New Range Rover, Range Rover Sport and Discovery 4 set new standards for performance and refinement

- Powerful, refined and economical new 3.0-litre LR-TDV6 diesel engine for Discovery 4 and Range Rover Sport
 - o Class leading 245PS, 600Nm torque
 - o Substantial reductions in fuel consumption
 - o Responsive, 500Nm from idle in 500ms
- All-new 5.0-litre supercharged LR-V8 petrol engine for Range Rover and Range Rover Sport
 - o 510PS, 622m torque
 - o CO2 and fuel consumption cut by over 7 percent
- e-Terrain technologies boost economy and reduce CO2
- Striking exterior design changes
- Redesigned interiors with new TFT driver information screens
- Enhanced terrain response for unrivalled performance on all surfaces

"The new 2010 Range Rover, Discovery 4 and Range Rover Sport combine world beating performance and luxury with reduced CO2 emissions thanks to a stunning new engine and transmission line up. Inside, we've move the game on too, with some innovative new technologies, such as the Range Rover's dual view screen. All three cars continue to set the pace when it comes to power, efficiency and refinement."

Phil Popham, managing director

New engines redefine performance and economy

Land Rover is introducing two new engines for the 2010 model year following a joint development programme with Jaguar. The LR-TDV6 3.0 alongside the LR-V8 Naturally Aspirated and LR-V8 Supercharged petrol engines set new benchmarks for performance and economy, boasting substantial increases in power and torque over their predecessors as well as reduced lower emissions and reduced fuel consumption.

When it comes to power and torque, the TDV6 betters the already impressive 2.7-litre diesel by 29 percent and 36 percent respectively. At 600Nm torque output of the diesel is thought to be the highest of any six-cylinder passenger car diesel in the world, despite a nine percent improvement in economy and producing nine percent fewer emissions of CO2 than the previous 2.7-litre V6.

The LR-V8 supercharged petrol engine is no less impressive, packed with innovative technical features enabling it to match supreme performance with extreme efficiency. Power and torque is considerably improved over the existing V8 petrol engines. For example, as fitted to the Range Rover, the new 5.0-litre supercharged engine produces 29 percent more power and 12 percent more torque than the outgoing 4.2-litre engine, yet CO2 emissions and fuel consumption are down by 7.3 percent.

Other engines available

The brand new engines will be supplemented by a choice of well proven existing power units. In addition to the new 3.0-litre TDV6, customers still have the option of ordering the Discovery with the outstanding 2.7-litre TDV6. The Range Rover Sport is available with the 3.0-litre TDV6, 3.6-litre TDV8 or the 5.0-litre LRV8 supercharged petrol engine. Finally, the Range Rover buyers will have the option of the new 5.0-litre supercharged petrol engine or the 3.6litre TDV8.

World class transmissions offer greater refinement and economy

All cars are fitted with the super-smooth ZF HP28 6-speed automatic transmission, tuned by Land Rover engineers to combine class-leading response with rapid, refined shifting. The outstanding low-end torque characteristics of the new engines have made it possible to actuate the transmission's lock-up clutches earlier in each gear, reducing slip through the hydraulic torque converter to improve both CO2 emissions and fuel economy.

e-terrain technologies boost economy and reduce CO2

Both the diesel and petrol engine were designed from the outset to deliver class-leading fuel economy and enhanced low-end torque. The parallel sequential turbocharging system of the LR-TDV6 3.0 makes use of a larger, primary turbo most of the time. The smaller secondary turbo remains dormant when higher power is not required, reducing pumping losses and fuel consumption.

A third generation common rail injection system with piezo injectors and energy-saving fuel metering system, also makes a substantial contribution to fuel economy, while a reduction in idle speed from 750rpm to 710rpm compared to the 2.7-litre diesel, further reduces fuel consumption and emissions without compromising refinement.

Similarly, every detail of the highly advanced new supercharged V8 engine has been designed to return maximum efficiency. A new high pressure, spray guided direct injection system optimises combustion while a new variable camshaft timing system helps deliver exceptional low end torque while also helping to maximise fuel efficiency at both ends of the rev range.

The LR-V8 is also equipped with a new, sixth generation, twin-vortex supercharger whose high-helix rotor design improves its thermodynamic efficiency by 16 percent. Faster warm-up thanks to a new, reverse flow cooling system further improves fuel economy as do the low friction design

features on both engines. Like the TDV6, idle speed has been reduced compared to previous petrol engines, from 700 to 600rpm.

Vehicle dynamics moves up a notch - on and off road

All three cars have further improvements to the award winning Terrain Response system for 2010. Revisions to the rock crawl programme reduce roll when traversing boulders delivering a more composed ride through rocky terrain. The addition of a new 'sand launch control' prevents wheels digging in when driving away in soft sand thanks to revisions to the traction control system. The acclaimed Hill Descent Control system has also been enhanced with the addition of Gradient Release Control. This inhibits the initial rate of acceleration making descent of very steep inclines much smoother.

A new Adaptive dynamics system for the Range Rover and Range Rover Sport is the world's first production system using model-based predictive technology to continually optimise the settings of DampTronic Valve Technology[™] damper units, optimising body ride and control. A refinement to the understeer control on all models helps slow the vehicle automatically if taking a bend too fast, enhancing driver control. Responding to driver steering inputs, the system will in extreme cases intervene using the brakes. A Roll Stability Control system will implement wheel-specific braking if an imminent rollover is detected. Both Range Rover and Range Rover Sport are fitted with Adaptive Cruise Control.

The Range Rover and Discovery 4 also benefit from Trailer Stability Assist, a towing aid which detects trailer oscillations and intervenes using the brakes and by reducing engine torque.

Design/interiors

Subtle but striking exterior changes characterise the new 2010 model year Land Rovers. Smooth, sculpted, frontal surfaces with revised bumpers incorporating anti-drag lips, create a more distinctive look while improving aerodynamics and fuel consumption. Grilles are restyled too, and headlights include both LED running light technology and High Beam Assist, which switches on the lights when ambient light levels are low, and dips headlights automatically when oncoming traffic is detected. New 19 and optional 20-inch wheels are available for the Discovery which also has larger brakes as standard.

Styling revisions extend to the interiors as well, with some new seats for Discovery 4 and Range Rover Sport together with new interior finishes. These are softer and incorporate more fine detailing in the Discovery while the Range Rover Sport is finished with stylish wood trim with greater use of leather on major surfaces. Both cars are also now fitted with 5-inch TFT screens in the instrument cluster displaying key information, there's a new Portable Audio Interface with MP3 player and i-Pod connectivity and other available features include a five-camera surround system for ease of parking.

The Range Rover exterior has also undergone subtle revisions with shallower headlamps, a more sculpted front end reflecting the clean surface integration which now characterises Range Rover design. External changes also include three-finger LED indicators, redesigned 3-section fender vents, LED rear light clusters and fog lights have been relocated to the lower front bumper skin. Inside, there are satin chrome plated buttons, European leather trim for headlining and door casings all picked out by the Range Rover's upgraded waterfall interior lighting.

Significant new technologies have been introduced too with a 12-inch TFT screen replacing traditional instruments and the world's first dual-view, infotainment touch-screen. The display allows passenger and driver to view completely different simultaneously.

For full details see www.media2010landrover.com