coerco

Pressure Washer Unit

Operating & Maintenance Guide

COERCO 30 YEARS 1993 - 2023

Certified System
Quality
ISO 9001
SAI GLOBAL

Contents

Risk Assessment

Coerco Firefighting Equipment

TASK	HAZARDS	RISK	CONTROL MEASURES
Testing the Pressure Washer Unit	Manual Handling: slips, trips or falls, petrol, diesel, fumes, hands or fingers jammed	Medium	• Concentrate on the task • Follow safe manual handling techniques • Don't lift on your own if more than 20kg, bend knees and keep back straight • Keep fingers clear • Keep unit at least 8m away from overhead powerlines • Fire extinguisher nearby • Follow warning stickers on tanks • Wear PPE for petrol and fumes- mask and gloves
Appropriate PPE for Use	Manual Handling: slips, trips or falls	Low	• Follow safe manual handling techniques: don't lift on your own if more than 20kg, bend knees and keep back straight • Wear gloves, safety footwear
Cleaning, Maintenance and Storage	Manual Handling: slips, trips or falls, petrol, diesel, fumes, hands or fingers jammed	High	• Must wear PPE, gloves, safety footwear, safety glasses and fume mask for cleaning the unit • Maintenance strictly to be done as per manufacturers guidance • Storage of units to be in clean, dry and well ventilated area.

Safety Information

Before operating the pressure washer unit, read the following safety instructions.

Failure to comply with these warnings may result in serious injury.

Whilst your Coerco pressure washer unit has been designed and manufactured to incorporate all necessary safety features, it is essential that any person who operates or works on the machine is aware of the safety precautions that should be exercised.

- This pressure washer unit is designed and manufactured solely for the purpose of pumping water. Under no circumstances should it be used for any other purpose.

- Before using the pressure washer unit, carefully read and ensure you understand the contents of this manual and any other manual supplied with the pressure washer unit, including the engine manual supplied.

- Before operating the pressure washer unit read all the safety warnings, which are attached to various parts of the machine.

- Never allow an inadequately trained person to operate the pressure washer unit.

- Always ensure the outlet end of the hose is sufficiently restrained before starting the pressure washer unit as water flow may cause the hose to move around suddenly.

- Never point the pressure washer hose at any person.

- Ensure the towing capacity of the vehicle is suitable for the loaded mass of the pressure washer unit. Refer to the vehicles operator's manual for safe working loads

- Exercise extreme care when operating in hilly or uneven terrain to ensure proper stability. Refer also to the vehicles manufacturer's operating and safety instructions.

Coerco Trailer Pressure Washer Unit Specifications

Tank	Baffled tank manufactured from impact resistant polyethylene. Capacities 1000 and 1500 litres 355mm diameter screw down lid with basket strainer.
Engine & Pump Combos	6HP Petrol Honda with PX10 3000PSI 10LPM Pump. 9HP Petrol Honda with PX13 3200PSI 13LPM Pump. 4.8HP Diesel Yanmar with PX10 3000PSI 10LPM Pump. 10HP Diesel Yanmar with 3000PSI 15LPM Hot/Cold Pump
Brakes Options	Mechanical brakes - Single axle and tandem axle trailer units Electric Brakes - Tandem Axle only

Honda Engine Operating Instructions

Engine Operation

Before starting the engine for the first time read the safety and operating information in the Owner's Manual supplied with the pressure washer unit.

Engine Oil Level

On a level surface, unscrew the oil filler cap, wipe the dipstick clean and check the oil level. The oil should not be less than half way up the dipstick when it is inserted but not screwed home.

If necessary add premium quality detergent SAE-10W30 engine oil as recommended by engine manufacturer to the edge of the oil filler hole taking care not to overfill.

NOTICE: Running the engine with insufficient oil can cause serious engine damage.

Starting the Engine

1. Turn the fuel valve to the ON position.
2. Move the choke lever left to the closed position.
   NOTE: The choke may not be needed if the engine is warm or the air temperature is high.
3. Move the throttle lever slightly to the left.
4. Turn the engine switch to the ON position.
5. Pull the starter grip lightly until resistance is felt, then briskly pull the starter cord all the way out.

Honda Engine
Operating Instructions

Operating the Engine

1. As the engine warms up, gradually move the choke lever to the OPEN position.
2. Position the throttle lever for the desired engine speed.

Stopping the Engine

1. To stop the engine in an emergency, turn the engine switch to the OFF position. Under normal conditions, use the following procedure:
2. Move the throttle lever fully to the right.
3. Turn the engine switch to the OFF position.
4. Turn the fuel valve to the OFF position.

Adding Fuel
Stop the engine before refilling. Fill the fuel tank with recommended fuel or diesel. Do not overfill the fuel tank.

Operating the Pump

The pump should self prime. Start the motor and check water flow at the lance by pulling the trigger, if it doesn't flow with in 30 seconds to 1 minute, shut the motor off and contact the manufacturer. Never run the pump dry for longer than 1 minute as this will cause damage to the pump seals

Yanmar Engine Operating Instructions

STARTING THE ENGINE

Recoil Start

CAUTION

NEVER use an engine starting aid such as ether. Engine damage will result.

Use the following procedure to start the engine.

Daily Checks

1. Makes sure you follow the procedures stated in *Daily Checks*.
2. Make sure the fuel cocks is in the ON position **(Figure 1,(1))**.

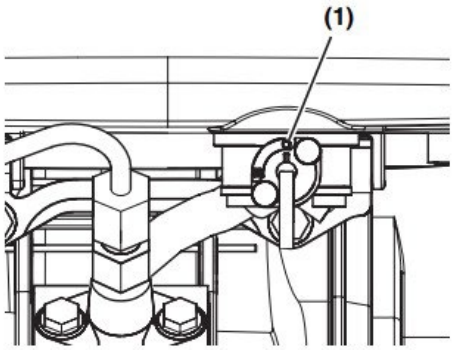

Figure 1

Set Engine Speed Control to START

Several types of engine speed controls are used in L-N engine applications. The following procedures are for three typical applications. Refer to the operating instructions for the driven machine.

1. If your engine speed control is similar to **Figure 2** slide the engine speed control lever **(Figure 2, (1))** to the RUN position **(Figure 2, (2))**.

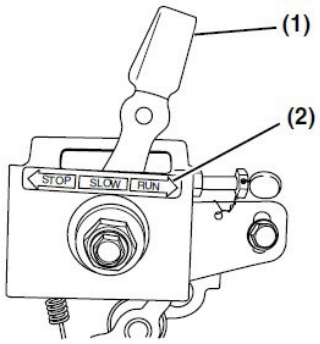

Figure 2

2. If your engine speed control is similar to **Figure 3** slide the engine speed control lever **(Figure 3, (1))** to the RUN position **(Figure 3; (2))**.

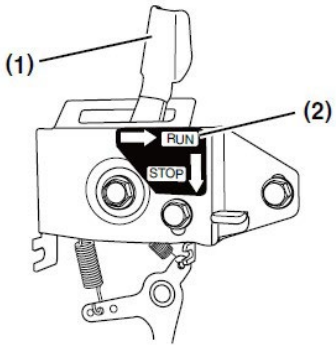

Figure 3

3. If your engine speed control is similar to **Figure 4**:

   (a) Turn the engine speed control knob **(Figure 4, (1))** to the left **(Figure 4, (2))**.
   (b) Slide the engine speed control knob to the START position **(Figure 4, (3))**.
   (c) Turn the engine speed control knob to the right **(Figure 4, (4))** to tighten it.

Yanmar Engine Operating Instructions

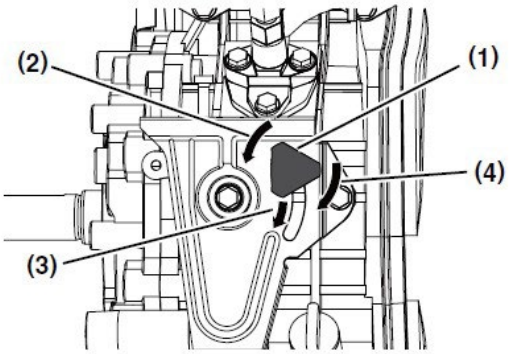

Figure 4

Start The Engine

CAUTION

Tips while starting engine with recoil starter (See Start The Engine on page 11.):

- Pulling out the recoil starter handle too hard or fast will damage the equipment.
- ALWAYS pull recoil starter handle all the way out or the engine will not start.
- NEVER allow the recoil starter handle to snap back against the engine. Return the handle to the starting position gently to prevent damage to the recoil starter.

CAUTION

NEVER use an engine starting aid such as ether. Engine damage will result.

1. Grasp the recoil starter handle **(Figure,(1))**.
2. Pull the handle out slowly until you feel strong resistance.
3. Slowly return the recoil starter handle to the initial position.
4. Push the decompression lever **(Figure 8, (1))** down and release it. The decompression lever will automatically return to the original position when the engines starts. Some L-N model engines have an automatic, internal compression release mechanism and do not have the external compression release lever. Refer to the specific instructions for your driven machne.
5. Grasp the recoil starter handle **(Figure, (1))**.
6. Pull the handle all the way out with a strong and even motion. Use two hands if necessary.
7. Slowly return the recoil starter handle to the initial position.
8. If the engine does not start, repeat the *Start The Engine* procedure from Step 1.

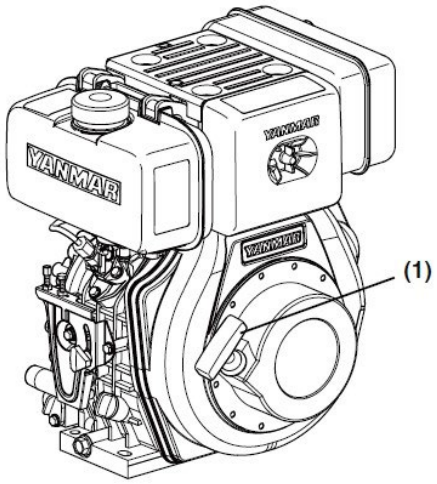

Figure 5

Yanmar Engine Operating Instructions

In Cold Weather - L48N Only

If you have trouble pulling the recoil handle on an L48N engine in cold weather follow this procedure:

1. Remove the oil plug **(Figure 6, (1))**.

2. Add 2 cc of engine oil to the oil port **(Figure 7,(1))**.

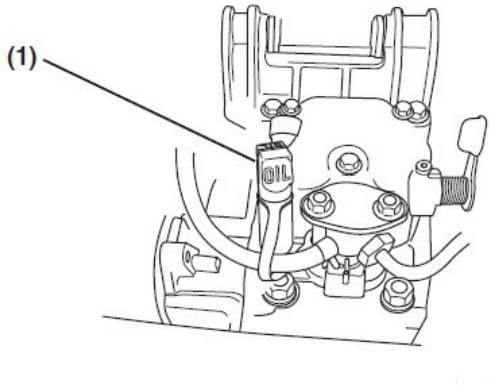

Figure 6

3. Reinsert the oil plug **(Figure 6, (1)).**

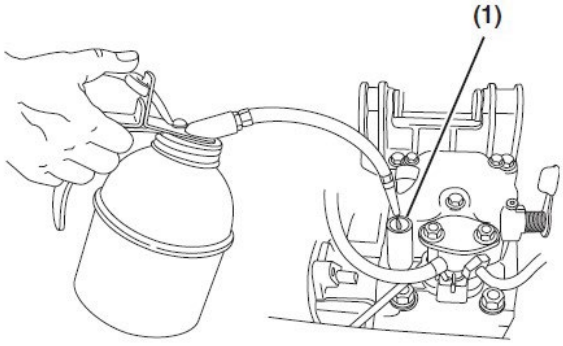

Figure 7

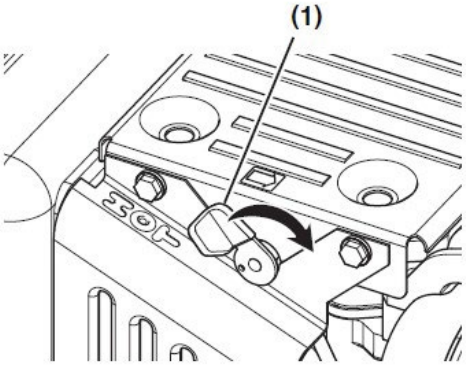

Figure 8

Electric Start

CAUTION

NEVER use an engine starting aid such as ether. Engine damage will result.

Use the following procedure to start the engine.

Daily Checks

1. Make sure you follow the procedures stated in Daily Checks.

2. Make sure the fuel cok is in the ON position **(Figure 9, (1))**.

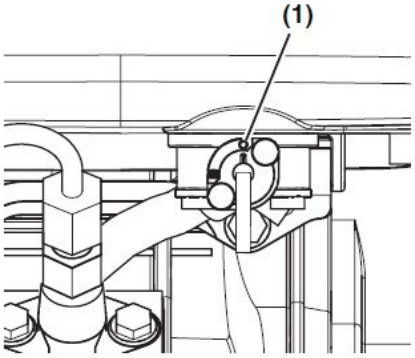

Figure 9

Yanmar Engine Operating Instructions

Set Engine Speed Control to START

Several types of engine speed controls are used in L-N engine applications. The following procedures are for three typical applications. Refer to the operating instructions for the driven machine.

1. If your engine speed control is similar to **Figure 10** slide the engine speed control lever **(Figure 10, (1))** to the RUN position **(Figure 10, (2))**.

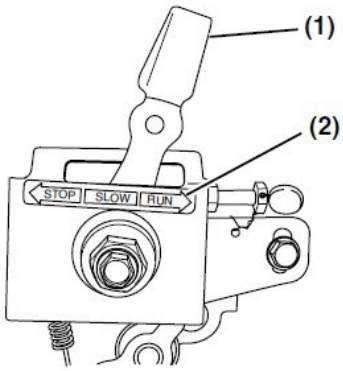

Figure 10

2. If your engine speed control is similar to **Figure 11** slide the engine speed control lever **(Figure 11, (1))** to the RUN position **(Figure 11, (2))**.

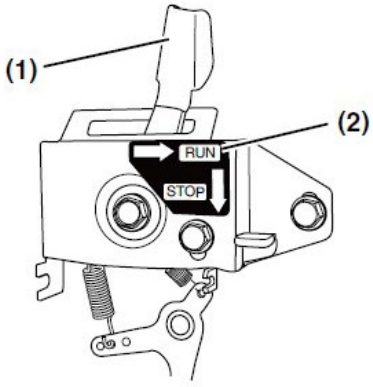

Figure 11

3. If your engine speed control is similar to **Figure 12**:
   (a) Turn the engine speed control knob **(Figure 12, (1))** to the left **(Figure 12, (2))**.
   (b) Slide the engine speed control knob to the START position **(Figure 12, (3))**.
   (c) Turn the engine speed control knob to the right **(Figure 12, (4))** to tighten it.

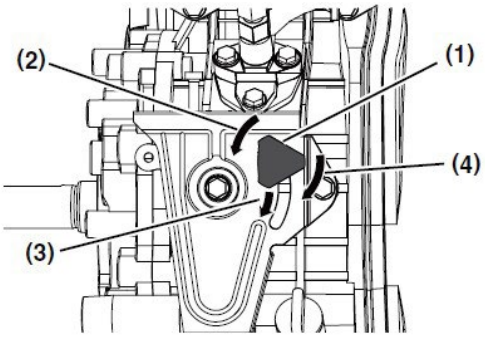

Figure 12

Start The Engine

CAUTION

NEVER use an engine starting aid such as ether. Engine damage will result.

Use the following procedure to start the engine.

1. Insert the key into the key switch.

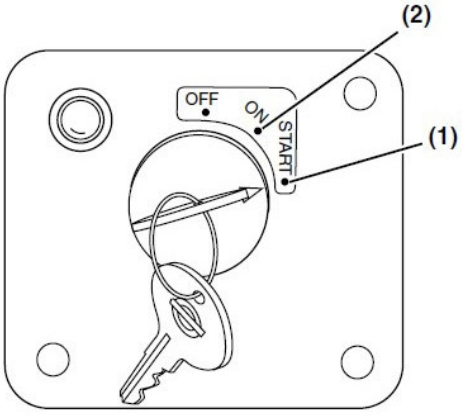

Figure 13

Yanmar Engine Operating Instructions

2. Turn the key clockwise to START position **(Figure 13, (1))**. Release the key as soon as the engine starts. It will return to the ON position **(Figure 13, (2))**.

3. If the engine fails to start:
   (a) Wait until the engine comes to a complete stop before you attempt to start it again. Engaging the starter while the engine is still rotating will result in damage to the starter motor and flywheel.
   (b) Wait at least 30 seconds before you attempt to start the engine again. This pause will allow the battery voltage to recover to prevent damage to the starter motor due to the low battery voltage.

CHECK THE ENGINE DURING OPERATION

CAUTION

Make sure the engine is installed on a level surface. If a continuously running engine is installed at an angle greater than 20° (in any direction) or if an engine runs for short periods of time (less than 3 minutes) at an angle greater than 25° in any direction, engine oil may enter the combustion chamber causing exessive engine speed and generate white smoke and also may occur unsatisfactory oil pressure. These may cause serious engine damage.

CAUTION

New Engine Break In:

- On the initial engine start-up, allow the engine to idle for approximately 15 minutes while you check for proper engine oil pressure, diesel fuel leaks, engine oil leaks, and for proper operation of the indicators and / or gauges.
- During the first hour of operation, vary the engine speed and the load on the engine. Short periods of maximum engine speed and load are desirable.
  Avoid prolonged operation at minimum or maximum engine speeds and loads for the next 100 hours.
- During the break-in period, carefully observe the engine oil pressure and engine temperature.
- During the break-in period, check the engine oil levels frequently.

Yanmar Engine Operating Instructions

1. After the engine has reached operating temperature, all of the indicators (if equipped) should be Off. If any of the indicators are On, shut down the engine and have the necessary repairs performed.

⚠ WARNING

HIGH PRESSURE HAZARD!

- Avoid skin contact with the high pressure diesel fuel spray caused by a fuel system leak such as a broken fuel injection line. High pressure fuel can penetrate your skin and result in serious injury. If you are exposed to high pressure fuel spray, obtain prompt medical treatment.
- NEVER check for a fuel leak with your hands. ALWAYS use a piece of wood or cardboard. Have your authorized Yanmar industrial engine dealer or distributor repair the damage.
- Failure to comply could result in death or serious injury.

2. Check for any fuel or engine oil leaks. If any leaks are found shut down the engine and have the necessary repairs performed.

3. Check for abnormal sounds or vibration. In some applications the engine and its mounting may start to resonate and cause unusual vibrations at certain engine speeds. Avoid running the engine at these speeds. If the abnormal sounds or vibration cannot be resolved, shut down the engine and have the necessary repairs performed.

4. Check for white or black smoke from the exhaust system. A small amount of white exhaust smoke is normal on start-up of a cold engine. Black exhaust smoke could mean the engine is overloaded or being over-fueled. If either of these conditions persists, contact your authorized Yanmar industrial engine dealer or distributor.

5. Check the fule level during operation. If the fuel level runs low, stop the engine and refuel.

Yanmar Engine Operating Instructions

ADJUST ENGINE SPEED

CAUTION

New Engine Break In:

- On the initial engine start-up, allow the engine to idle for approximately 15 minutes while you check for proper engine oil pressure, diesel fuel leaks, engine oil leaks, and for proper operation of the indicators and / or gauges.
- During the first hour of operation, vary the engine speed and the load on the engine. Short periods of maximum engine speed and load are desirable.
  Avoid prolonged operation at minimum or maximum engine speeds and loads for the next 100 hours.
- During the break-in period, carefully observe the engine oil pressure and engine temperature.
- During the break-in period, check the engine oil levels frequently.

Use the engine speed control to adjust the engine speed for the task that will be performed.

Several types of engine speed controls are used in L-N engine applications. The following procedures are for three typical applications. Refer to the operating instructions for the driven machine.

1. If your engine speed control is similar to **Figure 14** slide the engine speed control lever **(Figure 14, (1))** in the direction shown to adjust the engine speed.

Note: This is a friction adjustment. If the speed control will not maintain a given speed, tightening the nut will increase the friction on the speed control lever.

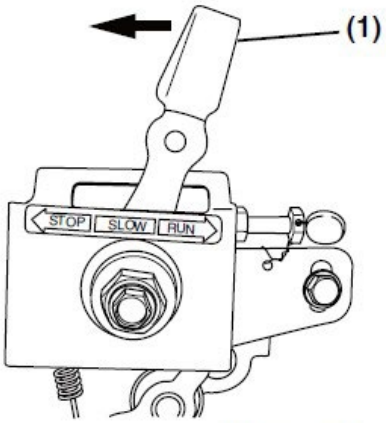

Figure 14

2. If your engine speed control is similar to **Figure 15** slide the engine speed control lever **(Figure 15, (1))** in the direction shown to adjust the engine speed.

Note: This type of speed control, typically used on a generator set, has only one speed setting. When you move the lever to the right, it clicks into the RUN position. The speed control lever is spring-loaded so when you push down on the STOP button, the speed control lever moves back to the shut-off position. There is no idle position or intermediate speeds.

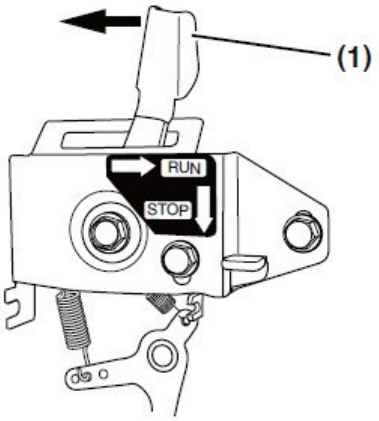

Figure 15

Yanmar Engine Operating Instructions

1. If your engine speed control is similar to **Figure 16**:
   (a) Turn the engine speed control knob **(Figure 16, (1))** to the left **(Figure 16, (2))**.
   (b) Slide the engine speed control knob in the direction shown to adjust the engine speed.
   (c) Turn the engine speed control knob to the right **(Figure 16, (3))** to tighten it.

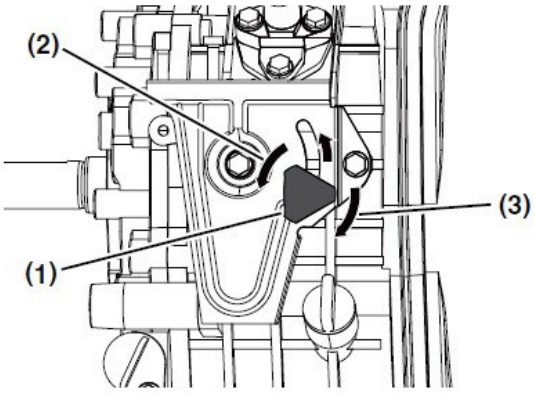

Figure 16

SHUTTING DOWN THE ENGINE

CAUTION

For maximum engine life, Yanmar recommends that when shutting the engine down, you allow the engine to idle, without load, for 5 minutes. This will allow the engine components that operate at high temperatures, such as exhaust system, to cool slightly before the engine itself is shut down.

Preparing To Stop Engine

Follow these steps to shut down the engine:

1. Disengage the PTO
2. Set the engine speed control to its lowest setting.
3. Run the engine at low idle speed or run without load for at least five minutes before you shut it down.

Set Engine Speed Control to STOP

CAUTION

If the engine continues to run after you position the engine speed control to the STOP position, turn the fuel clock to the CLOSED position.

Several types of engine speed controls are used in L-N engine applications. The following procedures are for three typical applications. Refer to the operating instructions for the driven machine.

1. If your engine speed control is similar to **Figure 17** slide the engine speed control lever **(Figure 17, (1))** to the STOP position **(Figure 17, (2))**.

Yanmar Engine Operating Instructions

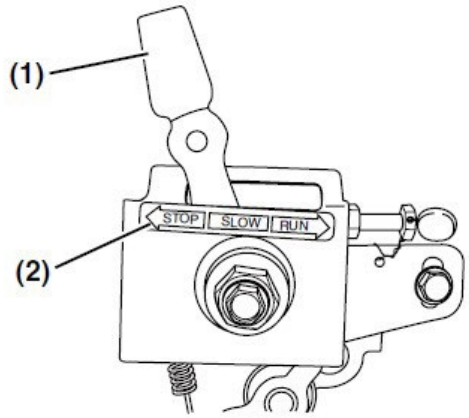

Figure 17

2. If your engine speed control is similar to **Figure 18** press the STOP button **(Figure 18, (1))** and the engine speed control lever **(Figure 18, (2))** will automatically return to the STOP position .

Note: The speed control lever is spring-loaded so when you push down on the STOP button, the speed contol lever moves back to the shut-off position. There is no idle position or intermediate speeds,

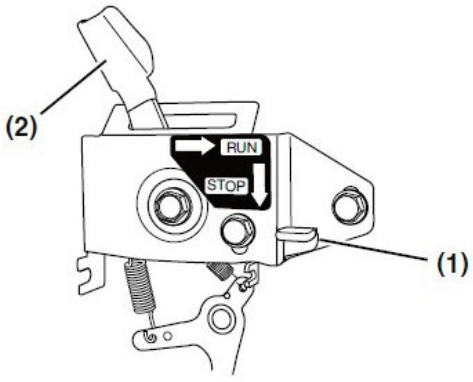

Figure 18

3. If your engine speed control is similar to **Figure 19**:
   (a) Turn the engine speed control knob **(Figure 19, (1))** to the left **(Figure 19, (2))**.
   (b) Slide the engine speed control knob to the STOP position **(Figure 19, (3))**.
   (c) Turn the engine speed control knob to the right **(Figure 19, (4))** to tighten it.

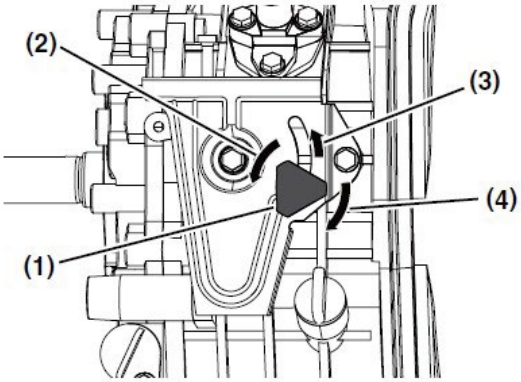

Figure 19

Electric Start Models

Turn the key to the OFF position **(Figure 20, (1))** and remove it from the key switch.

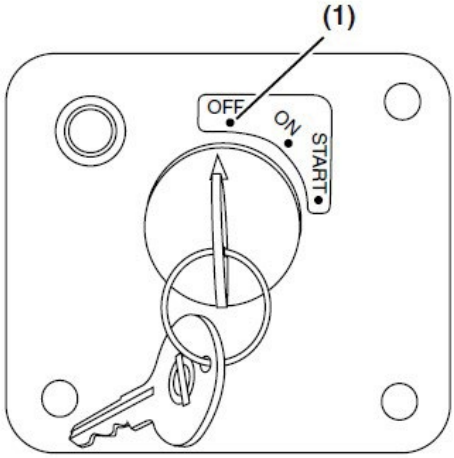

Figure 20

Yanmar Engine Operating Instructions

1. Move the fuel cock lever to the closed position (**Figure 21, (1)**).

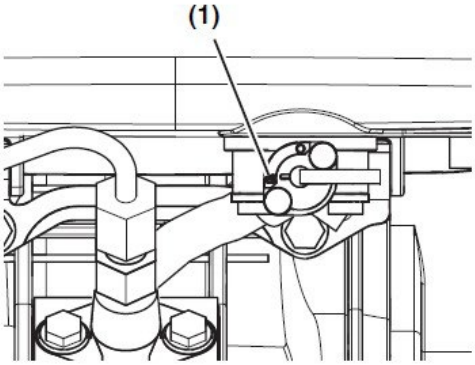

Figure 21

2. Slowly pull the recoil starter handle out to the point of resistance (the point in the compression stroke where the intake and exhaust valves are closed). This helps to prevent rust while the engine is not in use.

3. If the engine will not be used for six months or longer, follow the additional instructions in *Long Term Storage*.

Operating the Pump

To prime the pump initially, it is necessary to fill the pump body with water before starting the engine.

Start the engine and open the hose nozzle and allow the pump to run until it is drawing water.

The pump will establish prime better at higher engine speeds. Never run the pump dry for longer than two minutes or pump seals will be damaged.

Maintenance

It is important the pump and engine are serviced as per the manufacturer's instructions which will be supplied with the unit at time of delivery.

Hoses, nozzles and fittings should be visually checked every six months for any sign of wear or damage. Any damaged parts need to be replaced immediately.

If the hose reel has not been used for any length of time, unwind it fully to check that hose is in good order, pressurise the line and check operation of the spray nozzle etc. Rewind and lock reel on completion as per hose reel instruction above.

If pressure washer unit is to be stored for any length of time, disconnect battery, ensure tank is empty and no lines are under pressure. Store unit in a clean, dry, and well-ventilated area.

Important Pre-Use Checks for Trailer Units:

- Ensure tow vehicle is rated to the appropriate capacity.
- Tyre pressures on the trailers should be checked and should be at approx 36psi.
- All wheel nuts prior to towing trailer to ensure all are tight.

Brakes Maintenance/Inspection;

MECHANICAL BRAKES:

- Inspect all components for tightness and re-tighten as per manufactures specifications.
- Enspect brake pads for wear and replace as necessary.

ELECTRIC BRAKES:

- Before use, press the button on top of the brake safe unit to test if charged. Light should come on. The brake safe is charged using black AUX so vehicle MUST have 12v power supplied.

About Your Warranty

Coerco builds equipment to a high standard using components sourced from quality suppliers. The following information is provided to assist you with any repairs required within the warranty period.

• All warranty repairs on Coerco Pty Ltd products are carried out by Coerco Pty Ltd. If any warranty repairs are required on Coerco Pty Ltd products, it is recommended that the product be returned to the place of purchase.

• It is good practice to keep a record of equipment maintenance both during and after the warranty period.

The following information on warranty coverage explains the extent and limitations of your warranty coverage on Coerco Pty Ltd Products.

New Product Warranty

This warranty is the only warranty applicable to new products and, to the maximum extent permitted by law, is expressly in lieu of any other conditions or warranties expressed or implied in relation to the products.

Subject only to legislative obligations to the contrary, Coerco Pty Ltd shall not be liable for incidental or consequential damage resulting from ownership or use of a product. Coerco Pty Ltd does not authorize any person to create for it any other obligation or liability in connection with these products.

Coerco Pty Ltd warrants its authorised agent, who in turn warrants the original purchaser (owner) of each new Coerco Pty Ltd product that it will repair or replace the product, or pay the cost of repair or replacement, as determined by Coerco Pty Ltd without charge for labour or any defective or malfunctioning parts in accordance with the warranty limitations and adjustment schedule below.

The warranty period begins on the date the product is delivered to the first purchaser for a period of five years.

This Warranty Covers

Only conditions resulting directly from defects in workmanship or material under normal use and service.

Warranty Exclusions

The Warranty does not cover:

- Conditions resulting from misuse, use of incompatible chemicals, exceeding machine specifications including overloading, impact damage, negligence, accidental damage or failure to perform recommended maintenance services.
- Any product which has been repaired by other than Coerco Pty Ltd in a way which, in the sole and absolute judgment of Coerco Pty Ltd, adversely affect its performance or reliability.
- The replacement of maintenance items such as diaphragms, batteries, etc.
- Loss of time, inconvenience, loss of use of the product liability to third parties or any other consequential damages.
- Incidental costs associated with a warranty repair including any travel costs, out of hour's labour charges, cleaning costs, transportation costs, freight costs or any communication costs.
- The repair of a defective product qualifying under this warranty will be performed by any Coerco Pty Ltd within a reasonable time following the delivery of the product, at the cost of the owner, to Coerco Pty Ltd place of business. The product will be repaired or replaced, using new parts supplied by Coerco Pty Ltd. Coerco Pty Ltd, in its absolute discretion, may choose to pay the cost of replacement or repair of the product.
- The owner is responsible for the performance of regular maintenance services as specified in the Owner/Operator Manual applicable to the product. Failure to carry out regular maintenance may invalidate warranty

Warranty Registration Form

First Name

Last Name

Address (where Coerco product is primarily located)

Suburb

State

Postcode

Postal Address (if different from above)

Postal Suburb

Postal State

Postal Postcode

Mobile

Phone

Product Type

Order Number (if known)

Serial Number

Capacity (if known) Litres

Date of Purchase

Distributor Name (Trading Name)

Contact Name

Notes:

Notes:


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