

# QUICK REFERENCE DATA

## ENGINE OIL VISCOSITY

Anticipated temperature range	Recommended viscosity
Above 32° F (0° C)	SAE30
Zero° F (-18° C) to 32° F (0° C)	SAE20W
Below zero° F (-18° C)	SAE10W

## APPROXIMATE ENGINE OIL CAPACITIES

Engine	Capacity (qt.) <sup>1</sup>		OMC	Filter type AC	Purolator
	w/filter	w/o filter			
2.3L	5.0	4.0	173231	PF-2	PER 1
2.5L/3.0L	4.0	3.5	173232	PF-25	PER 49
4.3L	4.5	4.0	173834	PF-51	PER 173
5.0L/5.7L	6.0	5.0	173233 <sup>2</sup>	PF-35	PER 40
5.8L	6.0	5.0	173231	PF-2	PER 1
7.5L	6.8	5.8	173231 <sup>3</sup>	PF-2	PER 1

1. All capacities in this table are approximate. To assure correct oil level and prevent overfilling the engine, always use the dipstick as recommended in text.
2. For Ford 302 cu. in., use filter type shown for 5.8L engine.
3. For 1989-on models, an OMC 174796 is recommended.

## APPROXIMATE STERN DRIVE CAPACITIES

Model	Capacity*
2.3L/2.5L/3.0L (prior to 1990)	60 oz. (1,774 ml)
3.0L (1990-on)/4.3L/5.0L/5.7L/5.8L	64 oz. (1,892 ml)
7.5L	108 oz. (3,194 ml)

\* Capacity is only approximate. When refilling a stern drive after draining all lubricant, recheck level after a one-minute run-in period to eliminate air pockets which may develop during filling. If necessary, top up after rechecking to bring the lubricant to the correct level.

## RECOMMENDED LUBRICANTS, SEALANTS AND ADHESIVES

Lubricant	Application
OMC Cobra® Premium 4-cycle motor oil	Engine crankcase
OMC Hi-Vis gearcase lubricant	Vertical drive
OMC Triple-Guard grease	Steering ram
OMC Marine Wheel Bearing grease	Power steering actuator valve
OMC Needle Bearing Grease	Bearings
OMC 2 + 4 Fuel Conditioner	Fuel tank
OMC Rust Preventative	Engine
OMC Power Trim/Tilt Fluid	Power trim/tilt system
OMC Storage Fogging Oil	Carburetor
OMC Moly Lube	Remote control cables
<b>Sealer/Adhesive</b>	
OMC Black Neoprene Dip	
OMC Pipe Sealant with Teflon	
OMC Gasket Sealing Compound	
RTV adhesive sealant	
OMC Locquic Primer	
OMC Ultra Lock	
OMC Nut Lock	
OMC Spline Lock	
OMC Screw Lock	
OMC Adhesive M sealant	

## TUNE-UP SPECIFICATIONS

1986					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
2.5L/3.0L	AC-MR43T	0.035	31-34	0.019	4° BTDC
4.3L	AC-MR43T	0.035	39 ± 2	0.019	6° BTDC
5.0L <sup>3</sup>	AC-MR44T	0.032	30 ± 2	0.018	13° BTDC
5.7L	AC-MR43T	0.032	30 ± 2	0.018	10° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>2</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
2.5L/3.0L	1° ATDC	500-600	4,200-4,600	3.5-6.0	
4.3L	1° BTDC	500-600	4,200-4,600 <sup>4</sup>	5.75-7.0	
5.0L <sup>3</sup>	9° BTDC	500-600	4,200-4,600	5.75-7.0	
5.7L	5° BTDC	500-600	4,200-4,400	5.75-7.0	
1. Anti-knock index 89. 2. Anti-knock index 86. 3. GM 305 cu. in. 4. 4,400-4,800 rpm with 4-bbl. carburetor.					

(continued)

**TUNE-UP SPECIFICATIONS (cont.)**

1987					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
2.3L	AWSF-32	0.035	36 ± 2	0.018	10° BTDC
3.0L	AC-MR43T	0.035	31-34	0.019	6° BTDC
4.3L	AC-MR43T	0.035	39 ± 2	0.019	6° BTDC
5.0L <sup>3</sup>	AC-MR44T	0.032	30 ± 2	0.018	10° BTDC <sup>4</sup>
5.7L	AC-MR43T	0.032	30 ± 2	0.018	10° BTDC <sup>5</sup>
7.5L	ARF-32	0.035	31 ± 2	0.017	15° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>2</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
2.3L	10° BTDC	600-650	5,200-5,600	3.5-6.0	
3.0L	1° ATDC	500-600	4,200-4,600	3.5-6.0	
4.3L	1° BTDC	500-600	4,200-4,600 <sup>6</sup>	5.75-7.0	
5.0L <sup>3</sup>	5° BTDC <sup>6</sup>	500-600	4,200-4,600	5.75-7.0	
5.7L	5° BTDC <sup>7</sup>	500-600	4,200-4,400	5.75-7.0	
7.5L	10° BTDC	600-650	4,400-4,800	5.0-6.0	
1. Anti-knock index 89.			5. Models 574AMARY and 574APARY, 8° BTDC.		
2. Anti-knock index 86.			6. Models 504AMFTC and 504APFTC, 8° BTDC.		
3. GM 305 cu. in.			7. Models 574AMARY and 574APARY, 3° BTDC.		
4. Models 504AMFTC and 504APFTC, 13° BTDC.			8. 4,400-4,800 rpm with 4-bbl. carburetor.		
1988					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
2.3L	AWSF-32	0.035	36 ± 2	0.018	10° BTDC
3.0L	AC-MR43T	0.035	31-34	0.019	4° BTDC
4.3L	AC-MR43T	0.035	39 ± 2	0.019	6° BTDC
5.0L <sup>3</sup>	AC-MR44T	0.032	29 ± 2	0.017	10° BTDC
5.7L	AC-MR43T	0.032	29 ± 2	0.017	8° BTDC
7.5L	ARF-32	0.035	31 ± 2	0.017	15° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>2</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
2.3L	10° BTDC	600-650	5,200-5,600	3.5-6.0	
3.0L	1° ATDC	500-600	4,200-4,600	3.5-6.0	
4.3L	1° BTDC	500-600	4,200-4,600 <sup>4</sup>	5.75-7.0	
5.0L <sup>3</sup>	5° BTDC	500-600	4,200-4,600	5.75-7.0	
5.7L	3° BTDC	500-600	4,200-4,400	5.75-7.0	
7.5L	10° BTDC	600-650	4,400-4,800	5.0-6.0	
1. Anti-knock index 89.			3. GM 305 cu. in.		
2. Anti-knock index 86.			4. 4,400-4,800 rpm with 4-bbl. carburetor.		

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**TUNE-UP SPECIFICATIONS (cont.)**

1989					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
2.3L	AWSF-32	0.035	36 ± 2	0.019	10° BTDC
3.0L	AC-MR43T	0.035	31-34	0.019	4° BTDC
4.3L	AC-MR43T	0.035	39 ± 2	0.019	6° BTDC
5.0L <sup>3</sup>	AC-MR44T	0.030	29 ± 2	0.018	10° BTDC
5.7L	AC-MR43T	0.035	29 ± 2	0.018	8° BTDC
5.8L	AC-MR43T	0.030	29 ± 2	0.018	10° BTDC
7.5L	ASF-32M	0.035	29 ± 2	0.018	10° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>2</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
2.3L	10° BTDC	600-650	5,200-5,600	5.75-7.0	
3.0L	1° ATDC	550-600	4,200-4,600	5.75-7.0	
4.3L	1° BTDC	550-600	4,200-4,600 <sup>4</sup>	5.75-7.0	
5.0L <sup>3</sup>	10° BTDC	550-600	4,000-4,400	5.75-7.0	
5.7L	3° BTDC	550-600	4,200-4,600	5.75-7.0	
5.8L	10° BTDC	550-600	4,000-4,400	5.75-7.0	
7.5L	10° BTDC	600-650	4,400-4,800	5.0-6.0	
1. Anti-knock index 89. 2. Anti-knock index 86. 3. Ford 302 cu. in. 4. 4,400-4,800 rpm w/4-bbl. carburetor.					
1990					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
2.3L	AWSF-32	0.035	36 ± 2	0.019	10° BTDC
3.0L PWS	AC-R43TS	0.035	Breakerless		0° (TDC)
3.0L HO	AC-R43LTS	0.035	Breakerless		0° (TDC)
3.0L PWC	AC-MR43T	0.035	Breakerless		0° (TDC)
4.3L	AC-MR43T	0.035	39 ± 2	0.019	6° BTDC
4.3L HO	AC-MR43T	0.035	Breakerless		N/A
5.0L <sup>2</sup>	AC-MR43T	0.030	29 ± 2	0.018	10° BTDC
5.0L HO <sup>2</sup>	AC-MR43T	0.030	29 ± 2	0.018	10° BTDC
5.7L	AC-MR43T	0.035	29 ± 2	0.018	8° BTDC
5.8L	AC-MR43T	0.030	29 ± 2	0.018	10° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>3</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
2.3L	10° BTDC	600-650	5,200-5,600	5.75-7	
3.0L	0° (TDC)	550-600	4,200-4,600	5.75-7	
3.0L HO	0° (TDC)	550-600	4,200-4,600	5.75-7	
4.3L	1° BTDC	550-600	4,200-4,600	5.75-7	
4.3L HO	N/A	550-600	4,400-4,800	5.75-7	
5.0L <sup>2</sup>	10° BTDC	550-600	4,200-4,600	5.75-7	
5.0L HO <sup>2</sup>	10° BTDC	550-600	4,200-4,600	5.75-7	
5.7L	3° BTDC	550-600	4,200-4,600	5.75-7	
5.8L	10° BTDC	550-600	4,200-4,600	5.75-7	
1. Anti-knock index 89. 2. Ford 302 cu. in. 3. Anti-knock index 86.					

**TUNE-UP SPECIFICATIONS (continued)**

1991					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
3.0L	AC-R43TS	0.045	Breakerless		0° (TDC)
3.0L HO	AC-R43LTS	0.045	Breakerless		0° (TDC)
4.3L	AC-MR43T	0.035	Breakerless		6° BTDC
4.3L HO	AC-MR43T	0.045	Breakerless		N/A
5.0L <sup>2</sup>	AC-MR43T	0.035	Breakerless		10° BTDC
5.0L HO <sup>2</sup>	AC-MR43T	0.035	Breakerless		10° BTDC
5.7L	AC-MR43T	0.035	Breakerless		8° BTDC
5.8L	AC-MR43T	0.035	Breakerless		10° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>3</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
3.0L	0° (TDC)	650-750	4,200-4,600	5.75-7	
3.0L HO	0° (TDC)	650-750	4,200-4,600	5.75-7	
4.3L	1° BTDC	550-650	4,200-4,600	5.75-7	
4.3L HO	N/A	550-650	4,400-4,800	5.75-7	
5.0L <sup>2</sup>	10° BTDC	550-650	4,000-4,400	5.75-7	
5.0L HO <sup>2</sup>	10° BTDC	550-650	4,000-4,400	5.75-7	
5.7L	3° BTDC	550-650	4,200-4,600	5.75-7	
5.8L	10° BTDC	550-650	4,000-4,400	5.75-7	
1. Anti-knock index 89.		2. Ford 302 cu. in.		3. Anti-knock index 86.	
1992					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
3.0L	AC-R43TS	0.045	Breakerless		0° (TDC)
3.0L HO	AC-R43LTS	0.045	Breakerless		0° (TDC)
4.3L	AC-MR43T	0.035	Breakerless		6° BTDC
5.0L <sup>2</sup> , 5.0L HO <sup>2</sup>	AC-MR43T	0.035	Breakerless		10° BTDC
5.7L	AC-MR43T	0.035	Breakerless		8° BTDC
5.8L	AC-MR43T	0.035	Breakerless		10° BTDC
Engine displacement	Timing (RON 90 fuel) <sup>3</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)	
3.0L	0° (TDC)	650-750	4,200-4,600	5.75-7	
3.0L HO	0° (TDC)	650-750	4,200-4,600	5.75-7	
4.3L	1° BTDC	550-650	4,200-4,600	5.75-7	
5.0L, 5.0L HO	10° BTDC	550-650	4,000-4,400	5.75-7	
5.7L	3° BTDC	550-650	4,200-4,600	5.75-7	
5.8L	10° BTDC	550-650	4,000-4,400	5.75-7	
1. Anti-knock index 89.		2. Ford 302 cu. in.		3. Anti-knock index 86.	

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### TUNE-UP SPECIFICATIONS (continued)

1993					
Engine displacement	Spark plugs		Breaker points		Timing (RON 93 fuel) <sup>1</sup>
	Type	Gap (in.)	Dwell (degrees)	Gap (in.)	
3.0L	AC-43TS	0.045	Breakerless		0° (TDC)
3.0L HO	AC-43LTS	0.045	Breakerless		0° (TDC)
4.3L, 4.3L HO	AC-MR43T	0.035	Breakerless		6° BTDC
5.0L, 5.0L HO <sup>2</sup>	AC-MR43T	0.035	Breakerless		10° BTDC
5.8L	AC-MR43T	0.035	Breakerless		10° BTDC
5.0 EFI, 5.8 EFI	AC-MR43T	0.045	Breakerless		5° BTDC

  

Engine displacement	Timing (RON 90 fuel) <sup>3</sup>	Idle speed (rpm)	Full throttle range (rpm)	Fuel pump (psi)
3.0L, 3.0L HO	0° (TDC)	650-750	4,200-4,600	5.75-7
4.3L, 4.3L HO	1° BTDC	550-650	4,200-4,600	5.75-7
5.0L, 5.0L HO <sup>2</sup>	10° BTDC	550-650	4,000-4,400	5.75-7
5.8L	10° BTDC	550-650	4,000-4,400	5.75-7
5.0 EFI, 5.8 EFI	5° BTDC	600	4,200-4,600	See note 4

1. Anti-knock index 89.  
 2. Ford 302 cu. in.  
 3. Anti-knock index 86.  
 4. Fuel pressure at the injectors—36-42 psi at cranking speed and wide-open throttle; 28-34 psi at idle speed.

### ENGINE FIRING ORDER

Engine displacement	Firing order	Rotor rotation
All 4-cylinder	1-3-4-2	Clockwise
4.3L and 4.3L HO	1-6-5-4-3-2	Clockwise
5.0L (302 cu. in.)	1-5-4-2-6-3-7-8	Counterclockwise
5.0L (305 cu. in.) and 5.7L	1-8-4-3-6-5-7-2	Clockwise
5.0L HO (302 cu. in.), 5.8L and 7.5L	1-3-7-2-6-5-4-8	Counterclockwise

### TEST WHEEL RECOMMENDATIONS

Model	Test wheel part No.	
	Standard rotation	Counter rotation
2.3L, 2.5L	982036	
3.0L	384933	398673
4.3L, 5.0L (305 cu. in.)	387388	398673
5.0L (302 cu. in.), 5.8L	982038	985624
5.7L	982038	985624
King Cobra		
262	387388	398673
350	982038	985624
460	985007	985626