



Technical Service Bulletin

Date: 10/3/04

Product Description: **AMSOIL Synthetic Motorcycle Oils, Gear Lubes and Suspension Fluids**

Subject: **AMSOIL Recommendations for All Harley-Davidson® Models**

OBJECTIVE:

Recommend the preferred AMSOIL products and service intervals for Harley-Davidson® motorcycles, with emphasis on second and third oil options.

ISSUES:

Harley-Davidson recommends both motorcycle oils and gear lubes for its equipment. Because different models have different corresponding specific oil recommendations, it can cause confusion and lack of confidence when making AMSOIL lubricant recommendations. The following charts outline the proper sequence of product recommendations for the Harley-Davidson products listed.

DESCRIPTION & RECOMMENDATIONS:

Harley-Davidson has manufactured nine types of engines since 1929: Flathead (1929-1974), Knucklehead (1936-1947), Panhead (1948-1965), Shovelhead (1966-1984), Evolution (Blockhead) 1340 (1984-1999), Twin Cam (2000 to current), V-Rod (Revolution) (2001 to current), Ironhead Sportster (1957-1984) and Evolution Sportster (1985 to current).

Harley-Davidson recommends SAE 60 or SAE 50 engine oil for **Flathead, Knucklehead, Panhead and Shovelhead** equipped bikes. AMSOIL recommends AMSOIL SAE 60 Synthetic Motorcycle Oil (MCS) or 20W-50 Synthetic Motorcycle Oil (MCV) for these vintage models, while AMSOIL MCS or 75W-140 Severe Gear® Synthetic Gear Lube (SVO) is recommended in the transmissions. Shovelhead is the only model with a chaincase that is lubricated with engine oil.

AMSOIL recommends MCV for all three holes (engine, transmission and primary chaincase) on **Evolution 1340 and all Twin Cam** engines. AMSOIL 75W-110 Severe Gear Synthetic Gear Lube (SVT) may be used as a secondary oil for the transmission, and SVO is an option for older transmissions. New seals are recommended where excessive leaking is evident.

Ironhead, Evolution Sportster and V-Rod engines use one lubricant for both the engine and transmission. AMSOIL recommends MCV for this common sump.

AMSOIL Cross Reference

Harley-Davidson Part #	AMSOIL Product
99816-60 HD 360 SAE 60 Engine Oil	SAE 60 Motorcycle Oil (MCS)
99816-50 HD 360 SAE 50 Engine Oil	20W-50 Motorcycle Oil (MCV)
99816-2050 HD 360 SAE 20W-50	20W-50 Motorcycle Oil (MCV)
99816-1040 HD 360 SAE 10W-40	10W-40 Motorcycle Oil (MCF)
99824-03 Screamin Eagle Syn 3	20W-50 Motorcycle Oil (MCV)
99892-84 Semi-Syn Trans Lube	75W-110 Gear Lube (SVT)
	75W-140 Gear Lube (SVO)
	SAE 60 Motorcycle Oil (MCS)
99853-96 75W-90 Trans Fluid	75W-110 Gear Lube (SVT)
99887-84 Primary Chaincase Lube	10W-40 Motorcycle Oil (MCF)
99896-88 Sport-Trans fluid	10W-40 Motorcycle Oil (MCF)
99851-05 Formula +	20W-50 Motorcycle Oil (MCV)
99880-73 Type B Fork oil	Suspension Fluid (STM)
99884-80 Type E Fork oil	Suspension Fluid (STM)

Key to Harley-Davidson/AMSOIL Oil Chart

First AMSOIL preferred recommendation
Second Secondary option based on availability or preference
Third Tertiary option based on availability or preference

Harley-Davidson Models	First	Second	Third
Flathead			
Engine	MCS	MCV	---
Transmission	MCS	SVO	---
Knucklehead			
Engine	MCS	MCV	---
Transmission	MCS	SVO	---
Panhead			
Engine	MCS	MCV	---
Transmission	MCS	SVO	---
Shovelhead			
Engine	MCS	MCV	---
Transmission	MCS	SVO	---
Evolution 1340 and all Twin Cam			
Engine	MCV	---	---
Transmission	MCV	SVT	SVO
Primary Chaincase	MCV	MCF	---
Ironhead, Evolution Sportster and V-Rod			
Engine, Transmission	MCV	---	---

Submitted By: **KD/DA** Reviewed By: **DP**
Distribution: **Internal** All **X**

Approved By: **AA** Approval Date: **7/27/10**

RECOMMENDED SERVICE INTERVALS:

The following lubricant service intervals are recommended for AMSOIL products exclusively.

MODIFICATIONS:

Where the engine or operating conditions have been modified from the original manufacturer's design, the recommended AMSOIL service intervals cannot be utilized. An exception is Dealer-installed, street-legal EFI Stage kits offered by Harley-Davidson. In all other cases of modifications, oil change intervals are at the owner's discretion or based on specific oil analysis program recommendations. To set up a program, call Oil Analyzers (OAI) at 715-395-0222 or 1-800-956-5695.

Harley-Davidson Model and Application	First	Second	Third
Flathead, Knucklehead, Panhead and Shovelhead			
Engine	MCS - up to 2 times longer than Harley-Davidson recommendations or 1 year, whichever comes first.	MCV - up to 2 times longer than Harley-Davidson recommendations or 1 year, whichever comes first.	---
Transmission	MCS - up to 2 times longer than Harley-Davidson recommendations or 1 year, whichever comes first.	SVO - up to 2 times longer than Harley-Davidson recommendations or 1 year, whichever comes first.	---
Ironhead, Evolution Sportster and V-Rod			
Engine/Transmission/Chaincase	MCV - up to 10,000 miles or 1 year, whichever comes first.	---	---
Evolution 1340 and all Twin Cam			
Engine	MCV - up to 2 times longer than Harley-Davidson recommendations or up to 10,000 miles or 1 year, whichever comes first.	---	---
Transmission	MCV - up to 20,000 miles or 1 year, whichever comes first.	SVT - up to 20,000 miles or 1 year, whichever comes first.	SVO - up to 20,000 miles or 1 year, whichever comes first.
Primary Chaincase	MCV - up to 10,000 miles or 1 year, whichever comes first.	MCF - up to 10,000 miles or 1 year, whichever comes first.	---

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