

DRUM FILTER 160

“EC” DECLARATION OF CONFORMITY

The undersigned manufacturer:

FAIVRE SARL - 7 rue de l'Industrie - F 25110 BAUME LES DAMES - FRANCE

hereby declares that the new work equipment mentioned below:

- Drum filters model 12-160 with tank

conform to the prescribed rules layed out in appendix I
of the modified European directive 89/392.

Baume les Dames,
23/12/2002

FAIVRE SARL
Joint manager,

Jean-Louis FAIVRE

WARRANTY CERTIFICAT

Faivre sarl warrants the drum filter :

Type :

Serial nbr :

Customer :

to be free from defects in materials within
1 year from the date of purchase.

Baume les Dames,
the :
FAIVRE SARL

Jean-Louis FAIVRE

Our warranty solely concerns the conformity of parts to the order specifications, as well as the proper use of materials selected. It does not apply to the industrial or economic results of the equipment delivered, unless expressly agreed by the two parties. Our liability is exclusively limited to replacing and/or repairing, as decided by us, parts manufactured by us that are deemed defective. Products, sub-items or accessories not made by us shall, without exception, be subject to the warranty offered by their manufacturers. The warranty cannot be cited if the deterioration is caused by:

- improper use,
- improper maintenance,
- use under difficult conditions not stipulated for its normal use,
- use that does not conform to basic safety rules or to the Labour Code,
- conditions that we have not approved in writing.

It is the buyer's responsibility to prove that the defect is our fault.

Any action to enforce the warranty must be preceded by notice sent by the buyer.

Any intervention whatsoever by a third party, without our authorisation, shall cause the warranty to expire. Under no circumstances shall our warranty cover the consequences of the defect noted, such as: damages to people, damages to goods, loss of products, loss of production, or any other direct or indirect consequences. Our warranty is limited to replacing the defective part, in which case a new warranty period shall not take effect.

Unless otherwise stipulated, this warranty shall remain in effect for one year.

Restoration or repair work shall never be subject to the warranty.

The resale of our supplies to a third party without our authorisation shall void the rights to our warranty.

How to read these instructions?

the following signs will guide you throughout this manual



security measures



Advice and recommendations



Operating descriptions

Please keep this notice.

Informations bellow are important :

Serial number product :

Built year :

Motor Brand :

Serial number gearedmotor :

Voltage of geared motor :

Speed of geared motor : 23 rpm

Type of belt :

Water pump brand :

Model :

Voltage : V

Power : KW

Controlled by:

date :

Signature :



I) IMPORTANT WARNING

Please keep this manual close to your machine. Should this machine be sold or given, please ensure the manual follows. The new owner will then be informed of the machine's functioning and warnings.

These warnings have been written for your own security and other's.

On reception:

On reception, unpack immediately and generally check the machine. Should you have doubts please write your comments on delivery notice.

Use

This machine has been built for the use of adults only, make sure children do not tamper with it. Before cleaning procedures or maintenance please make sure the machine is unplugged; (all commands must be turned off: "Arrêt")

Please read the following instructions very carefully before setting and starting your machine. We shall not be responsible for damages or accidents due to its misuse

Electrical connection:

Check that :

- a circuit breaker is installed in first position**
- you have sufficient power**
- wires are in good condition**
- the diameter of wires are in accordance with installation regulations**

Our responsibility shall not be engaged shall these proceedings not be followed.

The filter holds protection hoods, should you need to remove one of them during repair, please remember to replace it afterwards.

Waranty

From the day of installation and for one year only, the constructor will change any faulty piece except in circumstances specified in chapter "Exceptions".

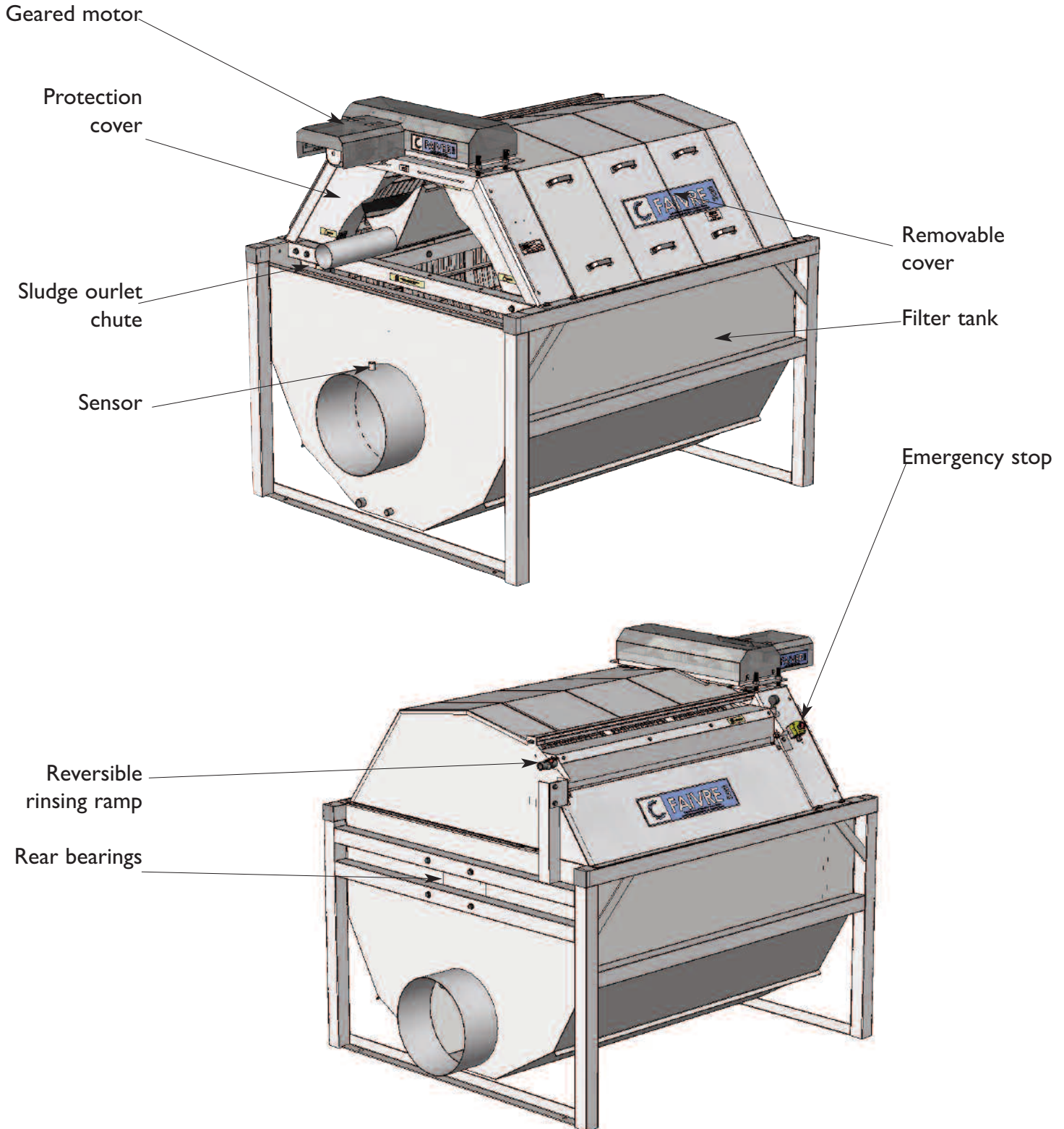
Special conditions :

-To apply this waranty, you must be able to present this machine's "Waranty certificate" to the representative who sold it to you, this salesperson will decide to or not to pay for any labour as well as transportation depending on his own conditions of sales.

Exceptions:

- Please note that this warranty does not cover damages done by external reasons, such as unusual electricity voltage , shocks or if installation rules described in this manual have not been respected.
- Also, if user has for some reason or other has modified the machine, erased its number or distinctive marks.
- If it has been repaired by someone having not been agreed upon by the constructor or salesperson.
- If the machine has been used for other puposes than the ones it has been built for.

II) FILTER DESCRIPTION



FILTRE SERIE I60 WITH TANK

III) INSTALLATION

3.1 Installation of a filter with tank

The filter with tank is meant to be installed on pipework, it can be placed directly on cemented ground, perfectly flat and horizontal.

3.2 Installation of a filter without tank

This filter has been made to be installed in a structure specifically conceived for it. Make sure it is totally waterproof (on incoming water side) and on the walls of the canal.

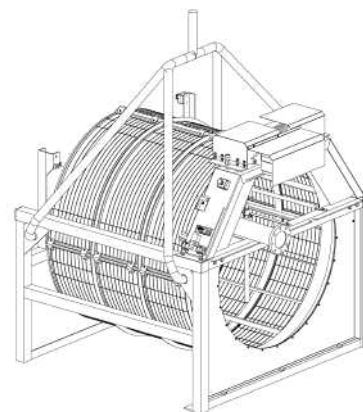
3.3 Unloading the filter

Please unwrapp carefully. The drum is wrapped in cling film, take great care in cutting it not to pierce the screens around it.

Warning : Only cut cling film at the last minute, on watering the filter. The drum must stay protected throughout installation.

3.4 Handling

To manipulate filters "Serie 160" please use a crane with 4 cables disposed as shone on the following picture. Do not hesitate to to unscrew protection plates and rinsing ramp to move more easily.



3.5 Fixing devices

The filter is meant to be fixed with 4 plugs \varnothing 20 mm. At each frame corner is welded a plate of metal with a piercing \varnothing 22mm. Use these 4 settings to secure filter firmly into the ground.

3.6 Electrical wiring

If your filter has been ordered without pump or sensor, it is then delivered without its electrical box. The wiring must then be done according to the local legislation. Please install a thermal circuit breaker and set it according to description on the motor plate.

3.7 Rotating direction of the drum and pump

Check on turning on the machine its rotating direction which is shown by an arrow on the pump. The rotating direction is **clockwise when facing water entry**, make sure it turns the right way as the opposite would damage it.

3.8 Electrical casket

If your filter has been ordered with a pump or a sensor, an electrical casket has been delivered with the machine.



Please go to chapter 4, sections 42.1 and 42.2 for correct wiring of the casket.

WARNING: DO NOT FORGET TO CONNECT EARTH WIRES

3.9 Unsealing pump

3.91 Connecting the plumbing

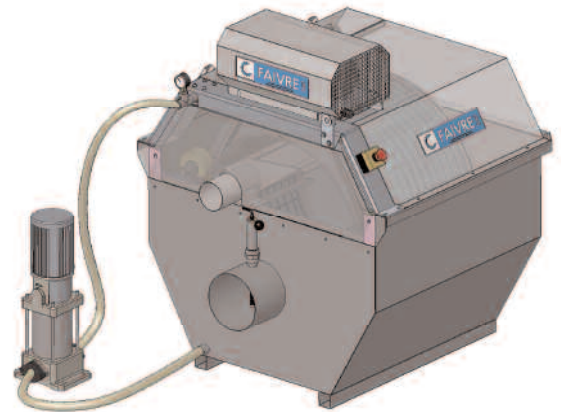


If your filter hasn't been delivered with the unsealing pump, you will need to connect a pressure pump on the rinsing ramp.

Generally speaking you'll connect a submersible pump to a filter on a base and a vertical pump to a filter with tank.

Advice : place a vertical pump as low as possible to enable priming.

Plug pump on the rinsing ramp, the pressure must be adjusted according to the size of the mesh set on the filter. The following diagram will show you the various pressures needed depending on the mesh of the filter.



The connection for the rinsing pump is a thread of 3/4. After plumbing installation and before starting off the machine, try pump, rinsing ramp not connected, in order to clean any dust from the pipes.

Microns	Pressure (bars)
100	3
80	3,5
60	4
40	5
30	6
20	>9

3.92 Priming of the pump (refer to pump manual)

If your filter is delivered with a submersible pump 4", this item is set with a self priming device, and you will only need to check that the pump is completely covered with water before starting the machine.

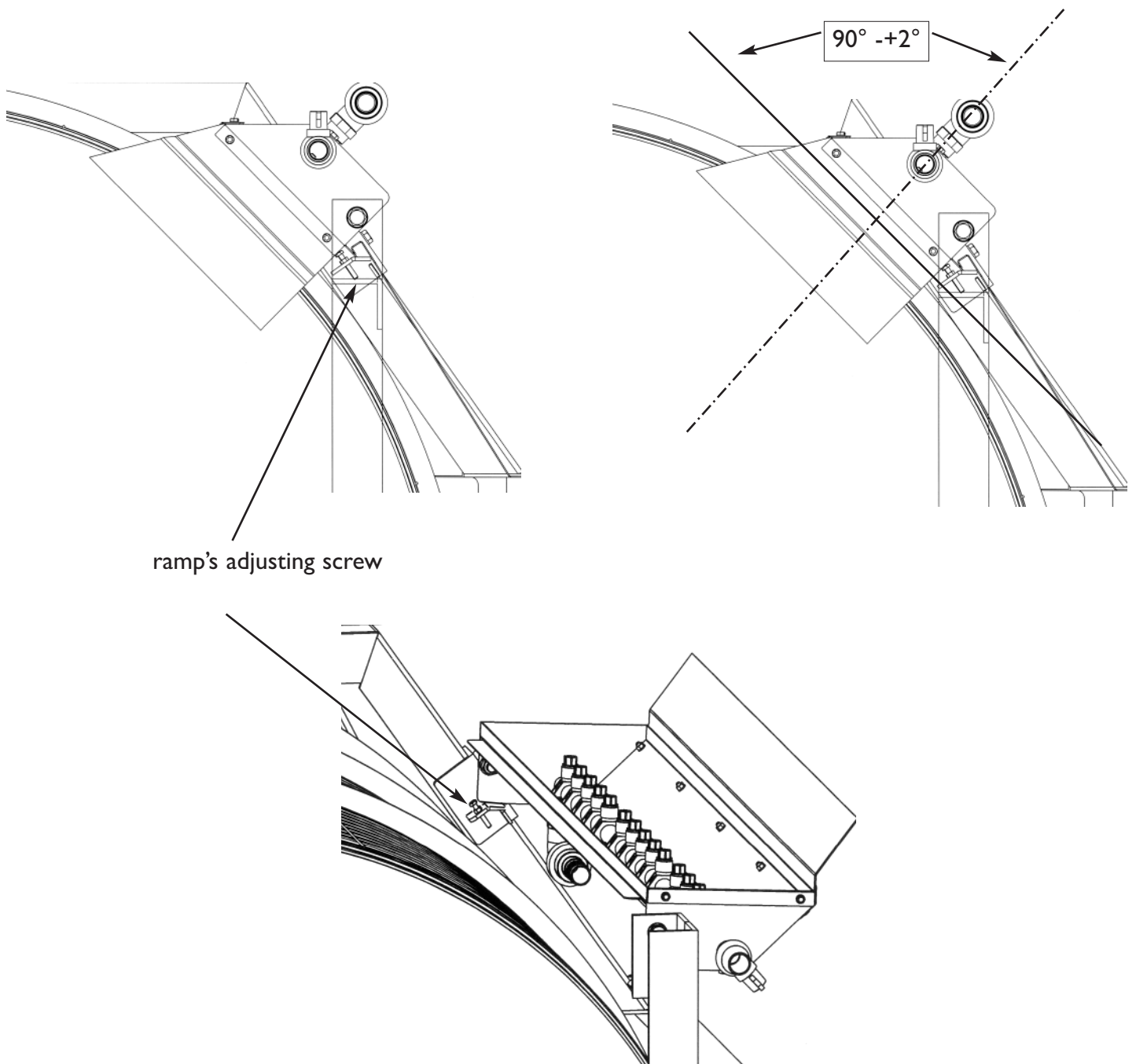
IV) ELECTRICAL BOX FONCTIONNING

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4.4 Rinsing system

The 160 series with reversible ramp have an adjustment as shown on this picture. Take care to adjust nozzles correctly so that jet hits the central sludge outlet.

The nozzles are standard, they have an opening of 1,4 mm. In certain circumstances, it is necessary to have a higher or lower flow for rinsing. In order to get it you need to use nozzels wich have a different opening. Please contact us for more information.



V) MAINTENANCE & REGULATION

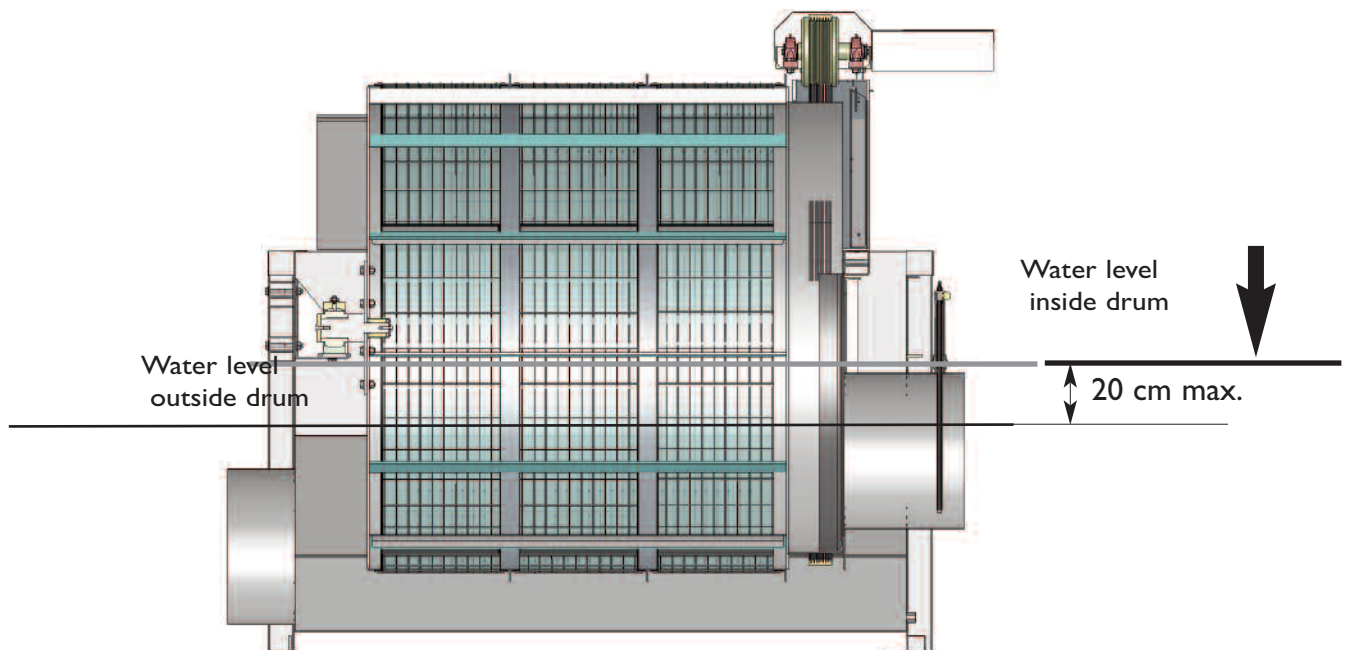
5.1 Check

Use copies of the check list operations at the end of the manual, in order to prevent failure.

5.2 Water levels

Water level inside the drum may vary if the automatic control works.

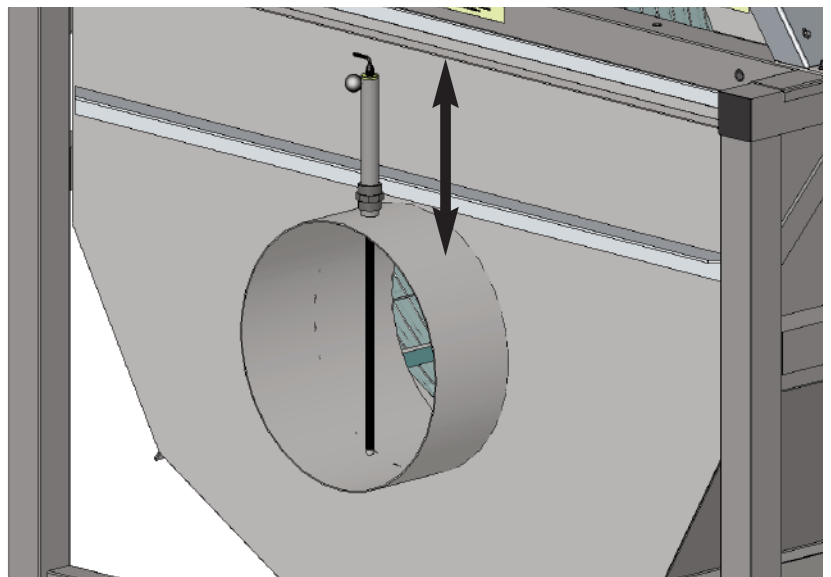
The level is lower after a rinsing session and goes back up again to reach the sonar level. To get a constant level of water in the drum, you need to set the switch onto manual mode: "MANU"



5.3 Tuning of the sensor in height

If your filter is equipped with the option "automatic control" of the sensor, you may choose to start a rinsing cycle by making the sonar slide in its shaft.

This sensor must be cleaned regularly (each month), especially when in salted water.



5.2 Rinsing system

Nozzles may become blocked for 2 reasons :



1- Solid particles (sand) may be present in the rinsing water. In this case, the cartridge filter must be changed for a smaller mesh. However, it is possible to install a filter cartridge (sizes between 0,15 and 1,5 mm) in the rinsing circuit, but this one will need to be thoroughly cleaned regularly, or it will cease functioning.

2- Algae or moss may grow in the pipes.

In this case, a valve at the end of the rinse water ramp should be opened to drain under pressure

5.3 How to remove nozzles:

Stop filter motor, turn off rinsing water.

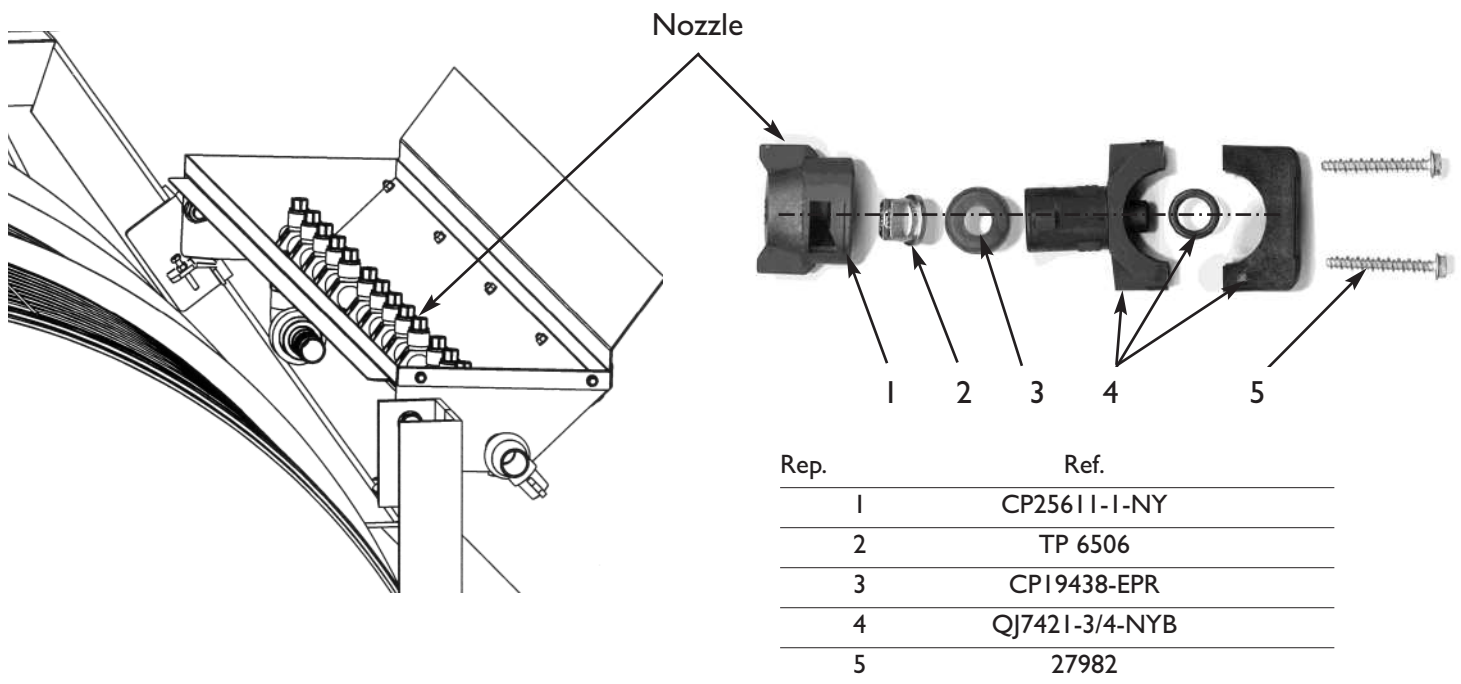
Series 120 and 160, you just need to turn the reversible ramp .Remove nozzle by turning anti-clockwise 1/4 turn.

Do not loose rubber seal . Clean nozzle with air or a plastic (or wood)point.

Do not use metal tool to clean nozzle.



Nozzel must be changed every year!



5.4 Filter plates.

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When effluent for filtration is very dirty or oily, filter plates gradually clog up and the rinsing system comes into operation more and more often.

In this case the plates should be cleaned using a high pressure cleaner (120 bar).

The high pressure hose nozzle should be at least 30 cm from mesh plate (always use the flat nozzle).

In the long run organic matter in the water, may block the filtering mesh. The filter elements must then be cleaned using a chemical product. Consult us for details.

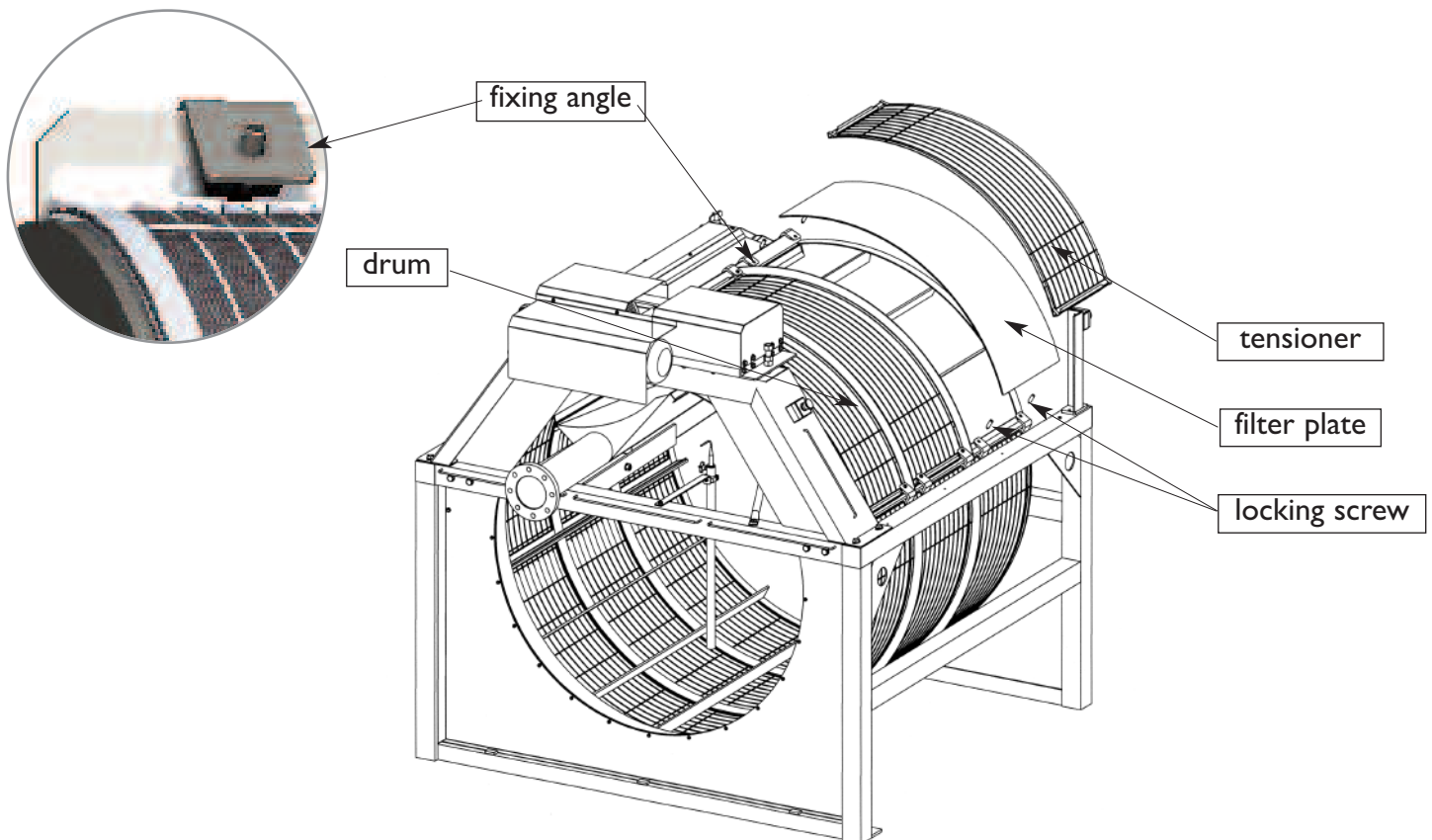
CAUTION the filtering mesh may be perforated by outside elements (ie: welding or milling sparks). Protect the plates if necessary, if your filter does not have a casing.

5.4.1 Plate removal.

- 1) Remove filter cover
- 2) Place drum in position so that plate and fixing screws are accessible.
- 3) Completely unscrew the two locking screws from one side of the plate, then the other side.

Note: Turn the drum by hand to make this easier

- 4) Take off tensioner by removing fixing angles, first one side then the other from below
- 5) The filter plate may be solidly stuck to the drum walls. If so, slide a screwdriver under a corner and lever up the plate, then pull gently using both hands at each side of the plate to lift it up completely.



5.42 Fitting a new plate.

- 1) Handle new plates with care.
- 2) Remove worn seal stuck around drum, then carefully clean off all traces of old glue or old seal with acetone or another solvent.

CAUTION : Solvents are highly inflammable. Avoid all heat sources and do not smoke whilst using them.

- 3) After cleaning and drying the surfaces, put the new seal in position carefully, without leaving any gaps at the joints.
- 4) Put the new plate gently onto the new seal (taking care to centre it properly).
- 5) Put the tensioner onto the plate, carefully passing the ends under the fixing angles.
- 6) Insert locking screws into thread of fixing angle, on one side only, and screw half-way in before repeating the operation on the other side.
- 7) Centre the plate and tensioner on drum (tensioner must be correctly juxtaposed on plate). Then begin to tighten the two screws alternately, first one side then the other. Use a key and hand-tighten only, without using any additional force.

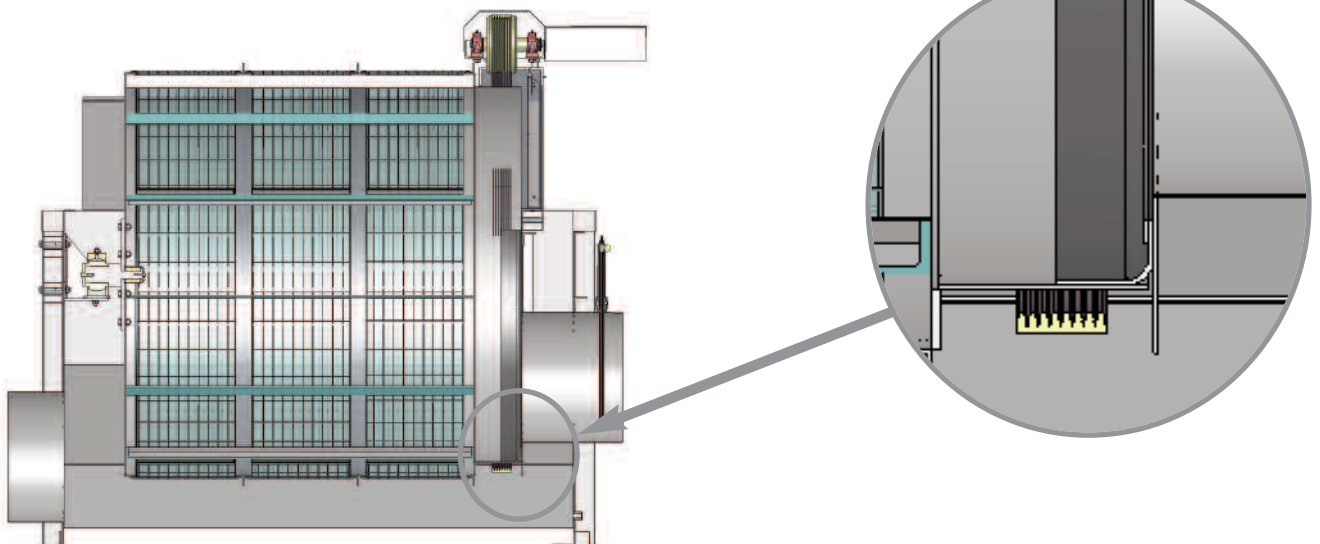
5.5 Checking/Fitting a new rubber seal.

Rubber seal must be checked every year. Drawing "A" shows the good position for the rubber seal. Check by hand if rubber is in good position. If rubber is under the drum pulley in a wrong position, you need to change the rubber.

rubber seal



A



6) LUBRICATION AND ADJUSTMENTS

6.1) Adjustment location on FILTER SERIE 160

The belt is considered tensioned when the drum is parallel with the filter frame or tank.

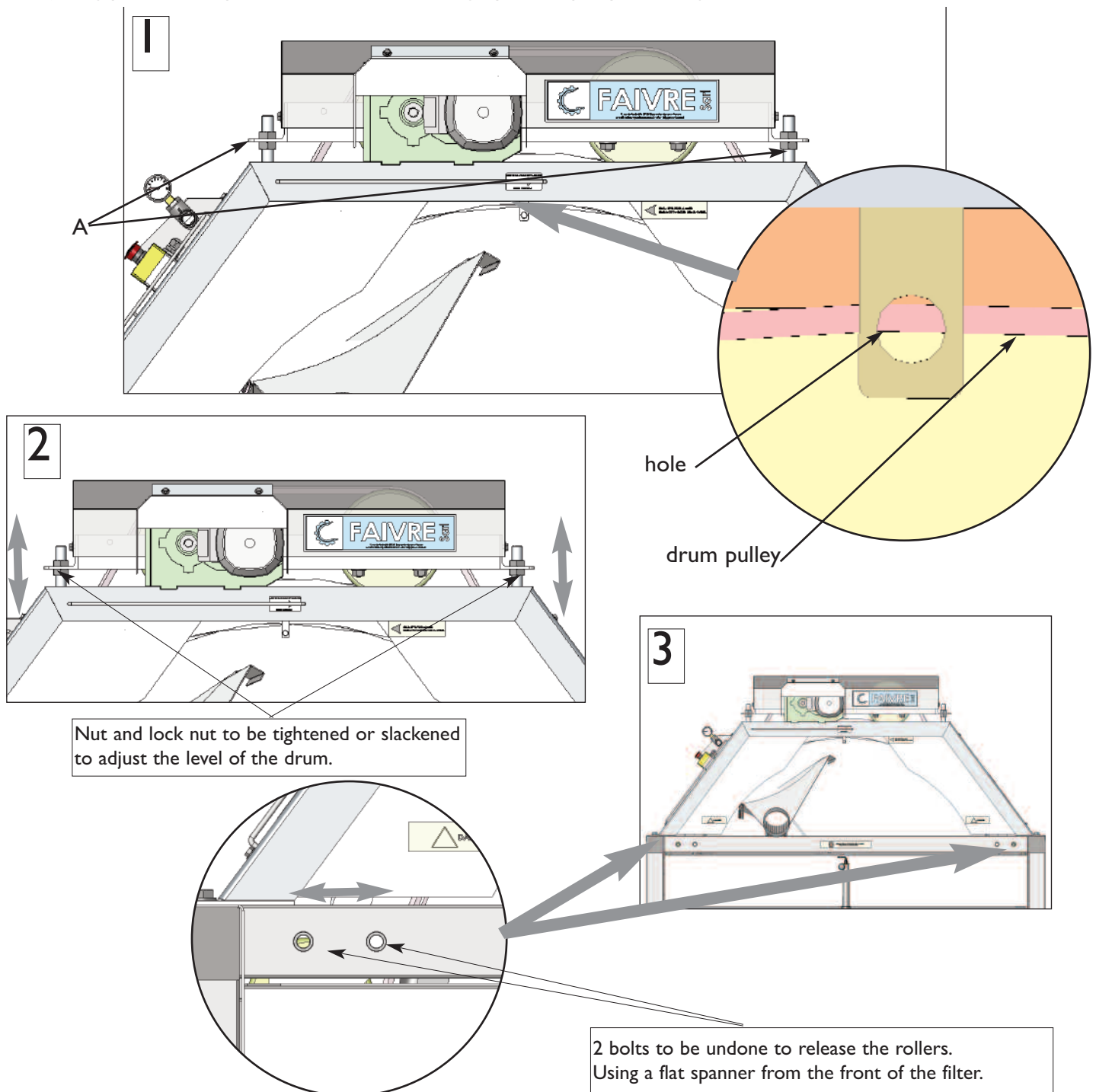
Before adjusting the level of the drum, slacken the roller bolts (drawing 3)

To be level, the hole on the pointer should be opposite the drum pulley. If the hole is not at the same level as the pulley, the bolts must be adjusted (drawing 2)

The hole is higher than the pulley: Slacken the nut and lock nut to lift the motor support until the mark is opposite the pulley (drawing 1)

The hole is lower than the pulley: Tighten the nut and lock nut to lower the motor support until the mark is opposite the pulley (drawing 1)

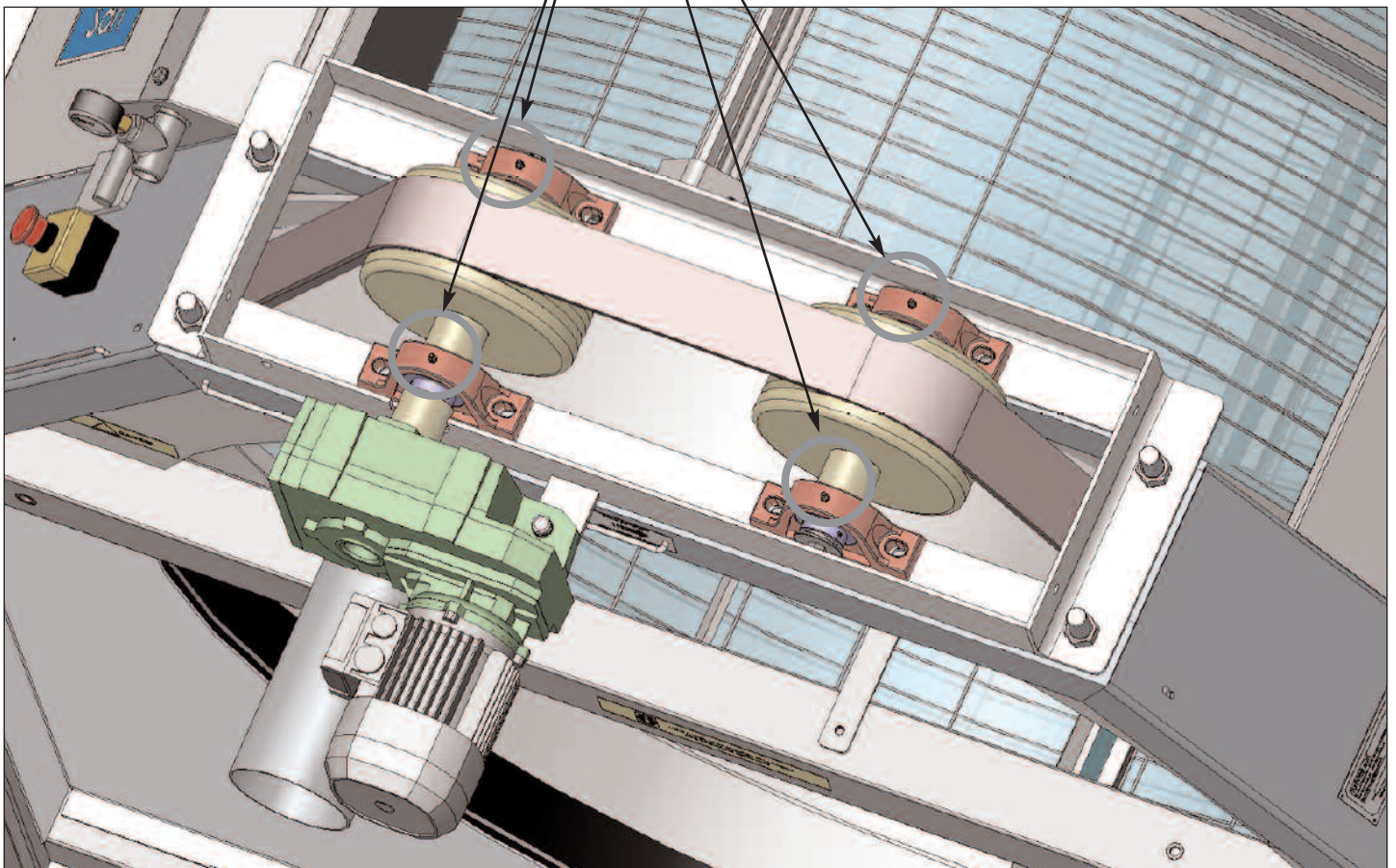
After adjusting, you should reposition the rollers to bear lightly on the pulley and re-tighten the bolts.



6.2) Grease point location filter 160

You must grease the bearings every 6 months

Grease bearings



Grease the two drive pulley bearings

6.3) Drain and oil level of the filter's geared motor

See owner manual

7) HELP

7.1) Possible problems and their solution

Drum doesn't turn or has stoped	<ul style="list-style-type: none"> - short-circuit's cut off -belt is broken -something's stuck in the drum 	<ul style="list-style-type: none"> - turn relay on - replace belt - take intruder out
Pump doesn't turn or has stoped	<ul style="list-style-type: none"> -short-circuit's cut off 	<ul style="list-style-type: none"> - turn relay on
Filtering isn't of good quality, particles stuck to filter	<ul style="list-style-type: none"> - screens are pierced - fabric's seals are gone - drum's waterproof seal is damaged 	<ul style="list-style-type: none"> - replace or repair screens -replace seals - check and replace seal, check drum level
Brown lines appear on drum	<ul style="list-style-type: none"> - nozzles are blocked 	<ul style="list-style-type: none"> - clean nozzles
Filter doesn't absorb water as much	<ul style="list-style-type: none"> -screens are partially blocked 	<ul style="list-style-type: none"> - clean nozzles - clean screens with a high pessure cleaner -clean unsealing pump and check its pressure - replace pump by a more powerfull one

**Whilst on mode
“Auto”,
the filter and pump
fonction constantly**

- Sonar is dirty

- Rinse and clean sonar
thoroughly

Drum skids

- Level adjustment's too
high

- Unscrew adjusting nut and
check level

- Effluent is too geasy

- Clean belt and call us

9) ANNEXES