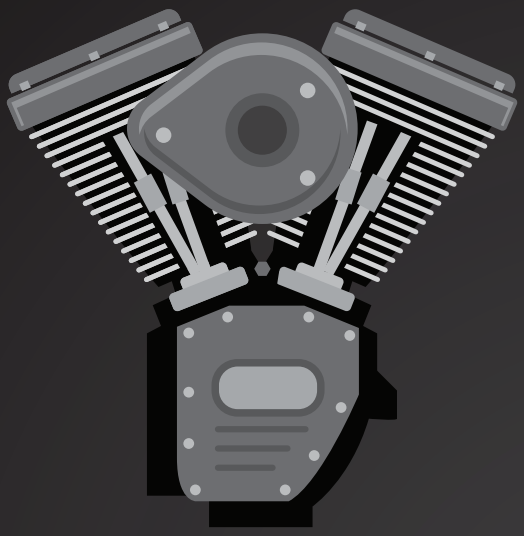
JASO T903: A STANDARD FOR DEDICATED 4-STROKE MOTORCYCLE ENGINE OILS

JASO (*Japanese Automobile Standards Organization*) T903 is globally the most recognized industry standard for 4-stroke motorcycle oils.

1998

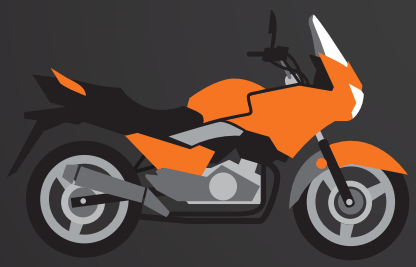


+ Implementation of T903 standard due to concerns about the effect of friction modifiers on wet-clutch applications
+ T903 was the first motorcycle lubricant standard to address clutch and engine performance (catalyst protection, reduce oil consumption and prevent wear)
+ Two performance categories, MA and MB, address the specific lubrication needs of 4-stroke motorcycles
+ The SAE#2 Clutch Friction test defines the lubricant's friction performance categorization:
  - MA lubricants deliver high frictional performance (primarily suitable for wet clutch applications)
  - MB lubricants deliver low frictional performance (suitable for CVT applications)

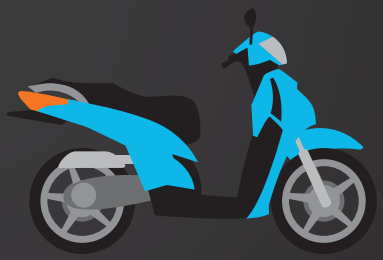
2006

+ T903 standard separated MA lubricants into MA1 and MA2 categories
  - MA2 lubricants deliver the highest level of friction

JASO MA (MA1/MA2)
Wet Clutch

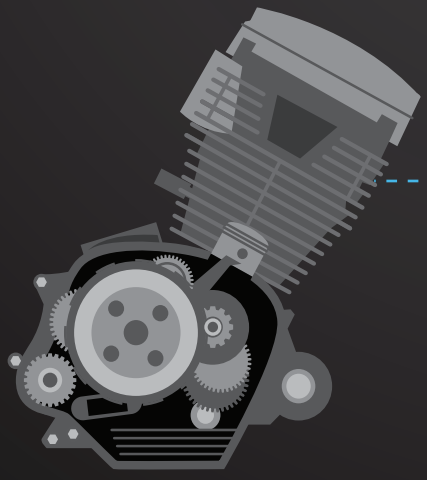


JASO MB
CVT (Continuously Variable Transmission)



2011

+ Minor changes in the limits for friction indices
+ Change in reference oils
+ Change in clutch friction plates in the SAE#2 Clutch Friction test to align with current materials used in the industry



To determine if a lubricant is capable of meeting MA or MB standards, the SAE#2 Clutch Friction test is employed which measures the following:

Dynamic Friction – Clutch feel and power transfer under slipping conditions

Static Friction – Torque handling capacity and resistance to slippage under breakaway conditions

Stop Time – How quickly the clutch engages

For more information visit www.jalos.or.jp

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