



# THE WAR IN EUROPE

INFOGRAPHIC: SHAER REAZ

There is a war brewing in Europe as a new rivalry emerges between a long standing leader and an unlikely returning name. The Italians have been cursed with reliability issues and an arthritic dullness in anything other than the machines from Maranello, and Alfa Romeo was the leading disappointment. No longer. Alfa is back with a stonking new performance sedan, charging at the Germans and their chief contender.



## THE ITALIAN

ALFA ROMEO GIULIA QUADRIFOGLIO



0-60 MPH 3.9 SEC

TOP SPEED 155+ MPH

50-50 WEIGHT DISTRIBUTION



3.0L TWIN TURBO V6

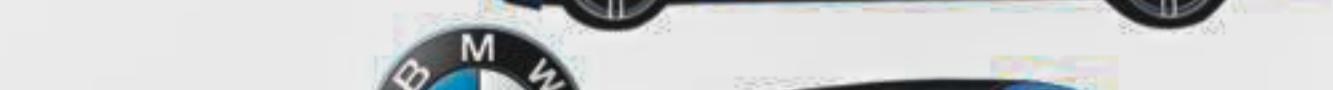
510 HP

FERRARI DEVELOPED



## THE GERMAN

BMW M3 F80



3.0L TWIN TURBO I-6

425 HP

406 LB-FT



0-60 MPH 3.9 SEC (DCT GEARBOX)

TOP SPEED 174 MPH (ON DRIVER'S PACK)

LIGHTWEIGHT CFRP BODY PANELS

## The other German: Mercedes Benz C63 AMG



The C63 AMG now offers a greater degree of optimisation, with three versions of the C63 itself. The range topper, the C63S AMG, comes with a bi-turbo 4.0 liter V8 engine putting out 510 HP and infinite torque, helping it do the 0-60 MPH sprint in 4 seconds flat. It's clear that the C63S is just as breathtaking on paper and in pictures as the machines above, but how will it fare in an economy obsessed

Europe with its big, bulking V8? Well, Benz is pretty confident, quoting decent fuel economy figures despite the two extra cylinders over its rivals. However, because the BMW M3 has the pedigree and past generations always found an edge over the C-class AMGs, we'll refer to the Benz as the "Other German" here. Trust us though, we want one. Badly. It's better looking for one.

## The British: Jaguar XE-S

Entering on the British side of the field is the Jaguar XE-S, Jag's latest weapon in taking the fight to the Germans. While the XE-S isn't as powerful or quick on paper as the M3 sedan or the Giulia, it still offers a surprising amount of grunt from its 3.0 liter supercharged V6: 335 HP, 332 lb-ft of torque, with a 0-60 MPH sprint time of 4.9 seconds. Those figures make more sense when considering that XE-S is the warmed up version of the XE and is a way of holding fort till the V8 powered XE-R makes its way to the market in 2017-18. For now, the XE-S offers incredible levels of refinement with performance to match. Except XE-R to deliver the full throttle punches. The Jaguar XE will be coming to Bangladesh in affordable trim sometime this year. We'll try it out when it does.



# Looking back at Le Mans 2015

Porsche has won the 24 Hours of Le Mans once again, making this their 17th victory in the greatest race in the world, more than anyone else in history. Remarkably, Porsche has achieved victory in only their second season since their return to endurance racing. Their last Le Mans win was all the way back in 1998.

Le Mans is a 24-hour endurance race where cars of several different classes compete together. This allows teams of various different budgets and skill levels to compete. Le Mans Prototype 1 (LMP1) is the fastest, most powerful and most expensive class. LMP2 cars are slower and cheaper, but they are thoroughbred racing prototypes. Then there are two road-car based classes, GT Pro (professional) and GT Am (amateur). The car that

light. However, Nissan designed a front engine, front wheel drive prototype, which is unthinkable in Le Mans. Their purpose was to create a car with massive downforce, by creating space in the rear and designing huge ground effects tunnels. Nissan also utilizes flywheel KERS.

Prior to the race, it was obvious that the Audi and the Porsche were the fastest cars. However, no one knew which of the two were ahead. Qualifying would prove that the Porsche was faster, but the gap was shocking. It was more

24 hours worth of racing is impossible to describe within reasonable space. The battle between Porsche and Audi was intense from the moment it began. There were hours of flat out wheel to wheel racing and the lead changed between the R18 and 919 many times. The battle lasted into the night, but by the time race entered its second half it was clear that Porsche had an unbeatable lead. Audi conceded defeat and from then on the fight was between the two leading Porsches.

Of course, as is usual in Le Mans there were a number of high-speed crashes. One of the most significant was when an Audi spun out and damaged its nosecone. However, it managed to limp back to the pits and its damaged bodywork replaced. There was also incident in the pit lane when a Ferrari 458 burst into flames.

Ultimately, it was a Porsche 1-2. The winning car was #19, driven by Earl Bamber, Niko Hulkenberg, and Nick Tandy. Especially significant is the fact that Hulkenberg is also a current F1 driver, winning Le Mans on his very first try. LMP2 class winners were KCMG, in the Oreca 05 Nissan. Interestingly, the 'slower' LMP2 Nissan finished 126 laps more than the factory backed LMP1 Nissan GTR. Corvette Racing-GM won GT Pro class, SMP Racing won GT Am with a Ferrari 458.

This edition of Le Mans has been historic because Porsche has won for the first time since 1998, ending

Radically different  
Nissan was a flop.



→

Winning car was #19, marking  
Porsche's 17th Le Mans win.

Great expectations  
from Toyota, but  
ultimately let down.

Audi was competitive,  
but edged out by  
Porsche.



covers the  
longest distance in  
24 hours wins the race,  
with winners from each  
different class.

The winning Porsche 919 has a 2.0 liter V4 turbo with a lithium ion battery based energy recovery system. The engine delivers 500hp and the electric motors contribute 400hp for a total of 900hp. The Audi R18 utilizes a 4.0 litre V6 that delivers 550 hp and a flywheel kinetic energy recovery system (KERS). A flywheel KERS converts energy recovered during braking into rotational kinetic energy that is stored in a small rotating flywheel inside the car. This rotational energy is then converted to electrical energy, which provides 268hp to the electric motors. Max power for the Audi is 818hp.

Toyota has an even more powerful car, the TS040, which is very different in concept. It has a 3.7 liter naturally aspirated V8, with a super capacitor based hybrid system. It produces 1000hp. However, it proved to be slower than the Audi and Porsche.

The Nissan GTR-LM Nismo is entirely different from any other Le Mans prototype ever designed. Nowadays, all Le Mans prototypes are mid-engine rear wheel drive (MR) cars. This provides the best compromise between weight distribution, power delivery and keeping the car

than 2.5 seconds a lap ahead of Audi. Toyota were the third fastest, which was a disappointment because they had the fastest car last year – in fact they are the defending World Endurance Champions. Nissan was disgracefully slow, 20 seconds down on Porsche.

The race itself was eventful, as Le Mans always is. Unlike the elitism of F1, Le Mans is extremely inclusive, resulting in a massive audience of over 265,000 people. More than just a mere race, it is considered a holiday weekend.

Audi's run of 5 consecutive wins in 2010-14. Porsche has extended their record for the most Le Mans wins of any manufacturer with 17 in total, Audi is in second place with 13 wins. Toyota disappointed this year and Nissan were an utter disappointment. However, there was plenty of good racing and the future looks bright for endurance racing, because the end of Audi's dominance can only be good for the show.

NABEEL AHMED KHAN

## 7 ways to drive safely in a flooded city

Normally people drive through water and they don't die. Unless they drive into an ocean because the GPS lady said so. We are not too far from oceans but in the cities of Bangladesh, we have unplanned network of buildings to stop us floating into the ocean.

So what happens when our city roads get submerged? Our cars can die. Here's how yours can survive.

**1** If you see a flooded road, slow down or stop completely. Better yet, turn back, go home and never come out till November.

But our ridiculous traffic means we can't go back especially when it rains. So assess the road in front so you can avoid open manholes and potholes. We have potholes as big as a Dhaka University bus going the wrong way. And like that bus, we also try to avoid unknown, unfriendly roads. Here's an idea for app developers: The Bad Road Finder

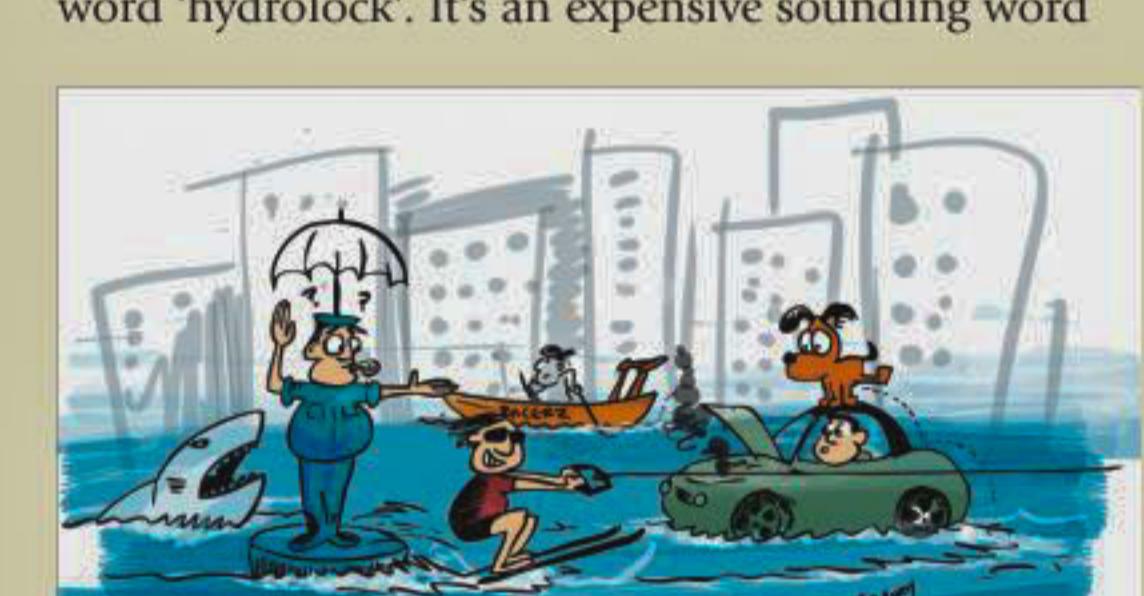
**2** Avoid the AC. The AC compressor is usually situated at the lowest part of the engine bay. It's a sealed unit so it will

survive water. But turning on an AC turns on the fan and that doesn't work so well if submerged. Not having air conditioning is uncomfortable. Not having a running car in the middle of a sewage flooded Gulshan Avenue road is smelly AND uncomfortable.

**3** Some people worry that water will go up the exhaust and into the engine. Not quite. A working engine pushes gases OUT of the car preventing water from coming in.

Theoretically a car may stall because the backpressure from the water exceeds the backpressure from the engine. Such science states water won't go all the way up into an engine through a working exhaust. But keeping the revs a little high prevents science from letting that back pressure drop which is easy with a manual. For an automatic, you can just pray the CNG conversion didn't mess with the computers that ensure an engine always stays on when it's on.

**4** Driving fast over water is the worst thing you can do aside from listening to every album of Justin Bieber. When you speed up, it creates a waves and if the water is higher than your wheels, you could cause the wave to crest over your bumper, through the grill and into the engine bay. You'd get a washed engine bay at the risk of sucking water into the air intake. If that happens you will soon learn the meaning of the word 'hydrolock'. It's an expensive sounding word



that causes an engine to seize and die forever. Secondly, avoid going too fast through shallow water to avoid hydroplaning. It's when the car's tyres start to float over water and lose traction. Your car will become a boat. I've steered boats. It is as bad as trying to perform brain surgery while eating oily French fries on a swaying Sylhet bound train.

**5** Try to keep to the edge of the island in the middle of the road. It's higher ground and murderous manholes are usually placed closer to the footpaths where pedestrians walk.

**6** Watch for big SUVs and also microbuses that think they are big SUVs. They drive fast because they are irritated that they have to pay so much AIT each year. It often makes them feel they own the road. Keep an eye out for such vehicles coming at speed from the opposite direction. It causes a bow wave that could drown small cars and short dogs. Not much you CAN do but sometimes, you can steer a little further away or at least quickly roll your windows up.

**7** When you get out of water, pump brakes multiple times to make sure it works properly and all water is drain or evaporated from the pumping generated heat. If you do make it out alive, go home, park, let the car dry and then run some checks. The fins of the radiator and air conditioner evaporator (also looks like a radiator) could get clogged by mud, leaves, HSC exam leaked question papers and lost cell phones. The fins need to be washed thoroughly or else in normal hot weather your car will not cool properly.

### IF ALL FAILS

And your car stalls, sit back and breathe. If you don't see any sharks, you will be fine. Try to start the engine but if it refuses, don't push it. Or rather, get out and literally push it to a safe place where you can have a mechanic inspect it to make sure it has not sucked in water.

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