

JASO T903 establishes two performance categories: MA for motorcycles fitted with wet clutch and MB for motorcycles fitted with Automatic transmission (Scooters).



Motorcycles house several components in one compact unit-the engine, a wet clutch and gearbox. This configuration relies on one oil to provide lubrication for the entire system. An optimum level of friction performance is therefore required in order to prevent clutch slippage, a problem that can lead to poor rideability and power loss during operation-a potentially undesirable scenario for riders.

By contrast, scooters typically utilize continuously variable transmissions (CVT) that are housed separately from the engine. Scooter oils do not require the high friction characteristics needed for a wet clutch, but still require specialized performance. Both motorcycles and scooters run under intense conditions, including hotter temperatures, higher engine speed and greater power density (power per unit displacement) than passenger cars, subjecting the lubricant to significant operating stress.

## Thus, JASO T903 establishes two performance categories: MA for motorcycles fitted with wet clutch and MB for motorcycles fitted with Automatic transmission (Scooters).

**JASO MA:** Delivers the desired friction performance motorcycles need to prevent slippage in the wet clutch.

**JASO MB**: Delivers to scooters friction performance via friction modifiers in order to provide fuel economy benefits.