ES/EU PROHLÁŠENÍ O SHODĚ (originál)

EC/EU Declaration of conformity (original)

Prohlašujeme, že zařízení definované níže uvedenými údaji je ve shodě s požadavky níže uvedených NV a směrnic
We declare that the trough below mentioned specifications defined equipment complies with requirements of below cited Directives

Výrobce *(manufacturer):* **Sídlo firmy** *(legal address):*	**NTC STAVEBNÍ TECHNIKA spol. s r.o.** **Jiřinková 120, Česká Skalice 552 03**
IČ *(identification number):*	**63221152**
Osoba pověřená sestavením a uchováváním technické dokumentace: *(person in charge of assembling and storing technical documentation)*	**NTC STAVEBNÍ TECHNIKA spol. s r.o.**
Název *(model):*	**VIBRAČNÍ PĚCH / VIBRATORY TAMPER**
Typ *(type):*	**NT 59, NT 65 N, NT68, NT 70H**
Výrobní číslo *(serial number)*	64426149
Popis *(description):*	Vibrační pěch se používá pro hutnění ve výkopech. Díky rázovému účinku a vysoké úderové síle je vhodný i pro hutnění obtížně zhutnitelných zemin, jako jsou jíly. Pohon vibračního pěchu je zajištěn čtyřdobým jednoválcovým motorem HONDA (čistý výkon: 2,6 kW) nebo dieselovým motorem HATZ (výkon 3,4 kW). *Vibratory tamper is used mainly for compaction in trenches. Due to the high impal force, the tamper is suitable even for compaction of heavy soils, such as Clar. The machine is driven with four-stroke single-cylinder engine HONDA (net power 2,6 kW)or diesel engine HATZ (power 3,4 kW).*
Všechna příslušná ustanovení, která výrobek splňuje *(The product meets all relevent provisions)*	Strojní zařízení – směrnice 2006/42/ES, NV 176/2008 Sb. *Machinery Directive 2006/42/EC* Emise hluku – směrnice 2000/14/ES, NV 9/2002 Sb. *Noise Emission 2000/14/EC* Elektromagnetická kompatibilita – směrnice 2014/30/EU, NV 117/2016 Sb. *Electromagnetic Compatibility Directive* 2014/30/EU
Harmonizované technické normy a technické normy: *(The harmonized technical standards and technical standards)*	**ISO 3744, ISO 11202, EN 292-1/2, EN 294**
Použitý postup na posouzení shody: *(To theckonformity assessment applied procedure)*	**Na základě směrnice 2006/42/ES příloha VIII** *Pursuant to the Machinery Directive 2006/42/EC Annex VIII*
Naměřená hladina akustického výkonu: *(Measured sound power level)*	L_{WA} = **95 dB**
Garantovaná hladina akustického výkonu: *(Guaranteed sound power level)*	L_{WA} = **105 dB**

Poznámka: Veškeré předpisy byly použity ve znění jejich změn a doplňků platných v době vydání tohoto prohlášení bez jejich citování.
Note: All regulations were applied in wording of later amendments and modifications valid at the time of this declaration issue without any citation of them.

Místo a datum vydání:
Place and date of issue:
Česká Skalice, 01.01.2012

Osoba zmocněná k podpisu za výrobce:
Signed by the person entitled do deal in the name of producer:

Jméno (Name): Ing. Petr Ratsam

Funkce (Grade): jednatel společnosti *(Company Executive)*

Podpis *(signature)*

1. SAFETY INSTRUCTIONS

Vibratory tampers NT are powerful compaction machines.
Read and understand the operation manual before using starting the machines.

Pay special attention to the safety instructions.
These safety instructions must be maintained all the time, otherwise these may arise a danger to health of the operator or other people.

1.1. General Instruction

1. Requirements for qualification of the operator:
   - The vibratory tampers must be operated by trained, reliable operators, of age above 18. The operator must read and understand the safety instructions, the regulations valid for the respective jobsite and valid technological procedure. This should be proved by getting operator's signature.
   - The operator is obliged to use suitable working dress, safety gloves and firm boots with hard tip. Do not wear loose or torn clothes, chains or jewelry which could be caught by moving parts of the machine.
   - The operator is obliged to use safety goggles and ear protection.
2. The vibratory tampers may be used only for compaction jobs in accordance with this operation manual.

1.2. Hygienical Data

Machine type	NT 59	NT 65 N		NT 68	NT 70H
Sound power level L_{WA} [dB]	95	95		95	95
Guaranteed sound power level L_{WA} [dB]	105	105		105	105
Accelaration transmitted to the hand [m/s^2]	5,9	6,1		6,7	6,8

1. Because of the noise level, the operator is obliged to use ear protection effective for the noise level 90 dB.
2. Work with the machine must be interrupted regularly, the breaks should last at least 10 min. Total time of work with the machine should not exceed 10 minutes per working shift. The technological procedures should be arranged accordingly.
3. The operator should not be exposed to excessive noise or vibrations during the breaks.
4. Should the machine be used to longer time than specified in point 2 above, the local hygienical authority should be consulted.
5. Within residential areas, the machine can be used only from 6 a.m. to 6 p.m.

1.3. Inspection

1. Do not remove any safety devices (covers etc.) from the machine.
2. Check all controls and safety devices prior to starting.
3. If any failures which affect operational safety are found during the work, the operator must stop the machine immediately.

1.4. Operation

Before starting:

1. Check the machine thoroughly, repair all failures before starting the engine. If the failures cannot be repaired at the jobsite, do not operate the machine.
2. Check the fuel system for leaking. Dripping fuel poses fire hazard.

Starting and operation:

3. When starting the engine, take stable position and held the grip firmly.
4. The controls must be in good order.
5. The operator must not leave from his position when the engine is running.
6. Stop the engine before interrupting the work. When parking the machine, secure it from falling.
7. Stop the engine before refueling. Avoid contact between fuel and hot parts of the engine. Let the engine to cool down first.
8. Keep the fuel tank tightly closed. Close the fuel tap when not in operation. Drain the fuel before transporting the machine for longer distances.

DANGER! Leaking fuel tank and distribution may cause explosion. Replace these parts immediately if damaged.

Jobsite:

9. No bystanders are allowed within the operational range of the machine. Especially children should be kept in safe distance.
10. No don operate the machine in areas with explosion danger.
11. If operated in closed spaces (halls, tunnels, deep digs), there should be ensured sufficient ventilation.
12. High care should be paid at the edges of digs, heaps or slopes in order to avoid falling down.
13. Held and guide the machine with high care in order to avoid hands injury caused with contact with an obstacle.
14. Do not smoke, do not use naked flame. Do not work close to flammables or in explosion danger areas.
15. Avoid touching hot parts. The exhaust silencer and other parts of the engine are very hot during operation and touching them can cause serious burns.

1.5. Maintenance and Service

1. Do not remove any covers or other safety devices. In case this must be done because of service, install all the parts back before starting.
2. Use genuine spare parts only. Do not carry out any modifications without prior written approval of the manufacturer.
3. Stop the engine before servicing the machine.

1.6. Transport and Storage

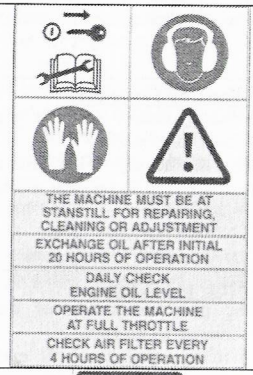
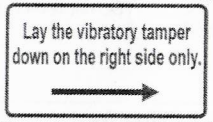
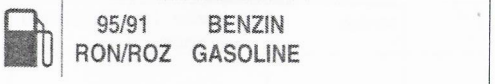
1. When loading and transporting the machine fasten the machine properly on the carrier.
2. The vibratory tamper is to be transported in upright position or laid on the face side (with engine upwards). These positions are also suitable for storing.
3. Prior to long-term storage: Conserve the machine, cover it and store it at safe, dry and ventilated place.

1.7.Testing

It is recommended to test the machine by authorized service at least once a year or more often if used under heavy conditions. If necessary, carry out repairs of all possible failures.

1.8. List of safety signs used in the machine

At the designated types of machinery, vibratory rammer, type NT 59, NT 65 N,NT 68 and NT 70H in accordance with the Act No. 22/1997 Coll. as amended, on technical requirements for products placed stickers symbols safety signs, symbols and informative descriptions of the design and implementation determine the technical norm.
In the following different types of labels represented in the design, they are placed on the appropriate machine. For each individual symbol, and the sticker is attached text explaining its significance.

1.	Hazard warning sign, a symbol No. B.3.1 (exclamation mark) before operating the machine warns of danger. Information for operators on how to proceed with the repair, cleaning or adjusting machines. Label, the symbol No. B.2.5 commands guide wear while working with the machine muffs to protect hearing	
2.	7.25 No sticker marks according to ISO 6405-1 (the symbol indicates hinging point, ie the place at which the machine can be lifted)	
3.	Sticker „LAY THE VIBRATORY TAMPER DOWN ON THE RIGHT SIDE ONLY“	
4.	Sticker containing information about the type of fuel intended for the engine machine	
5.	Sticker indicating the data value of the noise emission, which was for machinery vibration tamper detected by examination carried out under the terms of GO No. 9 / 2002.	
6.	Sticker indicating the need to tighten the screws on the heel luck.	WARWING- check and tighten the foot bolts during initial 20 hrs of operation

2. DESCRIPTION

2.1. Definition of Vibratory Tamper

Vibratory tamper is a compaction machine, which executes fast repeating blows to the soil which is compacted.
During compaction, distances between soil particles get shorter, specific weight of the soil increases and water contained in the soil is pushed out.
Vibratory tampers are suitable for compaction of backfills at digs, compaction of foundations, etc.

2.2. Working Principles

The vibratory tamper is driven by a gasoline or diesel, air cooled engine.
Torque from the engine is transmitted through a centrifugal clutch to the gear mechanism of the tamper, which converts rotation of the engine to rectilinear movement of piston.
A strong spring located in the lower part of the tamper transfers the force from the piston onto the tamper foot.

2.3. Prior to Starting

1. The gear mechanism of the tamper is lubricated by oil bath.
2. Prior to starting, check oil level in the sight glass at the rear side of the tamper. If there is no visible oil level, add oil. Use engine oil, class SAE 10W-30, 15W-40, SE, SF or better.
3. Add gasoline (either lead or lead-free) into the fuel tank. Do not use mixture with oil for 4-stroke engines!
   Check oil level in the engine. If necessary, add engine oil, class SAE 10W-30, 15W-40 or better. Oil shortage can cause serious damage to the engine. See also the engine manual.
4. Check all bolts and nuts. Connections which get loose from the vibrations may cause serious problems. Therefore, re-tighten the bolts properly.
5. Regularly clean the machine, especially around the starter and the foot.

2.4. Technical Data

Model	Dimensions l x w x h (mm)	Weight (kg)	Dimensions of the tamping foot (mm)	Amplitude (mm)	Compacting force (kN)	Blows per minute
NT 59	620x360x1070	58	285x345	50-85	10-11	600-700
NT 65 N	750x370x1030	64	285x345	50-85	11-12	600-700
NT 68	750x410x1070	68	285x345	50-85	12-13	600-700
NT-70H	750x400x1200	70	285x345	50-85	16-18	600-700

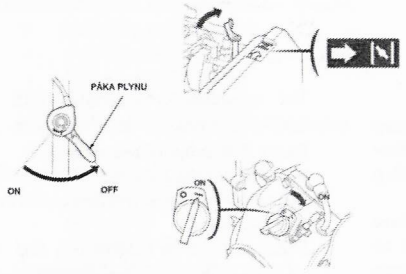
2.5. Engines

The NT 59 and NT 65 N tampers is equipped with gasoline four-stroke engine HONDA GXR120, power 2,6 kW.
The NT 68 tamper is equipped with gasoline four-stroke engine HONDA GX 120 , power 2,6 kW.
The NT 70H tamper is equipped with diesel engine HATZ 1B20, power 3,4 kW.

3. OPERATION

3.1. Starting

1. Turn the fuel tap down. Turn the ignition switch to position „ON".
2. At cold engine:
   Close the choke. Set up the throttle lever into position „OFF".
   At warm engine or high ambient temperature:
   Turn the choke lever into the middle position or leave it fully open. Adjust the throttle lever slightly above zero.
3. Hold the starting grip and pull a little, until slight resistance is felt. From this point pull vehemently. Do not release the grip then, but return it into the basic position.
4. After the engine gets started, move the choke lever slowly into the basic position. Let the engine to warm up at idle speed for 3-5 minutes.
   Check, whether there is no gasoline leaks and whether there is no unusual noise.
5. If the engine does not get started after several attempts, remove the sparkling plug and check, whether it emits proper sparkling. In case the plug is wet from fuel or dirty, clean or replace it. Rotate the engine several times before mounting the plug back, to flush out excessive fuel.



3.2. Operation

1. Set up full throttle quickly to increase the engine speed. The centrifugal clutch gets engaged and the temper starts working.
   Do not mode the lever slowly - that would cause irregular operation of the tamper, which may cause damage to the clutch, springs and the foot.
2. When the rammer begins to operate, set the frequency of strikes fine throttle adjustment. Pech works most effectively when the engine speed, which are shown on luck. Unnecessary increase in speed is no longer any increase in compaction force. Conversely, resulting resonance reduces compaction force and causing damage
3. At cold weather, the oil in the tamper foot is mode dense and causes higher resistance of the moving parts. This may cause slightly irregular operation. In such a case it is recommended to warm up the machine before working by repeated increasing and decreasing the engine speed.
4. The tamper foot is a highly durable structure. However in case that rockfill should be compacted, it is highly recommended to put a layer of soil on the top, in order to ensure even distribution of compaction effort.

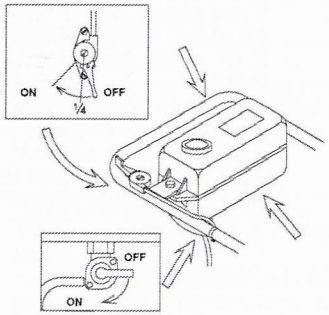
5. The tamper is designed to move forward during operation. The forward speed can be increased by pushing the handle down.

6. Work with the rammer quick stop moving the throttle to "OFF"

3.3. Turning Off The Engine

1. After operation, let the engine to idle for 3-5 minutes to cool down. Then turn off the engine by switching off the ignition.

2. Always remember to close the fuel tap.



3.4. Maintenance And Storage

DANGER!

! **Flammable liquid. When refueling stop the engine, do not smoke and do not allow any work with naked flame or sparkling around the machine.**

! **Moving parts. Stop the engine before commencing maintenance or repairs at the machine. The moving parts may cause serious injury.**

! **Hot parts. Let the engine to cool down before commencing maintenance or repairs.**

Daily maintenance:
Clean the machine, especially the engine and the points of inspection. If necessary, clean the air filter. Check and re-tighten all bolted connections. Check the machine for oil or fuel leaks.

Every 50 hours of operation:
Clean the air filter. (In case of operation under extremely dusty condition, clean it daily.)
Check the sparkling plug and adjust the gas between the contacts to 0,6-0,7 mm.

The machine is equipped with electronic ignition that requires no adjustments.

Every 300 hours of operation:
Remove and clean the fuel filter cap. Clean all parts of the machine and tighten the bolts and nuts as needed.
Drain oil from the tamper foot. Add new engine oil SAE 10W-30, 15W-40 (roughly 0,6l – NT 59 or 0,8l – NT 65 N and NT 68) up to the middle of the sight glass.
Oil should reach the mid-sight glass. The first oil change should be made after the initial 50 hours of operation.

Cleaning of the air filter by NT 59 (daily):
Every 10 hours, clean air filter. If the rammer is working in a dusty, clean the filter 2x a day. Urethane foam is first cleaned in paraffin and dried, then dipped in motor oil before installation, and squeezes the excess oil. Details are given in the instructions for operating the engine.

Cleaning of the air filter by NT 65 N and NT 68 (daily):
Remove the cartridge from the cleaners to the top of the engine. Foam of detergent in the

wash, let dry and lightly oil Fill. Before installing squeeze out excess oil.
Paper filters blown clean with compressed air from the inside liner.
If the cartridge is very dirty or damaged, replace it.

and check, whether the fuel does not leak. Drain the fuel tank if necessary.

NOTE!

Lower the tamper always on the front or right-hand side (with the fuel tank cap up).

Storage:
Store the machine in upright position, after the engine gets cooled.
If the machine must be stored in horizontal position, place it always on the front or right-hand side. Tighten the fuel tank cap properly

Long-term storage:
Drain the fuel tank and the carburetor. Remove the sparkling plug and put several drop of engine oil into the cylinder. Turn the engine several times, so that oil covers evenly all parts.
Clean the tamper and wipe it with a cloth dipped in clean oil.
Store the machine at a safe, dry and shaded place and cover it for protection against dust.

4. TROUBLESHOOTING

4.1. Difficult To Start

Fuel is in the tank, the plug does not sparkle.
- spark plug gap is bridged
- carbon sediments on the spark plug
- loose plug connector
- short circuit due to water
- improper distance of the electrodes
- short-circuited starting

Fuel is in the tank, the plug sparkles.
- clogged exhaust silencer
- wrong fuel
- clogged air filter
- dirty carburetor

Insufficient compression
- faulty window seals
- piston ring broken
- piston / cylinder excessively worn out
- loose sparkling plug

No fuel in the carburetor
- no fuel in the tank
- fuel tap closed
- dirty fuel filter
- clogged ventilation of the fuel tank
- air bubble in the fuel hose
- seized needle in the carburetor
- faulty membrane
- wrong carburetor adjustment
- dirty carburetor

4.2. Insufficient Engine Power

Low engine power
- dirty air filter
- air bubble in the fuel hose
- dirty nozzles in the carburetor
- carbonized exhaust silencer
- low compression (see above)
- improperly adjusted distance between electrodes of the sparkling plug
- faulty sparkling plug
- wrong fuel

Engine overheating
- carbonized combustion compartment
- carbonized exhaust silencer
- wrong sparkling plug (unsuitable temp. value)

Unstable engine speed
- dirty speed governor
- faulty governor spring
- failure at the fuel supply
- engine is getting false air

Faulty recoil starter
- dirty starter mechanism
- return spring broken
- damaged ratchets

Tamper does not regularly - blows are too slow

- Engine speed too low
- damaged speed governor
- improper volume of oil in the foot
- worn out centrifugal clutch
- faulty main spring

4.3. Spare Parts

All spare parts are available from:

NTC STAVEBNÍ TECHNIKA spol. s r.o.
Jiřinková 120
552 03 Česká Skalice

When ordering the spare parts, please note the type and serial number of the machine, which is stamped on the nameplate of the machine.

4.4. Maintenance Schedule

Before starting
- Check fuel level
- control of lubrication oil sight glass (if the machine is in a horizontal position, the sight glass is filled with oil)
- Check the engine oil

regurarly
- tightenning the screws, nuts, etc.
- cleaning the engine from dust

every 5 hours
- check air filter

every 25 hours
- check spark plugs
- control of foot rammer

every 50 hours
- replacement air filter
- changing the oil in the leg rammers (**after no more than 300 hours of work!**)

every 100 hours
- replacing the spark plugs
- engine oil

every 300 hours
- full service at the manufacturer or authorized service

5. WARRANTY

5.1. Warranty Period

The warranty period is 12 months from commissioning of the goods, unless otherwise stated in the sales contract.

5.2. Warranty Terms

The supplier warrants the goods as follows:
The supplier will repair or replace parts which prove to be defective due to faulty material, manufacturing failure, improper assembly, etc.

Warranty limitation
This warranty does not cover failures caused by the user, namely by unsuitable or inadequate operation, lack of maintenance, unauthorized modifications, improperly done repairs, use of non-genuine spare parts, or use under extremely heavy conditions.
This warranty also does not cover failures caused by utilizing of other than recommended fuel or oil.
The warranty does not relate to wear parts, such as filters, sparkling plugs, tamper foot, etc. and does not relate to wear adequate to the working hours the machine has passed.