



DATA SHEET

20W-50 Synthetic V-Twin Motorcycle Oil

High-Performance Lubricant for Engines, Transmissions and Primary Chaincases

AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil is a premium oil designed for those who demand the best protection for their motorcycles. It is the result of extensive research and is specially formulated to excel in all areas unique to motorcycles, including the high temperatures of air-cooled engines such as Harley-Davidson* V-twins, wet-clutch lubrication, extreme-pressure regions of gears and chains and rust common to short trips and storage. AMSOIL Synthetic V-Twin Oil is multi-functional and fulfills the requirements of both domestic and foreign motorcycles.

Reduces Wear and Deposits

Big, powerful V-twin engines run extremely hot, especially in summer during stop-and-go rally or parade traffic. High heat breaks down oil formulated for standard service, inviting wear and performance-robbing deposits.

AMSOIL Synthetic V-Twin Motorcycle Oil is formulated with naturally heat-resistant synthetic base oils that resist oxidation in extreme heat. It contains a heavy treatment of anti-wear additives to reduce wear regardless of operating conditions. After 1,000 miles (1,609 km) of dyno testing during which oil temperature reached 300°F (149°C) and cylinder temperature reached 421°F (216°C), AMSOIL V-Twin Oil fought piston-ring deposits to prevent sticking and protected against piston scuffing for maximum compression and power (see image).

Protects Transmissions and Primaries

AMSOIL V-Twin Oil delivers exceptional protection in transmissions and primary chaincases. It is shear stable and resists thinning from mechanical activity. AMSOIL 20W-50 V-Twin Motorcycle Oil performs like a gear lube without the negative effects of extreme-pressure additives. It resists viscosity breakdown 6X better than Harley-Davidson SYN3* for improved protection against compensator and transmission gear wear.¹

Delivers Superior Rust Protection

Motorcycles are prone to rust from storage, humidity and short drives. Rust can cause major damage such as roller-bearing failure, wear, compression loss and blow-by. Good rust protection, however, comes by design and is not natural to motor oils. Unlike many motorcycle oils, AMSOIL Synthetic V-Twin Oil contains special anti-rust agents. It passes the ASTM D1748 humidity cabinet rust test, demonstrating superior rust protection to help your engine achieve maximum performance and long life.



- **Resists** extreme heat
- **Retains** viscosity for excellent wear protection
- **Convenience** of one lubricant for all three sumps

Helps Prevent Wear



After 1,000 miles (1,609 km) of extreme-heat dyno testing, AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil protected against piston-ring sticking and piston scuffing for maximum compression and power.

¹Based on testing of AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil and Harley-Davidson Screamin' Eagle SYN3 purchased on 1/26/24 in the CEC L45-KRL, ASTM D445 test.

TYPICAL TECHNICAL PROPERTIES
AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil (MCV)

Table with 2 columns: Property and Value. Rows include Kinematic Viscosity @ 100°C, Kinematic Viscosity @ 40°C, Viscosity Index, Pour Point, Flash Point, High-Temperature/High-Shear Viscosity, Four-Ball Wear Test, FZG, Noack Volatility, Foam, Rust Test, and Total Base Number.

Provides Excellent Wet-Clutch Performance

AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil contains no friction modifiers and promotes smooth shifting and positive clutch engagement. It controls heat and helps prevent slippage and glazing, while its high TBN helps improve clutch life by resisting the acids that can degrade clutch material.

APPLICATIONS

Use in motorcycles that require 20W-50 motorcycle oil and any of the specifications listed below, including those made by Harley-Davidson* and Buell.* Suitable for use in motorcycles that require an API CH-4 oil.

JASO MA/MA-2 • API SL, SH, SG, CG-4, CF • ISO-L-EMA2
Do not use where an API GL-4 or GL-5 gear oil is required.

COMPATIBILITY

AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil is compatible with other synthetic and conventional motor oils. Mixing AMSOIL oils with other oils, however, will shorten the oil's life expectancy and reduce its performance benefits. AMSOIL does not support extended drain intervals where oils have been mixed.

Aftermarket oil additives are not recommended for use with AMSOIL Synthetic Motorcycle Oil.

SERVICE LIFE

Use for up to twice the motorcycle manufacturer change interval (miles/hours) or one year, whichever comes first, in engines, transmissions and primary chaincases. For Big Twin Harley-Davidson transmissions only, follow the Harley-Davidson

recommended drain interval for synthetic oil of up to 20,000 miles (32,187 km) or one year, whichever comes first. If not using an AMSOIL Motorcycle Oil Filter, change the filter at standard intervals.

For off-road use, change AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil at motorcycle-manufacturer-recommended intervals.

Racing or modified engines are excluded from extended-drain-interval recommendations. Oil changes are at the owner's discretion.

WARRANTY SECURE™

AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil is Warranty Secure, keeping your factory warranty intact. AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil is a high-performance replacement for vehicle manufacturer-branded products and is also backed by the AMSOIL Limited Warranty. For details, visit AMSOIL.com/warrantysecure.



HEALTH & SAFETY

This product is not expected to cause health concerns when used for the intended applications and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available via the Internet at AMSOIL.com or upon request at (715) 392-7101. Keep Out of Reach of Children. Recycle used oil and bottle.

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