MK100 ESP ABS

Continental ATE MK100 ESP ABS System:

In 2015 Continental introduced the next generation of their ABS System, the MK100, as a replacement to the MK61. The new gen is smaller and lighter but is also packed with new features. Such as electric parking brake integration, regenerative braking and scalable autonomous emergency braking, to name a few.

The MK100 ABS System comprises three main components: The ABS Module, Hydraulic Block, and the Electric Pump Motor. It is a flexible and modular system; it comes in several variants supporting a wide variety of powertrain technologies. The modular software architecture offers significant reduction in development and validation costs to the automaker.



MK100 ESP ABS

MK100 ABS HYDRAULIC BLOCK EXPLODED VIEW





PUMP MOTOR

Engineers at Continental chose salient pole rotor design for the pump motor. Salient pole motors are typically used in low-speed applications (less than 1500 rpm), such as synchronous generators in hydroelectric power plants. A short axial length rotor design allows for smaller stator housing. Infact this motor is 38% shorter than previous MK61 generation.





ATE MK100 ABS MODULE

In 2015 Continental launched the MK100 ABS Module which replaced the outgoing MK61 design. The module is visibly smaller and lighter yet packed with a lot of new features, such as previously mentioned integrated electric parking brake control and autonomous braking.









ATE MK100 ESP ABS

Unlike the MK61, the new MK100 is not a rebuilder-friendly module. All silicone chips are on the opposite side of the PCB. This means that the PCB needs to be removed from the module housing to service any one of them. The PCB is attached to housing via a minimum of 58 through-hole spreadable rivet pins. This is a delicate and time-consuming operation.

MK100 INSIDE VIEW







ATE MK100 ESP ABS

This is how the ABS Module looks like when it is fully disassembled and ready to be worked on.

MK100 ABS MODULE EXPLODED VIEW



