



## MOTORCYCLE MOTOR OILS

### PRODUCT DESCRIPTION

PENNZOIL<sup>®</sup> MOTORCYCLE MOTOR OILS are premium quality lubricants specially designed to protect motorcycle engines. They are formulated with a unique additive package chosen for exceptional wear protection, sludge and varnish resistance, and thermal stability. A special anti-foaming agent is included to reduce foaming and air entrainment at high engine speeds. This is particularly critical in high speed motorcycle engines, which can reach 12,000 rpm. Many motorcycles use the same oil for both the engine and transmission. Transmission gears place extremely high stress on the lubricating oil which can cause viscosity breakdown. PENNZOIL<sup>®</sup> MOTORCYCLE MOTOR OIL is formulated to resist this stress and provide outstanding protection against viscosity breakdown. When all these components are combined with Pennzoil's high quality petroleum basestocks, the result is a premium quality motor oil that meets the specific demands of motorcycle engines.

PENNZOIL<sup>®</sup> MOTORCYCLE MOTOR OIL is available in SAE grades 10W-40 and 20W-50 to cover the viscosity requirements for most manufacturers and climates.

### APPLICATION

PENNZOIL<sup>®</sup> MOTORCYCLE MOTOR OIL can be used in all 4-stroke motorcycle engines, including racing, high performance, street, and off road motorcycles. It can also be used in motorcycle transmissions when an API SF, SG, or SH motor oil is required.

PENNZOIL<sup>®</sup> MOTORCYCLE MOTOR OILS exceed the requirements of JASO MA-2 (2006).

### BENEFITS

- Exceeds warranty requirements for BMW<sup>®</sup>, Harley-Davidson<sup>®</sup>, Honda<sup>®</sup>, Kawasaki<sup>®</sup>, Suzuki<sup>®</sup>, and Yamaha<sup>®</sup>, where API SH or SG oil is recommended
- Reduces heat, friction, and wear
- Gives excellent protection for transmissions and wet clutches
- Helps reduce foaming and air-entrainment in high speed engines
- Provides excellent protection for air cooled engines
- Multi-grade formula allows easier cold starts while maintaining high temperature film strength
- Outstanding protection against thermal and viscosity breakdown
- Protects against piston/cylinder scuffing
- Exceeds API service classifications SH/SG
- Licensed for JASO MA (1998)

**TYPICAL PHYSICAL AND CHEMICAL PROPERTIES  
PENNZOIL<sup>®</sup> MOTORCYCLE MOTOR OILS**

TEST	METHOD	TYPICAL RESULTS	
SAE Viscosity Grade	SAE J300	10W-40	20W-50
		JASO MA	JASO MA
API Service	SAE J183	API SH, SG	API SH, SG
Gravity, API	ASTM D-287	30.8	29.2
Density @ 15°C	ASTM D-1298	0.8750	0.8804
Pour Point °C (°F)	ASTM D-97	-33 (-27)	-30 (-22)
Viscosity			
@ 40°C, cSt	ASTM D-445	107	167
@ 100°C, cSt	ASTM D-445	15.9	20.2
Viscosity Index	ASTM D-2270	159	140
Low Temperature Viscosity			
CCS Vis (cP) at temperature (°C)	ASTM D-5293	6300@-25°	5350@-15°
HTHS Viscosity, cP			
(TBS @150°C,10 <sup>6</sup> Sec <sup>-1</sup> )	ASTM D-4683	3.69	4.64
Shear Stability, %Viscosity Loss,			
Diesel Injector	ASTM D-6278	<4.0	<4.0
Material Number			
Bulk		3884	3883