



Press Release

MONTESA COTA 4RT260 & COTA 4RT Race Replica 2016 models



Cota 4RT260



Cota 4RT Race Replica

Introduction

Ever since its first appearance, the Montesa Cota 4RT model started a revolution in the world of trial, a discipline dominated completely by the mechanics of 2 stroke engines. These power plants are compact, highly reliable and easy to use, however they are often chastised for being highly polluting. This being the case, Montesa, in close collaboration with Honda Motor Co., and in anticipation of the emissions standards that were to be enforced in 2006, developed the Montesa Cota 4RT, an advanced trial motorcycle equipped with a compact and revolutionary 4 stroke and 4 valve engine with a PGM-FI electronic fuel injection system, which resulted in a highly efficient machine with a low level of emission pollution and a significant value in power and torque. The innovation of the motorcycle also is present in its chassis, with the adoption of an aluminium frame and a set of high quality SHOWA suspensions, known for the effective design of the rear suspension system. Surprisingly, from the very beginning, the performance of the 250cc engine has been able to compete, in theory, with the superior 2stroke engines with similar displacement.

The Montesa Cota 4RT has always been recognized for its exclusive technological features, as well as for being a model of superior quality and proven liability, aspects that were clearly valued by the clients of the brand. However, throughout the years, the taste of trial enthusiasts has changed much like the global economic situation. Such is the case that in most of the trial enthusiast's scale of values, economy has become a decisive factor when it comes to choosing one motorcycle model over another.

In 2014 Montesa introduced an all new Cota, with changes in both its engine and its chassis. After making some improvements in its 2015 model, for 2016 Montesa has decided to keep on improving its trial motorcycle with changes that enhance its performance and go way beyond aesthetics.

Montesa Cota 4RT260: 2016 improvements

Ever since the release of the 260 model in 2014, Montesa has continued to introduce significant improvements in all its trial models.

Montesa will continue to commercialize the Cota 4RT260 and the Race Replica as we know them, the main improvement in their 2016 versions being the increase in power thanks to the adoption of a new fuel pump which gives the motorcycle more fuel flow. This element, along with the new mapping of the ECU*, gives the motorcycle a consistent power curve especially in the low to mid ranges. In addition to increased power, the reduction of the engine braking when closing the throttle make the motorcycle feel lighter and easier to control. The chassis has also been improved by repositioning the foot pegs, now lower and more backward, making the overall weight of the front axle lighter.

Among other improvements, the new mount of radiator fan, designed to evacuate dirt, pebbles or any object, avoids any possible blockage of the fan itself.

Another noticeable upgrade of the 4RT260 model is the adoption of all improved Dunlop D803GP tires, capable of incredible traction. The features of these new tires also make the motorcycle more responsive and make the front axle lighter.

The 4RT260 keeps its colour red, but now features more details in white giving it a more modern look.

The Race Replica is also fitted with a new Showa rear shock, used to increase the levels of agility and stability as well as giving the more range in the spring preload adjustment.

Like in the 2015 model, the Cota 4RT260 model also comes with a supplementary seat for soft trial or trip trial. The seat is easy to remove and includes a space to store various objects. This new element gives the motorcycle more versatility, expanding the possibilities of its use.

*The versions of the models manufactured for exportation, called Full Power (for exclusive competition use), feature all these novelties as well as an ECU with a double ignition map activated though a switch on the handlebar. This way, the rider will be able to select a second map for lower grip conditions on top of the standard one.

Manufacturing Process

The Cota 4RT260 and Cota Race Replica are manufactured exclusively and for a worldwide distribution at the modern Montesa Honda facilities located at Santa Perpètua de Mogoda, in Barcelona. Worth mentioning is the fact that in an effort to ensure the preservation of the brand's high quality standards all the processes of welding, assembly of the engine, plastic injection, manufacturing of the fuel tank and swingarm, as well as the aluminium frames is all done at these facilities.

Concept of development

Based on the trial enthusiast's new priorities, the Cota maintains its original trait features: an advanced 4stroke PGM-FI technology and a light aluminium frame.

At the same time, to increase the Cota's competitiveness against the popular 2stroke mechanics, the new model has inherited the power plant from the 2014 model with a few upgrades and with a displacement of 260cc that presents a clear improvement in its performance.

To fulfil the expectations and needs of our current customers, as well as attracting a whole new set of clients, Montesa is continuing to commercialize two versions of the Cota 4RT model, the 4RT260 and the Race Replica.

Cota 4RT260: A model developed in conjunction with the Repsol Montesa Honda team that, maintaining its high quality and excellent performance, offers an affordable alternative to the 2stroke motorcycles.

Cota Race Replica: For more demanding customers, for those that seek a highest quality product, the Cota Race Replica offers the exclusiveness of its superior equipment as well as the image of the motorcycle mastering all the world competitions: the Motesa Cota 4RT ridden by the talented riders of the Repsol Montesa Honda team, Toni Bou, Takahisa Fujinami and Jaime Busto.

Much like its predecessors, the production of both versions of the new Cota 4RT will take place in the modern Montesa Honda facilities, located at Santa Perpètua de Mogoda, in Barcelona, insuring the highest quality standards that characterize the Cota 4RT model.

Design and Style

Both versions of the new Cota 4RT, the 4RT260 and the Race Replica, have a modern and fluid style. This year the 4RT260 incorporates new decals and decoration, giving the motorcycle a more modern and sportier look thanks to the combination between the classic colour red and the details in black and white. Red is also present on the hubs of the wheels, creating a perfect combination with the beautiful black anodized rims.

The fuel tank itself also remains untouched keeping its slim and compact shape and enough capacity to be able to enjoy a long day of trial.

Meanwhile, the Race Replica inherits the powerful image of the motorcycle dominating the world championships.

The 4RT models have always been known for their great quality finish and their excellent components that maintain their properties intact throughout out the years. This is something we have maintained in the new Cota models with the incorporation of the highest quality style and decals.

Engine

The new Cota 4RT260 inherits the 260cc engine from the previous season, which already included a redesigned camshaft to adjust the distribution diagrams for a better response from the engine at any range of rpm. In their 2016 versions the Cota will benefit from a noticeable increase in power thanks to the adoption of a new gas pump which gives more fuel flow. This element, along with the new mapping of the ECU*, gives the motorcycle a fuller power curve especially in the low to mid ranges. Another aspect worth highlighting is the reduction of the engine braking, a major improvement already present in the 2014 model's engine, a feature of the 4-stroke engines that was cleverly fixed by Honda's engineers by incorporating a crankcase's gas decompressing system. Through this system, when closing the throttle, the engine braking is minimized making the motorcycle feel more light and easy to control. For the 2016 models the engine braking has been reduced even more, making the motorcycle's overall feel much lighter.

At the same time, the Electronic Control Unit (ECU)'s injection and ignition map offer better traction, especially on difficult terrains, as well as in the most critical moments such as when you open and cut off the throttle in the middle of a zone. With these features the Montesa Cota 4RT is a very efficient model that provides total control to the rider.

This engine offers an excellent response at low range giving the pilot more control over the engine. It's a very flexible engine, usable at any range of rpm, with excellent torque values at low to mid rpm ranges up to peak-power. In this sense it's important to highlight the excellent connection between the throttle control and the rear traction, an essential feature for competitive trial and for which the exquisite functioning of the PGM-FI electronic fuel injection system is of vital importance.

Chassis

One of the main novelties of the 2016 models is that the front end has been made much lighter by repositioning the pegs, now lower and backward which allows the rider to position himself more towards the back and therefore gives him more control over the motorcycle. The wider pegs give also the pilot more control as well as a better riding feel. On the other hand, being wider they accumulate less mud and maintain a higher level of adherence. Furthermore the pegs have a certain capacity for adjustment through a simple change of thickness plates, allowing the pilot to change his position slightly forwards or backwards.

Another important innovation made exclusively for the 2016 4RT260 model is the adoption of the all improved Dunlop D803GP tires, capable of incredible traction. The features of these new tires also make the motorcycle more responsive and make the front axle lighter.

Both the Cota 4RT260 and the Race Replica rely on a light aluminium frame and swingarm with a proven reliability and performance.

In the Race Replica model, the frame-swingarm assembly has the same anodized black colour as the of the official Repsol Montesa Honda Team motorcycles.

In the 4RT260 model, both components have a formidable polished aluminium finish. A treatment that shows off the beauty of the lines and the perfection of the weld seams proving the high quality of the model.

Suspensions

Race Replica: The model maintains the prestigious high quality set of front and rear SHOWA suspensions, a leading brand in the world of trial motorcycles. In the 2016 version a new rear Showa suspension is used to increase the levels of agility and stability as well as giving the more range in the spring preload adjustment.

Cota 4RT260: Conscious that not all the trial enthusiasts need the supreme quality of the SHOWA suspensions present in the Race Replica model, the Cota 4RT260 model has a set of high quality suspensions at a much more affordable price. The front suspension is manufactured by TECH, whilst the rear end uses a light R16V multi-adjustable damper. Both manufacturers rely on a vast experience providing suspension sets to a varied clientele of trial motorcycle producers. However, Tech and R16V and the more than experienced Montesa Honda rider, Amós Bilbao, collaborated throughout various days testing the suspensions in trial tracks and areas to find the most appropriate setting for a machine with the Cota 4RT260's characteristics.

As a result the Cota 4RT260 presents a set of very efficient suspensions that give a lighter feel. With these suspensions, the Cota 4RT260 is able to absorb the irregularities of the terrain easily and its adjustability gives the rider the option to set them on a more Racing setting or one that offers more retention and comfort.

In 2015, both the setting of the front fork and the rear suspension were revised. On the front part, the new springs were made more progressive providing a better response and comfort without losing the feeling of lightness. As for the rear suspension, the hydraulic damper adjustment sensitivity was increased to achieve a better setting capacity. Also, the rebound and compression damping can now be adjusted manually, without the need of extra tools.

Programmable ECU HRC

If one of the advantages given by the adoption of the PGM-FI Electronic Fuel Injection system is the auto-adjustment of the carburetion to the different meteorological conditions, the more demanding riders will be able to vary the ignition and fuelling maps through an optional HRC kit and the help of a laptop.

The kit is offered as optional equipment for racing and is composed by:

Throttle body and ECU-Injection assembly, Interface and CD-ROM

Brakes

The Race Replica version features a set of front brakes that incorporate a 4 piston monoblock caliper, making the braking more efficient and powerful. Both versions, the Race Replica and the 4RT260 feature Braktec brakes.

High Quality Equipment

Both models maintain their high quality equipment, like the advanced digital ignition system without battery which powers, among others, the ignition system and the ignition coil. Also worth noting is the bank angle sensor which switches off the ignition when the motorcycle is laying on the ground or when it is at an inclination superior to 65° for more than 7 seconds. This device minimizes the expose to risk of the rider as well as protecting the engine, especially in situations where the engine can remain revving.

The wheel rims keep their design of 32 spokes and the rear one the innovative system that incorporates central adjustment spokes, allowing a significant weight reduction, an easy maintenance and the mount of Tubeless tires, which again reduces the weight of the motorcycle.

Racing Kit parts

Just for the Race Replica model a highly exclusive kit of carbon HRC parts is offered. It's composed by:

- Fork sliders shields
- Front fork bridge
- Clutch cover protector
- Exhaust pipe protector
- Exhaust muffler protector

The kit also includes:

- A complete set of decals with the image of the Team Repsol Montesa Honda.
- A light headlight visor for exclusive racing use.

The 4RT260 model comes with an optional headlight visor for exclusive racing use.

Sport Records

Montesa has been world champion on 17 occasions. The last 9 titles have been achieved consecutively with the Cota 4RT model.

Montesa has also proven its leadership as a brand in other specialties such as the World Indoor Championship and the Women's World Championship where it has obtained 13 and 17 titles respectively.

The achievement of these awards proves the authority of the Montesa Cota 4RT in high level competition, where it has been the leader ever since 2005.

MONTESA WORLD TITLES (RIDERS & MANUFACTURERS)

	OUTDOOR TRIAL WORLD CHAMPIONSHIP				
	YEAR	RIDER	MANUFACTURERS' CHAMPIONSHIP	Model	Engine
17	2014	T.Bou	MONTESA	Cota 4RT	4 stroke
16	2013	T.Bou	MONTESA		
15	2012	T.Bou	MONTESA		
14	2011	T.Bou	MONTESA		
13	2010	T.Bou	MONTESA		
12	2009	T.Bou	MONTESA		
11	2008	T.Bou	MONTESA		
10	2007	T.Bou	MONTESA		
9	2006	-	MONTESA	Cota 315R	2 stroke
8	2004	T.Fujinami	MONTESA		
7	2003	D.Lampkin	MONTESA		
6	2002	D.Lampkin	MONTESA		
5	2001	D.Lampkin	MONTESA		
4	2000	D.Lampkin	MONTESA		
3	1996	M.Colomer	MONTESA		
2	1981	-	MONTESA	Cota 349	
1	1980	U.Karlson	MONTESA		

E.Lejeune got 3 world trial titles in a row from 1982 to 1984 with an Honda RTL260, 4 stroke engine

TRIAL INDOOR WORLD CHAMPIONSHIP			
YEAR	RIDER	Model	Engine
13 2015	T.Bou	Cota 4RT	4 stroke
12 2014	T.Bou		
11 2013	T.Bou		
10 2012	T.Bou		
9 2011	T.Bou		
8 2010	T.Bou		
7 2009	T.Bou		
6 2008	T.Bou		
5 2007	T.Bou	Cota 315R	2 stroke
4 2001	D.Lampkin		
3 2000	D.Lampkin		
2 1996	M.Colomer		
1 1995	M.Colomer		

WOMAN WORLD TRIAL CHAMPIONSHIP			
YEAR	RIDER	Model	Engine
7 2011	LAIA SANZ	Cota 4RT	4 stroke
6 2010	LAIA SANZ		
5 2009	LAIA SANZ		
4 2008	LAIA SANZ		
3 2006	LAIA SANZ		
2 2005	LAIA SANZ		
1 2004	LAIA SANZ	Cota 315R	2 stroke

MONTESA WORLD TITLES	TOTAL	2 stroke	4 stroke
OUTDOOR WORLD CHAMPIONSHIP	17 TITLES	8	9
INDOOR WORLD CHAMPIONSHIP	13 TITLES	4	9
WOMEN WORLD CHAMPIONSHIP	7 TITLES	1	6
	37 TITLES	13	24

Montesa and trial

Montesa was founded in 1945 and quickly consolidated itself as a prestigious brand that manufactured high quality motorcycles. However, in 1962 with the launching of the popular Impala, Montesa consolidated its position as one of the leading national brands.

Its commercial success led Montesa to explore new motorcycle fields starting with the development of off-road vehicles, in the trial discipline first, then in cross and finally in endurance. Specifically the involvement with trial started in 1967, when the brand launched the revolutionary 250 Trial, a model that, contrary to the ones that were currently leading the market, was equipped with a 2stroke engine that quickly became popular because of its simplicity and light weight. Since then, Montesa hasn't stopped developing new trial models as emblematic as the Cota 247, the Cota 348 or the Cota 349, a model that Ulf Karlson used to proclaim himself World Champion in 1980.

At the same time Honda was also working in the development of trial models, such as the sophisticated RTL260, a model developed completely by HRC and that was known for its revolutionary 4stroke engine with which Eddi Lejeune won 3 World championships from 1982 to 1984.

In 1983 Honda and Montesa signed a collaboration agreement for the production of Honda models in Montesa's facilities and in 1986 the Montesa Honda S.A. society is born.

In 1994 HRC participates along with Montesa Honda in the development of the Cota 314R, a model that was the turning point in the development of trial models. The Cota 314R won several World Championships and served as a basis for the first prototype of the Cota 315R with which Marc Colomer won the World Championship in 1996.

Montesa consolidates its leadership in the Trial World Championship with the spectacular Dougie Lampkin who, riding the Montesa Cota 315R, obtained the World titles of '00, '01, '02, '03 leaving the one of 2004 for another Montesa rider, Takahisa Fujinami.

After 5 consecutive world titles with a 2stroke engine, advancing the emissions standards that were set to begin in 2006, Honda and Montesa will develop a new model equipped with a 4stroke engine, the Cota 4RT, that debuted in the competition in 2004 even though the production model commercialization wouldn't be until 2005.

From 2006 up until 2014, Montesa has won 8 consecutive world titles with the 4RT model, the last 8 having been won by the rider Toni Bou.

Montesa COTA 4RT260 '16 Specifications

(Versión competición)

ENGINE

Type	Single, 4-strokes, 4 valves, SOHC, liquid cooled.
Displacement	258.9 cm ³
Diameter x stroke	78 × 54.2 mm
Compression ratio	10.5 : 1
Idle speed	1,800 min ⁻¹
Engine oil capacity	0.6 liters; Transmission: 0.57 liters

FUEL SYSTEM

Carburation	Electronic fuel injection PGM-FI
Throttle body	28 mm
Air cleaner	Viscous, urethane foam element
Fuel tank capacity	1,9 liters

ELECTRICS

Ignition system	Electronic, digital transistorized
Ignition timing	27° APMS (idle) ~ 45° APMS (10,000 min ⁻¹)
Sparkplug type	CR6EH-9 (NGK)
Starting	Kick to primary transmission
ACG output	ACG 160 W

DRIVE TRAIN

Clutch	Wet, multiplate with coil springs
Clutch operation	Hydraulic
Transmission type	5-speed
Primary reduction	3.166 (57/18)

Gear ratios	1 ^a 2.800 (42/15)
	2 ^a 2.384 (31/13)
	3 ^a 2.000 (30/15)
	4 ^a 1.272 (28/22)
	5 ^a 0.814 (22/27)

Final reduction 4.100 (41/10)

Final drive Roller chain #520

CHASSIS

Type Diamond, aluminium twin spar

Dimensions (L×W×H) 2,016 × 830 × 1,130 mm

Wheelbase 1,321 mm

Caster angle 23°

Trail 63 mm

Seat height 650 mm

Footpegs height 390 mm

Ground clearance 335 mm

Dry weight 73 kg

SUSPENSION

Front 39 mm TECH telescopic fork with compression and rebound adjustment. 175mm stroke.

Rear Pro-Link system, R16V shock with compression and rebound adjustment. 170 mm stroke.

WHEELS

Type Aluminium rims/ wire spokes

Rim size Front 21 × 1.60

Rear 18 × 2.15

Tyre size Front 80/100 21 (Dunlop)

Rear 120/100 R18 (Dunlop)

Tyre pressure Front 39 – 44kPa

Rear 29 – 34kPa

BRAKES

Front	185 × 3.5 mm hydraulic disc with 4-piston caliper and sintered metal pads
Rear	150 × 2.5 mm hydraulic disc with 2-piston caliper and sintered metal pads

All specifications are provisional and subject to change without notice.

Montesa COTA 4RT Race Replica '16 Specifications

(racing version)

ENGINE

Type	Single, 4-strokes, 4 valves, SOHC, liquid cooled
Displacement	258.9 cm ³
Diameter x stroke	78 × 54.2 mm
Compression ratio	10.5: 1
Idle speed	1,800 min ⁻¹
Engine oil capacity:	0.6 liters; Transmission: 0.57 liters

FUEL SYSTEM

Carburation	Electronic fuel injection PGM-FI
Throttle Body	28 mm
Air cleaner	Viscous, urethane foam element.
Fuel tank capacity	1,9 liters

ELECTRICS

Ignition system	Electronic, digital transistorized
Ignition timing	27° APMS (idle) ~ 45° APMS (10,000 min ⁻¹)
Sparkplug type	CR6EH-9 (NGK)
Starting	Kick to primary transmission
ACG output	ACG 160 W

DRIVE TRAIN

Clutch	Wet, multiplate with coil springs
Clutch operation	Hydraulic
Transmission type	5-speed
Primary reduction	3.166 (57/18)

Gear ratios	1 ^a 2.800 (42/15)
	2 ^a 2.384 (31/13)
	3 ^a 2.000 (30/15)
	4 ^a 1.272 (28/22)
	5 ^a 0.814 (22/27)

Final reduction	4.100 (41/10)
Final drive	Roller chain #520

CHASSIS

Type	Diamond, Aluminium twin spar
Dimensions (L×W×H)	2,016 × 830 × 1,130 mm
Wheelbase	1,321 mm
Caster angle	23°
Trail	63 mm
Seat height	650 mm
Footpegs height	390 mm
Ground clearance	335 mm
Dry weight	73.5 kg

SUSPENSION

Front	39 mm SHOWA telescopic fork with compression and rebound adjustment. 175 mm stroke.
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Rear	Pro-Link system, SHOWA shock absorber with compression and rebound adjustment. 170 mm stroke.
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WHEELS

Type	Aluminium rims/ wire spokes
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Rim size	Front 21 × 1.60
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Rear	18 × 2.15
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Tyre size	Front 80/100 21 (Michelin)
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Rear	120/100 R18 (Michelin)
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Tyre pressure	Front 39 – 44kPa
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Rear	29 – 34kPa
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BRAKES

Front	185 × 3.5 mm hydraulic disc with 4-piston caliper and sintered metal pads
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Rear	150 × 2.5 mm hydraulic disc with 2-piston caliper and sintered metal pads
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