MX & ENDURO

Product Overview

2013



ABOUT ÖHLINS

Ever since the company was started in 1976 Öhlins has been an intricate part of the motorsport industry, but it doesn't stop there. We have produced advanced suspension technology for the motorcycle and car industry, and besides being motorsport specialists we are also OEM suppliers and manufacturer of aftermarket suspension.

It all started with Kenth Öhlin, himself a fair motocross rider in the 60's and 70's, started modifying his own bikes and later helping other riders reach success. Already before Öhlins Racing AB was started in 1976 he was constructing exhaust pipes, engines and shock absorbers.

Öhlins soon became synonymous with advanced suspension and in 1978 Öhlins shock absorbers were fitted for the first time on a world champion bike. Russian Gennady Moiseev who rode a KTM in the motocross 250cc class became the first world champion on Öhlins. More than 150 world titles would follow over the years with riders, drivers and teams winning titles with the help of Öhlins equipment.

Öhlins quickly grew, adding road racing to the motocross industry and after that it was just a small step into the automotive segment with success in car racing and rally adding to the motorsport pedigree. Öhlins continued to grow and with the CES technology we also moved into the automotive industry supplying CES valves to road car suspension.

In 1987 Öhlins was purchased by Yamaha and continued to grow in 20 years under Yamaha ownership but 20 years later Kenth Öhlin decided to buy back the company from Yamaha. Since 2007 the company is owned once again by Kenth Öhlin who is still active daily in the company.









ÖHLINS
ADVANCED SUSPENSION TECHNOLOGY

Öhlins MX Product Overview 2013

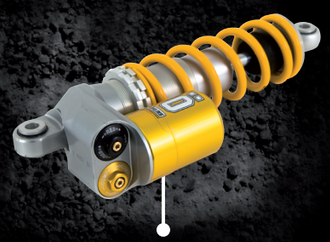
SHOCK ABSORBERS



TTX44 Mk II



STX46



TTX30

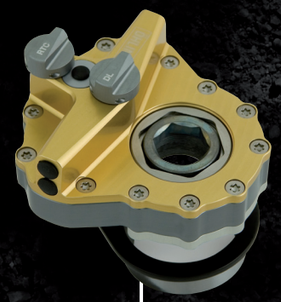
COOL TOOL OFFROAD







STEERING DAMPERS



STEERING DAMPER 2.1



SELECTIVE STEERING STABILIZER S³

FRONT FORKS



RXF48 RACING FRONT FORK

CARTRIDGE KITS



TTX22 CARTRIDGE KIT

SPRINGS



SPRINGS

FLUIDS & GREASE



FLUIDS & GREASE

ÖHLINS
ADVANCED SUSPENSION TECHNOLOGY

Shock Absorbers

SHOCK ABSORBER TTX 44 Mk II



TTX

FEATURES

Twin Tube design.

Öhlins TTX Technology.

Improved compression and rebound adjusters.

Three level HSC adjuster.

New piston and piston band.

New check valve layout.

New piston rod.

New seal head.

Newly designed bleed valve.

Dual spring kit available to most models.

Available for all major MX and Enduro models.

The TTX44 was originally developed for championship riders but has proven equally useful for serious private riders. Motocross and Enduro is the ultimate test for the Öhlins R&D department with the roughest and toughest conditions possible. It's close to the heart of Öhlins and it's where it all started, that is why Öhlins are serious about it.
The TTX44 was first launched in 2007 with the ground breaking TTX-technology at the forefront and has been constantly refined and upgraded ever since. The TTX 44 mkII from last season is further improved with the latest technology from MX GP. The newly developed piston and piston band gives improvements that can be translated into a significantly improved tire feeling for the rider. The TTX44 MKII can also be upgraded with a dual spring kit.

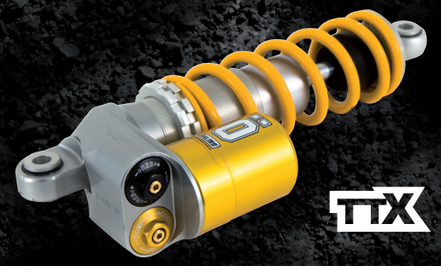


STX

STX46

FEATURES

Our new 85 cc shock.
New 2 way compression adjuster.
40 click low speed, 3 click high speed.
Improved dynamics, equals better function.
Updated PDS function.



TTX

TTX30

FEATURES

TTX technology, fully adjustable.
No cavitation risk.
Size is perfect to small bikes (50-65 cc).
A wide range of springs are available.



RXF RACING FRONT FORK



FEATURES

- Unique and further improved cartridge kit with Öhlins TTX22 design.
- New inner tube surface treatment, gives less friction.
- New stronger fork bottom material, more resistant to hitting stones.
- Maintenance is done easier thanks to new piston holder.
- New outer tube stickers to protect the outer tube better.
- Designed to be used with Öhlins fluids and spare parts.
- Available for all major MX and Enduro models.
- New protective stickers.

The Öhlins 48 mm front fork fully loaded with the TTX22 cartridge kit inside.

The Öhlins 48 mm front fork is loaded with the latest Öhlins front fork technology. The main piston performance in the cartridge kit inside is overall better thanks to the springs fitted to the kit, and the innertubes has a titanium oxide treatment. Riders will experience less fading as the seals fitted works to prevent this and there top-out noise is minimized due to the top out rubber used. The check-valve unit helps the fork to stay up in stroke without feeling too hard, which also improves the overall performance of the front fork.

The front fork has been designed so it is hard enough to resist stones but is still solid enough to prevent corrosion. The front fork also comes with protective stickers for the outer tube to protect the outer tube all way up to the lower clamp.
This is the very latest MX/Enduro front fork technology from Öhlins.

CARTRIDGE KIT TTX 22



It's the inside that really counts! If you want to keep your front fork legs but still upgrade to Öhlins TTX, just pull out the standard inserts and pop in this powerful TTX22 cartridge kit from Öhlins R&D.
The same kit that is fitted in the Öhlins Front Fork is based on the Öhlins TTX-technology is also available as a stand-alone cartridge kit for all major models. The TTX technology brings a positive pressure balance in the system, thanks to the twin tube technology. The gas pressurized dividing piston inside pushes the hydraulic fluid back into the low pressure side and the end result is better improved performance and no more cavitation.

The kit is lighter thanks to an 8 mm steel hollow piston and the main piston diameter is 22 mm. All other details are made in aluminum. Settings are constantly improved and a new one-way rebound valve was recently introduced which improves the performance and gives better front wheel control.
It's easily installed in OE front forks and available for most major models on the market.

FEATURES

- Unique cartridge kit with TTX design.
- Gas pressurized damping system for immediate damping response.
- Easy installation in OE front forks.
- External compression adjuster.
- External rebound adjuster.
- Improved hydraulic stops to improve bottoming resistance.
- Springs are ordered separately to suit rider's choice of rate.
- Top-out rubber for smoother top-out feeling.
- Maintenance is done easier thanks to new piston holder.
- Available for all major MX and Enduro models.

Steering Stabilizer

SELECTIVE STEERING STABILIZER S^3



FEATURES

Patented design.
High quality triple clamp.
Maintenance possibilities.
Uniuqe function without electrical power.



Öhlins proudly presents an MX/Enduro world sensation. Öhlins Selective Steering Stabilizer, the Öhlins S3. Straight from the R&D department comes something new and exciting for the 2012 season.

This is the answer for situations when you either don't get enough support from your steering damper or the handling of the bike suffers because you get too much damping from the steering damper when no damping is needed. Öhlins engineers went to work well aware that Motocross, Enduro and off-road riding provides the toughest of challenges.

The S3 stabilizes the ride and thanks to patented technology selects when and if the rider needs assistance. As long as the rider is in charge of the handle bars and with all the force derived from there the Steering Stabilizer provides no damping at all. The rider controls the bike and the front wheel allowing for a natural feel of the bike and free movement of the front end. It is also tuned to not affect the rider's movement of the bike while jumping. However, when an outside force like a stone or another object puts force to the front wheel the system activates instantly. Thanks to a torsion bar on top of the fork bridge the torque occurring from the outside force hitting the front wheel activates the valves in the Selective Steering Stabilizer. The sudden fast movement is filtered away and the rider maintains the control of the bike.

The Selective Steering Stabilizer is easy to use, no adjustments are needed as the system adapts to the forces affecting the front wheel. It is a solely mechanically and hydraulically designed system.
It is integrated with the Öhlins upper triple clamp which comes with the Selective Steering Stabilizer.
It has already been tested by numerous top riders in MX, Rally Raid and Enduro with great results and will be available as pure racing material to a limited amount of models.

STEERING DAMPER 2.1



FEATURES

The damper is installed on the top triple clamp with frame mounting on the upper steering head bearing, no radial movement like on previous models.

Damping Level Adjuster (DL) – Controls the general setup, including a high speed valve.

Return To Centre Adjuster (RTC) – Variable setup of the damping force on the return.

All aluminium casing.

One damper body to all bikes.

Mounting kits can be ordered separately to suit most brands on the market.

Full maintenance capacity.

Pressurized technology.

It has been on the market since 1992 and was praised from the very start. The evolution of technological solutions has been added to the design throughout the years but now it is time to launch a whole new concept.

The new silhouette is a result of a much easier way of mounting the damper under the handlebar. The new steering damper is now equipped with a completely new valving system, eliminating any fluctuation of the damping characteristics depending on making a left or a right turn. The new UniFlow feature is actually a system that controls the flow of the hydraulic fluid into only one direction hence the new fluctuation free damping curve. The system is also pressurized to compensate any temperature changes.

The new easy way of mounting the damper broadens the list of MX bikes that can be fitted with this model.

FRONT FORK FLUIDS

SHOCK ABSORBER FLUIDS

One important part of your suspension performance, is the fluids used.
Öhlins Racing does not accept nothing but the best, that is why we decided to develop our own suspension fluids. We use the more reliable scale Centistoke, to tell what´s inside the bottle, rather than the SAE scale. But to help you out a little bit if cSt is not your thing, we did put a small number on the lower right corner, to make a reference to the SAE scale.
Needless to say, Öhlins products works best with our fluids, and frankly, we belive others products do too!



FRONT FORK FLUIDS

Part. no:	Description:
01312-01	High performance FF fluid 1L
01312-02	High performance FF fluid 1,4L
01312-04	High performance FF fluid 4L

SHOCK ABSORBER FLUIDS

Part. no:	Description:
01304-01	High demand shock fluid 1L
01304-04	High demand shock fluid 4L

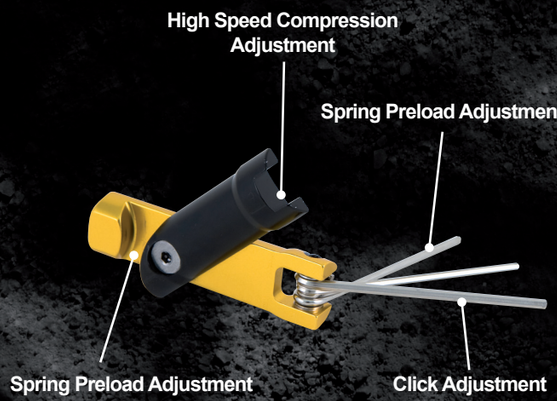
SPRINGS



Öhlins offer a wide range of springs to both front and rear end of most offroad bikes, and with different spring rates to suit the riders needs. The Öhlins dual spring kit deserves a special attention.
The Öhlins dual spring kit will increase comfort, traction (most prominent during acceleration over choppy areas) and increase the level of bottoming resistance, at the same time as the bike's tendency to kick during braking is decreased and the chassis movements are calmed down. All effects combined are giving the rider more confidence along a plush ride with larger margins to errors due to outside forces.
Using a dual spring kit is highly beneficial for light riders who normally run spring rates lower than 50-52N/mm. For this category of riders, the bike's own weight constitutes a large share of the total weight in motion, where it is possible to trick the laws of gravity and keep a low spring rate while operating above the ride height, and still use spring enough to handle the equipage weight while going further down the stroke.

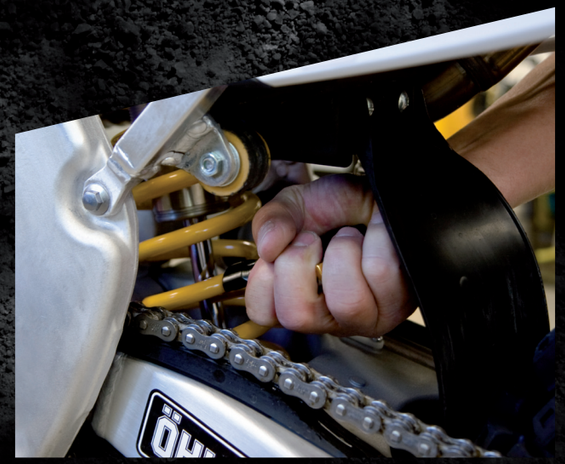
The advantages are greater at hard packed soil, but light riders might find the greater bottoming resistance helpful as soft, sandy soil tracks roughen up, while heavier riders might find some disadvantages at the deep, sandy tracks.
This dual spring kit is suitable for Enduro as well as comfort and traction are superior to standard type springs.

COOL TOOL OFFROAD





Our technicians got fed up with walking around the tracks with their pockets full of tools.
With this single piece of gold, you can adjust your Öhlins suspension easily, and it comes with a pocket too!
Use one of the Insex tools to open the spring preload adjuster locking ring, then grip the thread of the spring with the tool, and turn the spring in any direction to change spring preload! No more hook spanners or cursing.
You can also adjust the clickers and adjust the high speed compression hexagon with the black piece. Simple as that.



RECOMMENDATION LIST 2013

SHOCK ABSORBERS / FRONT FORK PRODUCTS / S3 STEERING STABILIZER / STEERING DAMPER 2.1

Model	Year	Part No	Type	Year	Part No	Type	Year	Part No	Available
GAS GAS									
EC 250 F	2013	GG 1387	T44PR1C2W	-	FGGG 1282	TTX Cartridge kit/Marz.	2012-13	SD 611	X
EC 300 F	2013	GG 1387	T44PR1C2W	-	FGGG 1282	TTX Cartridge kit/Marz.	2012-13	SD 611	X
EC 250 F	2013	GG 1389	T44PR1C2W	-	FGGG 1282	TTX Cartridge kit/Marz.	-	-	X
EC 300 F	2013	GG 1389	T44PR1C2W	-	FGGG 1282	TTX Cartridge kit/Marz.	-	-	-
EC 450 F	2013	GG 1389	T44PR1C2W	-	FGGG 1282	TTX Cartridge kit/Marz.	-	-	-
HONDA									
CRF150R	2007-12	HO 990	T44PR1C1W	2009-11	FGHO 1090	Cartridge kit	-	-	-
CRF150R	2013	HO 1391	T44PR1C2W	2009-11	FGHO 1090	Cartridge kit	-	-	-
CRF250R	2013	HO 1393	T44PR1C2W	2013	FGHO 1393	TTX Cartridge Kit	2012	SD 621	X
CRF450R	2013	HO 1394	T44PR1C2W	2013	FGHO 1394	TTX Cartridge Kit	2012	SD 621	X
CRF250/450R	-	-	-	2013	FGHO 1396	RXF 48mm Front Fork	2012	SD 621	X
HUSABERG									
FE 350/450/501	2013	KT 1384	T44PR1C2Q1W	2013	FGHU 1384	TTX Cartridge Kit	-	-	X
KAWASAKI									
KX85	2001-13	KA 590	S46PR1C2W	2009-13	FGKA 1090	Cartridge kit	-	-	-
KX250F	2013	KA 1393	T44PR1C2W	2013	FGKA 1393	TTX Cartridge Kit	-	-	X
KX450F	2013	KA 1394	T44PR1C2W	2013	FGKA 1394	TTX Cartridge Kit	-	-	X
KX250F/450F	2013	-	-	2013	FGKA 1396	RXF 48mm Front Fork	-	-	X
KTM									
KTM 50 SX	2013	KT 1397	T30PR1C1	-	-	-	-	-	-
KTM 65 SX	2013	KT 1398	T30PR1C1	-	-	-	-	-	-
KTM 85 SX	2013	KT 1390	S46PR1C2Q1W	2009-10	FGKT 1090	Cartridge Kit	-	-	-
250/300 EXC	2013	KT 1384	T44PR1C2Q1W	2013	FGKT 1384	TTX Cartridge Kit	2012	SD 661	X
250/350 EXC-F	2013	KT 1384	T44PR1C2Q1W	2013	FGKT 1384	TTX Cartridge Kit	-	-	-
450/500 EXC-F	2013	KT 1384	T44PR1C2Q1W	2013	FGKT 1384	TTX Cartridge Kit	-	-	-
125/150/250 SX	2013	KT 1394	T44PR1C2W	2013	FGKT 1393	TTX Cartridge Kit	-	-	X
250/350 SX-F	2013	KT 1394	T44PR1C2W	2013	FGKT 1393	TTX Cartridge Kit	-	-	X
450 SX-F	2013	KT 1394	T44PR1C2W	2013	FGKT 1394	TTX Cartridge Kit	-	-	X
250/350/450 SX-F	-	-	-	2009-13	FGKT 1396	RXF 48mm Front Fork	-	-	X
SUZUKI									
RM 85	2009-13	SU 1290	S46PR1C2W	2009-12	FGSU 1090	Cartridge Kit	-	-	-
RM-Z 250	2013	SU 1393	T44PR1C2W	2013	FGSU 1393	TTX Cartridge Kit	-	-	X
RM-Z 450	2013	SU 1394	T44PR1C2W	2013	FGSU 1394	TTX Cartridge Kit	-	-	X
RM-Z 250/450	-	-	-	2013	FGSU 1396	RXF 48mm Front Fork	-	-	X

RESERVATION FOR CHANGES

If you can´t find your bike in the list, please contact your local Öhlins Racing distributor.

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SHOCK ABSORBERS / FRONT FORK PRODUCTS / S3 STEERING STABILIZER / STEERING DAMPER 2.1

Model	Year	Part No	Type	Year	Part No	Type	Year	Part No	Available
YAMAHA									
YZ 85	2008-10	YA 1390	S46PR1C2	2008-13	FGYA 1090	Cartridge kit	-	-	-
WR 450 F	2012-13	YA 1384	T44PR1C2W	2012-13	FGYA 1384	TTX Cartridge Kit	-	-	X
YZ 125	2013	YA 1392	T44PR1C2W	-	-	-	-	-	X
YZ 250	2013	YA 1392	T44PR1C2W	-	-	-	-	-	X
YZ 250 F	2013	YA 1393	T44PR1C2W	2013	FGYA 1393	TTX Cartridge Kit	2012-13	SD 681	X
YZ 450 F	2013	YA 1394	T44PR1C2W	2013	FGYA 1394	TTX Cartridge Kit	2012-13	SD 681	X
YZ 250 F	-	-	-	2013	FGYA 1397	RXF 48mm Front Fork	2012-13	SD 681	-
YZ 450 F	-	-	-	2013	-	RXF 48mm Front Fork	2012-13	SD 681	-

RESERVATION FOR CHANGES

SHOCK ABSORBERS

Model	Part No	Type	Length	Stroke	Fitted Spring
VINTAGE MX					
Classic MX	CC 606	S36D	360	107	00180-90
Classic MX	CC 607	S36D	340	105	00180-90
Classic MX	CC 616	S36P	360	107	00180-90
Classic MX	CC 617	S36P	340	105	00180-90
Classic MX	CC 706	S36D	360	107	00480-01
Classic MX	CC 707	S36D	340	105	00480-01
Classic MX	CC 708	S36D	380,5	107	00480-01
Classic MX	CC 717	S36P	340	105	00480-01
Classic MX	CC 718	S36P	380,5	107	00480-01

RESERVATION FOR CHANGES





ÖHLINS
ADVANCED SUSPENSION TECHNOLOGY



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