

Yanmar Marine Pleasure Craft

Engine History

Y-Series: Available in 8 and 12 horsepower horizontal models (lay-down/low profile), updated three times, single cylinder, heavy duty, 2:1 or 3:1 marine gear, salt water cooled.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|------------------|---------------------|
| YSE | 8-12 | 1974-1976 |
| YSB | 8-12 | 1976 -1977 |
| YSM | 8-12 | 1977-1980 |

Y-Series: Available in 8 and 12 horsepower Vertical models, updated two times, single cylinder, heavy duty, 2:1 or 3:1 marine gear, salt water cooled.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|-------------------|---------------------|
| SVE | 8 and 12 E =early | 1974-1976 |
| SB | 8 and 12 | 1976 -1980 |

QM – Series: Two and three cylinder models, available with raw or fresh water cooling. Very heavy duty, on the large side, 2:1 or 3:1 marine gear available.
F = Factory fresh water cooling H = Hurth marine gear

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|----------------|------------------|---------------------|
| 2QM15 | 15 2 cylinders | 1977-1980 |
| 2QM20 (H), (F) | 22 2 cylinders | 1977-1980 |
| 3QM30 (H), (F) | 33 3 cylinders | 1977-1980 |

GM / HM-Series: Introduced 1980-81, completely new generation of engines. Lighter, smaller, smoother and quieter. F = fresh water cooling. 35 Amp alternator and Yanmar engine mounts.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|--------------------------------|---------------------|
| 1GM | 7.5 Raw water only | 1980-1983 |
| 2GM (F) | 15 Raw or fresh water cooled | 1980-1983 |
| 3GM (F) | 22.5 Raw or fresh water cooled | 1980 -1983 |
| 3HM (F) | 30 Raw or fresh water cooled | 1980-1983 |

GM /HM: Series with increased bore. Same as previous models with as much as 13-20 % increase in horsepower due to larger bore. 55 Amp alternators except for 1GM10 (35 Amp).

| <u>Model</u> | <u>Hp – Notes</u> | <u>Manufactured</u> |
|--------------|------------------------------|---------------------|
| 1GM10 | 9 Raw water only | 1980-2010 |
| 2GM20(F) | 18 Raw or fresh water cooled | 1980-2004 |
| 3GM30(F) | 27 Raw or fresh water cooled | 1980-2004 |
| 3HM35(F) | 34 Raw or fresh water cooled | 1980-1983** |

**Replaced with 3JH2

YM- Series: New design to meet EPA Tier 2 emissions requirements. Only available with fresh water cooling. 60 Amp alternator is standard, 80 Amp is optional. F = fresh water cooling

| <u>Model</u> | <u>Hp-Notes</u> | <u>Manufactured</u> |
|--------------|------------------------|---------------------|
| 2YM15 (F) | 14 Fresh water cooled | 2004-Present |
| 3YM20 (F) | 22 Fresh water cooled | 2004-Present |
| 3YM30 (F) | 30 Fresh water cooled | 2003-2014 |
| 3YM30AE | 29 Naturally Aspirated | 2014-Present |

JH- Series: New four cylinder engine family introduced in 1983. Engines are smaller, lighter, and smoother running. Eighty percent of parts are interchangeable and all four engines use the same block.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|------------------------|---------------------|
| 4JHE | 44 Naturally aspirated | 1983-1989 |
| 4JH-TE | 55 Turbo-charged | 1983-1989 |
| 4JH-HTE | 66 Turbo-charged | 1983-1989 |
| 4JH-DTE | 77 Turbo-charged | 1983-1989 |

JH2- Series: Same basic model as 4JH Series except for horsepower increase and larger displacement. Quieter and cleaner exhaust. 3JH2 is three cylinder version.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|------------------------|---------------------|
| 3JH2E | 38 Naturally aspirated | 1992-1999 |
| 3JH2-TE | 47 Turbo-charged | 1991-1999 |
| 4JH2E | 51 Naturally aspirated | 1989-1999 |
| 4JH2-TE | 63 Turbo-charged | 1989-1999 |
| 4JH2-HTE | 76 Turbo-charged | 1989-1999 |
| 4JH2-DTE | 88 Turbo-charged | 1989-1999 |
| 4JH2-UTE | 100 Turbo-charged | 1991-1999 |

JH3 – Series: Upgraded engine block, smaller, smoother, and quieter. Replaced the JH2 Series.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|---------------------------------|---------------------|
| 3JH3E | 40 Naturally aspirated | 1999-2003 |
| 4JH3E | 56 Turbo-charged | 1999-2004 |
| 4JH3-TE | 75 Naturally aspirated | 1999-2005 |
| 4JH3-HTE | 100 Turbo-charged & intercooled | 1999-2005 |
| 4JH3-DTE | 125 Turbo-charged & intercooled | 1999-2009 |

JH4- Series: New design to meet EPA Tier 2 emissions requirements. Quieter and smoother. 60 Amp alternator is standard, 80 Amp is optional.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|------------------------|---------------------|
| 3JH4E | 40 Naturally aspirated | 2003-2008 |
| 4JH4E | 55 Naturally aspirated | 2004-2008 |
| 4JH4-TE | 75 Turbo-charged | 2005-Present |
| 4JH4-HTE | 110 Turbo-charged | 2005-2012 |
| 4JH4-HTE1 | 100 Turbo-charged | 2012-Present |
| 3JH5E | 39 Naturally aspirated | 2008-Present |
| 4JH5E | 54 Naturally aspirated | 2008-Present |

JH CR- Series: Latest version in the JH series. Common Rail fuel system

| <u>Model</u> | <u>Hp-Notes</u> | <u>Manufactured</u> |
|--------------|------------------------|---------------------|
| 4JH45 | 45 Naturally Aspirated | 2014-Present |
| 4JH57 | 57 Naturally Aspirated | 2014-Present |
| 4JH80 | 80 Turbocharged | 2014-Present |
| 4JH110 | 110 Turbocharged | 2014-Present |

LH- Series: Larger horsepower models. Extremely compact and quiet. Very powerful. Most common marine gear is Kanzaki KM5A (4LH-TE, THE, and DTE). ZF63 marine gear is the most popular for LH series engines of 230 horse power and above. Designed to replace GM 350 V-8 gas engines. (A) = Built in USA (Z) = MerCruiser Stern drive. This engine is no longer EPA compliant

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|------------------------------------|---------------------|
| 4LH-TE | 110 Turbo-charged | 1988-2000 |
| 4LH-HTE | 140 Turbo-charged | 1988-1998 |
| 4LHA-HTE | 150 Turbo-charged | 1999-2001 |
| 4LHA-HTP | 160 Turbo-charged | 2001-Present** |
| 4LH-DTE | 170 Ideal replacement for 350 V-8 | 1990-1999 |
| 4LHA-DTE | 190 Built in USA, upgrade from 170 | 1999-2001 |
| 4LHA-DTP | 200 Built in USA, upgrade from 190 | 2001-Present** |
| 4LHA-STE | 230 Built in USA | 1998-1999 |
| 4LHA-STZE | 230 MerCruiser I / O Bravo Series | 1999-2001 |
| 4LHA-STP | 240 Built in USA, upgrade from 230 | 2001-Present** |
| 4LHA-STZP | 230 MerCruiser I / O Bravo Series | 2001-Present** |

** NO LONGER AVAILABLE IN THE US AS A NEW INSTALL DUE TO EPA

LP-Series: Lightweight 6cylinder, designed for inboard and MerCruiser Stern Drive packages. Higher speed (3800 RPM). Many differences from traditional Yanmar marine pleasure craft engines. Fits inside the same envelope as GM 350 and 545 gas engines.
This engine is no longer EPA compliant

| <u>Model</u> | <u>Hp – Notes</u> | <u>Manufactured</u> |
|------------------|------------------------------------|---------------------|
| 6LP-DTE | 250 | 1997-2001 |
| 6LPA-DTP | 260 Built in USA, upgrade from 250 | 2001-2006 |
| 6LPA-DTZE | 250 MerCruiser I/O packages | 1998-2001 |
| 6LPA-DTZP | 260 MerCruiser I/O packages | 2002-2006 |
| 6LP-STE | 300 | 1997-2001 |
| 6LPA-STP | 315 Built in USA, upgrade from 170 | 2000-2006 |
| 6LP-STZE | 300 MerCruiser I/O packages | 1998-2001 |
| 6LPA-STZP | 315 MerCruiser I/O packages | 2000-2006 |
| 6LPA-STZP2, STP2 | | 2006-Present** |

** NO LONGER AVAILABLE IN THE US AS A NEW INSTALL DUE TO EPA

LY-Series: Introduced in 1992, a 6 cylinder version of the 4LH Series. Lightweight and compact, with an excellent horsepower to weight ratio.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|-------------------------------------|---------------------|
| 6LY(M)-UTE | 315 Turbo-charged & intercooled | 1992-1996 |
| 6LY(M)-STE | 350 Turbo-charged & intercooled | 1994-1996 |
| 6LYA-UTE | 315 Built in USA | 1997-2003 |
| 6LYA-STE | 350 Built in USA | 1997-2001 |
| 6LYA-STP | 370 Built in USA, upgrade from 370 | 2001-Present** |
| 6LYACR | Common Rail | |
| 6LY2(M)-STE | 420 Best Horsepower to weight ratio | 1998-2001 |
| 6LY2A-UTP | 370 Turbo-charged & intercooled | 2014-Present** |
| 6LY2A-STP | 440 Built in USA, upgrade from 420 | 2001-Present** |
| 6LY2M-WST | 377 High Speed Commercial | 2014-Present |
| 6LY2M-WDT | 330 High Speed Commercial | 2014-Present |
| 6LY2CR | Common Rail | |
| 6LY3- ETP | 480 Built in USA meets EPA Tier 2 | 2005-Present** |
| 6LY3- STP | 440 Built in USA meets EPA Tier 2 | 2005-Present** |
| 6LY3- UTP | 380 Built in USA meets EPA Tier 2 | 2006-Present** |

** NO LONGER AVAILABLE IN THE US AS A NEW INSTALL DUE TO EPA

BY-Series: Introduced in 2006. First Yanmar engine with a common rail fuel system. Digital engine controls and display, KMH40 marine gears and ZT350 Stern drive. Z =Stern Drive

| <u>Model</u> | <u>Hp-Notes</u> | <u>Manufactured</u> |
|--------------|---------------------------------|---------------------|
| 4BY150(Z) | 150 Turbo-charged & intercooled | 2006-2009 |
| 4BY180(Z) | 180 Turbo-charged & intercooled | 2006-2009 |
| 6BY220(Z) | 220 Turbo-charged & intercooled | 2006-2009 |
| 6BY260(Z) | 260 Turbo-charged & intercooled | 2006-2009 |
| 4BY2-150(Z) | 150 BY with product upgrades | 2009-2013 |
| 4BY2-180(Z) | 180 BY with product upgrades | 2009-2013 |
| 6BY2-220(Z) | 220 BY with product upgrades | 2009-2013 |
| 6BY2-260(Z) | 260 BY with product upgrades | 2009-2013 |
| 4BY3-150(Z) | 150 BY with product upgrades | 2013-Present |
| 4BY3-180(Z) | 180 BY with product upgrades | 2013-Present |
| 6BY3-220(Z) | 220 BY with product upgrades | 2013-Present |
| 6BY3-260(Z) | 260 BY with product upgrades | 2013-Present |
| 6BY3-160 | 160 BY | 2013-Present |

CX-Series: Four valves per cylinder, very competitive in the 400 plus horsepower range. A heavy duty commercial engine adapted for pleasure boats.

| <u>Model</u> | <u>Hp – Notes</u> | <u>Manufactured</u> |
|--------------|---|---------------------|
| 6CX(M)-ETE | 420 Turbocharged and intercooled | 1992-2001 |
| 6CX-GTE | 465 Longer stroke, more displacement | 1997- 2010 |
| 6CX-GTE2 | 500 Longer stroke, more displacement | 1999-2010 |
| 6CX 530 | 530 Common rail meets EPA Tier 2 | 2009-Present?? |

SY-Series: Electronically controlled with unit injectors. Higher horsepower, quiet, smooth running, good fuel efficiency, and compact design.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|----------------------------------|---------------------|
| 6SY655 | 655 Turbocharged and intercooled | 2005-Present ?? |
| 6SY-STP2 | 720 Turbocharged and intercooled | 2009-Present ?? |
| 8SY-STP | 900 Turbocharged and intercooled | 2004-Present ?? |

8LV – Series: The 8LV series four stroke V-8 turbocharged direct injected diesel engine. It is equipped with an air cooler and is a common rail fuel injection system.

| <u>Model</u> | <u>Hp- Notes</u> | <u>Manufactured</u> |
|--------------|----------------------------------|---------------------|
| 8LV320(Z) | 320 Turbocharged and intercooled | 2012-Present |
| 8LV350(Z) | 350 Turbocharged and intercooled | 2012-Present |
| 8LV370(Z) | 370 Turbocharged and intercooled | 2012-Present |