

Table of Contents

- REF: Oiling & Lubrication** 3
- Transmission \ Primary Oil** 3
- About JASO Certifications*** 3
- Transmission / Primary Oil Capacities 3
- When to Check/ Change Transmission Fluid 4

[Go To Technical Menu](#)

REF: Oiling & Lubrication

Transmission \ Primary Oil

About JASO Certifications

- JASO introduced the MA and MB oil specification to distinguish between friction modified and non friction modified engine oils. Most four-stroke motorcycles with wet clutches need a JASO MA oil. ¹⁾
- The JASO MA - MB range:

| | JASO MA | JASO MB |
|---|----------------|----------------|
| Dynamic Friction Characteristic Index (DFI) | ≥1.45 and <2.5 | ≥0.5 and <1.45 |
| Static Friction Characteristic Index (SFI) | ≥1.15 and <2.5 | |
| Stop Time Index (STI) | ≥1.55 and <2.5 | ≥0.5 and <1.55 |

- The JASO MA range is further divided into 2 distinct ranges - JASO MA1 and JASO MA2:

| | JASO MA1 | JASO MA2 |
|---|-----------------|-----------------|
| Dynamic Friction Characteristic Index (DFI) | ≥1.45 and <1.8 | ≥1.8 and <2.5 |
| Static Friction Characteristic Index (SFI) | ≥1.15 and <1.7 | ≥1.7 and <2.5 |
| Stop Time Index (STI) | ≥1.55 and <1.9 | ≥1.9 and <2.5 |

Transmission / Primary Oil Capacities

| | |
|--|----------------------------|
| 1957-1990 ^{2) 3) 4) 5)} | 1.5 pints (24 oz) (710 ml) |
| 1991-1992 ⁶⁾ | 40 ounces (1183 ml) |
| 1993-1996, 1998, 2004 ^{7)8) 9) 10)} | 32 oz (946 ml) |

- Discrepancy in the 1991 FSM. It shows 1.5 pints of oil for primary / transmission. ¹¹⁾ 1991-1992 FSM corrected the 1991 book showing 40 oz for both years. ¹²⁾
- Note that for 1994-later, the manual says "Verify that lubricant level is even with bottom of clutch diaphragm spring." Not higher or lower, but even with the diaphragm spring. It also includes this warning: "Do not overfill the primary chaincase with lubricant. Overfilling may cause rough clutch engagement and incomplete disengagement (or clutch drag)."

When to Check/ Change Transmission Fluid

| HD Transmission Oil Recommendations | Check Change Only If Needed | Change |
|--|--|--|
| 1959-1978 ¹³⁾ ¹⁴⁾ | Every 1,000 miles | Every 5,000 miles or 1 year, Every Spring or Fall |
| 1979-1985 ¹⁵⁾ | | After first 500 miles, Every 5,000 miles, Spring or Fall |
| 1986-2003 ¹⁶⁾ ¹⁷⁾ ¹⁸⁾ | After first 3,000 miles, Every 2,500 miles after oil changes | After first 500 miles Every 5,000 miles after |
| 2004 ¹⁹⁾ | | After first 1,000 miles, At first 5,000, Every 5,000 miles after |

Go To Technical Menu

1)

<http://www.oilspecifications.org/jaso.php>

2)

1959-1969 HD Sportster FSM pg 1A-3

3)

1970-1978 HD Sportster FSM pg 1-1

4)

1979-1985 HD Sportster FSM pg 2-1

5)

1986-1990 HD Sportster FSM pg 2-1

6) ¹²⁾

1991-1992 HD Sportster FSM pg 2-1

7)

1993-1994 HD Sportster FSM pg 2-1

8)

1995-1996 HD Sportster FSM pg 2-1

9)

1998 HD Sportster FSM pg 2-1

10)

2004 HD Sportster FSM pg 2-1

11)

1991 HD Sportster FSM pg 2-1

13)

1959-1969 HD Sportster FSM pg 1B-6

14)

1970-1978 HD Sportster FSM pg 1-5

15)

1979-1985 HD Sportster FSM pg 1-2

16)

1986-1990 HD Sportster FSM pg 1-2

17)

1991-1992 HD Sportster FSM pg 1-2

18)

1993-1994 HD Sportster FSM pg 1-2

19)

2004 HD Sportster FSM pg 1-7

From:

<http://sportsterpedia.com/> - **Sportsterpedia**

Permanent link:

<http://sportsterpedia.com/doku.php/techtalk:ref:oil02>

Last update: **2018/07/23 14:42**

