE 1200 KIT

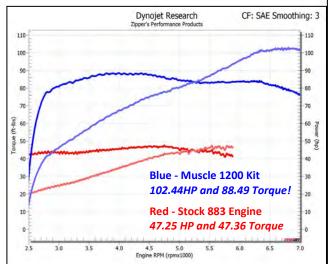


883's are great bikes for performance builds - they are light, plentiful, inexpensive and easy to add in some Muscle!

Zipper's Muscle 1200 package puts real Sport in your Sportster®, and puts to rest the 'girl's bike' knock. The 883's small-chamber head makes a great base for a hot rod build. After CNC porting, we install new guides and add lightweight, larger (1.725" intake, 1.485" exhaust) 7mm valves with high lift conical springs. Forged 3.5" pistons bring the displacement to 1200cc, and along with Red Shift 575 cams, horsepower is increased by 116% and torque by 87% - HUGE gains! Also included are Pro-Taper pushrods, telescoping pushrod covers (your choice of chrome or black finish) and gaskets needed for assembly. Leave those 883 stickers on the gas tank and have lots of fun hurting egos!

Note regarding late 2009-up 883 cylinders: Since the 883 was introduced in 1986, H-D® used a thick iron insert in the casting that allowed the 3" bore 883 cylinder to be safely bored to 3.5" for 1200cc displacement. Mid-year 2009, this changed. Less cast iron was used, and the cylinders can no longer be bored to 1200 (see cutaway photo). If you can see aluminum on the outside of the cylinder spigot (arrow), your cylinders can not be bored to 1200 due to the step circled in red. We try to keep used, earlier versions

in stock that we can use for these applications, but this is subject to availability and finish. Contact our sales department for availability. An exact color may not be available and you may need to paint to match your engine. H-D® sells color-matching spray paint you can use for this. We do not recommend powder coating as the heat required to cure the PC will alter the precision-bored finish of the cylinders.



#517-914 '91-'03 XL883 Muscle 1200 kit **#517-915** '04-'E09 XL883 Muscle 1200 kit **#517-916*** 'L09-'22 XL883 Muscle 1200 kit

*Includes reconditioned '04-'E09 cylinders
No Cost Options - Chrome or Black Pushrod Covers

This kit uses your factory head & cylinder* cores sent in for modification.



MAKING & HARLEYS®

GREAT SINCE 1981!!!



