

Yanmar Engine Identification Help

Use this page to help identify your engine model based on year, horsepower and other data. If you do not find your engine listed here you may contact us at: customerservice@torresenonline.com. We will be adding more information to this page often. Let us know what engine you have and we will make it a priority to get your engine listed.

Understanding YANMAR engine model codes

Most engine model designations are on an engine data plate, on the front or the top of the engine. Some older engines have the data plate on the adapter plate between the engine and the gearbox. Here are some examples of engine model codes and their meanings: YSE8 Y= horizontal cylinder, lying down. SE = engine model type or block type.

8=8 horsepower

If an engine model does not have the Y in the beginning, the engine has a vertical cylinder or cylinders. The numbers 1, 3, 4, and 6 indicate the number of cylinders. For example, 3GM is a 3 cylinder engine with a GM type block. A 2GM is a 2 cylinder engine with a GM type block, and so on.

A 3GM30 is a 3GM that has a larger bore and therefore develops more horsepower than its predecessor. The 1GM, 2GM and 3HM were also updated to 1GM10, 2GM20 and 3HM35 respectively, note, the suffix numbers are not the horsepower of the engine.

All of the above engines are either 'raw water' cooled or 'fresh water' cooled. An engine with an enclosed cooling system containing fresh water and coolant, in turn cooled by raw water going through a heat exchanger, is a fresh water cooled engine. On engines that are either 'raw' or 'fresh', below 34hp, the fresh water cooled engine has the letter F in the model designation, i.e. a 3HM35F is a freshwater cooled engine. If the F is absent, it is a 'raw' water cooled engine. The JH, LH, LP, LY, CX and KY family of engines are all freshwater cooled. The letter C indicates the engine has a saildrive attached. A 3GM30FC is a 3 cylinder, freshwater cooled engine from the GM family, with a saildrive attached. A 4JH2-BE model is fitted with a down angle gearbox. An M means the engine was shipped from the factory without a gearbox e.g. 6CXM-ETE The 4JH series was updated to 4JH2 series, then 4JH, series, each series increasing in bore size and horsepower while reducing emission levels to comply with the Bodensee Regulations in Europe and the EPA / CARB regulations in the USA. 3JH, and 3JH3 versions are also of this family.

The 4LH and 4LHA series are both 4 cylinder engines with the same long block assembled in Japan, but the 4LHA is finally assembled in the USA with US

sourced components, the same also applies to the 6LY and 6LYA engines. The models 3JH and over have a suffix in the model code: -E is a normally aspirated export engine

-TE, is a turbocharged, export model engine, -ETE is extra turbocharged -HTE is highly turbocharged, -DTE is deluxe turbocharged

-UTE is ultra turbocharged, -STE is super turbocharged, etc.

When the code has a Z, e.g., 4LHA-STZE, the engine is an inboard outboard model with a Mercruiser sterndrive or 'Z' drive.

Y Series

These horizontal models lay down in a low profile. The series was updated three times with the YSE being the earliest model, followed by the YSB and then the YSM. Either a 2:1 or 3:1 transmission. The models were sea-water cooled, single cylinder, heavy duty. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-----------------------|----|---------------------|-----------|
| YSB12 | 12 | 1976 - 1977 | B=Between |
| YSB8 | 8 | 1976 - 1977 | B=Between |
| YSE12 | 12 | 1974 - 1976 | E=Early |
| YSE8 | 8 | 1974 - 1976 | E=Early |
| YSM12 | 12 | 1977 - 1980 | M=Modern |
| YSM8 | 8 | 1977 - 1980 | M=Modern |

S Series

Vertical models, updated two times with the SVE engines followed by the SB. Single cylinder, 2:1 or 3:1 transmissions, sea water cooled, heavy duty. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-----------------------|----|---------------------|-----------|
| SB12 | 12 | 1976 - 1980 | B=Between |
| SB8 | 8 | 1976 - 1980 | B=Between |
| SVE12 | 12 | 1974 - 1976 | E=Early |
| SVE8 | 8 | 1974 - 1976 | E=Early |

QM Series

The QM series was available either sea-water or fresh-water cooled. 2:1 or 3:1 transmissions. A designation of F near the end of the model means it is fresh-water cooled. F=Factory Fresh Water This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-----------------------|----|---------------------|--------------------------------------|
| 2QM | | - | originally only distributed in Japan |
| 2QM15 | 15 | 1977 - 1980 | 2 Cylinder |

| | | | |
|--------------------------|----|-------------|---|
| 2QM20 | 22 | 1975 - 1980 | Engines with serial numbers 0001 - 0030 were prototypes and may require different parts. Engines with serial numbers 80001 - 80930 and 81131 - 81180 were also different from the primary production models and may require different parts. Engines with serial numbers 80931 - 81130 and any serial number higher than 81181 will use standard 2QM20 parts. |
| 2QM20(F) | 22 | 1975 - 1980 | 2 Cylinder |
| 2QM20(H) | 22 | 1975 - 1980 | 2 Cylinder |
| 3QM | | - | originally only distributed in Japan |
| 3QM30 | 33 | 1976 - 1980 | 3 Cylinder |
| 3QM30(F) | 33 | 1976 - 1980 | 3 Cylinder |
| 3QM30(H) | 33 | 1976 - 1980 | 3 Cylinder |

GM/HM Series

Introduced in 1980 and 1981 this series was a completely new generation of engines. Lighter, smaller, smoother and quieter than previous engines. An F designation on the model number indicates factory fresh-water cooling. 35 AMP alternators. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|----------------------|------|---------------------|----------|
| 1GM | 7.5 | 1980 - 1983 | Raw |
| 2GM | 15 | 1980 - 1983 | Raw |
| 2GMF | 15 | 1980 - 1983 | Fresh |
| 3GM | 22.5 | 1980 - 1983 | Raw |
| 3GMD | 22.5 | 1980 - 1983 | . |
| 3GMF | 22.5 | 1980 - 1983 | Fresh |
| 3HM | 30 | 1980 - 1983 | Raw |
| 3HMF | 30 | 1980 - 1983 | Fresh |

GM/HM Bored Up Series

Similar to the earlier standard GM/HM series, these engines provide upgraded horsepower and a 55 AMP alternator (1GM10 35 AMP). **Special Note:** If your engine serial number starts with an "E" you must make sure that you use parts for the YEU engines. For example, if you have a 2GM20 with a serial number starting with E you actually have a 2GM20YEU. The (YEU) engines are European manufactured and now more common in the United States than the Japan built models. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|---------------------------|----|----------------------|-----------|
| 1GM10 | 9 | 1983 - 2009 | Raw Water |
| 2GM20 | 18 | 1983 - December 2005 | Raw |
| 2GM20-YEU | 18 | 1997 - Present | |
| 2GM20F | 18 | 1983 - December 2005 | Fresh |
| 2GM20FYEU | 18 | - | . |
| 3GM30 | 27 | 1983 - December 2005 | Raw |
| 3GM30-YEU | 27 | 1997 - Present | |
| 3GM30F | 27 | 1983 - December 2005 | Fresh |

| | | | |
|----------------------------|----|-------------|--------------------|
| 3GM30F YEU | 27 | - | |
| 3HM35 | 34 | 1983 - 1992 | Replaced with 3JH2 |
| 3HM35F | 34 | 1983 - 1992 | Replaced with 3JH2 |

YM Series

Completely redesigned cylinder block and new combustion system. Indirect injection, fresh water cooled with heat exchanger, this new engine line complies with ETA Tier 2 and BSO Tier 2. Electric stop solenoid is standard. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-----------------------|----|-----------------------|----------|
| 2YM15 | 14 | Fall 2004 - Present | US Built |
| 3YM20 | 22 | Summer 2004 - Present | US Built |
| 3YM30 | 30 | Summer 2004 - Present | US Built |

JH Series

Extremely smooth running. Two transmission possibilities were available – either a Hurth or 7 degree down angle B type. 80% of the parts for this series of engine are inter-changable since all four engines in the series used the same block. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-------------------------|----|---------------------|---------------|
| 4JH-DTE | 77 | 1985 - 1989 | Turbo Charged |
| 4JH-E | 44 | 1983 - 1989 | |
| 4JH-TE | 55 | 1983 - 1989 | Turbo Charged |
| 4JH-THE | 66 | 1985 - 1989 | Turbo Charged |

JH2 Series

Extremely smooth running. Horsepower upgrade over the previous JH series. Quieter and cleaner exhaust. A B designation on these engines indicate a down angle transmission. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-----------------------------|-----|---------------------|-------------------|
| 3JH(B)E | 38 | 1992 - 1999 | |
| 3JH2-T(B)E | 47 | 1991 - 1999 | Turbo |
| 4JH2-(B)E | 51 | 1989 - 1999 | |
| 4JH2-DT(B)E | 88 | 1989 - 1999 | Turbo-Intercooled |
| 4JH2-HT(B)E | 76 | 1989 - 1999 | Turbo-Intercooled |
| 4JH2-T(B)E | 63 | 1989 - 1999 | Turbo-Intercooled |
| 4JH2-UT(B)E | 100 | 1991 - 1999 | Turbo-Intercooled |

JH3 Series

Upgraded blocks, smaller overall size, smoother and quieter. Meets all new EPA requirements. This series is a replacement of the JH2 series. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|----------------------------|-----|-----------------------------|-------------------|
| 3JH3 | 40 | May 1999 - 2004 | |
| 4JH3-DTBE | 125 | Summer 1999 - December 2006 | Turbo-Intercooled |
| 4JH3-HTBE | 100 | Summer 1999 - December 2006 | Turbo-Intercooled |
| 4JH3-T(B)E | 75 | Summer 1999 - December 2006 | Turbo |
| 4JH3E | 56 | May 1999 - 2004 | |

JH4 Series

Redesigned cylinder block and new combustion system. Produces 25% more torque with only a 10% increase in displacement. Lower running speed and less vibration reduce noise by five decibels. Complies with EPA Tier 2 emissions. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|-----------------------|----|-----------------------------|----------|
| 3JH4E | 39 | Summer 2004 - Present | |
| 3JH4E | 40 | Summer 2004 - Present | |
| 4JH4E | 55 | Summer 2004 - December 2006 | |

LH Series

Extremely compact and lightweight. Very powerful. Transmission is a 7 degree down angle (bi-rotational). Also designed to cleanly replace gas V-8 engines. Larger Hp models. A=Built in USA. Available as both inboard and Mercruiser Stern Drive packages. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|---------------------------|-----|------------------------------|--------------------------|
| 4LH-DTE | 170 | 1990 - 2000 | Replaces 350 GM |
| 4LH-HTE | 140 | 1988 - 2000 | Turbo-Intercooled |
| 4LH-STE | 230 | September 1995 - August 1998 | Replaces 454 GM |
| 4LH-TE | 110 | 1988 - 2000 | Turbo |
| 4LHA-DTE | 190 | June 2000 - August 2001 | Upgrade from 170 |
| 4LHA-DTZE | 190 | Spring 2000 - August 2001 | Merc I/O Package |
| 4LHA-HTE | 150 | Spring 2000 - August 2001 | Turbo-Intercooled |
| 4LHA-HTZE | 150 | Spring 2000 - August 2001 | Merc I/O Bravo |
| 4LHA-STE | 230 | September 1998 - August 2001 | Waste gated and US built |
| 4LHA-STZE | 230 | August 1999 - August 2001 | Merc I/O Bravo |

LY Series

Introduced in 1992, this is the six cylinder version of the 4LH series. Lightweight, compact with excellent horsepower to weight ration. All models are the same size and weight. Smallest HP in its class.

Race-proven performance with startling power-to-weight capability and low-slung configuration. Extremely popular for repowering petrol-driven engines because of the flat-top, narrow profile of these diesels. The engines benefit further from outstanding fuel economy. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|---------------------------|---------|------------------------------|-------------------|
| 6LY-STE | 350(70) | 1994 - 1996 | Turbo-Intercooled |
| 6LY-UTE | 315 | 1992 - 1996 | Turbo-Intercooled |
| 6LY2-STE | 420 | 1998 - Present | |
| 6LY2A-STE | 420 | March 2001 - September 2001 | US built |
| 6LYA-STE | 350 | January 1997 - May 2001 | US built |
| 6LYA-STP | | - | |
| 6LYA-UTE | 315 | January 1997 - December 2001 | US built |

LP Series

New mini-6 cylinder, super quiet, lightweight, designed for inboard and Merc sterndrive packages. Higher speed (3800 RPM). Many changes from Yanmar's traditional marine models. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|---------------------------|---------|-------------------------------|---------------------|
| 6LP | 250-300 | 1997 - present | |
| 6LP-DTZE | 250 | January 1998 - September 2001 | Merc I/O Package |
| 6LP-STE | 300 | June 1997 - July 2001 | Inboard |
| 6LP-STZE | 300 | January 1998 - October 2001 | Merc I/O Bravo |
| 6LPA-DTE | 250 | March 2001 - July 2001 | US built |
| 6LPA-DTP | 260 | August 2001 - December 2006 | Higher Hp |
| 6LPA-DTZE | 250 | March 2001 - July 2001 | US built |
| 6LPA-STE | 300 | March 2001 - June 2001 | US built |
| 6LPA-STZE | 300 | March 2001 - June 2001 | US built |
| 6LPDTE | 250 | June 1997 - September 2001 | Super Quiet/Inboard |

CX Series

Heavy duty, super smooth and quietest in this HP class. Commercial model with 4 valves per cylinder. Premium quality. This series includes the following engines:

| Engine | HP | Years In Production | Comments |
|----------------------------|-----|---------------------------|-------------------|
| 6CX(M)-ETE | 420 | 1992 - December 2001 | Turbo-Intercooled |
| 6CX-GTE | 465 | Fall 1999 - December 2005 | Turbo-Intercooled |
| 6CXM-GTE2 | 500 | July 2001 - Present | Turbo-Intercooled |