



# Operating and Maintenance Manual



# **SRX 750 D**

Yanmar L 48



#### Weber Maschinentechnik GmbH

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#### Introduction

This operating and maintenance manual is designed to facilitate familiarization with your tamper, and enable you to maintain the tamper and use it in accordance with the proper application possibilities. When complying with the instructions in the operating and maintenance manual you help avoid hazards, reduce repair and downtime costs, and increase the reliability and service life of your tamper.

This operating and maintenance manual must always be available at the implementation site of the tamper.

If necessary, you can obtain additional information from your authorized WEBER dealer, or you can obtain information from one of the contact addresses on the last page.

You can obtain information on the assembled Yanmar diesel engine at www.yanmarindustrial.eu.

The valid conformity declaration is enclosed with every machine delivery.

#### Safety guidelines

#### General

All safety instructions must be read and complied with, non-compliance results in

- Danger to life and limb of the user
- Impairments to the machine or other property.

In addition to the operating manual, the accident-prevention regulations in the country where the appliance is used must be complied with.

#### Intended use

The tamper should only be used in technically faultless condition, as intended, in a safety-conscious and hazard-conscious manner, in compliance with the instructions in the operating manual. Malfunctions that impair safety must be eliminated without delay.

The SRX 750 D tamper is designed exclusively for compacting

- Sand
- Gravel
- Crushed rock
- Semi-cohesive mixed material.

Any other use of the tamper is considered to be improper use for which the owner shall be exclusively responsible. All liability is rejected if damage occurs due to non-compliance with this provision. This risk is borne solely by the user.

#### Easily foreseeable misuse

Any use for which the machine is not intended.

#### **Operation**

Tampers are only permitted to be operated by suitable persons of or above the age of eighteen. Operators must be instructed in how to guide the tamper by the owner or by owner's assigned personnel.

The machine operator must comply with traffic regulations. If instructions that affect safety are given by third parties, then the operator must be authorized to reject these instructions.



Unauthorized persons are forbidden from being in the area of the soil compactor during the compacting process.

#### **Protective equipment**

This machine is capable of exceeding the permissible sound level of 80 dB(A). The owner might also face additional dangers when using the machine. Precautionary action must, therefore, be taken.

Protective equipment includes:



Hearing protection



Hard hat



Safety shoes



Protective gloves

#### Operation

Prior to starting work the owner of the tamper must be familiar with the work environment. The work environment includes obstacles in the work and traffic area, the bearing capacity of the ground, as well as the necessary safeguarding of the construction site in the area adjacent to public traffic; and it includes compliance with traffic regulations.

The tamper should only be operated when the protective fixtures are mounted. The protective fixtures must all be in functional condition.

At least once per shift the tamper must be checked for apparent defects. If there are apparent defects then operation of the tamper must be stopped immediately and the responsible person must be informed. Prior to restarting, tamper malfunctions that have occurred must be corrected.

Always maintain adequate clearance to the edges of pits and embankments.

Do not drive at ninety degrees to slopes to prevent the compactor from tipping over.

After work has been concluded secure the compactor in accordance with statutory regulations, particularly in the area of public traffic surfaces.

#### Operation under difficult conditions



Never inhale the exhaust gas; it contains carbon monoxide, a colorless and odorless gas that is extremely hazardous, which, if inhaled even briefly, can cause unconsciousness and death.

Therefore, never operate the engines in enclosed areas or in areas that are poorly ventilated (tunnels, caves, etc.). Exercise particular caution when operating the engine in the vicinity of people and livestock.

#### Maintenance and repair work

Only use **original Weber spare parts** to ensure reliable and safe operation for maintenance or repair work.

Adjusting tasks, maintenance tasks, and inspection tasks must be carried out on schedule as specified in this operating and maintenance manual. These activities should only be executed by instructed personnel.

For repair, maintenance, or inspection work the engine of the tamper must be safeguarded against unintentional starting.

All pressurized lines, particularly hydraulic lines and lines of the injection system of the drive motor must be depressurized before performing maintenance or repair tasks.

For maintenance and repair tasks the tamper must be placed on a level and stable substrate and must be secured from rolling off or tipping over.

Heavy components and assemblies must be secured to and lifted by hoisting machines that can bear their weight when they are replaced. Ensure that no hazard is caused by raising components or assemblies.

Do not position yourself or work under suspended loads.



If lubricating oils and fuel come into contact with skin, they can cause skin cancer. Upon contact with the skin, clean affected skin with suitable cleaning agent without delay.

#### Inspection

Tampers must be inspected in accordance with appropriate implementation conditions and operating conditions, as needed; however, an inspection to ensure operationally safe status must be performed by an expert at least once a year. The results of the inspection must be recorded in writing and must be stored at least until the next inspection.

#### Cleaning work

Prior to cleaning the tamper with a high-pressure cleaner, protect all accessible energized switches, cable connections, etc. against water penetration by masking them off.

Cleaning tasks should only be executed in areas that are suitable and have been approved for this purpose (oil separator amongst others).

#### **Disposal**

All operating fluids and auxiliary materials must be disposed of in an environmentally-compatible manner in accordance with country-specific regulations.

Important information for operating and maintenance personnel is marked by pictograms.



Warning against irritants or materials hazardous to health



Warning against a hazardous place



Warning against a suspended load



Wear ear protection



General regulation



Environmental protection



Hard hat

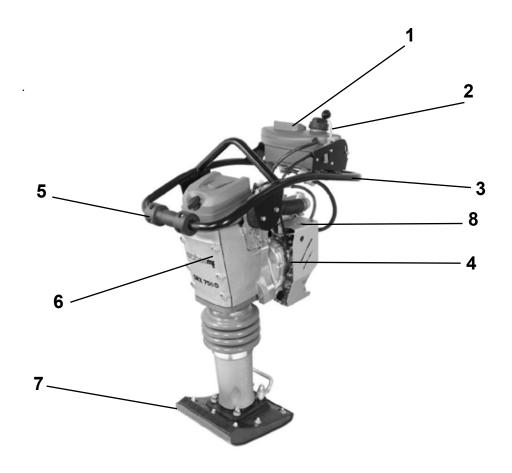


Safety shoes



Protective gloves

# **Graphic presentation**



## **Overall view SRX 750 D**

1	Fuel	tank

- 2 Gas lever
- 3 Manual guidance rod
- 4 Engine
- Transport roller 5

- 6
- 7
- Tamping system
  Tamping foot
  Hearing protection (sticker) 8



#### **Device description**

The series SRX 750 D tamper is used for road-building, canal construction, pipe laying and landscaping compaction tasks.

#### **Drive**

The compactor is propelled by an air-cooled Yanmar diesel engine.

Force is transmitted via the centrifugal clutch directly to the tamping system. The compaction work is performed by the tamping foot.

#### Operation

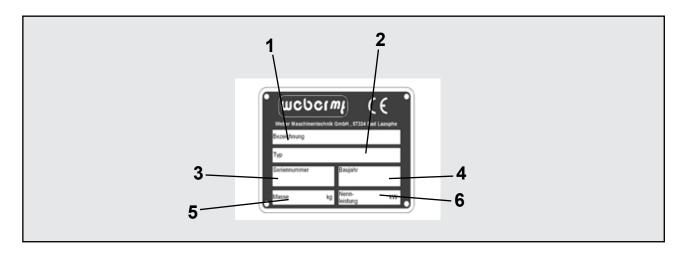
Start the Yanmar diesel engine with the attached reversing starter.

After starting, the tamping system starts to vibrate via the centrifugal clutch which is attached to the engine. Use the gas lever to vary the engine speed between idle speed and full-throttle speed. For easier transport the tamper can be pushed onto or into a means of transport with the help of the transport roller.

## **Technical data**

	SRX 750D
Weight	
Operating weight CECE in kg	82
Dimensions	
Overall length (in mm)	740
Overall width (in mm)	385
Height (in mm)	1110
Tamping foot width (in mm)	280
Impact rate (/min)	670
Force/impact (in kN)	28,9
Drive	
Engine manufacturer	Yanmar
Туре	L 48 N
Performance at operating speed in accordance with ISO 3046-1 (kW)	3.5
Combustion process	4-stroke diesel
Load speed (m/min)	3600
Fuel	Diesel

	SRX 750 D
Noise emissions in accordance with 2000/14/EC	
Sound pressure level L <sub>PA</sub> ascertained in accordance with EN 500, in dB (A)	98
Sound power level $L_{WA}$ ascertained in accordance with EN ISO 3744 and EN 500, in dB (A)	108
Vibration values	
Root-mean-square acceleration value for hand-arm vibration ascertained in accordance with EN 500 in m/s²	7.9
In accordance with directive 2006/42/EC, complying with the vibration values is the owner's responsibility.	



1 Description	2 TYPE
3 Serial number	4 Year of construction
5 Mass	6 Rated power kW

#### Activities prior to starting work

#### **Transport**



When transporting the tamper on a vehicle, secure it with suitable restraints.

#### Loading with crane

Fit the crane hook into the lifting ring (1) and lift the machine onto the desired means of transport.



Only use lifting machines with a minimum bearing capacity of 100 kg.

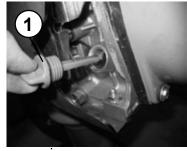


Do not step under suspended loads.



#### Checking the engine oil level

Pull the oil dip stick (1) out of the crankcase.



The correct oil level is between the min. and max. marks.

#### Check the fuel level

Open and remove the gas cap (1), check the level, if necessary top off to the lower edge of the filler neck with clean fuel in accordance with the specification.



Carefully wipe up spilled fuel.



If lubricating oils and fuel come into contact with skin, they can cause skin cancer. Upon contact with the skin, clean affected skin with suitable cleaning agent without



For work at the fuel system, have a suitable fireextinguishing agent at the ready.



Fire, naked light, and smoking is forbidden!



min max

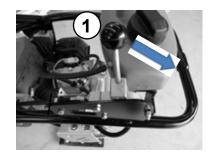


#### **Starting**



After horizontal transport: Bring tamper into a vertical position and wait several minutes until the engine oil has collected in the lower area of the crankcase.

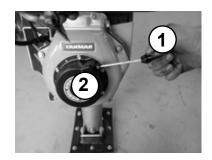
Push the gas lever (1) to full-throttle position.



Slowly tighten the handle (1) of the reversing starter (2) until resistance is noticeable.

Allow the handle (1) to glide back into the initial position.

Pull starter completely through. Allow the engine to warm up for a few minutes.





When starting in enclosed spaces ensure adequate ventilation – danger of suffocation.

- If temperatures are below minus 5 degrees Celsius, comply with the instructions in the operating manual provided by the engine manufacturer.
- Never use any starter spray.

#### **Tamping**

Bring the gas lever into full-throttle lock-in position.



Only run machine within reach of the manual guidance rod (1).

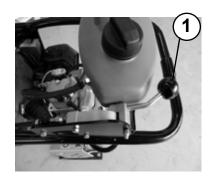


Compacting is only permissible at full throttle speed as there is an increase level of wear in the slip range of the centrifugal clutch.



At obstructions (walls, pits, etc.) ensure that no one can be caught between the machine and the obstruction; or ensure that the machine does not slip into the pit.

Unauthorized persons are forbidden from being in the area of the soil compactor during the compacting process.





#### **Shutting down**

Do not switch off the engine under full load; let engine run idle for a few minutes.

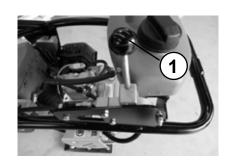
Push the gas lever (1) all the way to the front.



During breaks – even if they are short – the machine must be shut down.



Parked devices that represent an obstacle must be safeguarded against through conspicuous measures.



#### **Maintenance overview**

Maintenance interval	Maintenance point	Maintenance activity
After the first 25 operating hours	Engine	Change the engine oil
January Managara		Re-tighten all accessible threaded connections
Every 8 operating hours/daily	Air filter	Clean air filter insert,     check for damage,     replace if necessary
Every 150 operating hours/ every 6 months	Engine	- Change the engine oil  - Change the fuel filter
		- Clean the oil filter
Every 150 operating hours/ every year	Tamping system	- Change oil



The regulations of the engine manufacturer must be complied with in addition to the above maintenance overview!



Work must be carried out using regulation tools, and the operating and maintenance manual must be complied with for all work.



All maintenance work: Select a collection vessel that is large enough to prevent oil from spilling onto the ground. Dispose of waste oil in an environmentally friendly manner (regulation on waste oils).



Dispose of oils, greases, cloths soaked in oil, and replaced parts with oil on them in an environmentally friendly manner.



If lubricating oils and fuel come into contact with skin, they can cause skin cancer. Upon contact with the skin, clean affected skin with suitable cleaning agent without delay.



If accessible during maintenance, check the condition and stability of all screws.

#### Maintenance work

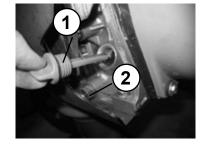
#### Change the engine oil

Remove the oil dip stick (1).

Open the drain plug (2) of the engine and drain oil.



Only drain engine oil when at operating temperature.



Screw in the oil drain plug (2) with new seal and top off with oil as specified.



When working in the area of the engine compartment there is a danger of being burnt!



Danger of scalding due to hot oil.

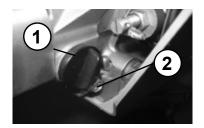


Check the oil fill level with the oil dip stick again.

#### Clean the engine oil filter

Drain engine oil.

Remove screw (2) and engine oil filter (1). Wash out engine oil filter in gasoline. Screw in engine oil filter (1) and secure screw (2). Top off engine oil in accordance with the specification. Check engine oil level.





Dispose of oils, greases, cloths soaked in oil, and replaced parts with oil on them in an environmentally friendly manner.



If lubricating oils and fuel come into contact with skin, they can cause skin cancer. Upon contact with the skin, clean affected skin with suitable cleaning agent without delay.

#### Clean/change air filter cartridge

Unscrew the air filter cover (1).



Remove the air filter insert from the air filter enclosure. Clean the air filter (1). Clean air filter insert if there is damage or if its is extremely dirty.



#### Change the fuel filter

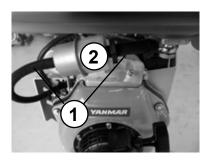
Pull the fuel line (1) off the fuel filter (2) on both sides. Replace the filter with a new filter element.



Dispose of the fuel filter in an environmentally responsible manner



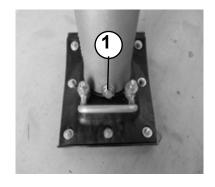
Carefully wipe up spilled fuel.



#### Change the oil in the tamping system

Unscrew the screw plug (1) from the fill opening. Tilt the tamper forward slightly and let the old oil drain into a suitable collection container. Tilt the tamper back and fill oil in as specified.

Clean the screw plug and screw it into the fill opening.





Discharged operating fluids must be collected and stored in suitable containers. Discharged fluids must be appropriately disposed of in accordance with environmental protection regulations.



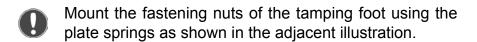
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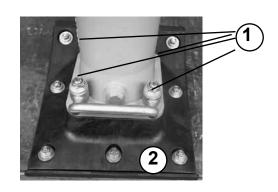
## Change the tamping foot

Unscrew the 4 nuts (1).

Lift the tamping foot (2) off of the tamper and attach a new tamping foot.

When mounting the new tamping foot the nuts (1) must be tightened with a torque of 35 Nm.







Mounting arrangement of the plate springs

# Operating fluids and fill levels

	Operating material		
Assembly	Summer	Winter	SRX
	Qu	ality	750 D
Engine	Engine oil SAE 10 W40 (-10 ~ +50 °C) API - CD CE or SHPD or CCMC - D2 - D3 - PD1		0.81
Fuel tank	Diesel		3.01
Tamper lower part	Hydraulic oil HVLPD 68		1.0

# Troubleshooting

Fault	Possible cause	Remedy	
Tamper does not start	Operating error	Execute the start process as prescribed	
	Lack of fuel	Check the fuel level	
	Air filter fouled	Clean/change air filter	
	Fuel filter fouled	Change the fuel filter	
Engine runs but it does not reach full speed	The fuel line is incorrectly mounted	Check the mounting of the fuel line	
or engine runs but stops after a short time	Air filter fouled Fuel filter fouled	Clean/change air filter Change the fuel filter	
Engine runs at full rpm, tamper does not tamp or tamps inadequately	Centrifugal clutch is defective	Repair	
Unclean compaction pattern	Tamping foot is worn	Change the tamping foot	

## Actions to be taken before long-term storage (longer than a month)

Entire soil compactor	<ul><li>Clean thoroughly</li><li>Check watertight</li></ul>
	If there are leaks,     correct defects
Fuel tank	Empty fuel and fill with clean fuel up to the lower edge of filler neck
Engine	Check oil level,     if necessary fill to     upper oil-level mark
	Check air filter, clean,     replace if necessary
	Check fuel filter,     change if necessary
All bare parts/accelerator/ accelerator control cable/fastening bolts	- Oil/grease

If the machine is to be stored for longer than six months, then contact the Weber service organization to discuss additional measures.



# Weber Maschinentechnik GmbH

For problems, questions and further information refer to one of the following addresses:			
in Germany	WEBER Maschinentechnik GmbH Im Boden 5 – 8, 10 57329 Bad Laasphe - Rückershausen	Telefon Telefax	+ 49 (0) 2754 - 398-0 + 49 (0) 2754 - 398101-switchboard + 49 (0) 2754 - 398102- spare parts- directline
		E-Mail	g.voelkel@webermt.de
in France	WEBER Technologie SARL 14' rue d' Arsonval 69680 Chassieu	Telefon Telefax E-Mail	+ 33 (0) 472 -791020 + 33 (0) 472 -791021 france@webermt.com
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In Tschechien	WEBER MT s.r.o. V Piskovne 2054 278 01 Kralupy nad Vitavou	Telefon E-Mail	+ 42 (0) 776 222 216 + 42 (0) 776 222 261 info@webermt.cz
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- > Vibration plates
  - > Vibrating tampers
    - > Vibration rollers
      - > Joint cutters
        - > Internal vibrators and converters
          - > Rollers



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