# HIGH PRESSURE CLEANER <br> NETTOYEUR HAUTE PRESSION HOCHDRUCKREINIGER HIDROLIMPIADORA ALTA PRESIÓN LAVADORA A ALTA PRESSÃO IDROPULITRICE AD ALTA PRESSIONE 



- DO NOT USE THE MACHINE WITHOUT FIRST READING THE OPERATING INSTRUCTIONS
- N'UTILISER L'APPARELL QU'APRĖS AVOIR LU LE MANUEL D'NSTRUCTIONS
- GERAT ERST NACH LESEN DER BEDIENUNGSANLEITUNG VERWENDEN
- NO UTILISE EL APARATO SIN LEER ANTES LAS INSTRUCCIONES PARA SU USO
- NÄO USE A MÁQUINA SEM LER A MANUAL DE INSTRUÇÖES
- NON USARE LA MACCHINA SENZA AVERE LETTO LE ISTRUZIONI PER L'USO


Models - Modèles - Modelle - Modelos - Modelli

TX 10.130<br>TX 12.100

TX 12.140
TX 13.180
TX 14.120
TX 15.150
TX 17.130
TX 951
TX 954
TX 956
TX 957
TX 961

## IMPORTANT SAFETY INSTRUCTIONS

This book has important information for the use and safe operation of this machine. Read and understand all warnings before you start working.

## WARNING - WHEN USING THIS MACHINE, BASIC PRECAUTIONS SHOULD BE FOLLOWED.

1. Read all the instructions before using the machine.
2. To reduce risk of injury, close supervision is necessary when the machine is used near children.
3. Know how to stop the machine and bleed pressure quickly. Be quite familiar with the controls.
4. Stay alert! Watch what you are doing.
5. Do not operate the machine when fatigued or under the influence of alcohol or drugs.
6. Keep operating area clear of all persons.
7. Do not overreach or stand on unstable support. Keep good footing and balance at all times.
8. Follow the maintenance instructions specified in the manual.
9. Read carefully instructions concerning grounding and extension cords on next page.
10. To prevent fire hazard, do not use with or near inflammable such as: gasoline, grain dust, solvents and thinners.
11. This product is provided with a ground fault circuit interrupter built into the power cord plug. If replacement of the plug or cord is needed, use only identical replacement parts that include GFCI protection. This applies only for UL version.

## WARNING - RISK OF INJECTION OR INJURY DO NOT DIRECT DISCHARGE STREAM AT PERSONS.

## SAVE THESE INSTRUCTIONS

## GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the product - If it will not fit the outlet, have a proper outlet installed by a qualified electrician.


#### Abstract

GROUND-FAULT CIRCUIT - INTERRUPTER PROTECTION (ONLY FOR U.S.A.) This pressure washer in UL version is provided with a ground-fault circuit-interrupter (GFCI) built into the plug of the power supply cord. This device provides additional protection from the risk of electric shock. Should replacement of the plug or cord become necessary, use only identical replacement parts that include GFCI protection.


## EXTENSION CORDS

WARNING - Extension cords are not recommended unless they are plugged into a ground-fault circuit-interrupter found in circuit boxes or protected receptacles.

Use only 3-wire extension cord that have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from the product.
Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use". Use only extension cords having an electrical rating higher than the rating of the product.
Do not use damaged extension cords. Examine extension cord before using and replace if damaged. Do not abuse extension cord and do not yank on any cord to disconnect. Keep cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord. When using an extension cord, observe the specifications below:

$$
\begin{array}{lc}
\text { Cable length } & \text { Wire Gauge } \\
\text { Up to } 50 \mathrm{ft.} & 14 \mathrm{AWG} \\
50 \text { to } 100 \mathrm{ft} . & 12 \mathrm{AWG}
\end{array}
$$

WARNING - To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands.


## - CONTROL DEVICES

Before connecting the machine to the water and electrical supplies, it is necessary that you know the function of the controls on the machine. This must be done in accordance with the descriptions in the Instruction Manual, taking reference to the relevant instructions and illustrations.

## - DISPOSITIFS DE CONTRÔLE

Avant de brancher l'appareil sur les réseaux d'alimentation d'eau et d'électricité, il est nécessaire de bien connaître le fonctionnement de ses dispositifs de contrôle. Effectuer cette opération en vous référant aux instructions données dans ce manuel et aux indications et illustrations y relatives.

## - BEDIENUNGS- UND KONTROLLVORRICHTUNGEN

Bevor Sie das Gerät mit Wasser- und Stromanschlüssen verbinden ist es notwendig, daß Sie die Bedienungsund Kontrollvorrichtungen des Gerätes verstehen. Dies muß anhand der Beschreibungen und lllustrationen in der Bedienungsanleitung erfolgen.

## - DISPOSITIVOS DE PUESTA EN MARCHA Y CONTROL

Antes de conectar el equipo a las redes de alimentación de agua y electricidad, es necesario conocer sus dispositivos de puesta en marcha y control. Efectuar estas operaciones siguiendo las indicaciones que figuran en el manual de instrucciones así como de sus ilustraciones grafícas correspondientes.

## - DISPOSITIVO DE COMANDO E CONTROLO

Antes da ligação às redes de alimentação hídrica e eléctrica, é necessário saber qual a função dos dispositivos de comando e controlo da máquina. Efectuar esta operação conforme descrito no Manual de Instruções,

## - DISPOSITIVI DI COMANDO E CONTROLLO

Prima dell'allacciamento alla rete di alimentazione idrica ed eletrica è necessario conoscere la funzione dei dispositivi di comando e controllo della macchina. Effettuare questa operazione seguendo quanto descritto nel Manuale Istruzioni facendo riferimento alle indicazioni e illustrazioni relative.
(1) ON/OFF switch
(2) Pressure adjusting knob
(3) Pressure indicator
(4) Oil level indicator
(5) High pressure hose connection (OUTLET)
(6) Inlet hose connection with water filter (INLET)
(7)

Outer chemical port
(8) Chemical regulator (CHEM)
(9) Built in tank cap
(10) Automatic gun
(11)
"LANCE"
(12)

Rototek or Multireg 99
(13) High pressure hose
(14)

Safety lock
(1) Interrupteur Marche/Arrêt
(2) Bouton de régulation de la pression
(3) Indicateur de pression
(4) Indicateur de niveau d'huile
(5) Raccord de tuyau haute pression (OUTLET)
(6) Raccord d'alimentation eau et filtre (INLET)
(7) Prise du réservoir extérieur détergent
(8) Molette de dosage du détergent (CHEM)
(9) Bouchon réservoir incorporé
(10) Pistolet automatique
(11) Lance a raccordement rapide "LANCE"
(12) Rototek ou Multireg 99
(13) Tuyau haute pression
(14) Cran de sûreté
(1) EIN/AUS Schalter
(2) Druckregel-Griff
(3) Druckanzeiger
(4) Ölschauglas
(5) Hochdruck-Ausgang (OUTLET)
(6) Wasser-Anschluß mit Filter (INLET)
(7) Externe Chemiesaugdose
(8) Chemiedosierung (CHEM)
(9) Verschluß des eingebauten Chemietanks
(10) Spritzpistole
(11) Wechsel-Lanze "LANCE"
(12) Rototek oder Multireg 99
(13) Hochdruckschlauch
(14) Sicherneitssperre
EQUIPO $\overline{\text { ETANDARD }}$ =
(1) Interruptor
(2) Mando de regulación de la presión
(3) Manometro
(4) Mirilla nivel de aceite
(5) Salida presion (OUTLET)
(6) Entrada + Filtro agua (INLET)
(7) Entrada aspiración deposito externo
(9) Mando de regulación detergente (CHEM)
(10) Pistola deposito interno
(11) Lanza
(12) Rototek o Multireg 99
(13) Tubo de alta presion
(14) Seguro

| EQUIPAMENTO <br> STANDARD $\qquad$ | $\begin{aligned} & \text { 三EQUIPAGGIAMENTO } \overline{\text { STANDARD }} \bar{\equiv} \end{aligned}$ |
| :---: | :---: |
| (1) Interruptor lig/des (ON/OFF) | (1) Interruttore |
| (2) Manipulo de ajuste de pressão | (2) Comando di regolazione della pressione |
| (3) Indicador de pressão | (3) Manometro |
| (4) Indicador de nivel de óleo | (4) Spia livello olio |
| (5) Conector de saida de alta pressão (OUTLET) | (5) Uscita (OUTLET) |
| (6) Entrada de agua com filtro (INLET) | (6) Entrata + Filtro acqua |
| (7) Entrada de aspiração de detergente | (7) Ingresso aspirazione serbatoio esterno |
| (8) Regulador de detergente (CHEM) | (8) Regolazione detersivo (CHEM) |
| (9) Tampa do depósito interno | (9) Tappo del serbatoio interno |
| (10) Pistolla automática | (10) Pistola |
| (11) Lança | (11) Lancia |
| (12) Bico (ROTOTEK Ou MULTIREG 99) | (12) Rototek $\circ$ Multireg 99 |
| (13) Manguera de alta pressão | (13) Tubo alta pressione |
| (14) Travão | (14) Sicura | ENGLISH

TECHNICAL SPECIPICATIONS

| MODEL |  | $\begin{array}{\|c\|} \hline T \\ 8.90 \\ \text { SINGLE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { T } \\ 10.100 \\ \text { SINGE } \\ \text { SHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline T \\ 11.120 \\ \text { THREE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \mathbf{T X} \\ 10.130 \\ \text { SINGE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \mathbf{T X X} \\ 12.100 \\ \text { SIIGE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline T X \\ 12.140 \\ \text { THREE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \mathbf{T X} \\ 13.180 \\ \text { THREE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{gathered} \mathbf{T X} \\ 14.120 \\ \text { THREE } \\ \text { PHASE } \end{gathered}$ | $\begin{gathered} T X \\ 15.150 \\ \text { THREE } \\ \text { PHASE } \end{gathered}$ | $\begin{array}{c\|} \hline T X \\ 17.130 \\ \text { THREE } \\ \text { PHASE } \end{array}$ | $\begin{array}{\|c\|} \hline \mathbf{T X X} \\ \hline 951 \\ \text { SINGE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \mathbf{T X X} \\ 954 \\ \text { SINGE } \\ \text { SHASE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { TXX } \\ \hline 956 \\ \text { THHEE } \\ \hline \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \mathbf{T X X} \\ \hline 957 \\ \text { SINGE } \\ \text { PHASE } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \mathbf{T X X} \\ 961, \\ \text { THEE } \\ \text { THASE } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Flow rate | Vmin. | 8 | 10 | 11 | 9,5 | 12 | 12 | 13 | 14 | 15 | 17 | 11,5 | 13,6 | 13 | 15,9 | 15 |
|  | G.PM. | 2.1 | 2.6 | 2.9 | 2.5 | 3.2 | 3.2 | 3.4 | 3.7 | 4 | 4.5 | 3 | 3.6 | 3.4 | 4.2 | 4 |
| Equivalent washing impact with rotating nozzle jet |  | E.W. bar / MPa / P.S.I.: specific jet pressure in bar / MPa / P.S.I. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | E.W. bar | 160 | 170 | 210 | 230 | 170 | 245 | 310 | 210 | 260 | 230 | 170 | 160 | 250 | 145 | 260 |
|  | E.W. MPa | 16 | 17 | 21 | 23 | 17 | 24,5 | 31 | 21 | 26 | 23 | 17 | 16 | 25 | 14,5 | 26 |
|  | E.W. P. P.I. | 2320 | 2465 | 3045 | , 3336 | 2465 | 3553 | 4496 | 3045 | 3771 | 3336 | 2465 | 2320 | 3626 | 2103 | 3771 |
| Working pressure | bar | 90 | 100 | 120 | 130 | 100 | 140 | 180 | 120 | 150 | 130 | 103 | 90 | 145 | 76 | 150 |
|  | MPa | 9 | 10 | 12 | 13 | 10 | 14 | 18 | 12 | 15 | 13 | 10,3 | 9 | 14,5 | 7,6 | 15 |
|  | P.S.I. | 1305 | 1450 | 1740 | 1886 | 1450 | 2030 | 2610 | 1740 | 2175 | 1886 | 1494 | 1305 | 2103 | 1102 | 2175 |
| Overpressure peak limit | bar | 120 | 130 | 150 | 160 | 130 | 170 | 210 | 150 | 180 | 160 | 133 | 120 | 175 | 106 | 180 |
|  | MPa | 12 | 13 | 15 | 16 | 13 | 17 | 21 | 15 | 18 | 16 | 13,3 | 12 | 17,5 | 10,6 | 18 |
|  | P.S.I. | 1740 | 1886 | 2175 | 2320 | 1886 | 2465 | 3045 | 2175 | 2610 | 2320 | 1929 | 1740 | 2538 | 1537 | 2610 |
| Recoil thrust of jet |  | $<20 \mathrm{~N}$ | <27 N | < 32 N | $<29 \mathrm{~N}$ | < 32 N | 40 N | < 47 N | < 41 N | < 49 N | < 51 N | < 31 N | < 35 N | < 41 N | < 37 N | < 49 N |
| Absorbed moto power | k $\mathrm{N}_{\mathrm{N}}$ | 2,2 | 2,65 | 2,9 | 3,2 | 3,2 | 3,8 | 5 | 3,8 | 5 | 5 | 3,2 | 3,2 | 4,6 | 3,2 | 5 |
| Frequency | Hz | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 60 | 60 | 60 | 60 | 60 |
| Voltage Amps | V/A | 230-10,5 | 230-12 | 230-8,9 | 230-14,7 | 230-14,7 | 230-12,5 | 230-15,8 | 230-12,5 | 230-15,8 | 230-15,8 | 220-15,5 | 220-15,5 | 220-16,5 | 220-15,5 | 220-15,8 |
|  | V/A | 240-9,5 | 240-11,5 | 400-5,2 | 240-13,6 | 240-13,6 | 400-7,2 | 400-9,2 | 400-7,2 | 400-9,2 | 400-9,2 |  |  |  |  | 380-9,2 |
|  | V/A |  |  |  |  |  |  | 240-14,5 |  | 240-14,5 | 240-14,5 |  |  |  |  |  |
|  | V/A |  |  |  |  |  |  | 415-8,5 |  | 415-8,5 | 415-8,5 |  |  |  |  |  |
| Capacitor |  | $50 \mu \mathrm{~F}$ | $50 \mu \mathrm{~F}$ | - | $2 \times 40 \mu \mathrm{~F}$ | $2 \times 40 \mu \mathrm{~F}$ | - | - | - | - | - | $2 \times 40$ HF | $2 \times 40 \mu \mathrm{~F}$ | - | $2 \times 40$ HF | - |
| Motor protection |  | Thermal |  | - | Thermal |  |  |  |  |  |  |  |  |  |  |  |
| Isolating class insulation |  | F | F | B | F | F | F | F | F | F | F | B | B | F | B | F |
| $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Motor protection } \\ \text { grade } \end{array} \\ \hline \end{array}$ |  | IPX5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Noise level | Lp dB(A) | 80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Lw dB(A) | 93 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Max. water inlet temp |  | $60^{\circ} \mathrm{C}-140^{\circ} \mathrm{F}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Max. inlet pressure | bar | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | MPa | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | P.S.I. | 145 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Max. suction depth | m | 1 | 1 | 1 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 1 |
|  | ft | 3,3 | 3,3 | 3,3 | 9,8 | 9,8 | 9,8 | 3,3 | 9,8 | 3,3 | 3,3 | 3,3 | 3,3 | 9,8 | 3,3 | 3,3 |
| High pressure hose | $\begin{aligned} & 8 \mathrm{~m} \\ & 26 \mathrm{ft} \end{aligned}$ | Steel reinforced rubber Inrenal diameter 1/4" Working pressure max. 150 bar $15 \mathrm{MPa}-2175$ P.S.I. |  |  | Steel reinforced rubber <br> Inrenal diameter $5 / 16^{\prime \prime}$Working pressure max. 200 bar - $20 \mathrm{MPa}-2900$ P.S.I. |  |  |  |  |  |  |  |  |  |  |  |
| Weight | Kg | 31 |  |  | 40-43 |  |  |  |  |  |  |  |  |  |  |  |
|  | lbs | 68,3 |  |  | 88,1-94,7 |  |  |  |  |  |  |  |  |  |  |  |
| Dimensions | mm | $860 \times 400 \times 875$ (h) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | inches | $33,8 \times 15,7 \times 34,4$ (h) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

WE CONGRATULATE YOU on your choice that shows your level of technical knowledge and love of beautiful objects.
In fact, you have purchased a highly technological machine produced by the world's largest manufacturer of high pressure cleaner pumps.
This machine is so useful and versatile that you will use it for many years.
THIS BOOKLET IS AN INTEGRAL PART OF YOUR MACHINE AND SHOULD BE CAREFULLY READ BEFORE PROGEEDING WITH INSTALLATION, START-UP AND USE.
This booklet contains important safety information and instructions for use and maintenance of the high pressure cleaners series T and TX and should be kept in a safe place.

## PRODUCT USE



## DESIGNATED USE

The machine is exclusively designed for washing, by way of a pressurized water jet, objects, things or any surface suitable for cleaning by a pressurized water jet with the possibility of adding liquid detergent.
ATTENTION: this appliance was designed for use of detergents recommended by the manufacturer. The use of other chemical products may jeopardize the safety of the appliance itself. The liquid detergent additives must be chosen in consideration of the chemical compatibility with the components of the pump and of the surface to be cleaned.
IMPORTANT: use only detergents that are biodegradable, and in any case complying with the regulations applicable in the country where they are used.

THE DESTINATION OF USE OF THIS MACHINE MUST BE STRICTLY ADHERED TO. ANY OTHER USE MUST BE CONSIDERED AS INCORRECT.

THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR DAMAGES CAUSED BY INCORRECT USE OF THE MACHINE.

THE MACHINE MUST NOT BE TAMPERED WITH FOR ANY REASON. IN CASES OF TAMPERING THE MANUFACTURER DECLINES ANY RESPONSABILITY ON THE FUNCTIONING AND SAFETY OF THE MACHINE.

IT IS FORBIDDEN TO STORE OR USE THE UNIT IN ENVIRONMENTS WITH POTENTIALLY EXPLOSIVE ATMOSPHERE.

## PRELIMINARY OPERATIONS

## UNPACKING

Unpack and make sure that the machine is complete and undamaged.
If the machine appears damaged in any way, do not use the machine and consult our dealer.
For shipping reasons some parts may be included separately. In this case assemble parts as indicated in this booklet.

Keep all packaging materials (bags, boxes, tape) out of reach of children.

## IDENTIFICATION LABEL

Before using the machine, make sure that it is provided with the Identification Label. In case the Identification Label is missing, do not use the machine and consult your dealer immediately.

The Identification Label with the technical specifications is fixed to the motor.

Check that the mains voltage is the same as shown on the identification label.


## INSTALLATION


(1) Body of the unit
(2) Handle
(3) Kit of screws + washers + nuts
(4) Hose hanger
(5) Fan grid
(6) Cover fixing knob

(A)
(1) Remove the cap of the chemical tank
(2) Unscrew cover fixing knob
(3) Remove the cover

(B)

[^0]
(C) Replace the red plug (Fig. 1) with the black and yellow dipstick (Fig. 2) and check that the oil in the sigth glass is at half-way level (Fig. 3)


D Insert fan grid into its holes and push firmly until it is fully locked.

(E) (1) Replace the cover.
(2) Reinsert the chemical tank cap.
(3) Lock cover fixing knob.

## Connection of high pressure line:

1. Connect one end of the high pressure hose to the gun $(A)$ and the other to the outlet connection (B).
2. Assemble the lance by pushing the two halves together and then fix by turning the connector (C).

## Connection to water supply:

1. The maximum temperature of the inlet water must not exceed $60^{\circ} \mathrm{C}\left(140^{\circ} \mathrm{F}\right)$.
2. Connect the water supply to the INLET port by means of a reinforced hose (minimum 15 bar $1,5 \mathrm{MPa} / 200$ P.S.I.) with internal diameter of no less than $13 \mathrm{~mm}\left(1 / 2^{\prime \prime}\right)$.
3. Considering that the water flow decreases in accordance with the length of the hose, make sure that the minimum quantity of water reaching the machine is in accordance with the chart below:

| Model | I/min | G.P.M. <br> USA |
| :--- | :---: | :---: | :---: | :---: |
| T 8.90 | 11 | 2.9 |
| T 10.100 |  |  |
| T11.120 |  |  |
| TX 10.130 |  |  |
| TX 12.100 |  |  |
| TX 12.140 |  |  |
| TX 951 |  |  |

## IMPORTANT

Make sure that the machine is fed with clean water during use.
Running the machine without water, or with dirty, sandy water or containing corrosive chemicals, causes serious damage to the machine.

## CONNECTION TO ELECTRICAL SUPPLY

1. Make sure that the mains voltage is the same as shown on the Identification Label on the machine.
2. Make sure that the plug complies with your local regulations, and that it is provided with ground connection (earth).
3. The power outlet must be protected by a residual circuit breaker having a sensitivity of less that 30 mA .
4. Do not connect other appliances to the same outlet.
5. Insert the plug after making sure that the switch on the machine is in the OFF position.

The machines of the TX series are supplied without electric plug.
The electric plug will have to be fitted on to the power cord by qualified personnel, respecting the following instructions:

1. Use a plug that complies with the regulations of the Country in which it is used. In any case the plug must be grounded.
2. Make sure that the connection to the power cord is water tight.
3. The electrical rating of the plug must be suitable to the machine for which is is used, as shown on the identification label.

WARNING: In case of power failure during operation, turn the unit OFF for safety reasons.

| USE OF EXTENSION CORDS | EXTENSION CORD CHART |  |  |
| :---: | :---: | :---: | :---: |
| - In case you need to use an extension cord, check that the connection is water tight. Keep all connections off the ground to avoidpossible contacts with water. | Voltage | Length m | Wire gauge $\mathrm{mm}^{2}$ |
|  | 220 240 | Up to 20 m | 2,5 |
|  | 220 240 | From 20 to 50 m | 4 |
|  | 380\%415 | Up to 50 m | 2,5 |

## Starting the machine

1. Now you can turn on the water.
2. Switch on the unit.
3. Hold the gun in the open position for a few seconds to allow the air to escape from the hose.
4. At this point adjust the machine to your pressure requirement and you are ready to enjoy your work.
5. When you have finished to work switch off.
6. Hold the gun in the open position for a few seconds to allow the pressure to escape from the hose.


## CHECKING THE WATER FILTER



It is important to check water filter before using the machine.
Remember that a well-cleaned filter means good performance and long life for your machine.
(1) Keep the Machine out of the reach of children.
(2) High pressure water jets are potentially dangerous if used incorrectly. In particular, the jet must not be directed against persons or animals, electrical equipment or the machine itself.
Do not use the machine when persons and/or animals are within the reach of the jet.

(3) The user must operate the machine in safe conditions and situations avoiding any situation of potential danger to himself: or other persons. In particular, the user will have to:

- Avoid operating in unstable balance conditions.
- Remember that the high pressure jet generates a recoil when the gun is opened.
The force of this recoil changes according to the model and is given in the technical data chart.

- Use adequate protection clothing.
- Wear protective goggles and anti-slip rubber shoes.
- Avoid contaminating the environment with polluting, toxic or harmful substances.

(4) This machine is built in compliance with the requirements of the current safety regulations. The use of electrical appliances involves the respect of some basic rules:
- Do not touch electrical parts or components.
- All operations of inspection, maintenance or repair must be made by qualified personnel only. ALWAYS disconnect the plug from mains before proceeding to any of the above mentioned operations.
(5) Do not pull power cord to unplug.

Do not pull high pressure hose to move unit.

6) Before using the machine, inspect power cord to make sure it is not damaged. If it is damaged have it replaced by qualified personnel. Replace power cable only with a cable of the same type as the original, this can be identified by the marking on the outer sleeve. Do not damage or effect risky repair on power cord.

(7) Before using the machine, inspect high pressure hose to make sure it is not damaged. In case of replacement make sure the new hose has at least the same specifications as the original one. Technical specifications (maximum working pressure, date of manufacturing, name of manufacturer) must be marked on the outer sleeve of the hose.
(8) While the machine is running, do not cover it and do not place it in an enclosed space with insufficient ventilation.

(9) Do not leave the machine running for more than 5 minutes with the gun closed. Should it run for a longer period, the temperature of the recirculating water will increase rapidly and could risk damaging the pump seals.

(10) When the machine is not in use, lock gun trigger in safe position to prevent it from being opened by accident.

(11) For the sake of safety use only original spare parts and accessories.

THE MANUFACTURER DECLINES ANY RESPONSIBILITY FOR DAMAGE CAUSED BY NON-COMPLIANCE WITH THE DESTINATION OF USE, WITH THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS INSTRUCTION MANUAL.

## HOW TO USE THE CHEMICAL INJECTION SYSTEM

The models T and TX can suck detergents and other liquid additives from the built-in tank or from a separate tank.

## Suction from the built-in tank

Fill the tank, as shown in Fig. 1. Select the low pressure by operating the Rototek or Multireg 99 (Fig. 2). Make sure that the outer chemical ports is plugged (Fig. 3).
Adjust the chemical quantity by using the suitable cursor +/- (Fig. 3).
In order to empty the tank, open the plug located at the bottom of the machine (Fig. 4).
Capacity of the built-in tank: 7,5 litres.


## Suction from a separate tank

Remove the plug from the chemical port (Fig. 1). Fit the connector of kit "A" into the chemical port (CHEM) and plunge the filter into the separate tank "B" (Fig. 2).
Select the low pressure by operating the Rototek or Multireg 99 (Fig. 3). Adjust the chemical quantity by using the cursor $+/-$ (Fig. 4). When you have finished working, remove kit "A" from the chemical port and reinsert the plug (Fig. 5).


## ミPRECAUTIONS IN THE CASE OF STORING AND/OR FREEZING

If the unit is to be stored in a place where there is risk of freezing, or it is to remain unused for more than three months, we recommend placing some anti-freeze solution into the pump, (a normal anti-freeze as used in your vehicle is sufficient). In any case, to avoid any risk, we suggest you to place the unit in a warm room for a few minutes before using.

## HOW TO USE THE "ROTOTEK" (OR "MULTIREG")

A) Selection of high or low pressure by push-pull action.

The selection of the pressure must be carried out with the gun in closed position (1).
B) Adjustment from straight (4) to fan (5) of water jet, by simple turning of the ROTOTEK.


## CHECKING AND CHANGING THE OIL

- The level of the oil must be checked periodically.
- The first important oil change must be carried out after the first 50 hours of work and successively every 300 hours.
- In any case we suggest an oil change at least once a year.
- Oil type: SAE 15W40 Mineral
- Oil capacity: for series "T" = 0,33 I.
- Oil capacity: for series "TX" $=0,40$ I.


## SERIES "T"



SERIES "TX"


## DISPOSAL OF THE MACHINE

- Should you decide not to use the machine anymore, it is recommended to make it unusable by removing the power supply cord.
- In all cases it must be kept out of the reach of children.
- Being as the machine is a special waste, disassemble it and gather the homogeneous parts for disposal according to the applicable laws.
- Do not use the scrapped parts as spare parts.

| FOR QUALIFIED PERSONNEL ONLY |  |  |
| :---: | :---: | :---: |
| FAULT | CAUSE | REMEDY |
| Pump running normally but pressure does not achieve rated values | Pump sucking air <br> Valves worn or dirty Unloader valve packing worn Nozzle incorrect or worn Worn piston packing Dirty filter | Check that hoses and fitting are air tight <br> Check, clean or replace <br> Check and replace <br> Check and replace <br> Check and replace <br> Check and clean |
| Fluctuating pressure | Valves worn dirty or stuck <br> Pump sucking air <br> Worn piston packing Dirty filter | Check, clean or replace Check that hoses and fittings are air tight Check and replace Check and clean |
| Pressure drops after period of normal use | Nozzle worn <br> Valves worn, dirty or stuck Unloader valve packing worn Worn piston packing Dirty filter | Check and replace Check, clean or replace Check, clean or replace Check and replace Check and clean |
| Pump noisy | Pump sucking air <br> Valves dirty or worn <br> Worn bearings <br> Water top hot Dirty filter | Check that hoses and fittings are air tight <br> Check, clean or replace Check and replace if necessary Reduce temperature Check and clean |
| Presence of water in oil | High humidity in air Piston packing and oil seal worn | Check and change oil twice as often Check and replace |
| Water dripping from under pump | Piston packing worn The O-rings of piston guide or retained worn | Check and replace Check and replace |
| Oil dripping | Oil seal worn | Check and replace |
| The motor does not start when switched on | The plug not well connected or lack of power supply | Check plug, cable and switch |
| When switching on the unit, the motor hums but does not run | The mains voltage is insufficient, lower than the minimum required The pump is stuck or frozen Incorrect extension cable | Check that the mains power supply is adequate Follow the precautions at page 14. For correct choice see table (page 10) |
| The motor stops | Tripped thermal overload due to overheating | Check that the mains voltage corresponds to the specifications: <br> T - TX: wait a few minutes before turning on the unit again |

## DECLARATION OF CONFORMITY

The manufacturer INTERPUMP GROUP S.p.A. - Via E. Fermi, 25-42049 S. ILARIO D'ENZA (RE) - Italy
DECLARES that the machine identified and described below:
Type of machine:
High Pressure Cleaner
Factory mark:
INTERPUMP GROUP
Model:
T-TX
Flow rate: $\quad 660 \mathrm{l} / \mathrm{h} \max -954 \mathrm{l} / \mathrm{h} \max$
is in conformity with the requirements of the following European Commission directives:

- Machine Directive 98/37 CE
- Low voltage directive 2006/95/CE
- Electromagnetic Compatibilty directive 89/336 CE
- Product Liability directive 85/374 CE
- European Union Directive 2002/95 CE (ROHS)
- European Union Directive 2002/96/CE (WEE - Waste from Electrical and Electronic Equipment)
- General Product Safety Directive 2001/95 CE
- Noise Emissions Directive 2000/14 CE modified from 2005/88/CE

Measured Sound Power: $L w=93 \mathrm{~dB}(A)$ - Guaranteed Sound Power: $L w=94 \mathrm{~dB}(A)$
Evaluation of conformity according to annex $V$
UNI EN ISO 12100.1:2005 - UNI EN ISO 12100.2:2005 - EN 414:2002 - UNI EN 1050:1998 - EN 60335.1:2004-04 - EN 60335.1/A1/A11:2006-01 - EN 60335.1/A12:2006 - EN 60335.1/A2:2007 - EN 60335.2.79:2004 - EN 60335.2.79/A1:2006 - UNI EN ISO 5349.1:2004 - UNI ISO 17050.1/2:2005 - EN 60204.1:2006 - EN 60704.1:1998 - EN ISO 3744:1997 - EN 60529:1997-06 - EN 60529/A1:2000-06 - EN55014-1 EN55014-2 EN61000-3-2 EN61000-3-3 - EN50366:2003


03-2009

## dÉCLARATION DE CONFORMITÉ

Le fabricant INTERPUMP GROUP S.p.A. - Via E. Fermi, 25-42049 S. ILARIO D'ENZA (RE) - Italie
DÉCLARE que l'appareil identifié et décrit ci-après:
Type d'appareil: nettoyeur haute pression
Marque d'origine: INTERPUMP GROUP
Modèle:
T-TX
Débit nominal: $\quad 660 \mathrm{l} / \mathrm{h} \max -954 \mathrm{l} / \mathrm{h} \max$
est conforme aux directives et normes CE indiquées ci-dessous:

- Directive Machines 98/37 CE
- Directive basse tension 2006/95/EC
- Directive sur la compatibilité électromagnétique 89/336 CE
- Directive sur la responsabilité du producteur 85/374 CE
- Directive sur la restriction d'utilisation de certaines substances dangéreuses 2002/95 CE
- Directive sur les déchets d'équipements électriques et électroniques 2002/96/CE
- Directive sur la sécurité générale des produits 2001/95 CE
- Directive sur les émissions sonores dans l'environnement 2000/14 CE modifiée par la 2005/88/CE

Puissance sonore: $L w=93 \mathrm{~dB}(A)$ - Puissance sonore garantie: $L W=94 \mathrm{~dB}(A)$
Evaluation de la conformité indiquée dans l'annexe $V$
UNI EN ISO 12100.1:2005 - UNI EN ISO 12100.2:2005 - EN 414:2002 - UNI EN 1050:1998 - EN 60335.1:2004-04 - EN 60335.1/A1/A11:2006-01 - EN 60335.1/A12:2006 - EN 60335.1/A2:2007 - EN 60335.2.79:2004 - EN 60335.2.79/A1:2006 - UNI EN ISO 5349.1:2004 - UNI ISO 17050.1/2:2005 - EN 60204.1:2006 - EN 60704.1:1998 - EN ISO 3744:1997 - EN 60529:1997-06 - EN 60529/A1:2000-06 - EN55014-1 EN55014-2 EN61000-3-2 EN61000-3-3 - EN50366:2003



[^0]:    (1) Insert the handle in its guides
    (2) Fix the handle and hose hanger by using screws, nuts and washers supplied
    (3) Fix the bottom of the handle by using screws, nuts and washers supplied

