

BikesMedia

Everything About Two Wheelers

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NEW HERO SPLENDOR SMART 110 TEST RIDE REVIEW

A FRIENDLY COMMUTER
ESPECIALLY IN CITY
RIDING CONDITION

TOP 4 AFFORDABLE 110CC MOTORCYCLES

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2. TVS STAR CITY PLUS
3. HONDA CD 110 DREAM
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OVERSEAS

MOTORCYCLE
FALSE NEUTRAL
EXPLAINED

RECORD 400 KMPH TOP
SPEED ON KAWASAKI
NINJA H2R

ROYAL ENFIELD 750CC
CONTINENTAL GT SPIED
UNDISGUISED

New Hero Splendor iSmart 110 Test Ride Review

Hero MotoCorp has begun to establish their very own indigenously manufactured product lineup, after the launch of Maestro Edge, they have come up with new Splendor iSmart 110 designed and developed by their home team. After parting from the Japanese partner Honda, Hero went on to develop their own engines for both scooters and motorcycles.

In the slew of indigenously manufactured products Hero has recently launched Splendor iSmart 110 equipped with their brand new 110cc engine, which is featured with the patented i3S technology. Let's find out how the new entrant from the house of Hero MotoCorp turns out when we test the new machine in different riding conditions.

Rider's Note: Having the torque available at virtually all rev range makes the new Splendor iSmart a friendly commuter especially in city riding condition. The pulling capacity of the bike from as low as 20 kmph speed in top gear is something that impresses me after Platina 100 ES.

Style & Features:

The new Splendor iSmart 110 is certainly a serious update from the company, be it the brand new engine it is featured with or the design element it carries. No matter how many features are added to the new updated product by Hero, they have maintained the peculiar styling of the brand iSmart. The signature dual tone color options come with distinct graphics making the new iSmart stand out of the crowd similar to its older sibling.



Hero consolidating their commitment towards safety has introduced the industry first Automatic Headlight On (AHO) feature on the newly designed headlight assembly of iSmart 110. The AHO is something that we will get to see on every two wheeler rolling out from each manufacturer starting from 2017. On account of imposing additional safety feature on two-wheelers the Government authorities have made it compulsory.

To tell you a little about how the AHO works- the moment you thumb start/kick start the engine, the headlight automatically gets on. Irrespective of day or night now your headlight will remain on aiding to the better visibility at all the times in all conditions. To ensure the system remains intact, there is no headlight switch present at all, through which one can switch off the headlamp manually.

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EDITOR Farhan Kashif Siddiqui



However, there is a passing switch and an upper/dipper toggle switch present on board via which one can use the headlamp on high or low beam. To me, albeit all of its safety benefits, the AHO feature would affect the life of the headlight bulb as there would be good chances of fused bulbs seen more frequently. However, since the headlamp runs on AC circuit, it is not likely to affect the battery life.

The patent i3S technology is also featured on the new iSmart 110, it is through this system the brand iSmart is known for what it is today. The system is switchable and one can either switch it on/off manually.

The i3S system works on a simple principal, it simply shuts off the engine automatically when the transmission is in neutral and the engine remains on idle for few seconds. One can restart the engine by just pulling up the clutch and you are good to go. If you find the system annoying or simply don't want to get into it and would like to go the conventional way, just switch off the system.

To summarize the i3S system's efficiency- it is only helpful when you are at traffic signal and have slotted the transmission into neutral. The system will shut the engine off after few seconds and you can restart the engine by just pressing the clutch lever when you are good to go, thereby saving fuel and hence getting improved fuel efficiency. Other than this there is no way the i3S system directly affects the ride or in any way disrupts the ride unwantedly.

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Engine & Performance:

The brand new engine of iSmart 110 is designed and developed by the R&D team of Hero MotoCorp at their local facility in India. The entire engine is been manufactured indigenously by the home team and there is nothing to do with the Honda technology. The 110cc i3S engine is capable to produce 9.1 Ps of power and 9.0 Nm of torque. The mill is mated to 4-speed transmission gear and the torque is evenly distributed to all rev range.



The new engine is smooth and there is no unwanted vibration seen on it. Apparently Hero has mastered the technology from their erstwhile Japanese partner Honda and in fact is trying to take it even further ahead. The new engine plonked on the iSmart 110 is vertical, opposite to the previous generation Honda derived 97cc engine which was horizontal.

After the indigenously developed CVT engine slapped on the Maestro Edge, this vertical 110cc engine is going to be the base for the rest of the higher displacement engines which we will be seeing in near future from Hero's stable. The new 110cc mill is featured with 4-speed gear with same popular gear pattern. The transmission is as smooth as engine and we were able to drop all the gears in right slots with no false neutral seen.

One thing that we noticed on the new iSmart 110 is its power delivery, it's pretty linear and you get decent amount of torque available at all rev range. Pulling the bike further when it is at as low as 20 kmph speed in top gear seemed effortless, it is one feature that comes pretty handy while riding in city traffic condition.

Instrument Cluster & Switchgear:

The instrument console comes in part analog and part digital display, the bold analog speedometer sits right in center, whereas the digital meter on the right side of the console. The Blue backlight of the console and the use of blue tint bold letters make the display legible even in low light condition. There is a trip meter given on the digital display along with Odometer. The signature side stand indicator is also featured on the center console along with neutral light.



The Switchgear however are very basic in nature and lacks fit and finish. The plastic parts used on the switchgear seem below standards and they are not snugly fit as well. This is one area where Hero has to pay attention as it's time to give importance to the detailing of the product.

Riding Dynamics:

We tried to test the new Splendor i-Smart 110 on variety of terrains, including natural rocky tracks filled with pebbles, steep incline of hill and city traffic. The new iSmart felt NEW indeed, the ride quality is plush. Soft handle grips along with soft and firm seat adds to the overall smoothness to the ride.

The new lightweight double cradle frame not only provides better stability under all conditions but also renders new dimension to the bike. The increased ground clearance comes pretty handy while going over hurdles.

When we took the new iSmart to the rough terrain it was nice and quiet experience as not only the increased ground clearance helped us crossing uneven rock bed but the feature like plastic chain cover made it rattle free ride also. The suspension is also decent for a commuter, a pair of red colored spring loaded suspension like in the previous gen iSmart is featured on new iSmart as well.



Hero has given an option for tubeless tyres on the new Splendor i-Smart, those who want to get the tubeless tyres can get the variant by paying extra. However, the all black alloy wheels come as standard fitment and the stopping duty is been handed over to the drum brakes (there is no option for disc brake available). The brakes are also good and both front and rear drum brakes offer decent amount of bite.

While city riding condition and load condition such as steep hill incline, the flat torque of the engine makes the ride easy and fun. One amusing thing we experienced with the AHO is, since people are not habitual of this functionality, neither the majority is aware of it, we found passerby indicating that the headlight of the bike is on (assuming the headlamp is on by mistake in a broad day light).



Verdict:

The new Hero Splendor iSmart 110 is a true commuter in all sense, Hero has tried to club what all is needed to make a commuter a no nonsense bike. Hero can be trusted for its competent technical backup and their vast sales and service experience. The new Splendor iSmart can be considered as beginning of a new era for Hero MotoCorp, as in near future we will be seeing many more new products in different capacities from the house of Hero based on this indigenously developed platform.

Ride Courtesy: My Bike, Bhopal.



Hero MotoCorp Splendor iSmart 110 Specifications

GENERAL:

Price	Rs. 53,300 <small>(ex-showroom, Delhi)</small>
Launched	Jul, 2016

ENGINE:

Engine Displacement	109.15 CC
Engine Type	Air cooled, 4 stroke
Number Of Cylinders	1
Valves Per Cylinder	2
Max Power	9.1 PS @7500 rpm
Max Torque	9.0 Nm @5500 rpm
Bore x Stroke	N/A
Fuel Type	Petrol
Starter	Electric-Kick

TRANSMISSION:

Transmission Type	Manual
Number Of Speed Gears	4
Final Drive (Rear Wheel)	Chain

WHEELS & TYRES:

Front Tyre (Full Spec)	80/100-47 P Tubeless Tyre
Rear Tyre (Full Spec)	80/100-54P Tubeless Tyre

BRAKES:

Front Brake Type	130 mm Drum
Rear Brake Type	110 mm Drum

SUSPENSION:

Suspension Front	Telescopic Hydraulic Shock Absorbers
Suspension Rear	Adjustable hydraulic suspension

DIMENSIONS:

Overall Length	2015 mm
Overall Width	770 mm
Overall Height	1055 mm
Wheelbase	1245 mm
Ground Clearance	165 mm
Kerb Weight	115 kg
Fuel Capacity	8.5 Litres

Shipping a Motorcycle Overseas

Moving to a new country or taking an extended vacation and need to move your motorcycle as well as your personal luggage and other property? If so, it is easier today than ever before to have a motorcycle shipped overseas to virtually every country around the world. Whether you own a street bike or have an expensive racing bike, taking careful precautions when you need to have it moved is something that will be very important to the life of your bike. No matter what your reason is for heading across the ocean to a new country or even if you are selling your motorcycle to someone overseas, here are a few tips on ensuring your motorcycle reach its new destination as quickly, and safely as possible as it is being moved across the world.

Hiring a Pro to Ship the Motorcycle

For a bike owner, there is most likely not much that is more stressful than having to be parted from your motorcycle and entrusting it to someone else's care. When you are making a move overseas and need to have your bike shipped along so that you may use it or even sell it to a new owner, you will need to make arrangements with a professional and reliable motorcycle shipper such as A1 Auto Transport INC to have them handle the transport of your bike for you. When you start searching for the right company for your motorcycle, there are a few things you should keep in mind during your search.



1. Check with at least three motorcycle shipping companies so you can compare rates and services offered. It takes time to speak to company agents and get a true feeling for how professional and customer friendly a company is.
2. You should begin to contact companies no less than two to four weeks prior to the date you need to have the motorcycle shipped. When shipping overseas, it can take several weeks to prepare the bike as well as to secure a shipping date from the port the bike needs to ship from.
3. Avoid companies that give you a quote that is not competitive with other companies. If a company is offering suspiciously low pricing, they are apt to add extra cost to your bill after they know you are booking your bike with them. Keep in mind that you are hiring someone to entrust your pride and joy and the price should reflect the care they will use when handling the shipment.
4. Ask upfront if the company has experience with international shipments. Not all companies can ship overseas and not all have the necessary experience to make sure your bike will be safe during shipment so it is very important to verify that the company you hire has the knowledge, licensing and experience needed to keep your bike safe.
5. Check customer reviews online to see how well the company has performed for previous customers. It is also a good idea to ask for personal references from the company itself so you may be able to email or speak to customers directly when possible. Many businesses will have a file of references available upon request.
6. You must be prepared to pay customs fees and taxes when you ship a motorcycle overseas. Depending on the country you are shipping to, you can expect tariffs that range anywhere from nothing at all to more than 75% of the value of the motorcycle. Your agent will be able to go into full detail with you about the fees you must pay to ship the bike overseas.



Getting Your Motorcycle Ready for Shipment

Unlike a quick trip down the interstate, an overseas voyage will be a little rough on a motorcycle and careful precautions need to be taken to ensure that it remains safe and sound during the trip. Before you even begin to think about having the bike loaded onto a truck or ship, be sure to take care of the regular maintenance so you will not need to worry about that once it is in another country where motorcycle parts may not be quite so simple to access. Some things that you may want to consider taking care of ahead of time are:

1. Changing the oil and oil filter. If the bike has a filter screen, be sure to change this as well.
2. Have a complete brake check taken care of and replace any parts that may be worn or in need of repair.
3. Check the wiring and all electrical components to make sure everything is plugged in correctly and that there are no electrical shorts anywhere.
4. Check the battery and make sure it is fully charged. Chances are that it will need to be disconnected before the bike is shipped but you really need to make sure it has a full charge beforehand. If it is an older battery, you may want to consider replacing it ahead of time.

READ ALSO: [The Ultimate Guide to Motorcycle Shipping](#)

5. You will also need to check the motorcycle to make sure there are no fluid leaks as it will not be loaded if the shipper sees any leaking fluids at all. The gasoline needs to be driven down to a minimum or, in some instances, it will need to be completely drained in order to be packed inside of a crate for shipment. If the bike is being shipped on an open transport ship (RORO) then you will need to make sure the key is attached to the bike.
6. It is usually best to secure a key with packing tape to the handlebars of the bike where the shipper can access it easily. If you are shipping personal items at the same time you ship the bike, it may be more convenient to ship in a large shipping container so you can pack everything into one container. If you are in a hurry however, it may be best to ship things separately as household items and personal items can often delay shipments due to customs checks.

Motorcycle shipping, especially when shipping internationally, can take up to several weeks. It is best to plan ahead of time so that you will not have to worry about serious delays, especially if you will want to have your bike shipped as quickly as possible to the new country so you can have it to enjoy riding or for delivery to the new owner.

By: Jenna Oppenheimer



Top 4 Affordable 110cc Motorcycles



We Indians want the best of all worlds. We want more power, more mileage, and at a cheap cost. Well, bike manufacturers have come out with a lovely compromise of sorts with an 110cc class of motorcycles which provides the ease of a commuter with a slight edge in power for that smoother ride. But then again we want it for as cheap as possible, so to make things simpler for you, we have compiled a list of the 5 most affordable 110cc motorcycles in our market currently.

1. Mahindra Centuro
2. TVS Star City Plus
3. Honda CD 110 Dream
4. Suzuki Hayate EP

1. Mahindra Centuro:

You might have expected Bajaj, Hero, or Honda to be the cheapest, but no, it is Mahindra with its Centuro. Interestingly Mahindra came out with an 110cc bike, but Bajaj didn't. It might surprise many, but not me as this is Mahindra's first ever bike on the road and they had to be competitive about it. The Centuro is a really able bike and the twin tube frame design which is a typical Mahindra identity sure does stand out. The Mahindra Centuro hence is a good bike to get with loads of features on offer with it.

The bike is powered by a 106.7cc engine which is the smallest of the lot, yet makes a good 8.4 bhp of power at 7500 RPM, and still manages to deliver a company claimed mileage of 85.4 Kmpl; all this at a price of INR 43,250/- ex-showroom Delhi. What this gets you are great looks, great performance and loaded features such as optional bike immobilizer, parking lights and the works.

2. TVS Star City Plus:

Second on the list is the TVS Star City Plus. TVS has been aggressively marketing the bike with various colour options as well as with well-rounded looks and features. The engine does its job well, and the overall fit and finish of the bike is pretty good for the price. The bike is giving a tough fight to the competition out there.

For the TVS Star City Plus, you would get a 109.7cc engine producing 8.28 bhp of power at 7000 RPM which is pretty good. But what makes this an even better proposition for the buyer is the massive 86 Kmpl of claimed mileage for the bike. The feeling could compare to owning a 125cc but receiving a 100cc bike's mileage. And TVS has also priced the bike pretty well with the bike pricing INR 44,000/- ex-showroom Delhi.



4. Suzuki Hayate EP:

Yes, it is not really the most popular bike on the street, but it exists. Suzuki has one of the reliable engines and with the Access doing well in the scooter market, you can be sure that the Hayate would not really disappoint you.

The bike is powered by an 112.8cc engine producing 8.3 bhp of power at 7500 RPM. The biggest downside for the bike is the 64 Kmpl mileage which is almost in the 125-150cc category bikes. That could be a major reason why the bike has not received much response in our market. What Suzuki has done to counter this is provide decent styling to the bike to make it look attractive and priced it competitively. The Suzuki Hayate EP is available for INR 49,269/- ex-showroom Delhi.

3. Honda CD 110 Dream:

Finally we have a Honda in the mix with the CD 110 Dream. It is typical commuterish bike with the commuterish look and basic design philosophy used by Honda to cut down on the costs. Honda has the reputation for having the most trustworthy engines in the Indian market and expect no different from the Honda CD 110 Dream.

The bike gets a 109.19cc engine which is a really odd figure, but that is how it is. The engine churns out 8.25 bhp at 7500 RPM and returning a mileage of 74 Kmpl which is still within acceptable range. For a person looking for a proper no-nonsense bike, this is the one. But someone looking for a little flair in their commuter machine, this is the one to pass. The conservative looks will earn great praises from your dad and uncles, but it is not the one to impress your friends or girls with. The Honda CD 110 Dream costs INR 44,525/- ex-showroom Delhi.



All in all, we got you covered. This is our list of the top 4 affordable 110cc motorcycles in our market currently. So if you are looking to get an 110cc motorcycle only based on the cheapest tag, then this is your perfect partner as you don't have to look any further. Makes the job a lot simpler and non-confusing once the list has been shortlisted. So go ahead, make a decision and ride your worries away.

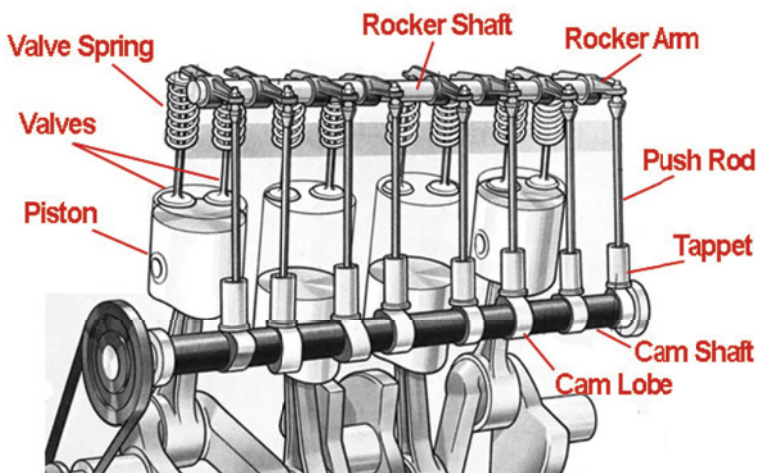
By: Pratik Patole

Engine Tappet Noise- All you need to know

The Royal Enfield motorcycle owners can relate to this problem in a big way, the noisy tappets are something very common sight especially on old model Royal Enfield Bullets (Cast Iron Engine). The reason behind is the now relatively older technology used in the non UCE Royal Enfield motorcycles. The older cast iron non UCE engine of Royal Enfield was an OHV (Overhead Valve) type engine and it was opposite to the modern day OHC (Overhead Cam) engines.

READ ALSO: SOHC Vs DOHC Motorcycle Engines

But what are these Tappets all about? And why they become noisy over the period of time? Let me take you to the in-depth of engine and its Valvetrain to make you understand what Tappets are, how they work and why they go noisy. The OHV type engine which is often referred as "Push Rod" engine is the easiest to understand the detailing of Tappets and the Noise associated with it.



In an Overhead Valve engine the Tappets are cylindrical part with mushroomed or clear face attached with the Push Rod. The Tappets are those which are directly connected with the Push Rod on one end and on the other hand the face of Tappet is in contact with the "Cam Lobe". The job of the rotating Cam Lobe is to push the Tappet (which is following the Cam Lobe) with its protruded portion. The Tappet which is attached to the Push Rod on the other side eventually lifts the "Rocker Arm"; this is why the Tappets are also known as Cam Followers or Lifters.

The upward movement of the Push Rod makes the Rocker Arm push downwards which is pivoted on the Rocker Shaft and thereby forcing the related Valve to be pushed further downward. This whole movement creates the opening of the Valve which later closes down automatically with the help of Valve Spring when the Cam Lobe reaches to its clear face.

Now the Tappets which are seated deep down in the engine cylinder are adjustable and they can be adjusted through the set of screw and locknut present on the rocker arm stud in case of OHV engine. By virtue of Tappet adjustment the Valve clearance can be adjusted, probably this is the reason why Tappets are often held responsible for any anomaly related to the Valvetrain.

RELATED ARTICLE: [An insight Of Engine Valvetrain](#)

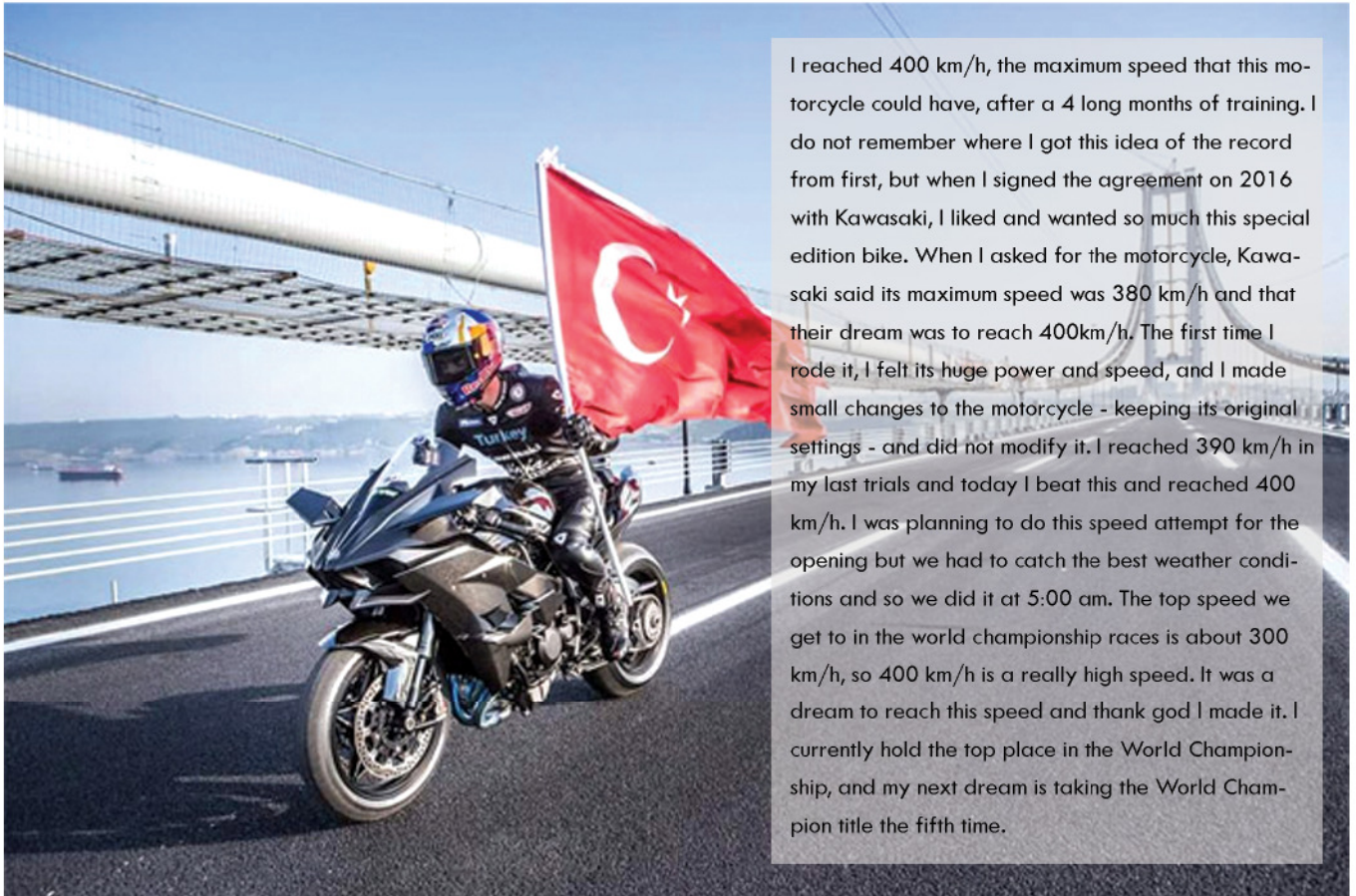
The ticking, clicking or knocking sound coming from the engine Head is referred as "Tappet Noise". Surprisingly the Tappets are seldom found responsible for what is termed on its name- Tappet Noise. The noise can be caused by any of the Valvetrain parts individually or collectively, as you can see, from Cam Lobe to the Valve Seat every part is interconnected and any of these can go faulty, causing Noise. Since the Tappets are adjustable and can affect all the interconnected/interlinked parts they are often held responsible for the noise. It is also not incorrect saying often mere adjusting the Tappets resolve the problem, if at all it is minor.

Adjusting Tappet clearance is a skillful job and can backfire if not done properly, if you loose the screw a little too much, it will increase the Tappet clearance and hence will increase the noise. On the other hand if you tight the screw a little too much, it might over tight the valve and can result into bent Push rod. All in all the root cause of the Tappet noise should be figured out first and the Tappet adjustment must be done by the skillful and equipped mechanic accordingly.

By: Farhan Kashif

Motorcycle News

Record 400 Kmph Top Speed Achieved on Kawasaki Ninja H2R



I reached 400 km/h, the maximum speed that this motorcycle could have, after a 4 long months of training. I do not remember where I got this idea of the record from first, but when I signed the agreement on 2016 with Kawasaki, I liked and wanted so much this special edition bike. When I asked for the motorcycle, Kawasaki said its maximum speed was 380 km/h and that their dream was to reach 400km/h. The first time I rode it, I felt its huge power and speed, and I made small changes to the motorcycle - keeping its original settings - and did not modify it. I reached 390 km/h in my last trials and today I beat this and reached 400 km/h. I was planning to do this speed attempt for the opening but we had to catch the best weather conditions and so we did it at 5:00 am. The top speed we get to in the world championship races is about 300 km/h, so 400 km/h is a really high speed. It was a dream to reach this speed and thank god I made it. I currently hold the top place in the World Championship, and my next dream is taking the World Champion title the fifth time.

In an attempt to break the previous land speed records on a production motorcycle, the Turkish rider Kenan Sofuoglu geared up with his mean machine, the Kawasaki Ninja H2R. Kenan planned for the brave attempt to be performed at the opening of a new bridge across the Gulf of Izmit, 50km away from Istanbul. Being the most successful World Supersport rider ever, he has four WSSP titles to his name, while also topping this years points table. Kenan Sofuoglu is currently riding for the Kawasaki Puccetti Racing team.



The Landspeed Record run took place on the bridge at 5:00 AM just to make sure the temperature was well under control, considering the amount of heat produced in the rear tyres. The record run was planned to be done under a 30 second time limit, in order to avoid a rear tyre blow. The rider visited the bridge for a number of times at different times of the day, in order to prepare for the death defying task. Kenan was protected by a specially made leather suit designed by REVIT. In 26 seconds from the start of the record attempt, Kenan successfully reached the 400 kmph mark.

By: Aravind Rb

Motorcycle News

Yamaha Recalls YZF-R3 In India



The Japanese automaker Yamaha Motor India is recalling total 902 units of YZF-R3 bikes in India to rectify some defects. In a statement Yamaha said they are recalling the R3 motorcycles under their factory modification campaign and there they will replace the defective parts without charging any extra amount.

According to Yamaha Motor India Company, they have determined few YZF R3 motorcycles with certain production numbers having defected Clutch Pressure Plate assembly and Oil Pump assembly. The company will replace the defective parts free of cost and the replacement of the parts will be done at the authorized Yamaha dealers.

By: Farhan Kashif

Steelbird Launches IGNYTE Riding Rain Suit

Steelbird marquee which is known for its helmets and regarded as pioneer in branded quality helmets in the country have stepped into the riding accessories. Steelbird has launched a special Rain Suit for the riders under the brand name IGNYTE, which comprises of Rain Jacket, Rain Pants, Waterproof Gloves and Boot covers. All the products are waterproof and manufactured keeping the rainy and winter season in mind.

The company claims all their products coming under IGNYTE brand have been designed in Italy and that they are all made as per the international standards. All the products are made from 100% Nylon and waterproof material. The seams of the products are sealed with PU tape to make them all watertight, despite of being made with the waterproof material all the products are claimed to be breathable. The Ignyte rain suit comes in variety of sizes, ranging from "S to XXXL". Steelbird has launched the Ignyte range of rain suit at the following price tag:

Jacket- Rs 1669/-

Pant- Rs 1319/-

Gloves- Rs 1139/-

Shoe cover- Rs 1349/-



By: Farhan Kashif

Motorcycle News

Steelbird Launches SBA1 Free Live Helmet



From the “AIR Series” of helmets, Steelbird has launched new SBA1 “Free Live” helmet. Steelbird has designed and developed riding helmets based on ventilation technology, the patented tech allows air to pass on through the head and keep it cool while riding.

The technology was developed by Steelbird R&D department in Italy especially based on Indian climate condition. The company claims, based on their lab test reports drop of 4-5 degree temperature inside the helmet is seen while riding a two wheeler. The Free Live Helmets from the AIR series comes in 14 designs and are available in various color options and attractive designs.

The “Free Live” Steelbird helmets are priced at Rs 1799 and are being sold through online channels and retail outlets across the country.

By: Farhan Kashif

Asif Ali Wins Gulf Monsoon Scooter Rally For TVS Racing

Syed Asif Ali has won the popular Gulf Monsoon scooter Rally held in Navi Mumbai, Maharashtra. Ali was riding TVS Wego for Team TVS Racing, along with him another rider from TVS Racing Muzzafer Ali also managed to finish at 5th riding TVS Wego. There were total 53 riders participated in the Rally representing different teams across the country.

Ali managed to ride his scooter flawlessly on the rough and muddy terrain filled with slush and clogged water everywhere. The Bangaluru rider also thrashed the dream of defending champion Shameem Khan for becoming champion for the record fifth time.



On occasion, the winner, Syed Asif Ali said, This time the course was really tough. In addition to the slushy areas we had a couple of trucks coming in our way and forcing us to slow down. It did not rain heavily during the race, but, still it was challenging.

By: Farhan Kashif

Motorcycle News

New Hero Splendor iSmart 110 Launched



Hero MotoCorp has launched their very first indigenously designed and developed motorcycle after parting from the erstwhile partner Honda. The new Splendor iSmart 110 is what Hero had showcased at the Auto Expo conducted earlier this year. Hero has chosen the Splendor platform being their most popular marquee among all the products from their current lineup.

The new Hero Splendor iSmart 110 has taken the i3S technology (Idle Start Stop System) from the now older version of the Splendor iSmart. However, the company has increased the cubic capacity of the new bike and has made it 109.15cc instead of the previous Honda based technology 97.2cc engine plonked on the older iSmart.

The new 110cc mill developed by the Hero MotoCorp development team is capable to produce 8.9 Bhp of power and 9 Nm of torque at 7500 and 5500 rpm respectively. The new engine is certainly more powerful and torquier than the older generation iSmart but in spite of the frugal i3S technology the company claims only 68 Kmpl of mileage. This figure looks a little shy from what the previous gen iSmart is offering to the market.

The new Splendor iSmart 110 is featured with more rigid double tube cradle frame and it is also loaded with industry first features like Automatic Headlight On (AHO) and BS IV compliance engine which is also industry first in its segment. To differentiate the new Splendor iSmart 110 from its older sibling Hero has not only equipped it with new a little more upright engine but also new headlamp and new tail lamp assembly.

The Hero Splendor iSmart 110 is priced at Rs 53,300 (ex-showroom, Delhi) and comes in four dual tone colors- Blue black, Red black, Silver black and Sports red. Keep watching the space as we will bring you the detailed overview of the newly launched Hero Splendor iSmart 110 soon.

By: Farhan Kashif

Motorcycle News

Royal Enfield 750cc Continental GT Spied Undisguised

Royal Enfield's new 750cc parallel twin engine Continental GT has been spied in Spain, the testing of the new product has been conducting by RE's British team. One of the most ambitious projects that Royal Enfield holds is their upcoming 750cc motorcycle featured with parallel twin oil cooled engine. Royal Enfield has been working on the parallel twin engine project for quite a sometime from now, we've earlier seen the pictures of the underdeveloped twin engine plonked on the RE Continental GT.



This time the test mule has been spotted in its absolute undisguised form, the bike holds the modified chassis of the RE Continental GT. The new 750cc parallel twin and oil cooled engine can be seen very clearly. It appears that Royal Enfield is trying to bring the new 750cc RE to the Indian market first, as the test mule has been seen featured with carburetors instead of EFI, which has now become mandatory in the EU in compliance of Euro-4.



However, no word has been heard from the company on the new project but by looking at the motorcycle it is apparent that the launch is not far and you can expect the launch latest by next year. The new entrant from the RE's stable after their war horse- Himalayan is going to play very important role for Royal Enfield in both domestic and international market. The new 750cc Royal Enfield Cafe' Racer will lock horns with the established players of the market like Triumph Motorcycles and Harley Davidson.

Motorcycle News

MotoGP German Grand Prix- Marquez Reigns At The Ring



After a completely rain hit Moto3 and Moto2, the conditions were uncertain for the bigger machines to get into action at Sachsenring. The race direction declared it to be a full wet race. As soon as the lights went off Valentino Rossi and Andrea Dovizioso made off to a good start and lead the pack, as the track was getting drier lap by lap.

Andrea Iannone was the first one to hit the pits, for a tyre change and was followed by most of the riders on track. Marquez, who was unable to keep up his pace was seen battling with Hector Barbera, and soon ran wide into the gravel at turn 8. As he managed to avoid a crash, he soon entered the pit lane for a change of bike with slick tyres. It turned out to be a great decision to risk it soon, as he was able to gain around 4 seconds from the race leader in the following lap.

As Dovizioso, Rossi and Redding were struggling at the front with wet tyres on a dry racing line, Marquez made steady progress at the back. As it was unable to ride with the wet tyres, Dovi and Rossi followed by a number of other riders swapped their bikes. In the meantime Marquez made very quick lap times, and found himself in the top slot with about 20 seconds in the lead. He was followed by Dovizioso, Cal Crutchlow on slicks and Scott Redding who was on the intermediates.

On the start of the penultimate lap, Cal Crutchlow made a hard overtaking maneuver on Scott Redding who was running in 2nd place. Dovizioso did the same to find himself on the podium. The final lap saw Marc Marquez take his 7th consecutive victory at Sachsenring, across all the classes. The podium was completed by Cal Crutchlow and Andrea Dovizioso. They were followed by Scott Redding, Andrea Iannone, Dani Pedrosa and Jack Miller.

Valentino Rossi had a misfortune and was seen in 8th position. The factory Suzuki teammates Maverick Viñales and Alex Esparago were on 12th and 14th place respectively. Jorge Lorenzo continued his worst form in the wets, only to finish the race at 15th place with a just single point added to his championship standings.

At the end of the German Grand Prix Marc Marquez leads the Championship with 170 points. He's followed by the Yamaha teammates, Jorge Lorenzo and Valentino Rossi with 122 and 111 points respectively. The fight for the championship will be continued at the Austrian GP, after a short mid season break. Stay tuned for more updates.

By: Aravind Rb

Motorcycle News

Mahindra MOJO “Mountain Trail” Kicks Off



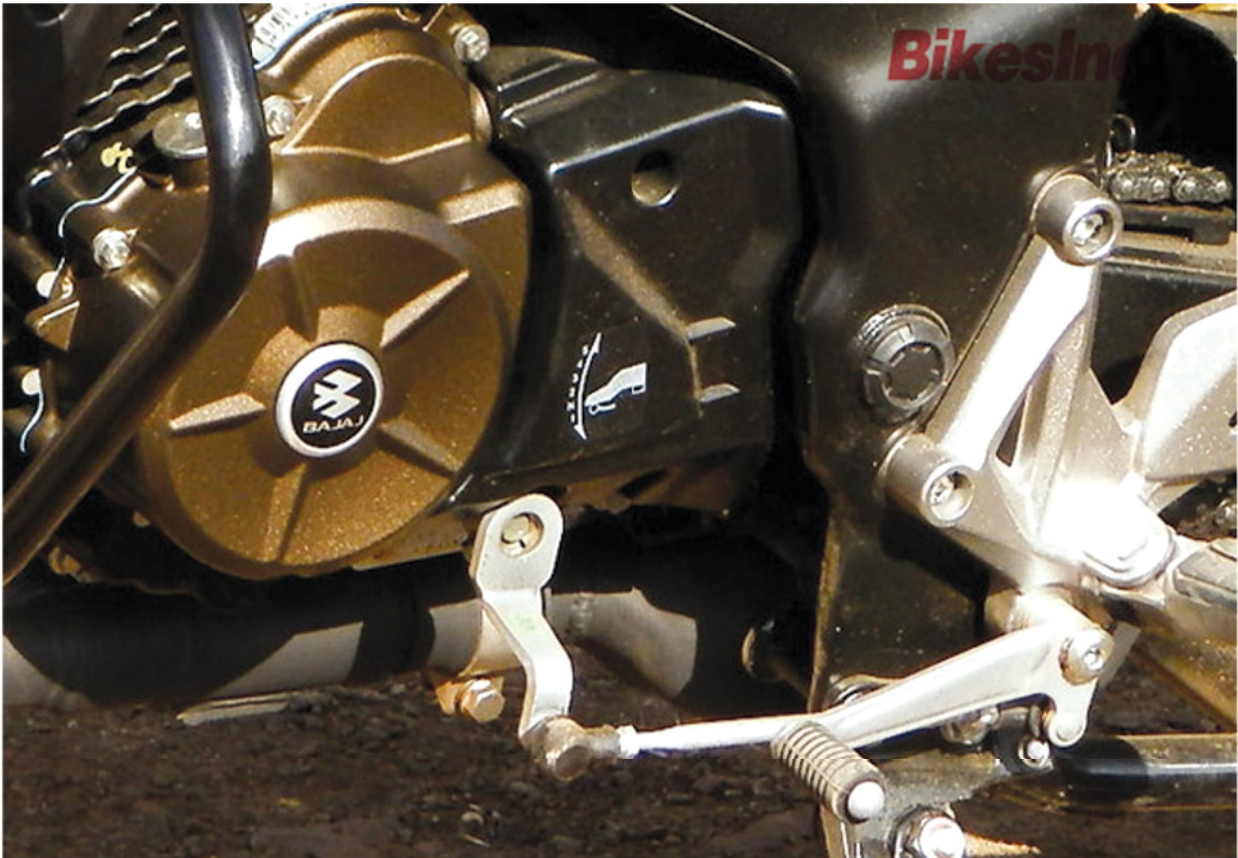
28 Mojo riders from 8 different cities across the nation join the “Mountain Trail”, a ride from Delhi to Chandigarh via Leh. The 15 day ride starts from Delhi as many biking aficionados seen riding on their Mojoes to Biker’s Café to cheer their fellow riders before the epic trail. Youth icon Ranvijay Singh and film maker Nagesh Kukunoor was also joined the trail riding on Mahindra Mojo for Chandigarh to Leh.

On the occasion, Naveen Malhotra, Senior General Manager, Marketing & Product Planning, Mahindra Two Wheelers said, *Mahindra MOJO has always stood for Joy of Riding & Brotherhood, keeping this in mind we launched The MOJO Tribe — a club for MOJO owners providing them a platform to engage with their fellow bikers and the company. It gives me immense pleasure to see The MOJO Tribe spread itself across 15 cities with owners actively participating, all this within a year from launch. Topping every bikers’ bucket list is a ride to Leh and with the ‘MOJO Mountain Trail’, we are providing bike enthusiasts an opportunity to undertake a ride of a lifetime with multiple experiences planned along the trail to provide a memorable experience. What makes this even more exciting is the association with youth icon and avid biker Ranvijay Singh and ace filmmaker Nagesh Kukunoor, who will be joining this trail for the Chandigarh to Leh leg.*

The riders are all set to undergo the most satisfying ride of their lifetime while riding through the majestic north. The tribe will go through challenging routes across valleys and mountains with their Mahindra Mojoes. The trail will make enjoyable stops for the camel safari in Nubra to riding along the Pangong lake which is popularly known as the lake of changing colors. The trail will also visit to Drass War memorial in Kargil which will make this trail one wholesome experience. The ‘Mountain Trail’ certainly promises to leave a long-lasting memory in the minds of the MOJO tribesmen.

By: Farhan Kashif

Motorcycle False Neutral Explained



False Neutral is an annoying state when you drop a gear and instead of slotting the right gear you hit a neutral. This is what exactly you feel when you encounter a False Neutral but in reality this condition is not that simple. Getting into a neutral state while changing gear of your motorbike is not always “False Neutral”, for example; having a gear pattern 1-N-2-3-4-5, while upshifting from 1st gear to 2nd gear if you experience the same condition and you hit the neutral, it is not False Neutral instead you’ve actually hit the “True Neutral”. Let’s take it to another level and try to understand what’s actually going on in the transmission.

What Is False Neutral?

When we say we’ve experienced a False Neutral, we mean that a Neutral like condition is being experienced while shifting between two gears other than 1st and 2nd in case of above mentioned gear pattern (1-N-2-3-4-5). In this kind of situation the engine revs freely and no gear is been engaged so far, in fact it’s a kind of limbo between two gears and no gear has been cogged whatsoever.

Apparently the False Neutral state does not pose any threat to the engine or the transmission but it is indeed a very frustrating and annoying condition. The False Neutral can be seen on both comparatively older and brand new motorcycles. As far experiencing False Neutral in old bikes is concerned, normally worn out gears and bent shift forks come out as culprit. But same can be seen on brand new motorcycles as well and hence this should not be misunderstood as any mechanical fault.

In comparatively newer machines and sometimes even on the brand new motorbikes, the False Neutral can also be seen. Generally it is witnessed when you try to shift the gear while accelerating the bike you tend to hit the false neutral more, this could happen between any gears and while both up and down shifting. Encountering False Neutral in newer machines is generally caused due to slotting gears in hurry. It is seen that when correct pressure is not given on the gear shifter and one just tap the shifter while pulling the clutch, False Neutral hits.



How To Avoid False Neutral:

To avoid false neutral one should preload the shifter before actually pulling the clutch and dropping the gear. This method is found effective by many riders across the world and is considered as remedy for the False Neutral state especially on new bikes. The preloading of the gear shifter helps the shift fork to engage the right gear and one can actually feel the meshing of gears happening.

While False Neutral does not seem fatal for the engine or transmission but the overall experience could lead to a disaster depending on the timing of the event. As the false neutral generally occurs at high acceleration, it is likely that one is doing the maneuver while overtaking any vehicle and hitting a false neutral at a crucial condition like this could be fatal.

Another thing that needs to be kept in mind is once you hit the false neutral, try to get it back in the slot by upshifting (e.g.; from 3rd to 4th or from 2nd to 3rd) and always avoid doing downshifting (e.g.; from 4th- 3rd or from 3rd to 2nd). This is very important and can be understood by assuming you are experiencing the false neutral while making a cornering maneuver. If you downshift to get out of the false neutral, there are full chances of the rear wheel lock and you will never want this to happen while you are at the corner of the road.

The problem of False Neutral on the old bikes can be rectified by getting the gear transmission serviced and by repairing or replacing the faulty parts like gears, shift drum and shift fork. However, the false neutral can be addressed efficiently on new motorbikes by adapting better shifting technique and better riding habits.

So, now as you've understood what a False Neutral is and how to tackle it, try to implement the same when you encounter one and let us know your feedback. Do tell us how you find this in the comment section below and let us know if you want us to come up with any particular topic of your choice, till then ride safe.

By: Farhan Kashif

Clash of the final drives- Belt Vs Chain Vs Shaft

The final drive on a motorcycle is the connection between the output shaft of the gearbox and the rear wheel. In scooters the engine is located at the rear, so that a simple gear train is used to put the power onto the rear wheels. In case of motorcycles, the distance between the output shaft and rear wheel is considerably higher. So it becomes necessary to adopt an appropriate drive which can transmit power and torque without much loss. The following are some types of final drives commonly used on motorcycles.



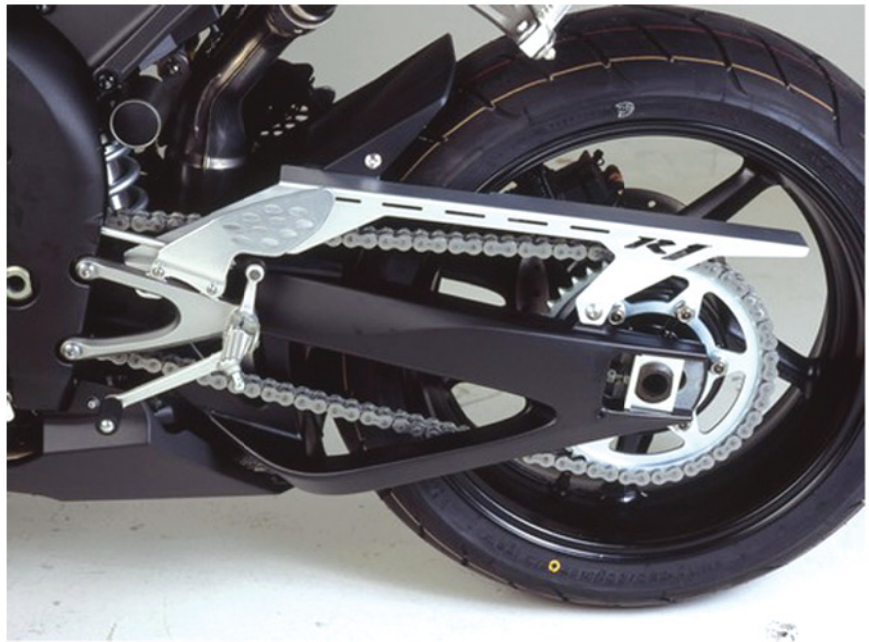
1. Belt Drive

This drive system includes a driving pulley, rubber belt and a driven pulley for the power transmission. The rubber belts have teeth on the contact side of the belt. As there are grooves provided on the driven and driver pulleys, the grooves on the belt matches them. The driver pulley is attached on the output shaft of the gearbox while the driven pulley is mounted onto the rear wheel. The rubber belt sits between both the pulleys and transmits power.

The belt is generally made with polychloroprene rubber along with metallic torsion cords inserted in the middle, to increase its tensile strength. A nylon coating on the upper surface of the belt protects it from cracking. A belt with either a crack or a broken teeth should be replaced immediately. The major benefit of belt drive is that, it doesn't require any lubricating maintenance or adjustment for its life. But the life of these belts are comparatively lower, and requires frequent replacement due to wear and tear. The Belt drives can be found in abundance in Cruisers, as they are made for munching miles without any hindrance.

2. Chain Drive

The chain drive is the most used and most straightforward way of getting power transmitted to the rear wheel. The chain drive is also very light in weight. Most of the motorcycles make use of this type of drive, due to its very high efficiency. It works at almost 99% efficiency, where the remaining 1% is lost due to friction. The chain drive has two sprockets attached at the output shaft of the gearbox and the rear wheel, with the chain connecting both. The sprockets are made up of hardened steel and generally has 12 to 23 teeth on the front, and 30 to 72 teeth at the rear. The chain comes in different types according to the requirements, say O ring, X ring.



The length of the chain increases with time, which creates noise during operation and also lowers the efficiency. Appropriate maintenance is required for efficient working of the chain drive. Cleaning and lubrication at regular intervals is required to reduce wear and tear. The swingarm facilitates a slot for the backward movement of the rear wheel assembly, up to an acceptable length. The chain drive is most vastly used in commuter and sports bikes, due to its very high efficiency.

3. Shaft Drive

A few larger motorcycles eliminate the chain problems by incorporating a driveshaft from the engine through an universal joint to a spiral bevel gear on the rear wheel hub. The shaft at the rear operates in the oil bath and virtually requires no service or maintenance. Though the shaft drive is expensive to manufacture, it is smooth, quiet and trouble free. It consists of a drive shaft, universal joint, bevel gear joint and a casing.



The drive shaft are mostly hollow for better whirling protection at high speed. It's made up of mild steel without any stress concentration. The drive shaft is powered by the gearbox followed by a bevel gear pair to the rear wheel. These parts are covered in a casing which acts as a sump for lubricating oil. The same case is also used as an integral part of the swingarm. Since the production cost is on the higher side, this is the least used type on motorcycles. The shaft drives are mostly used on Adventure and sports tourer motorcycles.

By: Aravind Rb

Motorcycles Used In MotoGP Racing- All You Need To Know

A GP motorcycle is an optimized machine to get the desired acceleration, top speed, braking and stability. Every effort put on these bikes are just to increase and maintain those parameters, on the expense of comfort and fuel economy. Engineers do many alterations and hours of explorations in their designing, manufacturing and assembling, which is proved right or wrong by endless amount of testing on the race tracks. What follows are the insights of technology that goes through each and every part of a MotoGP bike.



1. Engine

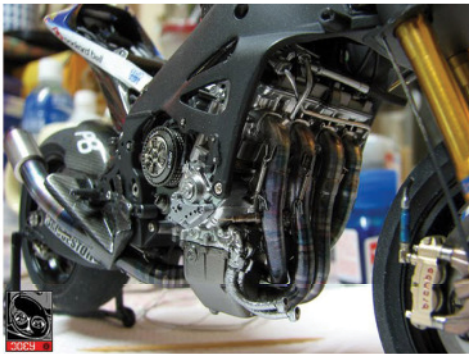
It is obvious that the very first difference exists in the power producing heart of these bikes. As per the current MotoGP regulation one can use a maximum of four cylinders and a capacity of one litre. Manufacturers use two types of configurations at present, V4 and Inline four. A Racing bike incorporates much lightweight engine which produces a mammoth amount of power compared to a production bike. These engines can produce around 20%-30% more power than a normal production engine, thanks to its ultra lightweight components and higher Compression Ratio.

The current MotoGP engines are capable of making around 260 hp. Each and every part of the engine gets special consideration from the designers. Much lighter alloy castings are used instead of normal aluminium alloy casting, in order to reduce weight. Steel parts are replaced by stronger and lighter Titanium parts. Now most machines use Carbon fibre parts in the engine as a solution for weight reduction. The Clutch is also operated as a dry unit and there is no casing above the fly wheel of the engine. As production costs stay very high, there is no room for any blunders and the manufacturing with precision.

2. Air intake and Throttle

Air ducting in Racing bikes plays an imperative responsibility in the Bike's performance. As it is the only means by which the bike engine breaths sufficiently and efficiently, the air intakes are slot in a straight and simplest way to provide adequate amount of fresh air. The fresh oxygen also helps to increase volumetric efficiency.

The throttle bodies in these bikes are advanced and very sensitive with the use of butterfly valves. By the use of "Ride by Wire" technology, there is no direct mechanical connection between the throttle and the butterfly throttle opening. It is replaced by an electronic sensor at the throttle, which opens the butterflies according to the input given by the rider. Just a small twist of the wrist can open the butterfly wide which amplifies the bikes acceleration tremendously. This helps to avoid more twisting of rider's wrist and reduces the fatigue, considering the long race duration.



3. Exhaust System

They look the simplest part of the engine, but are highly engineered and precisely manufactured. This contributes a lot to gain and retain the desired performance by increasing the scavenging (process of removing the exhaust gases) efficiency of the engine. Though the exhausts are "Free Flow", a number of sensors are integrated on it, to read out the temperature of exhaust gases, oxygen and carbon dioxide. With this data, the ECU and other electronics helps to increase the power output.

4. Clutch and Transmission

Almost all racing bikes use "Slipper Type Clutch". It is a multiplate clutch that allows the rider to downshift aggressively while cornering, without worrying about locking the rear wheel. Difference exists in the materials used to manufacture these type of clutches, and are 10%-20% lighter than the conventional ones. They also transmit power more efficiently, which is a key aspect of a GP bike. The transmission acts as a deciding factor for the bikes acceleration. The bike can't have great acceleration if the transmission chosen is erroneous.

As acceleration is the deciding factor of victory, each crew tries hard all through the race weekend to have the accurate gear box that provides the highest acceleration. The gear shifts are now done in fractions of a second, by use of "Quick Shifters". These quick shifters have an electronic sensor, that senses a downshift or upshift and cuts the engine firing for that very moment resulting in a very quick gear shift.



5. Chassis

The chassis is the second main component on which designers concentrate for the much possible weight reduction. The most vastly used frames are made of aluminium consisting a mixture of cast, extruded and forged pieces. KTM has even used "Trellis Frame" for its MotoGP venture, which is a pipe based frame. Nowadays, manufacturers even use Carbon fibre chassis for great weight reduction and stability.

A GP bike frame stays almost 35% lighter than other production frames. The "Swingarm" is also a part of the chassis, which has a slight bit of elasticity while cornering. This slight amount of elasticity provides ample feedback to the riders in the fast corners, helping to understand the bikes characteristics. The swingarms are made up of Aluminium or a mixture of aluminium alloy and carbon fibre.



6. Brakes

Plane Carbon discs are now universally used on all GP bikes which offer great heat dissipation and considerably less expansion under heating. They also help in reducing the bikes weight, compared to steel discs. These carbon discs need to be at an optimum temperature for its efficient operation. So, in case of cold weather or rain, conventional steel discs are replaced. ABS seems worthless on racing bikes, as the riders go beyond the limits to get that extra advantage over others.

Brake pads used here are heavy duty and lasts longer due to the use of composite materials in the process of manufacturing. This is done because these materials do not change their characteristics under thermal stress.



7. Suspensions

Almost all GP bikes use "Inverted Telescopic Forks" up front and mono shocks at the rear. Although there are no cavities on the racetrack, suspensions are required to transfer the weight from the front to rear during acceleration and vice versa. Suspension has to absorb various forces at the time of cornering, including the banking of corners. Due to this, the setup is always on the harder side. For instance, Yamaha uses two different damping characteristics for the two front forks. One is used for elongation while the other is used for compression. This helps to customise the suspension setup according to the need of the rider.





8. Wheels and Tyres

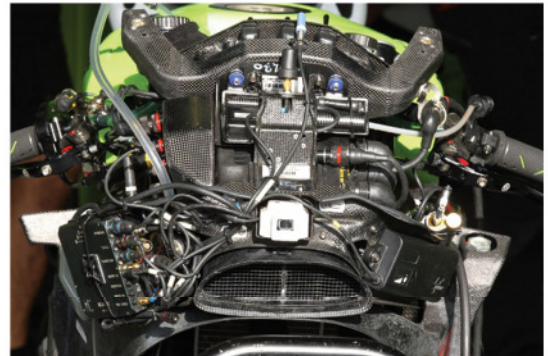
These high performance machines incorporate forged wheels which are ultra lightweight compared to conventional alloy wheels. The wheels are made up of Magnesium alloys, Carbon fibre and other composite materials. Marchesini Wheels is one supplier, that makes these type of Forged wheels.

The most important aspect of putting all the power onto the tarmac, is done by the tyres. As the GP bikes are ridden on well laid and dry roads most often, Slick tyres are used. Slick tyres don't have any treads, in order to generate the maximum contact patch between the rubber and tarmac.

The external conditions, rider feedback are vastly used in designing them. These tyres wear out at a specific distance, and cannot be used more than that. More advancement in the tyre technology lead to asymmetric tyres, which has an upper hand in terms of grip and stability. These asymmetric tyres have a harder compound at the centre and softer compounds at the sides, to reduce degradation in straights and provide high grip around corners.

9. Electronics

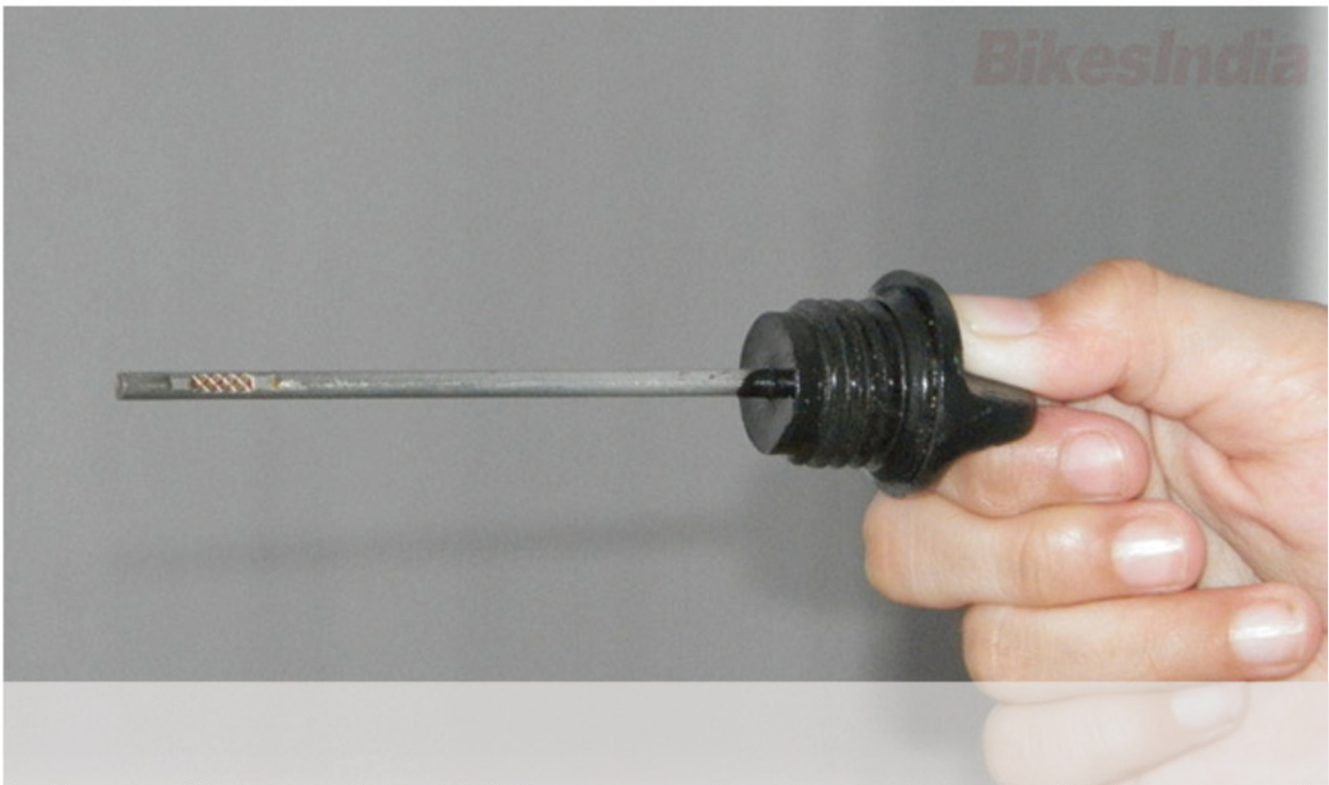
Electronics play the most vital part in modern day GP racing. Each and every parameter is monitored and fed to the ECU (Engine Control Unit). These modern electronics paved way for the designers to get rid of some bulky mechanical parts. The ECU helps in controlling the amount of power delivered from the engine. Launch Control is a feature used to launch the bike during race starts at around 10,000 rpm from stand still, without the fear of a bad roll over. Traction Control, Slide Control and Wheelie Control are some of the other features used to control the engine power. The crew could get the performance data of the engine and various other components of the bike in real time on their computer screens.



10. Aerodynamics

Fairings are a very obvious requirement for these bikes, considering the amount of speeds they reach. These bikes reach almost the takeoff speed of certain aircraft. In order to have the required down force, aerodynamically tested fairings are used. They have smooth and simple structure without any complicated curves, as they would lead to instability at high speeds. Manufacturers have gone a step up and used Winglets (little aerodynamic wings) to provide much more downforce. Ducati's GP15 machine was incorporated with large winglets, which they claim to provide about 10 kilograms of downforce at ~300 kmph. The fairings are always made of Carbon fibre to be strong and also light in weight.

Effects of Low Engine Oil Level

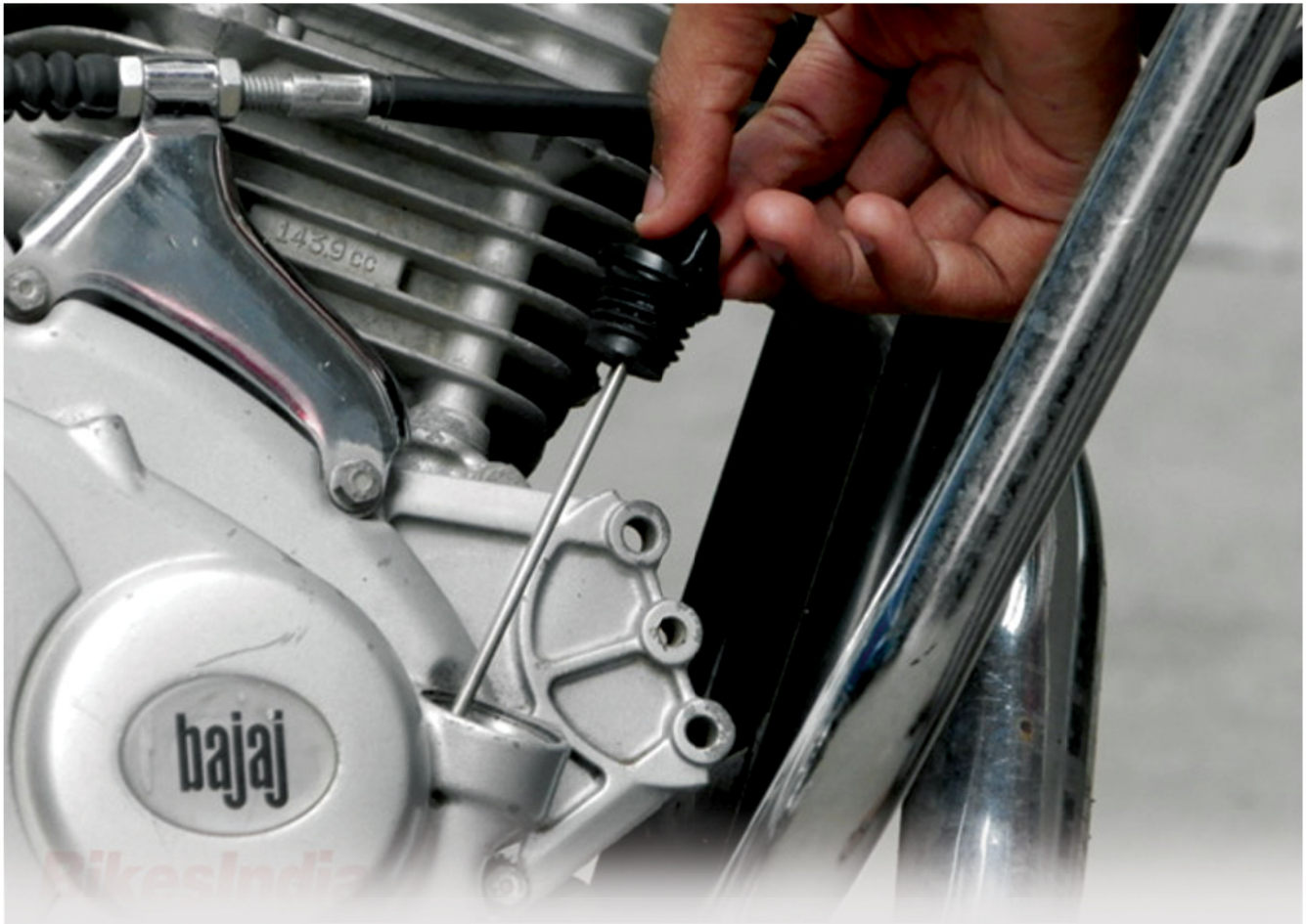


We all are aware of the importance Engine oil holds for our motorcycles, but to what extent the damage could be done to the engine if we run short of engine oil must also be known so that we should remain extra careful. Let's talk about the implications of running our motorbike engines dry or at low engine oil levels.

Knowing the fact that low engine oil levels can be fatal for the engine, the engine oil pressure sensor comes very handy, But the bitter truth is not all two wheelers come featured with this piece of technology, therefore we still have to rely on our instincts and have to be vigilant as far as monitoring the engine oil levels in our rides are concerned. When we talk about our instincts every biker knows how to communicate with his/her ride. Often when the engine starves for the fluids the roughness starts augment and one can feel the heaviness in the engine, the transmission also becomes clunky and chattering sound becomes audible. The best way to keep an eye on the engine oil level is by regularly checking the oil level through the oil gauge. The gauge is a dip stick that dips into the oil pan present at the bottom of the engine where the engine oil lies. Now, the random check of the oil level is fine but that won't give you the accurate feedback, to get more accurate info, one has to check the oil when the engine is not hot and all the oil remains at the oil pan. Another thing that must also be considered important while checking the engine oil level is: never check the level while the motorcycle is resting on the side stand or leaned on either sides. The best is to engage the center stand or rest the motorbike on paddock stand or simply hold the bike upright and take the reading.

On the dip stick normally there are two markings available at the extreme end, one depicting low and the other showing high level. The normal reading can be considered which comes somewhere in between these two marks. If you find the engine oil level below the "Low" marking or even at it, consider its time to top up with fresh engine oil to the normal marking. Avoid filling engine oil above the "High" level because it may also create problem by seeping into the combustion chamber via bearing or valve present at the cylinder.

The majority of the engine oil serves the duty at the Cylinder Head and at the Block Piston where all the moving parts including piston, rocker arms, camshafts, cam followers and push rods are moving at a very high speed. The engine oil is either squirt on these moving parts on regular intervals or they are simply dipped into it to provide maximum lubrication and hence greater protection against any wear.



Normally it is seen that the Piston and the Connecting rod are the first to get affected by the scarcity of engine oil. The gap between Piston and the Cylinder remains very low, in fact in brand new engines the gap is fixed in such a manner that even after Piston expansion there should be enough space left for the movement. Still the piston remains in contact with the cylinder walls all the time and hence required thin film of oil for lubrication throughout. Imagine, a brand new engine which has comparatively tighter fitting Piston if runs without engine oil. The friction between the Piston and the Cylinder increases the heat which otherwise would have been taken care by the viscous layer of oil. It is seen the extremely hot Piston expands so much so that it tends to get welded with the cylinder permanently.

The extent of the damage done to the engine can also be understood by the fact that the expanded piston which is running without any lubrication and which is now sticking to the cylinder wall exerts all its might as the cylinder is still firing and the power delivered as a result is also transmitting through the piston. Now the stressed out and exerting piston receives numerous permanent scars from where the compression is bound to leak in future.

A hole in the piston and bent connecting rod is a common sight in a seized engine, if the damage is somehow restricted to Piston scars it can be corrected by replacing piston or in some cases by replacing the entire cylinder but if the damage comes down to the connecting rod and further, it is going to cost you a full engine overhauling. In extreme cases especially with multi cylinder powerful machines engine explosions are also reported.

So folks, do take care of the engine oil level in your two wheelers irrespective of their make and type. The damage done to the engine is often permanent which has its implications in longer run. You will never ever want to face any such outcomes and therefore one should stick to "Precaution is better than cure".

By: Farhan Kashif