

Husqvarna Motorcycles - Enduro Model Year 2022

Media Information

Husqvarna Motorcycles introduces the 2022 enduro range, with a host of innovations to the line-up delivering light, manageable machines without rival in conquering all types of terrain. The MY22 enduro range furthers the reputation of Husqvarna Motorcycles for a winning combination of dynamic performance and advanced ergonomics.

Revisions to the damping and action of the WP XPLOR forks and XACT rear shock featured on the enduro range mean riders can get even more from 2-stroke and 4-stroke engines delivering optimal torque and power in a manageable package. Riders of every level from amateur to professional can choose from a complete range of models unequalled in their class for power, performance and agility.

All models come with a new BRAKTEC hydraulic clutch system. This ensures light action with perfect progression and reliable performance in all conditions and the hydraulic system is self-adjusting and almost maintenance-free. Furthermore, a new BRAKTEC brake system offers superior stopping power with outstanding sensitivity and modulation in conjunction with high-performance GSK wave brake discs.

New rugged grey and electric yellow accents are a distinctive and stylish adornment for the Swedish-inspired design.

What is new in 2022:

- New colours, trims and graphics with rugged grey and electric yellow accents are a distinctive and stylish adornment for the Swedish-inspired design
- New BRAKTEC hydraulic clutch system → perfect modulation and reliable performance in all conditions
- New BRAKTEC brake system and high-performance GSK discs → superior stopping power with outstanding sensitivity and modulation
- Revised suspension settings for improved performance and rider feedback
- Oil bypass in the outer fork tubes reduces friction for smooth, consistent travel through the stroke and a revised cartridge joint offers added damping performance
- Revised shock valve seals with reduced hardness (MY21 = 90 Shore / MY22 = 70 Shore) offer improved feedback and consistent damping performance
- Inspired and tested by our Factory Racing Team all 2022 enduro machines run Michelin Enduro tyres for maximum traction on difficult terrain
- New 13:52 gearing on TE 250i for improved low-end response

Features and benefits

Frame

The chrome-moly steel frame is crafted from laser-cut, hydro-formed tubes which are robot-welded to ensure the highest levels of precision and quality. Specifically developed frame geometry and advanced longitudinal and torsional flex characteristics give unparalleled rider feedback, energy absorption and exceptional straight-line stability.

Forged aluminium cylinder head mounts connect the engine with the frame on all models and are designed to maintain optimal handling with rider comfort. The frame is finished in premium grey powder coating with frame protectors as standard for superior protection and durability.

- Advanced longitudinal and torsional flex characteristics → unparalleled rider feedback, energy absorption and exceptional straight-line stability
- Forged aluminium cylinder head mounts on all models
- Durable powder coated finish with frame protectors as standard

Composite carbon fibre subframe

A carbon composite subframe showcases advanced production technologies and innovation and is unique to Husqvarna Motorcycles. Using 70% polyamide and 30% carbon fibre, the 2-piece subframe has a total weight of just over 1 kg. Through the application of computational dynamics, specific rigidity could be engineered into the light and robust subframe, delivering outstanding handling and rider comfort.

- 2-piece subframe → weight just over 1 kg
- Carbon fibre composite construction → lightweight and robust
- Specific rigidity characteristics → exceptional handling and comfort

Swingarm

The hollow, cast aluminium swingarm offers optimal stiffness and strength for the least possible weight. The swingarm is machined so that the chain adjustment markings are visible from above for ease of maintenance.

- Optimal stiffness and strength in a lightweight construction

WP XPLOR fork

The WP XPLOR front fork consists of a 48mm spring type layout with split damping functions so that compression damping is controlled by the left leg and rebound damping by the right. Adjustment is simple, with an easy access adjuster (30 clicks) on top of each fork leg. Additionally, the standard preload adjusters offer 3-way adjustment with no need for tools.

Offering unsurpassed performance and comfort, the XPLOR fork features an advanced mid-valve piston to guarantee consistent damping and helps the fork operate throughout its stroke with exceptional rider feedback and resistance to bottoming out. A new oil bypass in the outer tube

reduces friction for smoother, more consistent travel throughout the stroke while a revised cartridge joint further enhances damping performance.

- WP XPLOR front fork → 48 mm spring type with split damping function
- Revised fork settings for improved performance and rider feedback
- Easy access preload adjusters
- Advanced mid-valve piston → superior performance, feel and comfort

CNC-machined triple clamps

Premium quality, CNC-machined, black-anodised 22 mm offset triple clamps are standard on all Husqvarna enduro models. The triple clamps are expertly manufactured using superior techniques and materials to provide high levels of quality and reliability. Ergonomics are customisable with 2-way handlebar adjustment as standard.

- CNC aluminium → finest quality and reliability
- Adjustable handlebar position → adjustable ergonomics

WP XACT rear shock

The WP XACT shock provides advanced damping functions in a compact, lightweight design. A pressure balance inside the shock means consistent damping for superior rider comfort and handling. New valve seals with reduced hardness (MY21 = 90 Shore / MY22 = 70 Shore) offer improved shock feedback and further improvements to damping performance.

Using the same linkage progression as the Husqvarna Motocross range, the rear-end sits low for optimum control and comfort in extreme enduro conditions. The component is fully adjustable and delivers unrivalled traction, feel and absorption. Rear wheel travel is 300 mm.

- Revised shock setting for improved damping consistency and rider feedback
- Advanced linkage progression → exceptional control and comfort
- Reduced valve seal hardness → further damping improvement
- 300 mm wheel travel

BRAKTEC hydraulic clutch

A new BRAKTEC clutch system guarantees even wear with reliable, near maintenance-free operation and perfect modulation in every condition. Free play is constantly compensated so that the biting point and function of the clutch remain identical in cold or hot conditions, and over time.

- BRAKTEC hydraulic clutch → perfect modulation in every condition

BRAKTEC brakes

A new BRAKTEC braking system offers the highest level of performance and is specifically tailored for enduro riding, delivering a sensitive and modulated feel. The front brake consists of an 11 mm master cylinder, monoblock caliper with a pair of 25 mm pistons and a 260 mm GSK wave disc. The rear brake has a 12,7 mm master cylinder, single 25 mm piston caliper and a 220 mm GSK disc. The cast aluminium brake master cylinders and calipers help to keep weight to a minimum while offering complete braking confidence by delivering superior stopping power in any condition.

- BRAKTEC brake system and high-performance GSK discs → superior stopping power with outstanding sensitivity and modulation

ProTaper handlebar

The ProTaper handlebar is second to none for function and style. Manufactured to exacting standards, the Pro Taper handlebar features class-leading fatigue resistance and minimal weight. The Pro Taper logos are chemically applied and are scratch and peel resistant.

- ProTaper handlebar → class-leading function and style

Grips and throttle assembly

An ODI lock-on grip on the left bar does not require gluing, while on the right, the vulcanised grip contains an innovative integrated throttle mechanism. The assembly has easy free-play adjustment and throttle progression can be altered by changing the cam.

- Throttle assembly and ODI grips → easy-to-alter throttle progression; easy grip mounting without glue

Map switch, traction control

Designed for easy operation, a map switch comes as standard on all 4-stroke models and selects between two electronic fuel injection (EFI) maps and activates the traction control feature. Traction control offers improved grip and control on slick terrain.

Traction control is selected on or off by the switch and functions by analysing throttle input from the rider and the rate at which engine RPM increases. If the RPM increases too quickly, the engine management system (EMS) registers a loss of grip and reduces the amount of power to the rear wheel to maintain maximum traction.

Additionally, all 2-strokes are fitted with a standard map switch to allow selection between two ignition curves based on conditions or rider preference.

- Standard handlebar map switch → alter engine characteristics according to conditions and rider preference
- Traction control → optimal traction in all conditions

Engine management system (EMS)

Apart from controlling EFI parameters on the 4-strokes, the Keihin EMS features selectable engine maps via the switch on the handlebar as well as traction control. Combined with the gear sensor, power delivery is tailored for each gear.

- Keihin EMS → smaller, lighter and faster at processing engine data for more efficient engine management
- Gear sensor → specific engine maps for each gear

The EMS features an electronic control unit (ECU) on the 2-strokes, which is responsible for a number of functions. The unit determines ignition timing and amount of fuel and oil injected. It also receives information from the throttle position sensor, ambient air and intake pressure sensors as well as crankcase pressure and water temperature sensors to adapt values and make corrections

for automatic temperature and altitude compensation. Prior to fuel injection, this would have meant changing carburettor jets.

- 2-stroke EMS → modern engine management eliminating the need for jetting changes

Throttle body

The 4-stroke range features a 42mm Keihin throttle body. The injector is positioned for the most efficient flow into the combustion chamber, while to ensure optimal throttle response the throttle cable is mounted directly without a throttle linkage.

- Throttle body → 42 mm, injector positioned for optimal flow, more immediate throttle response thanks to direct cable mounting

The 2-strokes use a 39 mm throttle body which regulates the amount of air entering the engine via a butterfly operated by dual throttle cables connected to the handlebar throttle assembly. Unlike 4-stroke throttle bodies, fuel is not introduced at this point, but rather 2-stroke oil is mixed with the air entering the engine to lubricate the crankshaft, cylinder and piston. Additionally, a throttle position sensor (TPS) relays airflow data to the ECU which in turn calculates the amount of oil and fuel delivered to the engine while a bypass screw regulates the idling speed and a cold start device opens an air bypass for cold starts.

- 39 mm throttle body → regulates air flow, TPS relays airflow data

Exhaust system

Tailored specifically for each model using an innovative 3D design process, the 2-stroke header pipes feature advanced geometry and performance. The TE 250i/300i header pipe offers more ground clearance making it less susceptible to damage, while a corrugated surface makes the header pipe more durable to rock damage and other hazards found on the enduro trail. The 2-stroke mufflers also feature an aluminium mounting bracket and advanced internal construction for excellent noise damping and weight saving.

The 4-stroke exhaust system is designed to deliver class-leading performance for the lowest possible weight. The header pipe is designed and manufactured in two pieces, to be as compact as possible. The joining arrangement allows it to be removed without having to take out the rear shock. Further innovation allows for a short, compact silencer without increased noise levels. The component is crafted from lightweight aluminium and is stylishly finished in a black coating to highlight its premium quality.

- Corrugated surface on TE 250i/300i → less susceptible to damage
- Header joining position on 4-stroke → remove without removing rear shock

Electric start and wiring harness

All TE and FE models come with electric start as standard. The system uses a compact and lightweight Li-Ion battery which is 1 kg lighter than a conventional battery. After several years experience producing electric start Husqvarna enduro models, reliability is second to none and quick and seamless starting is assured in all conditions.

Additionally, the wiring harness concentrates all needed electrical components into a common area below the seat for easy accessibility.

Integrated cooling system and radiators

The radiators are made from high-strength aluminium and designed using CFD (computational fluid dynamics) to channel air through them more efficiently. The cooling system is intelligently integrated with the frame, eliminating the need for additional hoses. The large centre tube running through the frame reduces pressure at this point, allowing for a consistent coolant flow.

Additionally, the radiators are mounted close to the centre of gravity for improved handling agility. All 4-stroke models are fitted with radiator fans as standard with an option in the accessories catalogue to fit them to all 2-strokes.

- Integrated cooling → maximum efficiency in minimum space
- Large central tube → consistent coolant flow

Fuel tank

An 8,5 litre polythene fuel tank incorporates a quick release filler cap and an integrated fuel pump. The fuel pump features internal line routing directly from the pump to the flange for optimal fuel flow. Additionally, the external fuel line is specifically positioned to make it less exposed and susceptible to damage. A fuel level sensor is incorporated in all models.

Airbox and tool-less Twin Air air filter access

The airbox is designed with precisely positioned inlet ducts aimed at preventing air deformation to ensure maximum airflow and filter protection. The air filter is easily accessed, without tools, by removing the left side-panel. Easy maintenance is guaranteed by the Twin Air filter and filter cage design featuring a simple fail-proof mounting system for safe and accurate filter installation.

- Airbox → maximum air flow and filter protection
- Filter mounting system → safe and accurate protection against dirt
- Tool-less filter access → easy and fast maintenance

Wheels

Black high-strength alloy rims by D.I.D with laser engraved logos are coupled to CNC machined hubs using lightweight spokes and silver anodised aluminium nipples. The nipples incorporate an advanced design reducing the frequency of spoke checks and maintenance.

- Lightweight but strong and reliable construction → minimum unsprung weight

Tyres

The enduro range features Michelin Enduro tyres as used by the Rockstar Energy Husqvarna Factory Racing team. The FIM approved tyres offer exceptional grip in a wide variety of different terrain and riding conditions.

- Michelin Enduro tyres → advanced grip in all conditions

Bodywork

The enduro range features bodywork which clearly showcases the progressive approach of Husqvarna Motorcycles to offroad motorcycles. Rugged grey and electric yellow graphics stylishly adorn the Swedish-inspired design. Ergonomics are specifically tailored to deliver great comfort and

control. As a result of extensive testing, the slim contact points make shifting between riding positions easier and allow the rider free- flowing movement.

The flat seat profile, together with the textured seat cover, deliver superior comfort and control in all conditions.

- Progressive bodywork → distinctive looks, modern design and graphics
- Ergonomics → confidence-inspiring riding position in all riding situations
- Seat → flat seat profile for exceptional comfort and control in all conditions

Technical information by model

FE 250

The FE 250 is the lowest capacity 4-stroke in the enduro line-up. Its small displacement makes the FE 250 very lightweight and it shines in tough, technical terrain while delivering torque and manageable 4-stroke performance. Combined with class leading WP suspension, selectable engine maps and a BRAKTEC hydraulic clutch, the FE 250 features an array of premium components for unsurpassed quality and reliability.

Engine

The 250cc engine is designed to be powerful, light and compact. All major components are carefully positioned with the engine and gearbox shafts arranged to ensure the overall package delivers the best performance and handling characteristics. As a result, the engine weighs only 27.9 kg while retaining a torque character to make the FE 250 accessible to both professionals and amateurs.

- Engine design → light and compact for optimised mass-centralisation
- Powerful engine → accessible to all skill levels

Cylinder head

The cylinder head features advanced technology aimed at reducing weight and drag: from the low friction surface in which the twin overhead camshafts rotate, to the four lightweight titanium valves – intake 32.5 mm, exhaust 26.5 mm – actuated by DLC (diamond-like carbon) coated finger followers. This helps the engine to rev freely while maintaining smooth, efficient power throughout the RPM range.

- Cylinder head → minimum drag for maximum performance
- Finger followers with DLC coating → reduced friction, increased performance

Cylinder and piston

The cylinder is taken from the successful FC 250 motocross model and features the same 78 mm bore. It also houses a forged bridged-box-type piston, professionally engineered from high-strength aluminium. The compression ratio of 13.8:1, in combination with the state-of-the-art cylinder and cylinder head gasket, provides outstanding performance and reliability.

- State-of-the-art cylinder and cylinder head gasket → optimal compression ratio and engine performance
- Forged bridged-box-type piston → low weight, low oscillating mass

Crankshaft

The plain big-end bearing features two force-fitted bearing shells to ensure maximum reliability and durability, guaranteeing long 135-hour service intervals.

- Plain big-end bearing with force-fitted shells → 135-hour service interval

Counter-balancer shaft

In order to counteract the rotational force of the crankshaft and reduce vibration, the FE 250 engine uses a multifunctional counter-balancer shaft which also drives the water pump and timing chain.

- Multifunctional counter-balancer shaft → reduced vibrations, compact design

Crankcases

The FE 250 engine is designed to be compact and centralise rotating masses. As a result, the crankcases are engineered to arrange the engine and gearbox shafts for the ideal centre of gravity and integrate the oil supply to the main bearing. The casings are manufactured using a high-pressure die-cast production process and are optimised for minimal weight while retaining exceptional reliability. The iconic Husqvarna logo adorns the bronze-finished crankcase covers.

- Crankcases → light and compact, mass-centralisation
- High pressure die-cast production process → minimal weight, while maintaining strength

Gearbox

The 6-speed gearbox from Pankl Racing Systems provides specific wide-range enduro-type gearing. Additionally, a gear sensor allows the EMS to deliver specific engine maps tailored to each gear.

- Pankl 6-speed gearbox → enduro specific ratios
- No-dirt gear lever → prevents dirt build-up for perfect control

DDS clutch

The FE 250 features a DDS (Dampened Diaphragm Steel) clutch. The exclusive characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs to make clutch operation very light, while also integrating a damping system for better traction and durability. The clutch basket is a single-piece CNC-machined steel component that allows the use of thin steel liners contributing to the compact design of the engine. The BRAKTEC hydraulic system ensures perfect modulation in all conditions.

- DDS clutch → compact with light action and improved durability
- BRAKTEC hydraulic system → perfect clutch modulation

Benefits

- Class leading performance and weight
- Centralised mass for top-level handling and manoeuvrability
- Advanced electronics for unsurpassed usability
- Hydraulic clutch and reliable gearbox for precise and smooth shifting
- Dependable electric start

FE 350

The FE 350 displays its versatility in all types of terrain. With a lightweight chassis and abundant performance, the FE 350 possesses a power-to-weight ratio to rival a 450 with the light and agile feel of a 250. Combined with WP suspension, traction control and comfortable ergonomics, the FE 350 is second to none when the going gets tough.

Engine

The DOHC 350cc engine is unrivalled in terms of versatility. Sharing much of its architecture with the FE 250 engine, the FE 350 delivers a significant increase in power and torque, enough to get close to a 450, while maintaining its lightweight character.

- Performance, weight, mass centralisation → ride-ability
- Lightweight and compact → 450 rivalling power-to-weight ratio

Cylinder head

The FE 350 features an advanced DOHC cylinder head layout meticulously engineered to deliver performance and reliability. Internally, the DOHC layout features polished camshafts and low-friction DLC coated finger followers. Together with lightweight titanium valves – 36.3 mm intake and 29.1 mm exhaust – they aid in delivering optimal performance.

- Lightweight titanium valves → 36.3 mm intake and 29.1 mm exhaust
- Polished camshafts, finger followers with DLC coating → minimal friction

Cylinder and piston

The 88 mm bore and 57.5 mm stroke cylinder features a compression ratio of 13.5:1 and a lightweight forged bridged-box-type piston. As a result, the low oscillating mass delivers exceptional power, high RPM and a broad, usable power band.

- Lightweight 88mm diameter piston → reduces oscillating mass
- Forged bridged-box-type piston → optimised fit in combustion chamber
- 13.5:1 compression ratio → highest performance with least danger of engine 'knock'

Crankshaft

The crankshaft is optimised for overall reliability to guarantee long service intervals of 135 hours. This has been made possible by use of a connecting rod with a bushed small-end and two force-fitted shells at the big-end bearing. Additionally, an oil supply to the main bearing is integrated with the engine cases.

- Bush-type small-end bearing on connecting rod → Maximum reliability and long service interval
- Plain big-end bearing with force-fitted shells → 135-hour service interval

Counter-balancer shaft

In order to counteract the rotational force of the crankshaft and reduce vibration, the FE 350 engine uses a multifunctional counter-balancer shaft which also drives the water pump and timing chain.

- Multifunctional counter-balancer shaft → reduced vibration, compact design

Crankcases

The engine cases are engineered to arrange the shafts for the ideal centre of gravity. The casings are manufactured using a high-pressure die-cast production process, resulting in thin wall thickness while retaining exceptional reliability. The iconic Husqvarna logo adorns the bronze-finished crankcase covers.

- Crankcases → light and compact, mass-centralisation
- High-pressure die-cast production process → thin walls for reduced weight while maintaining strength

Gearbox

A 6-speed gearbox from Pankl Racing Systems uses specific wide-range enduro-type gearing. Additionally, a gear sensor allows the EMS to deliver specific engine maps tailored to each gear.

- Pankl 6-speed gearbox → enduro-specific ratios
- No-dirt gear lever → prevents dirt build up for perfect control

DDS clutch

The FE 350 features a DDS (Dampened Diaphragm Steel) clutch. The exclusive characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs making the clutch operation very light, while also integrating a damping system for better traction and durability. The clutch basket is a single-piece CNC-machined steel component that allows the use of thin steel liners contributing to the compact design of the engine. The BRAKTEC hydraulic system ensures perfect modulation in all conditions.

- DDS clutch → compact with light action and improved durability
- BRAKTEC hydraulic system → perfect clutch modulation

Benefits

- 450-rivalling performance in a lightweight engine
- 250 manoeuvrability and agility
- Map switch and traction control as standard
- BRAKTEC hydraulic clutch for consistent, maintenance-free operation

FE 450

The FE 450 features class-leading technology and premium components as standard. The chromium molybdenum frame is expertly crafted to offer ideal flex, while the powerful engine features shaft arrangements aimed at balancing mass centralisation and handling. Combined with traction control, WP suspension and a progressive rear linkage, the FE 450 is without compromise for pure enduro performance and precision.

Engine

Weighing only 29.2 kg, the 450cc engine is not only light and compact but features the latest technology available to offer unequalled performance, ride-ability and reliability in its class. Additionally, the engine is specifically suited to enduro riding with an electric start as standard, a 6-speed wide-ratio gearbox and a host of electronic rider aids.

- Engine → lightweight and compact
- Class leading electronics → traction control, map selection

Cylinder head

The SOHC cylinder head is incredibly compact and lightweight, using a short profile with the camshaft located as close to the centre of gravity as possible to contribute to improved handling and agility. Lightweight valves are actuated via rocker arm and feature timing specifically designed to deliver precise levels of torque and throttle response – 40 mm titanium intake valves and 33 mm steel exhaust valves. Low-friction DLC rocker arm coating and low-friction chain guides offer optimum efficiency and reliability.

- SOHC cylinder head → compact, lightweight design, camshaft close to centre of gravity
- DLC coating and low-friction chain guides → efficiency and reliability

Cylinder and piston

The lightweight aluminium cylinder features a 95 mm bore and a lightweight Konig forged bridge-box-type piston. This is perfectly matched to the high-compression combustion chamber, and creates very little oscillating mass. A high compression ratio of 12.75:1 is achieved without engine vibration and knock, further increasing rider control and comfort.

- Lightweight aluminium cylinder → 95 mm bore
- Lightweight forged bridged-box-type piston by Konig → high performance, reduced oscillating mass

Crankshaft

A plain big-end bearing comprising two force-fitted bearing shells ensures maximum reliability and durability, guaranteeing long service intervals of 135 hours.

- Plain big-end bearing and force-fitted shells → increased durability and service intervals

Counter-balancer shaft

In order to counteract the rotational force of the crankshaft and reduce vibration, the FE 450 engine uses a multifunctional counter-balancer shaft which also drives the water pump.

- Multifunctional counter-balancer shaft → reduced vibration, compact design

Crankcases

The crankcases are designed to position the engine and gearbox shafts and internals in the best possible positions to centralise mass for lightweight handling. High-pressure die-cast production processes result in thin but strong wall thicknesses keeping weight to a minimum.

- State-of-the-art design → mass-centralisation for lightweight handling
- High-pressure die-cast production process → thin walls for optimised weight while maintaining strength

Gearbox

The lightweight 6-speed gearbox ensures smooth and precise shifts thanks to a low-friction coating on the shifting fork. The gear lever features a design that prevents dirt build-up and keeps the lever tip in its original position even in the toughest conditions. A gear sensor allows the EMS to deliver specific engine maps tailored to each gear.

- 6-speed gearbox → lightweight
- Fork coating → smooth and precise shifting
- Gear sensor → specific engine maps for each gear

DDS clutch

The FE 450 features a DDS (Dampened Diaphragm Steel) clutch. The exclusive characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs making the clutch operation very light, while also integrating a damping system for better traction and durability. The clutch basket is a single-piece CNC-machined steel component that allows the use of thin steel liners contributing to the compact design of the engine. The BRAKTEC hydraulic system ensures perfect modulation in all conditions.

- DDS clutch → compact with light action and improved durability
- BRAKTEC hydraulic system → perfect clutch modulation

Benefits

- Class-leading performance and reliability
- Intuitive and confidence-inspiring riding experience
- Advanced electronics include traction control and adjustable engine maps
- Exclusive DDS clutch with BRAKTEC hydraulics for smooth and light clutch action
- Electric starter and compact Li-Ion battery

FE 501

The FE 501 houses the most powerful engine in the Husqvarna enduro range. With large moving components, vibration is kept to a minimum by a counter-balancer shaft while a map select switch changes the power characteristics to best suit riding conditions. High-quality finishes and premium components ensure the FE 501 meets the highest level of quality and craftsmanship.

Engine

Delivering the highest level of performance in the Husqvarna enduro line-up, the 510.9cc power plant is more advanced than ever while weighing only 29.4kg. Despite its high performance, the FE 501 can be tamed using its numerous advanced electronic rider aids, such as traction control and the handlebar map select switch. Hence the performance of the FE 501 is accessible on many types of terrain by riders of various skill levels.

- Engine → light and powerful
- Class leading electronics → Keihin EFI, traction control

Cylinder head

The SOHC cylinder head is incredibly compact and lightweight, using a short profile with the camshaft located as close to the centre of gravity as possible to contribute to improved handling and agility. Lightweight valves are actuated via rocker arm and feature timing specifically designed to deliver precise levels of torque and throttle response – 40 mm titanium intake valves and 33 mm steel exhaust valves. Low-friction DLC rocker arm coating and low-friction chain guides offer optimum efficiency and reliability.

- SOHC cylinder head → compact, lightweight design, camshaft close to centre of gravity
- DLC coating and low-friction chain guides → efficiency and reliability

Cylinder and piston

The lightweight aluminium cylinder features a 95 mm bore and a lightweight Konig forged bridge-box-type piston. This is perfectly matched to the high-compression combustion chamber, producing very little oscillating mass. The high compression ratio of 12.75:1 is achieved without engine vibration and knock, further increasing rider control and comfort.

- Lightweight aluminium cylinder → 95 mm bore
- Lightweight forged bridged-box-type piston by Konig → high performance, reduced oscillating mass

Crankshaft

A plain big-end bearing comprising two force-fitted shells ensures maximum reliability and durability, guaranteeing long service intervals of 135 hours.

- Plain big-end bearing and force-fitted shells → increased durability and service intervals

Counter-balancer shaft

In order to counteract the rotational force of the crankshaft and reduce vibration, the FE 501 engine uses a multifunctional counter-balancer shaft which also drives the water pump.

- Multifunctional counter-balancer shaft → reduced vibration, compact design

Crankcases

The crankcases are designed to position the engine and gearbox shafts and internals in the best possible positions to centralise mass for lightweight handling. High-pressure die-cast production processes result in thin but strong wall thicknesses keeping weight to a minimum.

- Design → mass-centralisation, lightweight handling
- High-pressure die-cast production process → thin walls for optimised weight while maintaining strength

Gearbox

The lightweight 6-speed gearbox ensures smooth and precise shifts thanks to a low-friction coating on the shifting fork. The gear lever features a design that prevents dirt build-up and keeps the lever tip in its original position even in the toughest conditions while a gear sensor allows for specific engine maps in each gear.

- 6-speed gearbox → light weight
- Fork coating → smooth and precise shifting
- Gear sensor → specific engine maps for each gear

DDS clutch

The FE 501 features a DDS (Dampened Diaphragm Steel) clutch. The exclusive characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs making the clutch operation very light, while also integrating a damping system for better traction and durability. The clutch basket is a single-piece CNC-machined steel component that allows the use of thin steel liners contributing to the compact design of the engine. The BRAKTEC hydraulic system ensures perfect modulation in all conditions.

- DDS clutch → compact with light action and improved durability
- BRAKTEC hydraulic system → perfect clutch modulation

Benefits

- Most powerful Husqvarna enduro engine available
- Intuitive and confidence-inspiring riding experience
- Advanced electronics include traction control and adjustable engine maps
- Exclusive DDS clutch with BRAKTEC hydraulics for smooth and light clutch action
- Electric starter and compact Li-Ion battery

TE 150i

Epitomising lightweight and nimble 2-stroke character, the TE 150i features the latest 2-stroke fuel injection technology giving it all the convenience of a modern 4-stroke with far less weight. The TE 150i is fitted with an electric starter as standard for easy starting in challenging situations. Additionally, the chassis offers precise flex characteristics which, in combination with WP suspension, offers advanced handling characteristics and comfort in the most challenging conditions.

Engine

Using the latest 2-stroke fuel injection technology, the TE 150i has all the convenience of a modern 4-stroke as it eliminates the need to premix fuel or adjust jetting at different altitudes. The engine uses specific shaft arrangements designed to harness the rotating mass of the engine in the ideal centre of gravity. The lightweight and compact engine provides strong power delivery tailored for enduro riding while retaining low-cost 2-stroke maintenance.

- Latest generation 2-stroke → fuel injection, powerful, light and compact
- Mass-centralisation → significant benefits for handling and manoeuvrability

Cylinder and piston

The cylinder features a 58 mm bore and an innovative power valve design that delivers controllable power throughout the RPM range. The piston is designed to perfectly match the combustion chamber contour delivering the highest level of 2-stroke performance.

Additionally, the cylinder features two inlet positions located on the transfer ports at the rear of the cylinder where a pair of fuel injectors are mounted. The injectors deliver the fuel downwards into the transfer port which guarantees excellent atomisation with the air travelling upward to the combustion chamber. This ensures more efficient combustion resulting in reduced fuel consumption and emissions.

- Cylinder and piston → optimal combustion chamber contour
- Fuel injection → increased efficiency and reduced emissions

Crankshaft

With a 54.5mm stroke, the crankshaft is perfectly balanced to reduce vibrations. The weighted flywheel attached to the crankshaft provides abundant torque and controllable power tailored for enduro riding while the large alternator provides all the power needed for the EFI system.

- Lightweight crankshaft → very little vibration
- Large alternator → ample electrical output to power EFI system

Crankcases

The crankcases are manufactured using a high-pressure die-cast production process resulting in a thin wall thickness and minimal weight. To centralise mass, the layout features a shaft arrangement precisely positioned to harness rotating masses at the ideal centre of gravity. The reed block features optimised carbon reeds for improved sealing.

- High pressure die-cast production process → thin walls resulting in light weight

- Shaft arrangement → ideal mass centralisation

Oil tank and pump

The TE 150i features an electronic oil pump which feeds vital 2-stroke oil into the engine to keep it lubricated. The pump is located just below the oil tank and feeds the oil via the throttle body meaning the oil is not mixed with the fuel, eliminating the need for pre-mixing as on traditional 2-stroke engines. The pump is controlled by the EMS and delivers the optimal amount of oil according to the current RPM and engine load, reducing waste and preventing excessive smoke being transmitted from the exhaust.

The oil tank is located beneath the fuel tank and is connected to a filler hose which runs through the upper member of the frame to a filler cap conveniently located for easy refills. The tank capacity is 0.7 litre and is fitted with a sensor which illuminates a warning visible to the rider when the oil needs to be refilled.

- Oil pump and tank → convenient solution, eliminates pre-mix

Gearbox

The TE 150i is fitted with a Pankl Racing Systems 6-speed wide range gearbox. The enduro-specific ratios are tailored to the 150cc power delivery while an innovative gear level reduces dirt build up ensuring perfect operation in all conditions.

- PANKL 6-speed gearbox → enduro-specific gearing
- Innovative gear lever → prevents dirt build up ensuring precise control

DS clutch

The TE 150i features a DS (Diaphragm Steel) clutch. The exclusive characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs. The clutch basket is a single-piece CNC-machined steel component that allows the use of thin steel liners and contributes to the compact design of the engine.

- DS clutch → excellent modulation and durability

Benefits

- Continuous 2-stroke development offering maximum performance and low running costs
- Low weight and agile handling
- Hydraulic clutch
- High quality standard components

TE 250i

The TE 250i incorporates the perfect balance between usable 2-stroke power and nimble, lightweight handling. The TE 250i features revolutionary 2-stroke electronic fuel injection. This new-age technology redefines 2-stroke competition motorcycles, cementing their position in the enduro segment for the foreseeable future. The TE 250i adds convenience and simplicity, doing away with the premixed fuel and jetting changes of the past and ushering in efficiency and low emissions while retaining the simple character and inexpensive ownership of a 2-stroke.

Engine

The 250cc 2-stroke engine has for long been the best combination of unsurpassed power and lightweight construction. The simplicity and low maintenance cost of the 2-stroke engine has made it a favourite amongst enduro riders for generations. The TE 250i features an advanced electronic fuel injection system. This comprises of a set of fuel injectors positioned at the transfer ports which deliver the ideal amount of fuel to the engine in every condition. This not only reduces fuel consumption and emissions but also delivers a clean and smooth power delivery giving the revered 2-stroke the edge. Additionally, the TE 250i engine has an advanced construction featuring shaft arrangements precisely positioned for greater mass centralisation, a counter-balancer shaft reducing vibration, a twin-valve controlled power valve and a 6-speed enduro gearbox.

Cylinder

The 66.4 mm bore cylinder in the TE 250i features a twin valve-controlled power valve system which delivers smooth and controlled power throughout the RPM range. Optimal exhaust port timing is achieved with the combination of a state-of-the-art, adjustable power valve drive and machined port window.

Additionally, the cylinder features two inlet positions located on the transfer ports at the rear of the cylinder where a pair of fuel injectors are mounted. The injectors deliver the fuel downwards into the transfer port which guarantees excellent atomisation with the air travelling upward to the combustion chamber. This ensures more efficient combustion resulting in reduced fuel consumption and emissions.

- Dual fuel injectors → excellent atomisation, reduced fuel consumption
- Power valve → machined port window

Piston

The lightweight piston is perfectly matched to the cylinder and transmits minimal oscillating mass ensuring high levels of reliability and performance.

- Piston → fits perfectly to cylinder and combustion chamber

Engine casings

The TE 250i engine is designed to improve mass centralisation. The engine uses specific shaft arrangements designed to harness the rotating mass of the engine in the ideal centre of gravity. As a result, the lightweight, die-cast engine casings are developed with the shaft arrangements in the ideal position, centralising oscillating mass and improving ride-ability. Additionally, the counter-balancer shaft is integrated in a very compact manner, having little effect on the overall design.

Additionally, the water pump casing is designed for effective cooling by optimising the flow of coolant.

- Die-cast engine casings → mass centralisation, optimal handling
- Water pump casing → optimal flow of coolant for effective cooling

Counter-balancer shaft

The engine houses a laterally mounted counter-balancer shaft. The balancer significantly reduces vibration resulting in a smoother and more comfortable ride.

- Counter balancer shaft → significantly reduced vibration

Crankshaft

The crankshaft features a 72 mm stroke and is balanced in conjunction with the counter-balancer shaft for minimum vibration. By incorporating a heavier ignition rotor, the crankshaft produces more inertia than its motocross counterpart which improves control in the lower RPM range.

Gearbox

A 6-speed Pankl Racing Systems gearbox features enduro-specific ratios while an innovative shift lever reduces dirt build up guaranteeing easy operation in all conditions.

- 6-speed gearbox → enduro-specific ratios
- Gear lever → prevents dirt build up and blockage

Clutch

The TE 250i features a DDS (Dampened Diaphragm Steel) clutch. What this means is the clutch uses a single diaphragm spring instead of the more common coil spring design resulting in a much lighter clutch action. This design also incorporates a damping system which increases both traction and durability. Additionally, the light and robust basket and inner hub guarantee optimal oil supply and cooling to the clutch.

Combined with the BRAKTEC hydraulic system this guarantees a light, modulated clutch feel with reduced maintenance and freedom from adjustment.

- DDS clutch → light action with integrated damping system, increased traction and reliability
- BRAKTEC hydraulic system → light, modulated clutch action, almost maintenance-free

Oil tank and pump

The TE 250i features an electronic oil pump which feeds vital 2-stroke oil into the engine to keep it lubricated. The pump is located just below the oil tank and feeds the oil via the throttle body meaning the oil is not mixed with the fuel, eliminating the need for pre-mixing as on traditional 2-stroke engines. The pump is controlled by the EMS and delivers the optimal amount of oil according to the current RPM and engine load reducing waste and preventing excessive smoke being transmitted from the exhaust.

The oil tank is located beneath the fuel tank and is connected to a filler hose which runs through the upper member of the frame to a filler cap conveniently located for easy refills. The tank capacity is 0.7 litre and is fitted with a sensor which illuminates a warning lamp visible to the rider when the oil needs to be refilled.

- Oil pump and tank → convenient solution, eliminates pre-mix

Benefits

- State-of-the-art 2-stroke technology
- Reduced fuel consumption
- No premix needed
- Smooth and clean power delivery
- Low maintenance costs
- Hydraulic clutch
- Excellent handling and agility

TE 300i

The flagship TE 300i offers astonishing power in a light and agile package. The TE 300i features innovative electronic fuel injection and retains solid reliability and low maintenance costs. While offering the highest 2-stroke performance in the Husqvarna enduro range, the TE 300i remains controllable and benefits from added convenience by eliminating the need for premixing fuel and tedious jetting changes inherent with carburettor models. Additionally, the system significantly reduces emissions and excellent fuel consumption allows the rider to stay on the trail for extended periods of time.

Engine

The 300cc 2-stroke engine is the benchmark in unrivalled power in a lightweight construction. The engine features precisely positioned shaft arrangements for optimal mass centralisation, a counter-balancer shaft reducing vibration, a twin-valve controlled power valve and 6-speed enduro gearbox.

The TE 300i features an advanced electronic fuel injection system. This comprises of a set of fuel injectors positioned at the transfer ports which deliver the ideal amount of fuel into the engine for every condition. This not only reduces fuel consumption and emissions but also delivers a clean and smooth power delivery giving the revered 2-stroke the edge.

Cylinder

The 72mm bore cylinder features a twin valve-controlled power valve system which delivers smooth and controlled power throughout the RPM range. Optimal exhaust port timing is achieved with the combination of a state-of-the-art, adjustable power valve drive and machined exhaust port window.

Additionally, the cylinder features two inlet positions located on the transfer ports at the rear of the cylinder where a pair of fuel injectors are mounted. The injectors deliver the fuel downwards into the transfer port which guarantees excellent atomisation with the air travelling upward to the combustion chamber. This ensures more efficient combustion resulting in reduced fuel consumption and emissions.

- Dual fuel injectors → excellent atomisation, reduced fuel consumption
- Power valve → machined port window

Piston

The lightweight piston is perfectly matched to the cylinder and transmits minimal oscillating mass ensuring high levels of reliability and performance.

- Piston → fits perfectly to cylinder and combustion chamber

Engine casings

The TE 300i engine is designed to improve mass centralisation. As a result, the lightweight, die-cast engine casings are developed to accommodate a shaft arrangement aimed at centralising oscillating mass and improving ride-ability. Additionally, the counter balancer shaft is integrated in a very compact manner having little effect on the overall design.

Additionally, the water pump casing is designed for effective cooling by optimising the flow of coolant.

- Die cast engine casings → mass centralisation, optimal handling
- Water pump casing → Optimal flow of coolant for effective cooling

Counter balancer shaft

The engine houses a laterally mounted counter balancer shaft. The balancer significantly reduces vibration resulting in a smoother and more comfortable ride.

- Counter balancer shaft → significantly reduced vibration

Crankshaft

The crankshaft features a 72mm stroke and is balance in conjunction with the counter balancer shaft for minimum vibration. By incorporating a heavier ignition rotor, the crankshaft produces more inertia than its motocross counterpart which improves control in the lower RPM range.

Gearbox

A 6-speed PANKL gearbox features enduro specific ratios while an innovative shift lever reduces dirt build up guaranteeing easy operation in all conditions.

- 6-speed gearbox → enduro-specific ratios
- Gear lever → prevents dirt build up and blockage

Clutch

The TE 300i features a DDS (damped diaphragm steel) clutch. What this means is the clutch uses a single diaphragm spring instead of the more common coil spring design resulting in a much lighter clutch action. This design also incorporates a damping system which increases both traction and durability. Additionally, the light and robust basket and inner hub guarantee optimal oil supply and cooling to the clutch.

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- Oil pump and tank → convenient solution, eliminates pre-mix

Benefits

- State-of-the-art 2-stroke technology
- Reduced fuel consumption
- No premix needed
- Smooth and clean power delivery
- Low maintenance costs
- Hydraulic clutch
- Excellent handling and agility

Functional Offroad Apparel Collection 2021

Moto 9 MIPS Gotland Helmet

Packed with protection, the Moto 9 MIPS Gotland Helmet provides safety, comfort, and style. Made exclusively for Husqvarna Motorcycles by Bell, the helmet features a highly sophisticated ventilation system, a fully adjustable visor, and a removable, washable liner. The helmet is finished with a distinctive black and yellow design.

Gotland Jacket

The all new Gotland Jacket is extremely versatile and feature-packed. A lightweight, breathable, water-repellent offroad enduro jacket with multi-season appeal. When the temperature rises the Gotland Jacket doubles as a vest, with sleeves that can be detached and stowed in its large rear cargo pocket. Comprehensive ventilation lets cool air in and warm air out. Numerous other pockets inside and out add to the Gotland's usefulness, one of the internal pockets being totally waterproof. Preformed shoulders and elbows plus reflective detailing provide comfort and protection.

Gotland Shirt

The Gotland Shirt is a fresh take on an offroad staple. Light and robust the modern yet timeless Gotland Shirt is water repellent while remaining breathable.

Gotland Pants

Team the Gotland Jacket with Gotland Pants. Lightweight, durable and breathable, the Gotland Pants are Cordura-reinforced, offer highly effective ventilation and feature heatproof and abrasion-resistant leather knee reinforcement.

Gotland Waterproof Gear

For wet weather offroad days, the new Functional Apparel Collection features the Gotland Jacket and Pants WP. Waterproof, multilayer, functional membranes keep the elements at bay. Hard-wearing construction and design also allow for easy movement and plenty of ventilation as required.

Crossfire 3 SRS Boots

Combining protection with style, the high-quality Crossfire 3 SRS Boots are made exclusively for Husqvarna Motorcycles by leading Italian boot brand, SIDI. A fully adjustable calf area and micro adjustable buckles ensures a personalised fit for exceptional comfort and control.

Technical Accessories

Seat

Superior grip for ultimate control in all conditions. The resistant coating features a wave design for enhanced traction while allowing complete freedom of movement for the rider. Retaining the standard seat height ensures a fast and effective upgrade with no changes to the motorcycle's ergonomics.

Factory Racing Triple Clamp

CNC milled from aluminium creates a smooth finish for the Factory Racing Triple Clamp, which delivers both aesthetic and performance improvements. Rider feedback is enhanced with the clamps engineered for optimal flexibility and a smoother front fork action. Blue anodised for a race team inspired look.

FMF Titanium Powercore 2.1 Silencer

The super-low weight FMF Titanium Powercore 2.1 Silencer is a fast and simple solution to reducing weight from the TE 150, TE 250 and TE 300 models. Lowering sound with no compromise on performance, this blue anodised silencer can be mounted in minutes.

Wrap-around Handguard Kit

A necessity for tight woods riding, the Wrap-around Handguard Kit provides exceptional hand and finger protection. Creating a closed version handguard, the robust plastic design also prevents lever damage ensuring no ride is cut short early.

Supersprox Stealth Rear Sprocket

Combining an aluminium centre with an outer ring of high-strength steel teeth ensures the Supersprox Stealth Rear Sprocket lasts at least three times longer than a conventional aluminium

sprocket. In addition, the blue anodised aluminium centre reduces un-sprung weight for improved handling.

Clutch Cover Protection

Providing highly effective engine protection, Husqvarna Motorcycles' Clutch Cover Protection neatly fits over the original clutch cover. Vastly improving motorcycle durability, it is essential for extreme enduro and comes with a mounting kit included. Fitting the cover is super-simple.

Factory Rear Wheel 2.15x18" and Factory Front Rear 1.6x21"

For superior strength, the hubs used on the Factory Wheels are machined from individual pieces of aluminium and anodised blue for a race team inspired look. The hubs are then connected to black D.I.D. DirtStar rims to improve stability in all conditions and reduce the overall weight.

LED Headlight

Featuring the latest LED technology, the all new LED Headlight is specifically developed for offroad riding in the most extreme night conditions. Exceptionally robust, it is installed in the standard Husqvarna Headlight Mask and offers an impressive 1.500 Lumen of light power.

Skid Plate

Providing extreme protection thanks to its 3 mm thick, high-strength C-SMC material construction, Husqvarna Motorcycles' Skid Plate ensures highly effective frame and engine protection. Extremely light and fitting easily and directly to the frame, the Carbon Sheet Moulding Compound process and high-quality machining guarantee a truly tough and durable product.