

# Outboard Models Covered in This Service Manual

## 2, 2.3, 3.3 Models

E2WRSS  
E3WRSS  
E3ROSS

J2RTSS  
J2WRSS  
J3RTSS  
J3RTLSS  
J3WRSS

## 4 Models

J4RSS  
J4RLSS

## 5 Models

J5RSS  
J5RLSS

## 6 Models

J6RSS  
J6RLSS

## 8 Models

E8WRSS  
E8WRLSS  
E8DRSS

J8RSS  
J8RLSS  
J8RXSS  
J8WRSS  
J8WRLSS

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## Engine Specifications 2, 2.3, 3.3

### Operation

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Full Throttle Operating Range	2 – 4000 to 5000 RPM 2.3 – 4200 to 5200 RPM 3.3 – 4500 to 5500 RPM
Power	2 – 2 HP (1,5 kw) 2.3 – 2.3 HP (1,7 kw) 3.3 – 3.3 HP (2,5 kw)
Power Rate	2 – 4700 RPM 2.3 – 4800 RPM 3.3 – 4900 RPM
Idle RPM in Gear	1100 ± 100
Test Propeller	2, 2.3 – OMC P/N 115297 3.3 – OMC P/N 115306
Minimum Test RPM	2 – 4500 2.3 – 4800 3.3 – 5000
Weight	29.7 lbs. (13,5 kg) 3RL – 31.5 lbs. (14,3 kg)

### Powerhead

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Type	Single Cylinder
Displacement	4.75 cu. in. (77,8 cm <sup>3</sup> )
Bore	1.8898 (48 mm)
Stroke	1.6929 (43 mm)
Standard Bore	1.8890 - 1.8906 in. (48,00 - 48,02 mm)
Crankshaft Dimensions	
Top Journal	0.7875 - 0.7878 in. (20,002 - 20,010 mm)
Bottom Journal	0.5906 - 0.5910 in. (15,001 - 15,011 mm)
Rod Crankpin	0.6299 - 0.6301 in. (16,00 - 16,005 mm)
Piston Diameter, Standard	1.8868 - 1.8873 in. (47,9247 - 47,9374 mm)
Piston Ring End Gap	0.0059 - 0.0138 in. (0,15 - 0,35 mm)
Piston Ring Groove Side Clearance	0.0026 in. (0,066 mm) maximum

# Engine Specifications

## 4

### Operation

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Full Throttle Operating Range	4500 to 5500 RPM
Power	4 HP (3 kw)
Power Rated @	5000 RPM
Idle RPM in Gear	900 ± 100
Test Propeller	<b>OMC</b> P/N 317738
Minimum Test RPM	4400
Weight	<b>R</b> – 33 lbs. (15,0 kg) <b>RL</b> – 35 lbs. (16,0 kg)

### Powerhead

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Type	In-line 2-Cylinder
Displacement	5.28 cu. in. (87 cm <sup>3</sup> )
Bore	1.565 in. (39,7 mm)
Stroke	1.374 in. (34,9 mm)
Standard Bore *	1.5643 - 1.5650 in. (39,74 - 39,75 mm)
Crankshaft Dimensions	
Top Journal	0.7515 - 0.7520 in. (19,08 - 19,10 mm)
Center Journal	0.6685 - 0.6690 in. (16,98 - 16,99 mm)
Bottom Journal	0.6691 - 0.6695 in. (17,00 - 17,01 mm)
Rod Crankpin	0.6695 - 0.6700 in. (17,01 - 17,02 mm)
Piston Diameter, Standard	1.5625 - 1.5631 in. (39,69 - 39,70 mm)
Piston Ring End Gap, Both	0.005 - 0.015 in. (0,13 - 0,38 mm)
Piston Ring Groove Side Clearance, Both	0.004 in. (0,10 mm) maximum

\* To bore oversize, add piston oversize dimension to standard bore.

# Engine Specifications

## 5

### Operation

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Full Throttle Operating Range	4600 to 5400 RPM
Power	5 HP (3,7 kw)
Power Rated @	5000 RPM
Idle RPM in Gear	950 ± 50
Standard Propeller	3 blade 7½ x 7 in. (191 x 178 mm)
Test Propeller	Use Standard Propeller
Minimum Test RPM	4400
Weight	<b>R</b> – 46 lbs. (21 kg) <b>RL</b> – 47 lbs. (21,5 kg)

### Powerhead

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Type	Single Cylinder, 2-cycle
Displacement	6.7 cu. in. (109 cm <sup>3</sup> )
Bore	2.163 in. (54,95 mm)
Stroke	1.800 in. (48 mm)
Crankshaft Run-Out	0.000 - 0.002 in. (0,00 - 0,05 mm)
Standard Bore *	2.1654 - 2.1659 in. (55,00 - 55,015 mm)
Piston Diameter, Standard	2.1630 - 2.1636 in. (54,940 - 54,955 mm)
Piston Ring End Gap, Both	New – 0.006 - 0.012 in. (0,15 - 0,30 mm) Limit – 0.031 in. (0,80 mm)

\* To bore oversize, add piston oversize dimension to standard bore.

### Gearcase

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Gearcase	Forward, Neutral, Reverse
Gear Ratio	12:23 (0.52)
Lubricant	<b>OMC</b> Ultra-HPF Gearcase Lube
Capacity	6.4 fl. oz. (190 ml)
Shift Rod Height	None

## Engine Specifications 6, 8

### Operation

Full Throttle Operating Range	<b>6</b> – 4500 to 5500 RPM <b>8</b> – 5000 to 6000 RPM
Power	<b>6</b> – 6 HP (4,5 kw) <b>8</b> – 8 HP (6 kw)
Power Rated @	<b>6</b> – 5000 RPM <b>8</b> – 5500 RPM
Idle RPM in Gear	700 ± 25 <b>8RX</b> – 900 ± 25
Test Propeller	<b>OMC</b> P/N 390239
Minimum Test RPM	<b>6</b> – 4800 <b>8</b> – 5300 <b>8RX</b> – 4850
Weight	<b>6R; 8R</b> – 56 lbs. (25,4 kg) <b>6RL; 8RL</b> – 58.5 lbs. (26,5 kg) <b>8RX</b> – 64 lbs. (29 kg)

### Powerhead

Type	In-Line 2-Cylinder
Displacement	10 cu. in. (164 cm <sup>3</sup> )
Bore	1.9375 in. (49,21 mm)
Stroke	1.700 in. (43,18 mm)
Standard Bore *	1.9373 - 1.9380 in. (49,21 - 49,23 mm)
Crankshaft Dimensions:	
Top Journal	0.8762 - 0.8767 in. (22,26 - 22,27 mm)
Center Journal	0.8120 - 0.8125 in. (20,62 - 20,64 mm)
Bottom Journal	0.6691 - 0.6695 in. (17,00 - 17,01 mm)
Rod Crankpin	0.6695 - 0.6700 in. (17,01 - 17,02 mm)
Piston Diameter, Standard	1.9345 - 1.9355 in. (49,14 - 49,16 mm)
Piston Ring End Gap, Both	0.005 - 0.015 in. (0,13 - 0,38 mm)
Piston Ring Groove Side Clearance, Both	0.004 in. (0,10 mm) maximum

\* To bore oversize, add piston oversize dimension to standard bore.