



## CITGO Technical Bulletin

### OEM Recommendations for Small Engines

#### TWO-STROKE OUTBOARD OEM'S

		GEO Recommendation	Alternate Recommendations
<b>Carbureted Two-Stroke Outboard</b>	OMC	Johnson/Evinrude	TC-W3
	Mercury	Precision Premium Plus	TC-W3
	Yamaha	Yamalube 2M	TC-W3
	Nissan	Yes	TC-W3
	Suzuki	Yes	TC-W3
	Tohatsu	Yes	TC-W3
<b>DFI Two-Stroke Outboard</b>	OMC	Ficht Ram Injection Oil	TC-W3
	Mercury	Precision Premium Plus	TC-W3
	Yamaha	Yamaha 2M	TC-W3

#### FOUR-STROKE OUTBOARD OEM'S

		GEO Recommendation	Alternate Recommendations
<b>Four-Stroke Outboard</b>	OMC	OMC Ultra 4 Stroke Outboard Oil	Dealer Recommendation
	Mercury	Precision 10W-30 4 Stroke Outboard Oil	Other OEM 4-Stroke Outboard Oil (Other non-OEM Oils not recommended)
	Honda	-	10W-30 Recommended. Pennzoil synthetic 10W-30 or Enzo 10W-30 acceptable after 20-25 hrs. break-in
	Suzuki	-	10W-40 with API SE, SF, SG or SH
	Yamaha	-	10W-30, 10W-40 or 20W-40 with API SE, SF, SG or SH

#### INBOARD AND STERN DRIVE OEM'S

		GEO Recommendation	Alternate Recommendations	Not Recommended
<b>Inboard or Stern Drive</b>	OMC	OMC Cobra 4-Cycle Motor Oil	Quality SG/CD meeting: GM-6094-M or Ford ESE-M2C153-E	Multi-viscosity oils such as 10W-30 or 10W-40
	Mercury	Precision 25W-40 4 Cycle Marine Engine Oil	Straight weight SH, CF/CF-2 detergent automotive oil: SAE 20W < 32°F SAE 30W 32 - 50°F SAE 40W > 50°F or 20W-40 SH, CF/CF-2 or 20W-50* SH, CF/CF-2 <i>*less preferred</i>	Non-detergent multi-viscosity oils (other than 20W-40 or 20W-50) Low quality oils Oils containing solid additives

## NORTH AMERICAN TWO-STROKE LAND EQUIPMENT OEM'S

	GEO Recommendation	Alternate Recommendations
<b>Toro</b>	Yes @ 32:1	Ashless TC-WII or TC-W3
<b>Husqvarna</b>	Yes - ISO-EGD @ 50:1	"Good quality"oil
<b>Stihl</b>	Yes @ 50:1	API TC @ 25:1
<b>Homelite</b>	Yes @ 50:1	"High quality"oil @ 32:1
<b>Redmax</b>	Yes @ 32:1	"Quality"air-cooled oil with anti-oxidant added
<b>McCulloch</b>	Yes @ 40:1	"Premium grade"air-cooled oil
<b>Poulan</b>	Yes @ 40:1	"Good quality"air-cooled oil
<b>Echo</b>	Yes - ISO-EGD @ 50:1	ISO-EGD oil
<b>Craftsman</b>	Yes @ 40:1	"Good quality"air-cooled oil
<b>Ryobi</b>	Yes @ 32:1	"High quality"air-cooled oil
<b>John Deere</b>	Yes @ 50:1	Other BIA TC-W oil @ 32:1

## RECREATIONAL TWO-STROKE OEM'S

		GEO Recommendation	Alternate Recommendations
<b>Snowmobile</b>	Ski-Doo	Ski-Doo Injection Oil <sup>(1)</sup>	No alternate recommendation <sup>(3)</sup>
	Polaris	Polaris Premium <sup>(4)</sup>	No alternate recommendation
	Artic Cat	Artic Extreme <sup>(5)</sup>	No alternate recommendation
	Yamaha	Yes	No alternate recommendation
<b>ATV</b>	Polaris	Yes	No alternate recommendation
<b>PWC</b>	Sea-Doo	Sea-Doo Injection Oil <sup>(2)</sup>	Low-ash API TC <sup>(3)</sup>
	Polaris	Polaris Premium <sup>(4)</sup>	No alternate recommendation
	Yamaha	Yes	TC-W3
	Kawasaki	Yes	TC-W3 or TC-WII

(1) Bombardier Rotax Formula XP-S synthetic injection oil (for the equivalent synthetic oil) is recommended for XP, GSX and GTX Limited models.

(2) Bombardier Rotax Formula XP-S DI synthetic injection oil (or equivalent) recommended for 947 DI engines.

Bombardier Rotax Formula XP-s synthetic injection oil (or the equivalent synthetic oil) is recommended for RX carburated models.

(3) Ashless outoard formulations are specifically not recommended.

(4) Polaris VES Oil recommended for engines equipped with exhaust valves.

(5) Arctic Cat Exhaust Valve Oil recommended for engines equipped with exhaust valves.

## JAPANESE TWO STROKE MOTORCYCLE OEM'S

	Honda		Yamaha		Suzuki		Kawasaki	
	GEO	Alternate	GEO	Alternate	GEO	Alternate	GEO	Alternate
<b>China</b>	Yes	FC	Yes		Yes		Air-cooled 2T oil	
<b>Malaysia</b>	FC		Air-Cooled 2T oil		Yes		Air-cooled 2T oil	
<b>Vietnam</b>					Yes		Air-cooled 2T oil	
<b>Indonesia</b>	2T oil		Yes		Yes		Air-cooled 2T oil	
<b>India</b>	Yes	FC	Specified brand		Yes		Air-cooled 2T oil	
<b>Thailand</b>	Yes	FC/TISI	Yes		Yes		Air-cooled 2T oil	
<b>Japan</b>	Yes	FC`	Yes		Yes	FC	Yes	FC
<b>USA</b>	Yes	FC	Yes		Yes	FC	Air-cooled 2T oil	
<b>Europe</b>	Yes	FB	Yes		Yes	FB	Air-cooled 2T oil	

## CURRENT 4T MOTORCYCLE OEM GENUINE OIL RECOMMENDATIONS

### Major Recommendations

	API Quality	JASO 4T
Yamaha	SE/SF	MA
Suzuki	SE/SF/SG	MA
Kawasaki	SE/SF/SG	MA
Honda	SF-SG/SH SF-SG/SH	MA MB

## CURRENT 4T MOTORCYCLE OEM GENUINE OIL RECOMMENDATIONS

### OEM's Primarily Recommend API SG, or Earlier Quality Levels, in Owner's Manuals.

	SC	SE	SF	SG	SH	SJ
China		YSK	SK	HSK		
Malaysia		YSK	YKS	KS	H	
Vietnam		YSK	YKS	HKS		
Indonesia		YSK	HYKS	KS		
India	H	SK	KS	KS		
Thailand		SK	KSY	HKS		
Japan		HSK	HYK	YK		Y
USA		<b>YK</b>	<b>HSKY</b>	BDHSKQ		
Europe		YK	YSK	HSK	H	

B=BMW D=Harley-Davidson H=Honda Q=Husqvarna K=Kawasaki  
S=Suzuki Y=Yamaha **Italic**=Only one source mentions this recommendation

## CURRENT 4T MOTORCYCLE OEM GENUINE OIL RECOMMENDATIONS

### OEM's Primarily Recommend 10W-40, or Heavier Oils, in Owner's Manuals.

Recommendation depends on the ambient temperature of the driving region.

	5W30	10W30	10W40	10W50	15W50	15W40	20W40	20W50	20	30	40	50	60
China	Y	HY	YSK	K			K	K					
Malaysia		Y	YSK	K			HYK	YK					
Vietnam			SK	K			YK	YK			H		
Indonesia			SK	K			YK	HYK					
India			SK	K			HK	K					
Thailand			SK	K		<b>K</b>	KY	K		H	<b>HSK</b>		
Japan		H	HYSK	Y			Y						
USA		<b>BHY</b>	BDHSK	BK	B	B	<b>BHYK</b>	BDHSKQ	B	B	B	D	D
Europe		Y	HYSK	K			YK	HYK					

B=BMW D=Harley-Davidson H=Honda Q=Husqvarna K=Kawasaki  
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