Installation manual

ED Venturi
Efficient Dosing System

![Electrolux Professional logo]

Original instructions

Contents

The manufacturer reserves the right to make changes to design and component specifications.

1 General safety information

These installation, operation and servicing instructions shall only be performed by qualified personnel.

The Efficient Dosing System (EDS) must be installed in accordance with all applicable electrical and plumbing standards. All washer extractor and dispenser power must be isolated during installation and/or any time the dispenser is maintained or serviced.

- Always verify all voltage sources with a meter.
- Do not locate the pump-stand under plumbing fittings that could leak.
- Ensure that the installer has enough room to carry and lift the units when installing the EDS.
- Do not pick up unit by supply cord.
- Wear PPE (Personal Protective Equipment) when dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling, or emptying equipment.
- Always observe safety and handling instructions of the chemical manufacturers.
- You must follow all precautions as advised on the product safety data sheet.
- Always direct discharge away from you or other persons or into approved containers.
- Always dispense cleaners and chemicals in accordance with manufacturer's instructions.
- Always exercise caution when maintaining your equipment.
- Always re-assemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
- Keep equipment clean to maintain proper operation.
- **NOTE! This appliance is not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.**
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- **NOTE! Appliances connected to the water mains by detachable hose should use hoses provided with the appliance and should not reuse previous.**
- **NOTE! If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person, in order to avoid a hazard.**
- **NOTE! A locally approved back-flow prevention device must be installed with the appliance for safe and legal operation. An approved back-flow prevention is provided: 432930084 DOUBLE CHECK VALVE.**
- **NOTE! The Venturi/Pump-stand unit operates on 115VAC / 60 Hz, 220VAC / 60Hz, or 230VAC / 50 Hz. It also supplies low voltage power to the EDS controller and must only be supplied at Safety Extra Low Voltage (SELV).**
- **NOTE! This appliance must only be supplied at safety extra low voltage corresponding to the markings on the appliance.**
- **NOTE! It is a legal requirement, if the unit is supplied from the water mains, that a backflow device is installed offering protection equal or higher than the chemical class being used. This is to prevent back siphoning of non-potable substances into the water mains.**

2 Symbols

|	
	Warning/Caution An appropriate safety instruction should be followed or caution to a potential hazard exists.
	Dangerous voltage To indicate a hazardous arising from dangerous voltages.
	Protective earth (ground) To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.
	Refer to product manual Read the instructions before using the machine.
	Protective Personal Equipment The use of appropriate eyewear shall be used.
	Protective Personal Equipment The use of appropriate safety gloves shall be used.
	Protective Personal Equipment The use of appropriate protective clothing shall be used.

3 Introduction

The Efficient Dosing System (EDS) is capable of connecting and synchronizing directly to the washer extractor with Compass Control, Compass Pro or Clarus Control via a data cable. In Compass Control and Compass Pro any of the RS232 connections in the control system can be used. In Clarus Control the X10 connection on CPU card A1 can be used.

The EDS controller automatically adjusts the chemical dosage rate up or down based on the weight instruction from the washer extractor. This system will optimize the wash process, reduce chemical- and energy costs and deliver a total cost solution to the customer.

Up to 50 dosing formulas may be stored with the EDS controller.

The EDS controller receives a signal from the washer extractor at predetermined times in the wash program.

Once a signal is received the EDS injects specific product(s) at that time in proportion to the weight of the linen as determined via the automatic saving system.

fig.W01144A
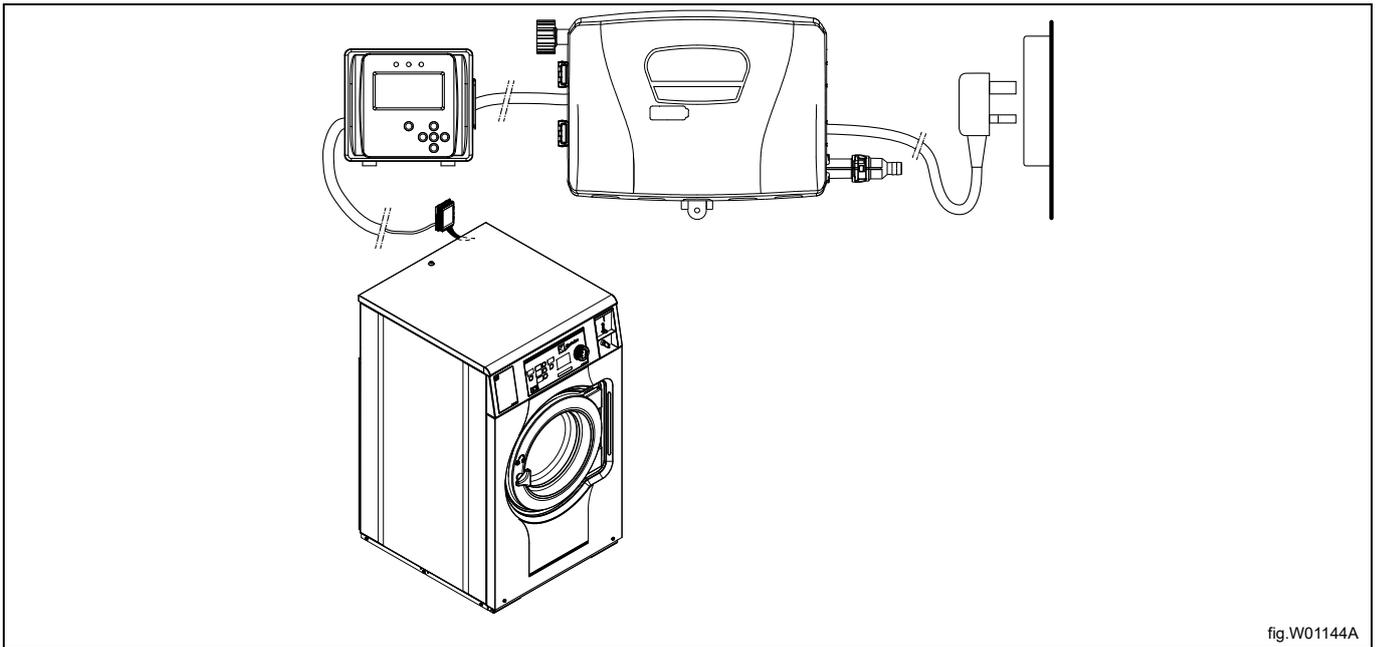
The Venturi unit operates on 115VAC / 60 Hz, 220VAC / 60Hz, or 230VAC / 50 Hz. It also supplies low voltage power to the EDS controller.

Installation time and cost is significantly reduced with the computer based Formula editor program that allows an off-site technician to create sets of dosing formulas that are loaded onto the EDS controller via a standard USB stick. (16 GB or smaller). Summary reports can be created in Excel or HTML.

ED Venturi PNC's	Description
988930021	EDS Kit with 5 Venturi dosing pumps High flow 1500 ml/min 110-240V/50/60HZ
988930022	EDS Kit with 5 Venturi dosing pumps Low flow 500 ml/min 110-240V/50/60HZ
988930023	EDS Kit with 3 Venturi dosing pumps High flow 1500 ml/min 110-240V/50/60HZ
988930024	EDS Kit with 3 Venturi dosing pumps Low flow 500 ml/min 110-240V/50/60HZ
988930025	EDS Kit with 6 Venturi dosing pumps High flow 1500 ml/min 110-240V/50/60HZ
988930026	EDS Kit with 6 Venturi dosing pumps Low flow 500 ml/min 110-240V/50/60HZ

4 Recycling instruction for packaging

fig.X02421

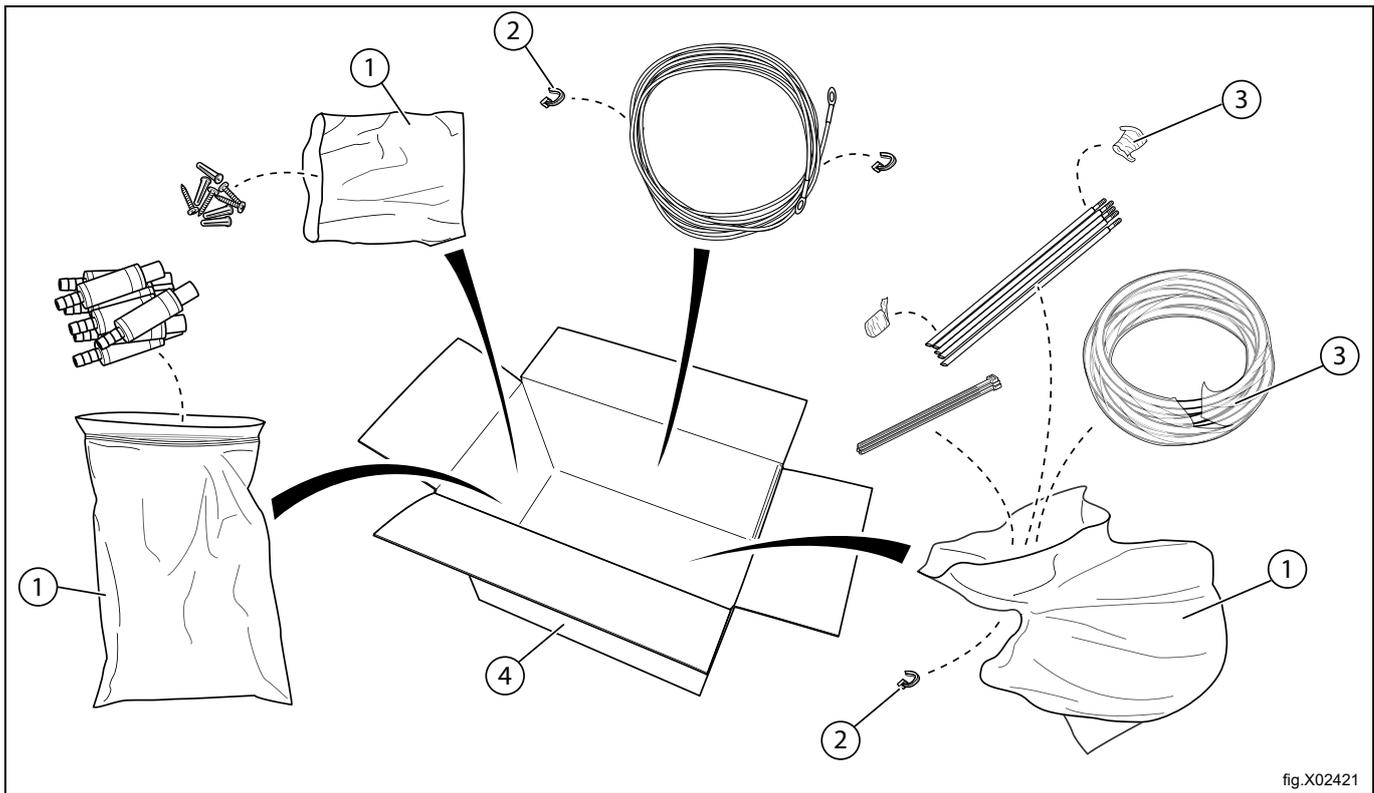| Fig.	Description	Code	Type
1	Plastic bag	LDPE 4	Plastics
2	Cable Ties	Other	Plastics (Nylon)
3	Cling film	LDPE 4	Plastics
4	Cardboard packaging	PAP 20	Corrugated card board

5 Installation

5.1 Requirements

- Verify that there is access to the appropriate power source for the unit.
- If the washer extractor has quick connections no external power source is needed for the pumps.
- The EDS system must not be installed near areas that suffer excess temperature changes, frost or precipitation of any kind.
- Ensure that the units can be mounted in an accessible position above the height of the required discharge location.
- The Venturi unit should be installed within 3 m of the washer extractor and close to product containers and at a convenient height for servicing, about 1–1.5 m. The input tubing from the chemical container to the Venturi should not be more than 2 m. The tubes must not be twisted and should hang freely without any sharp bends.
- The EDS controller must be mounted securely to a wall or on the washer extractor.
- The EDS controller can be mounted to a horizontal or vertical surface such as a wall or on the side panel on a washer extractor.
- The EDS system must not be used or installed in an ATEX environment.

5.2 Installation of the Venturi system

The wall where the pump-stand shall be mounted must support wall anchors and must be flat and perpendicular to the floor.

Use the wall mounting bracket as a template and mark the location of the holes on the wall.

Drill the holes and put in suitable wall anchors. Fasten the wall mounting bracket with the screws. Make sure the wall mounting bracket is in level.

Mount the Venturi unit on the wall mounting bracket and push down the clips to secure the unit. Secure the unit at the bottom with the remaining screw provided.

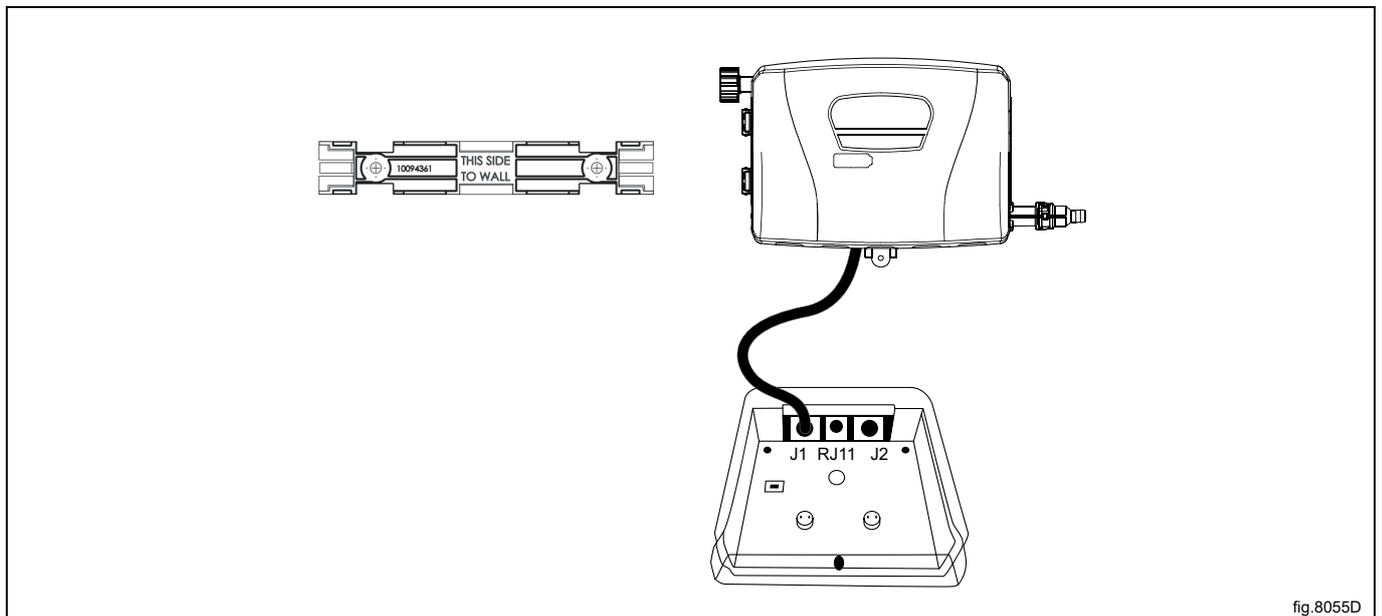Connect the cable from the Venturi unit to the J1 port on the EDS controller.

fig.8055D

Water connection

Connect the incoming water supply (A) to the Venturi pumps unit using the fittings provided. This will be a 3/4" Female BSP swivel. Ensure that the incoming water supply hose is supported so that it does not create unnecessary force on the inlet.

| ⚠	**Caution**	⚠
	The one way valve (C) must be installed. The one way valve is offering protection equal or higher than the chemical class being used. This is to prevent back piphoning of non-potable substances into the water mains.	

⚠	**Caution**	⚠
	The water inlet pressure must be min. 26 psi/1.8 bar and max. 90 psi/6 bar.	

The one way valve (C) must be installed to the main water pipe or at the tap to avoid risk of breaking at inlet (A).

The hose (D) and adapter (E) are not included in the kit. They can be ordered as accessories or any extra required adapters which are field supplied can be used.

Connect the water outlet (B) to the washer extractor using the hose. Secure the hose to barb with a clamp.

Hose sets used to connect the Venturi to the mains water supply must also be compliant with IEC61770.

fig.X01354C
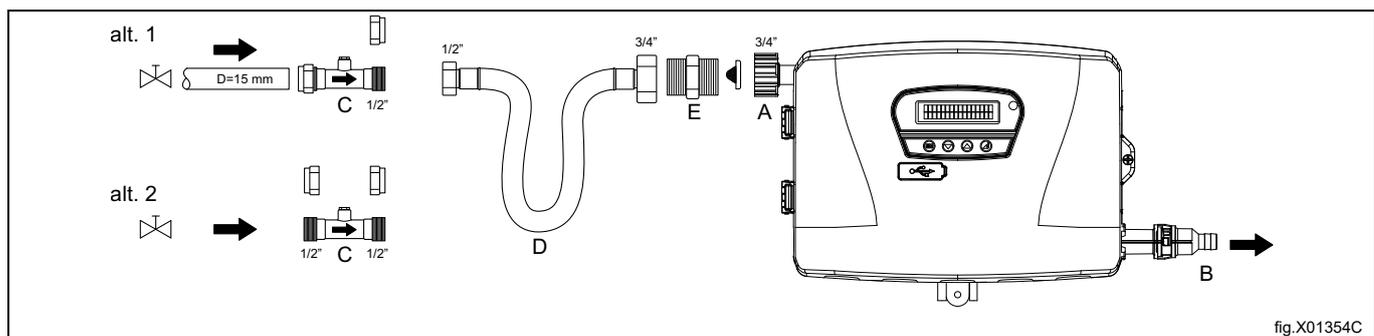
Connection of the pickup tubes

Before connection, the Venturi pumps unit has to be opened. Use the screw driver to open the Venturi pumps unit.
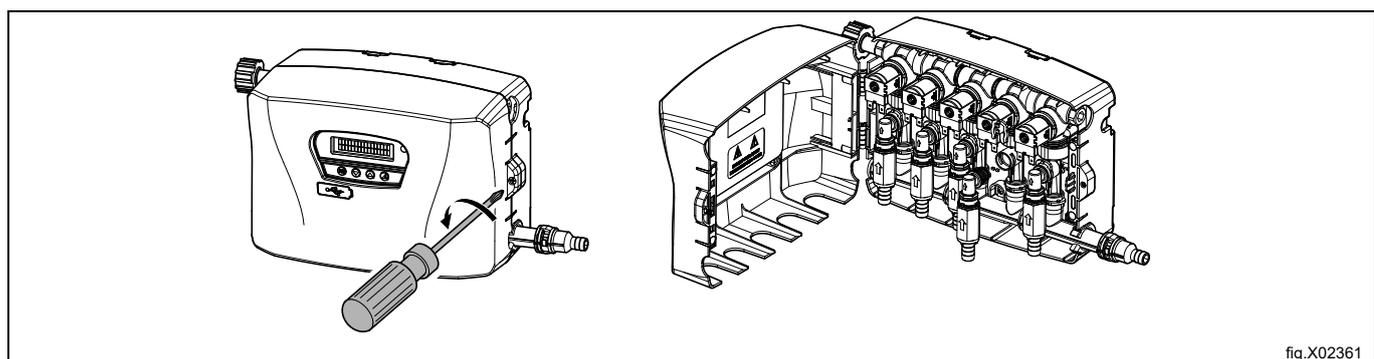
fig.X02361

NOTE!
The check valves (D) are supplied detached in a bag with the unit. To prevent damage, do not install hoses to the check valve while connected to the manifold.
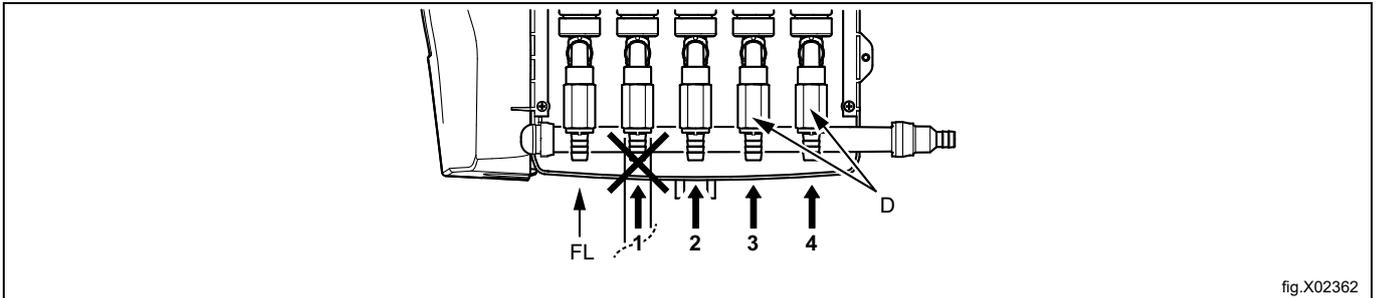

fig.X02362

⚠ **Warning** ⚠

Do not connect any chemical hose to the (FL) flush position.

Cut the hose to the length needed.
Push the hose (E) on to the check valve (D) and secure with a cable tie. Connect the elbow (F) to the manifold and secure with the white clip (G).
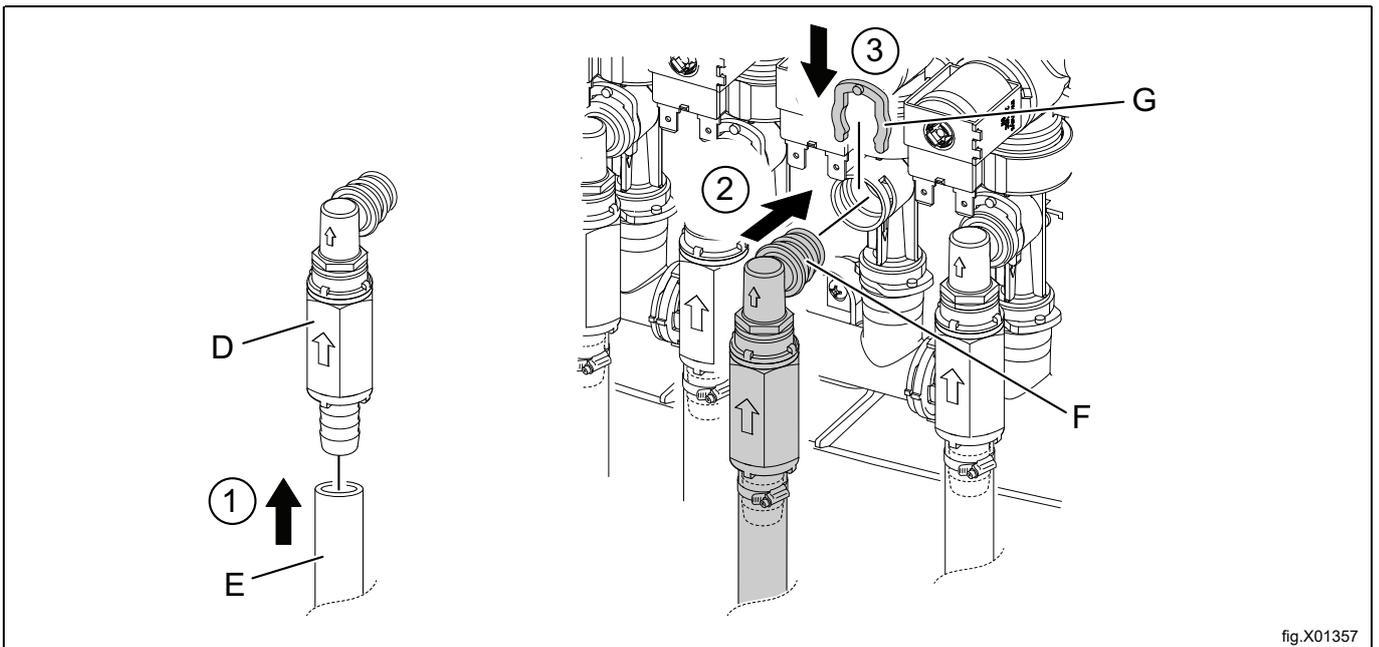

fig.X01357

Remove and drill a hole in each lid to the chemical containers to be used for the tubes to pass through. The hole shall be ⌀ 20 mm (3/4"). Use cable tie to fasten the suction pipe under the lids to prevent the suction pipes of floating or moving up from the containers.

NOTE!
Do not drill the hole when the lid is fastened to the chemical container.

Fasten each lid to the chemical containers again and insert the inlet tubes in the holes.

fig.X01321B
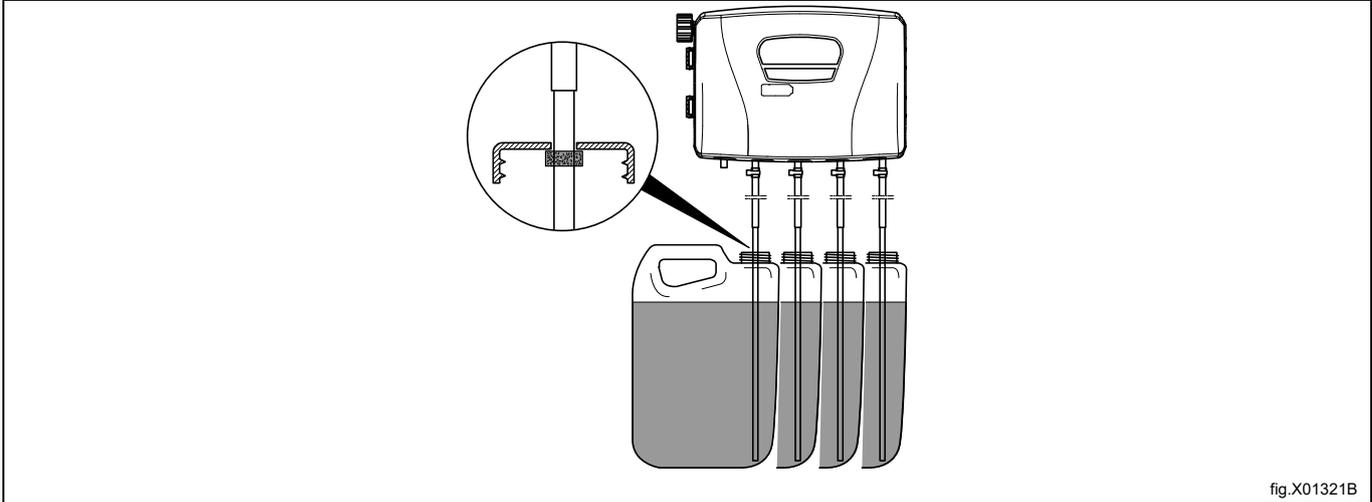
The washer extractor is prepared for connection of external dosing systems or water re-use systems etc.

The connections may be closed at delivery.

• If the connections are closed at delivery, open the connections (A) that shall be used by drilling a ⌀ 17 mm hole where the hoses shall be connected. Any extra required adapters which are field supplied can be used.
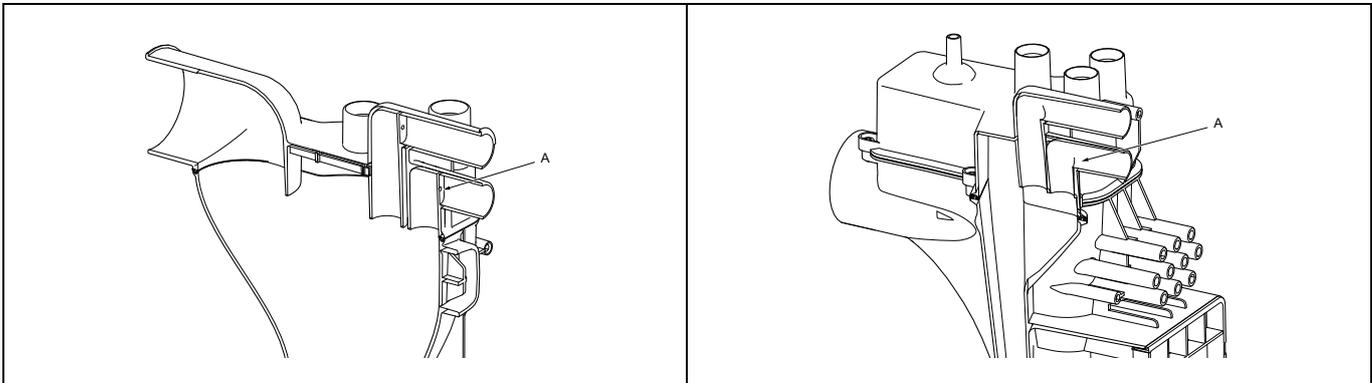
NOTE!
Make sure there is no burrs left after drilling.

- Connect the hose from the right side of the Venturi pumps unit to the connection to be used on the washer extractor.
- Mount the rubber adapter, rubber bushing, clamps, hose from pumps unit to the connection (A) according to the following figure.
- Tighten clamps (B) with torque 3 Nm (2.2 lbf.ft).
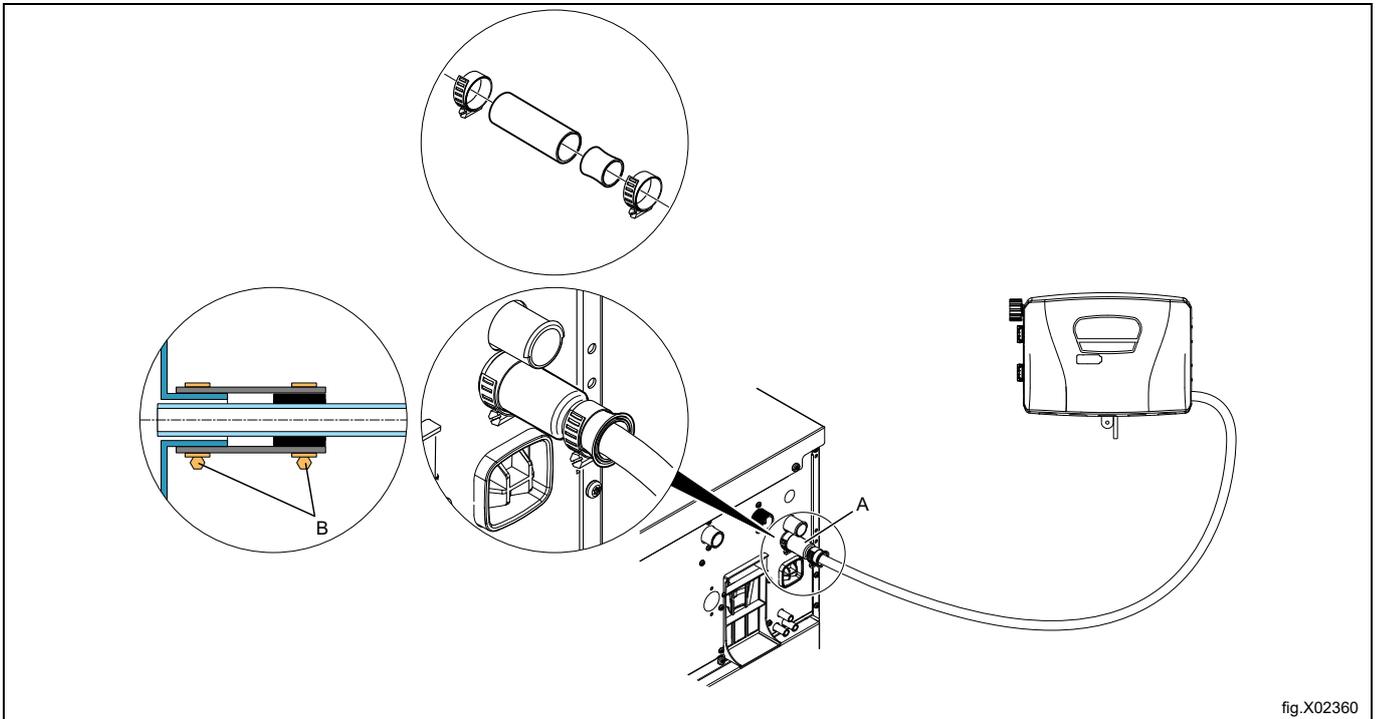
fig.X02360

If the hoses are made of a soft material such as silicone or similar, make sure the hose size isn't reduced, isn't sharp bended and is fitted properly to the washer extractor (A). Previous figure isn't valid for the soft hose.

For WH6–6 model:

Note!
The washer extractor is prepared with nipple as below figure, connect the hose to the nipple at port (X) only

- Cut the top of the hose nipple (X) as showed in the figure.
- Connect the hose to the hose nipple (X).
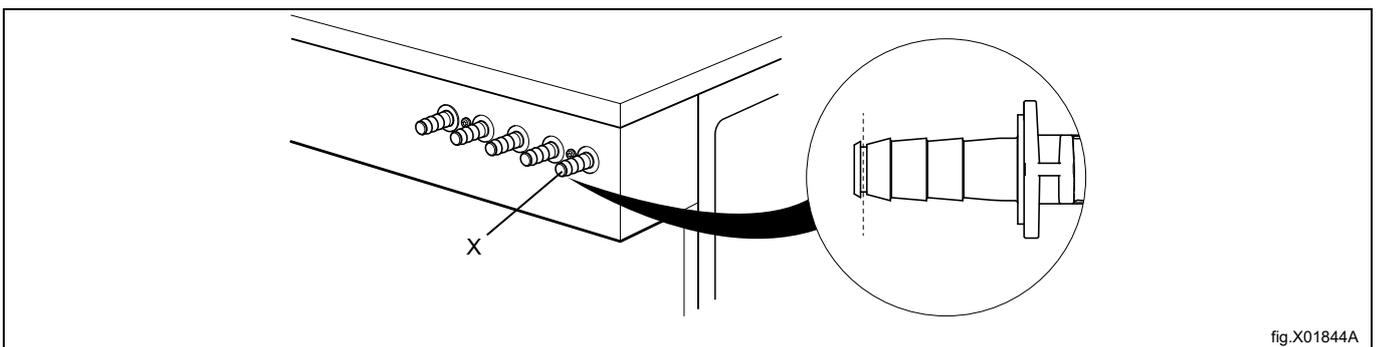
fig.X01844A

NOTE!
Equipment for external dosing must only be connected to work on pump pressure and not on network pressure.

6 Installation of the EDS controller

6.1 General

The EDS controller can be mounted on a wall or on the side panel on a washer extractor.

Connect the cables on the back of the EDS controller. Mount the mounting plate on its location and mount the EDS controller on the mounting plate.

The mounting plate is mounted with the self-adhesive Velcro hooks or with the nuts and Allen bolts (enclosed with the kit). The self-adhesive Velcro hooks shall be used if the EDS controller is to be mounted on a washer extractor.

6.2 Installation on Compass Control and Compass Pro

- Connect the power supply cable to the machine (A) and the other end of the cable together with the cable from Efficient Dosing in a connection box or with plug and receptacle.
- Connect one end of the cable to the EDS controller J2 and the other end to the machine (B).

fig.8056B
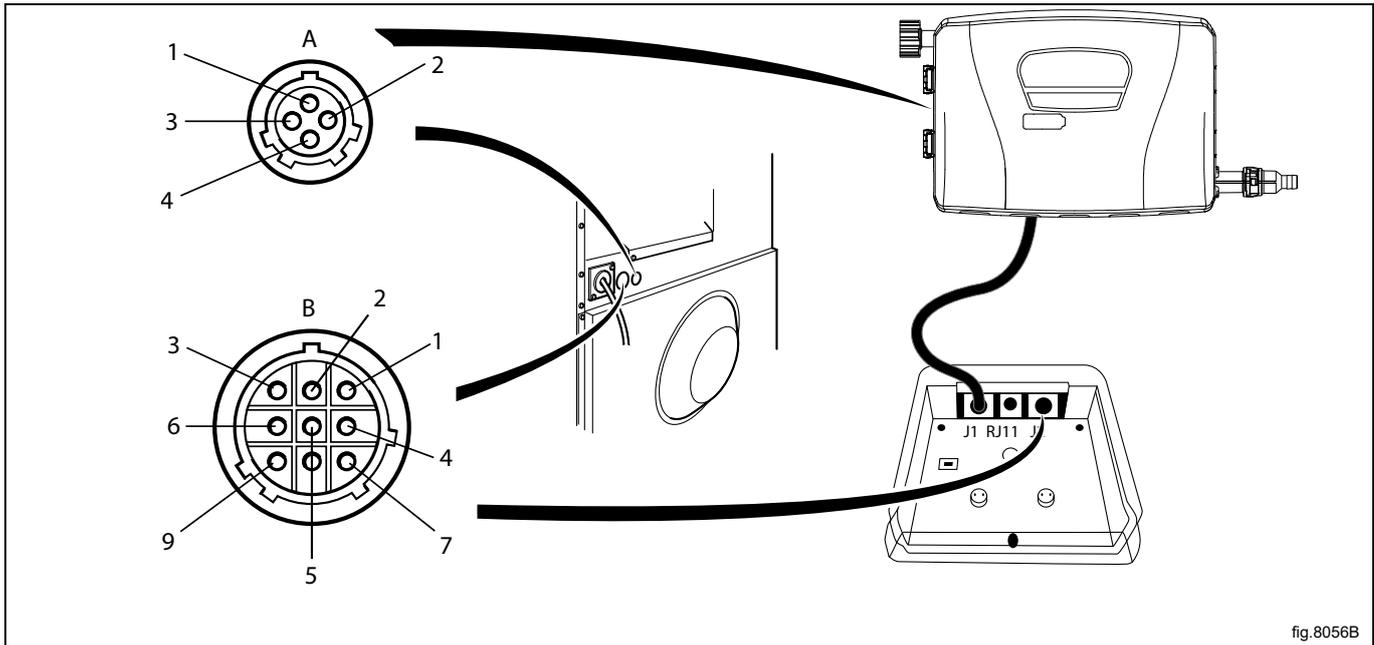
If the machine IS NOT prepared for external dosing systems from factory the cable from the J2 port on the EDS controller shall be connected to the RS232 port on one of the I/O modules in the machine. Follow the instruction for your type of machine.

fig.8055C
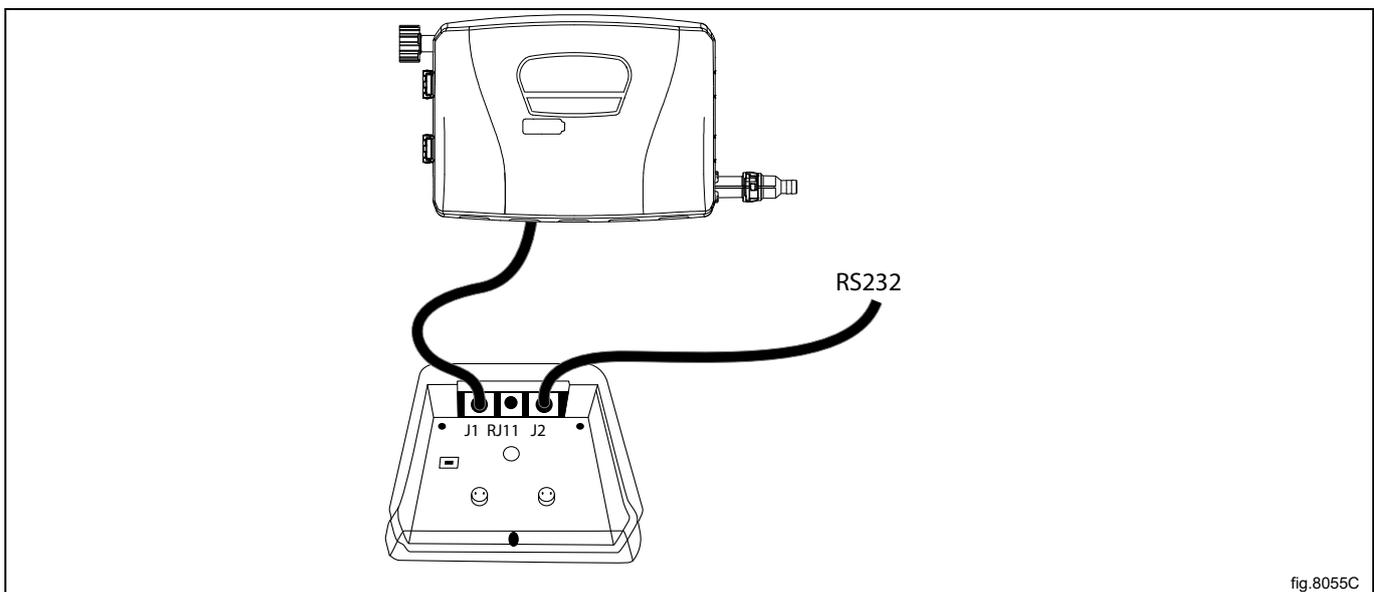
Connection to I/O module type 2

Disconnect the power to the machine.

Demount the cover panel at the back of the machine.

Remove one of the covers to the holes on the back of the machine. The location is different on different models.

The cable from the J2 port on the EDS controller shall then be run through the hole (A) and connected to the RS232 port on the I/O module.

Insert the cable and mount with the counter nut and cable gland according to the figure.

fig.W01145
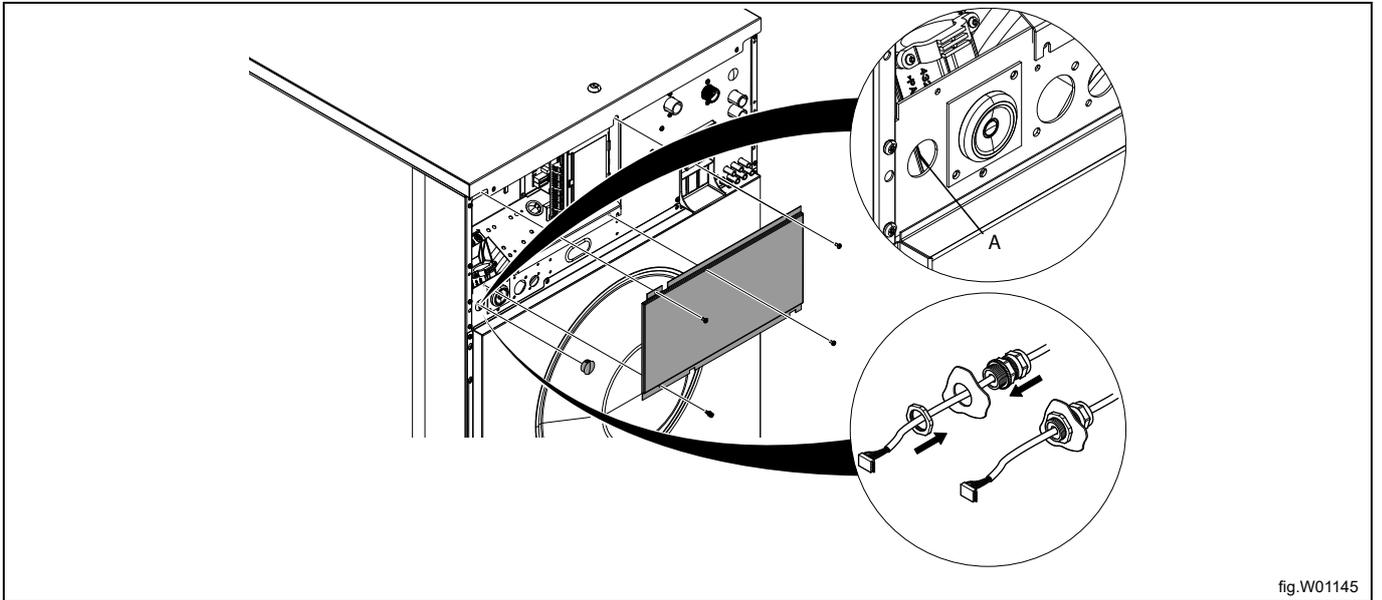
Connect the cable from the J2 port on the EDS controller to the RS232 port on the I/O module.

Strap the cable at suitable positions.

fig.W01146

Connection to I/O module type 1, 11 or 3

Disconnect the power to the machine.

Remove one of the covers to the holes on the back of the machine. The location is different on different models.

The cable from the J2 port on the EDS controller shall then be run through the hole (A) and connected to the RS232 port on the I/O module.

Insert the cable and mount with the counter nut and cable gland according to the figure.
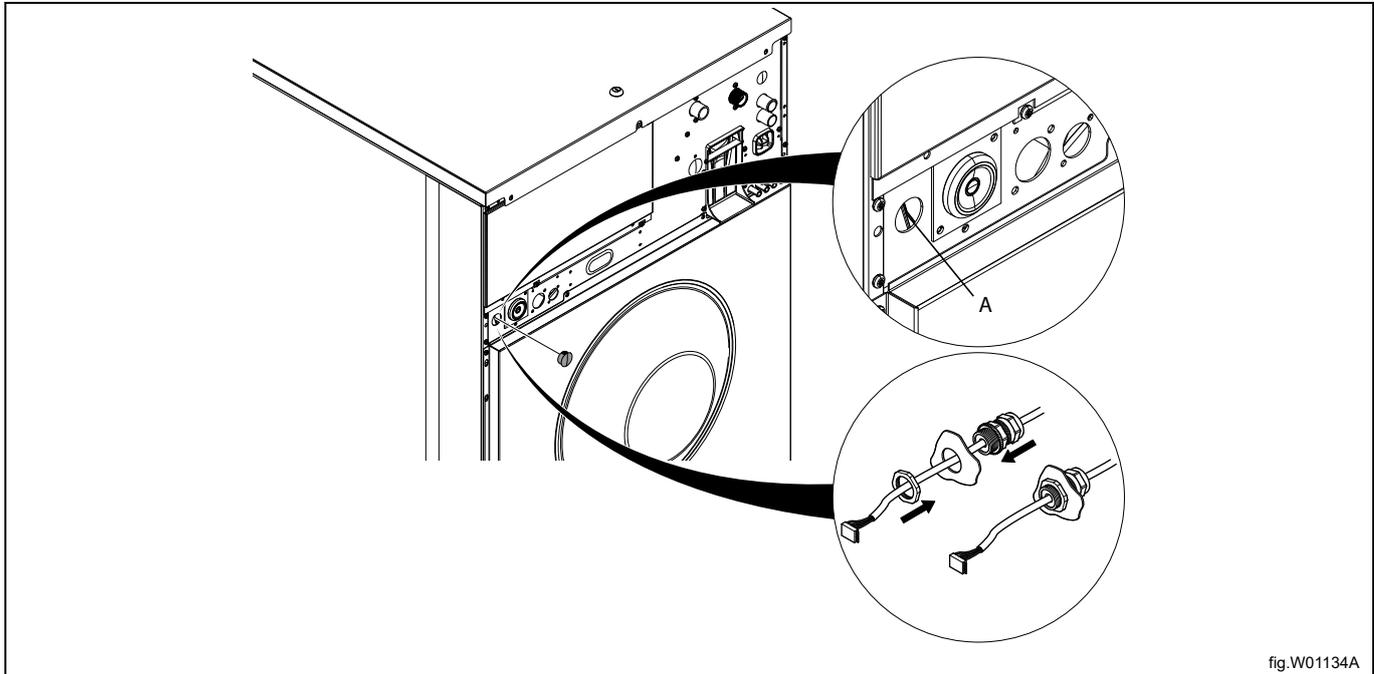
fig.W01134A

Demount the top panel.

fig.W01143

Connect the cable from the J2 port on the EDS controller to the RS232 port on the I/O module.

The connection is in the bottom of the I/O module. It might be necessary to temporarily demount the I/O module to be able to connect.

Strap the cable at suitable positions. The cable must not be in contact with the drum.
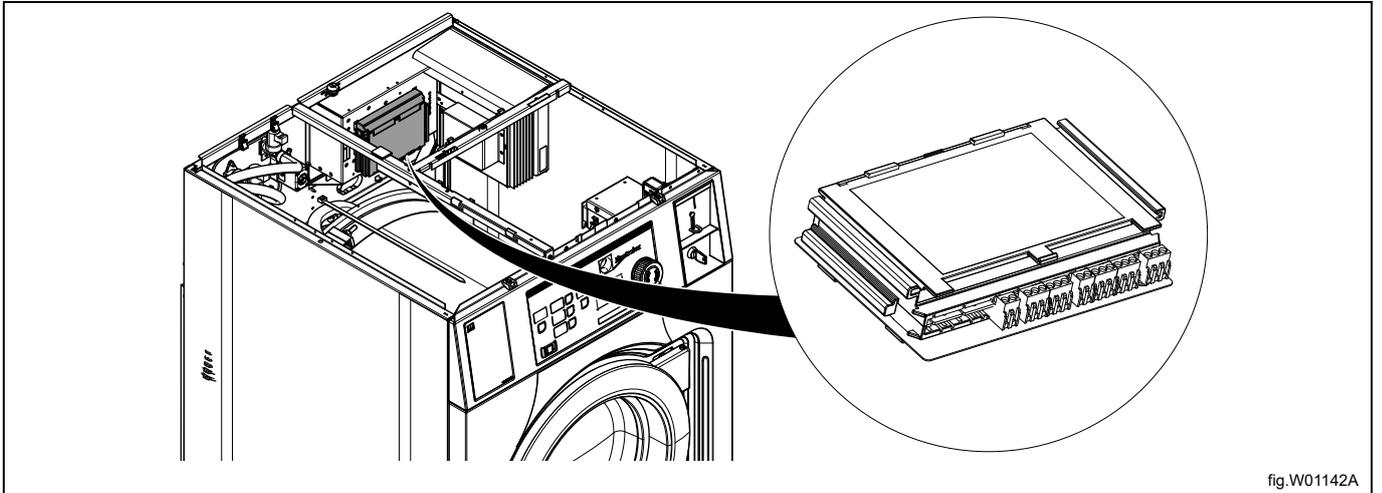
fig.W01142A

Connection to the CPU module

Disconnect the power to the machine.

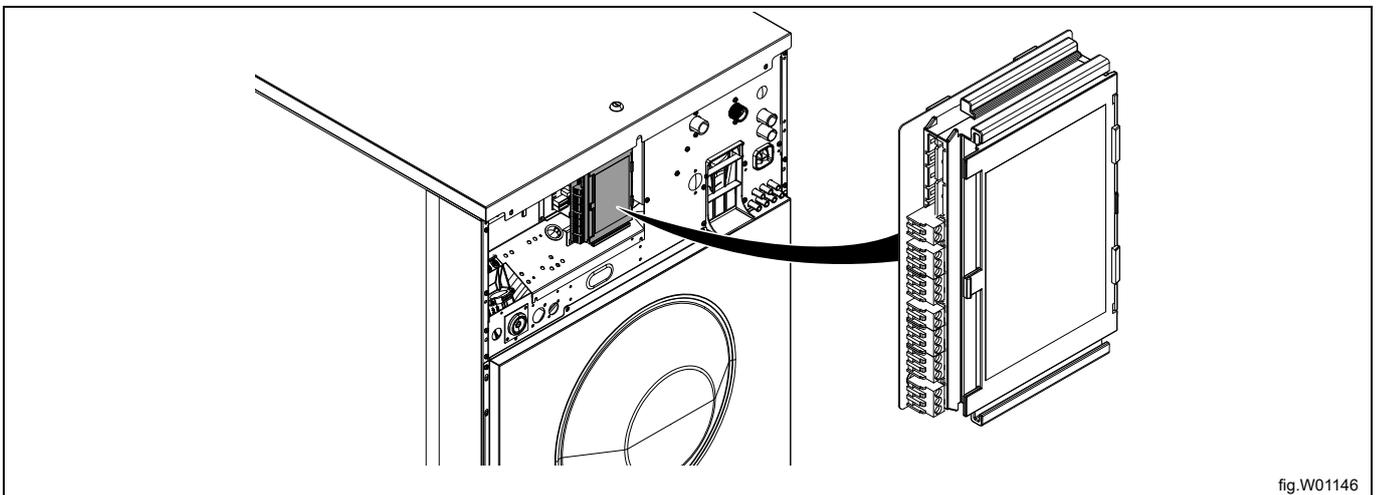Remove one of the covers to the holes on the back of the machine. The location is different on different models.

The cable from the J2 port on the EDS controller shall then be run through the hole (A) and connected to the RS232 port on the CPU module at the front of the machine.

Insert the cable and mount with the counter nut and cable gland according to the figure.
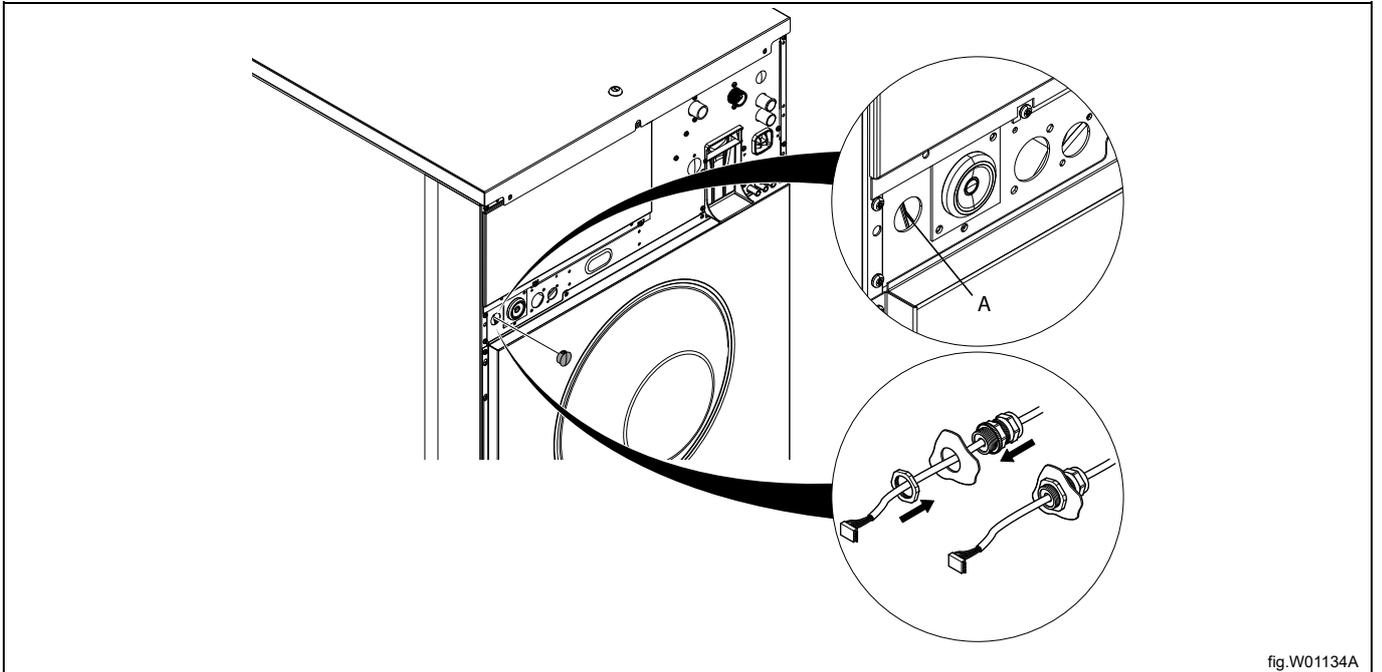
fig.W01134A

Demount the top panel.
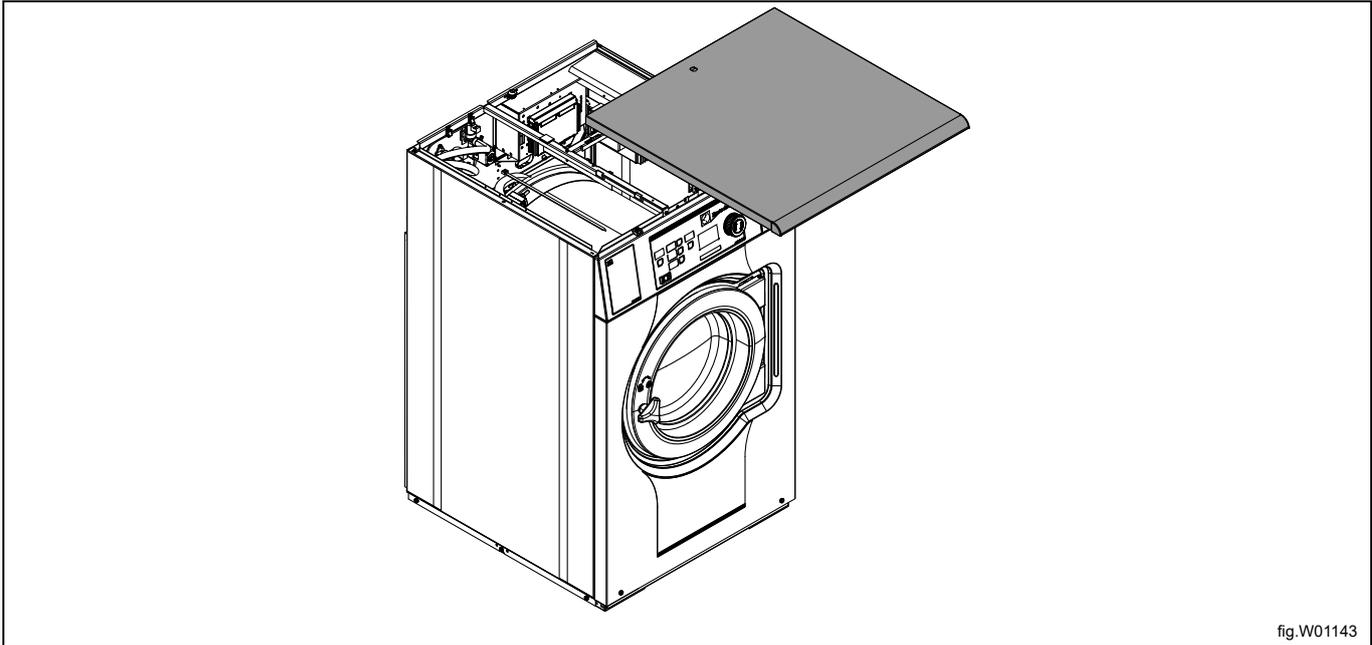
fig.W01143

Demount the cover.
Connect the cable from the J2 port on the EDS controller to the RS232 port on the CPU module.
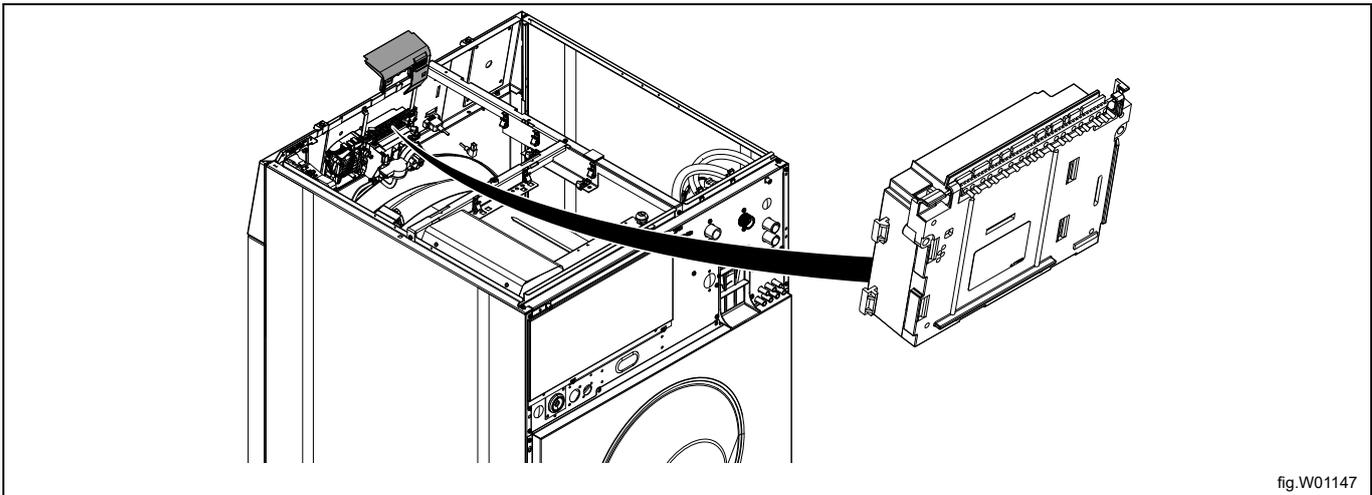
fig.W01147

Strap the cable at suitable positions. The cable must not be in contact with the drum.

Note!
If there is no free RS232 port on any of the I/O modules it is necessary to install a new I/O module into the machine. Follow the instructions for this in the Service manual for the specific model.

6.3   Installation on Clarus Control

The cable from the RJ11 port on the EDS controller shall be connected to the X10 connection on the CPU card A1

CPU card A1 has different locations depending on machine model.

Follow the instruction for your type of machine.

W465H/N/S-W4330H/N/S

Disconnect the power to the machine.

The cable from the RJ11 port on the EDS controller shall be run through a hole at the back of the machine (A) and connected to the X10 connection on the CPU card A1.

Insert the cable and mount with the counter nut and cable gland according to the figure.
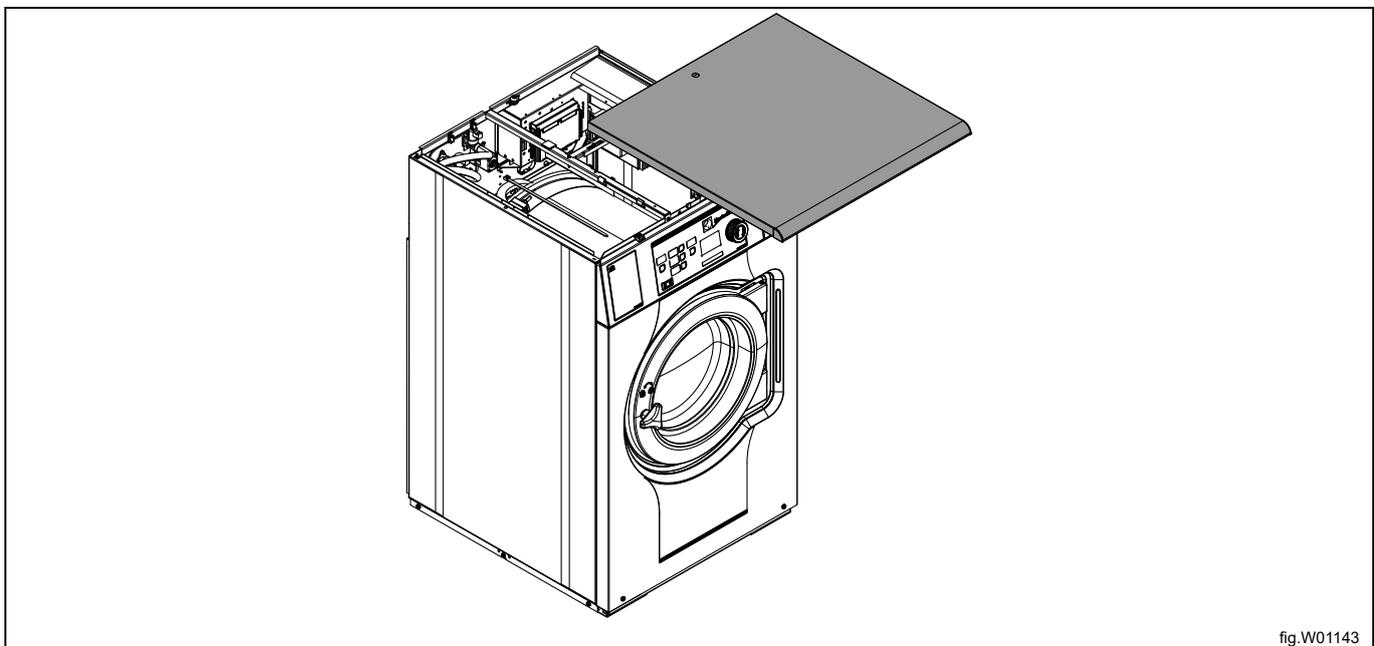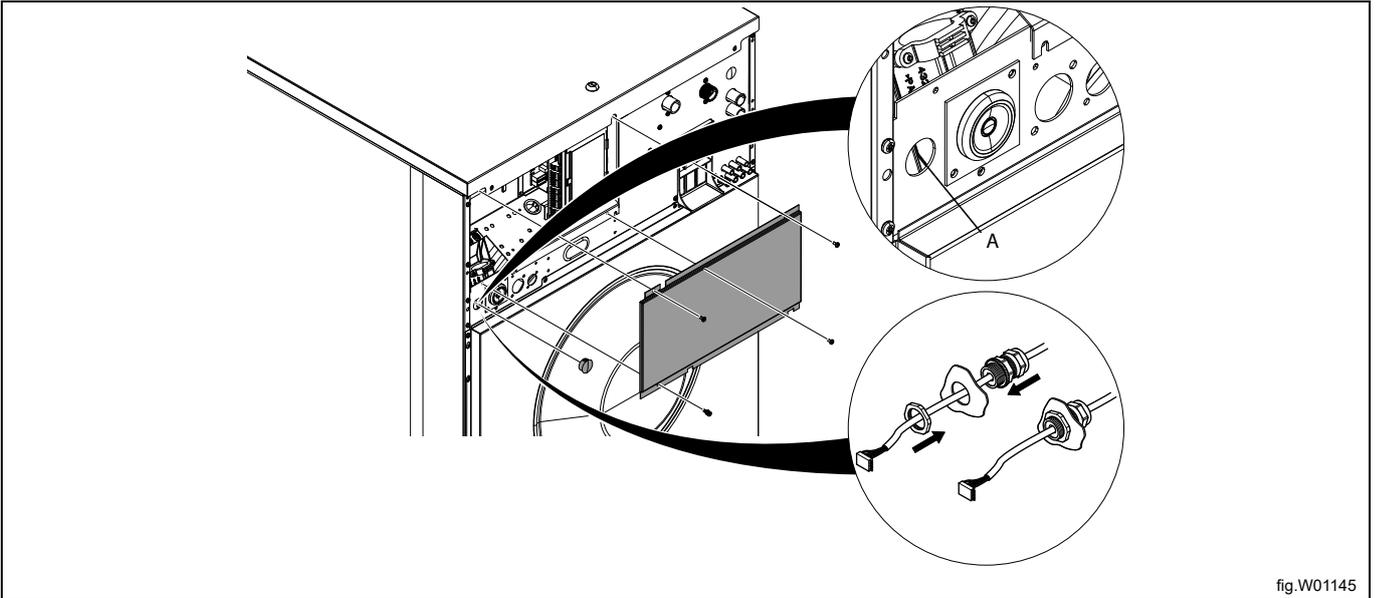

fig.W01145

Demount the top panel and remove the cover over the connection module.

Locate the X10 connection on back right side on the CPU card A1.

Connect the cable from the RJ11 port on the EDS controller to the CPU card A1.

Strap the cable at suitable positions. The cable must not be in contact with the drum.
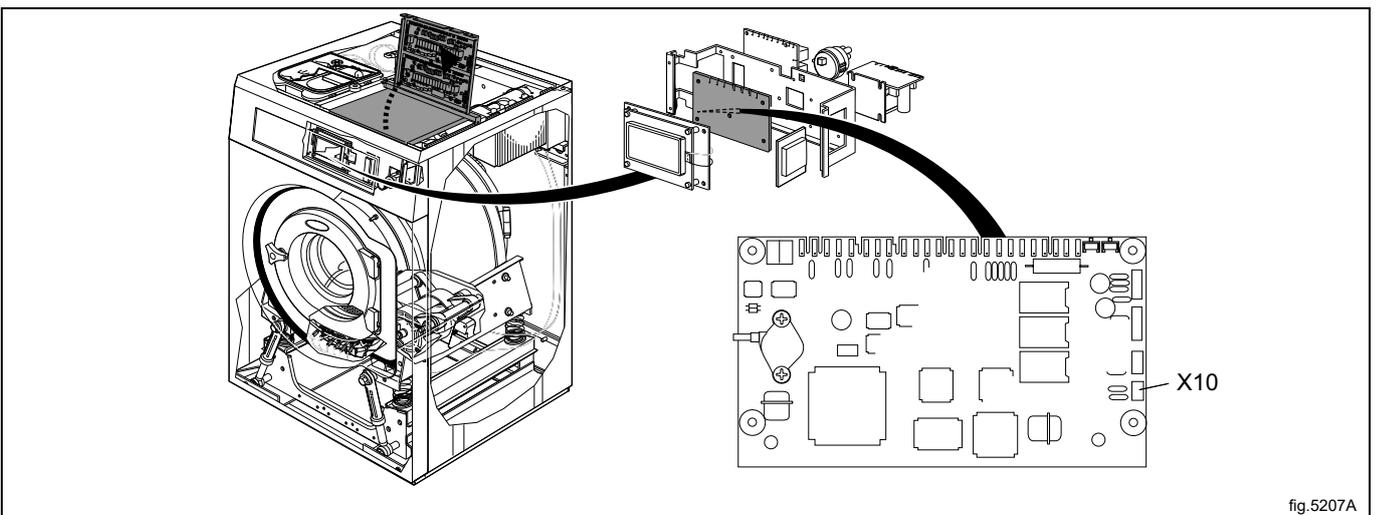
fig.5207A

W4400H-W41100H

Disconnect the power to the machine.

Open the electric cabinet on the back of the machine.

Locate the X10 connection on the CPU card A1.

The cable from the RJ11 port on the EDS controller shall be run through a hole at the back of the machine (A) and connected to the X10 connection on the CPU card A1.

Insert the cable and mount with the counter nut and cable gland according to the figure.

fig.W01212
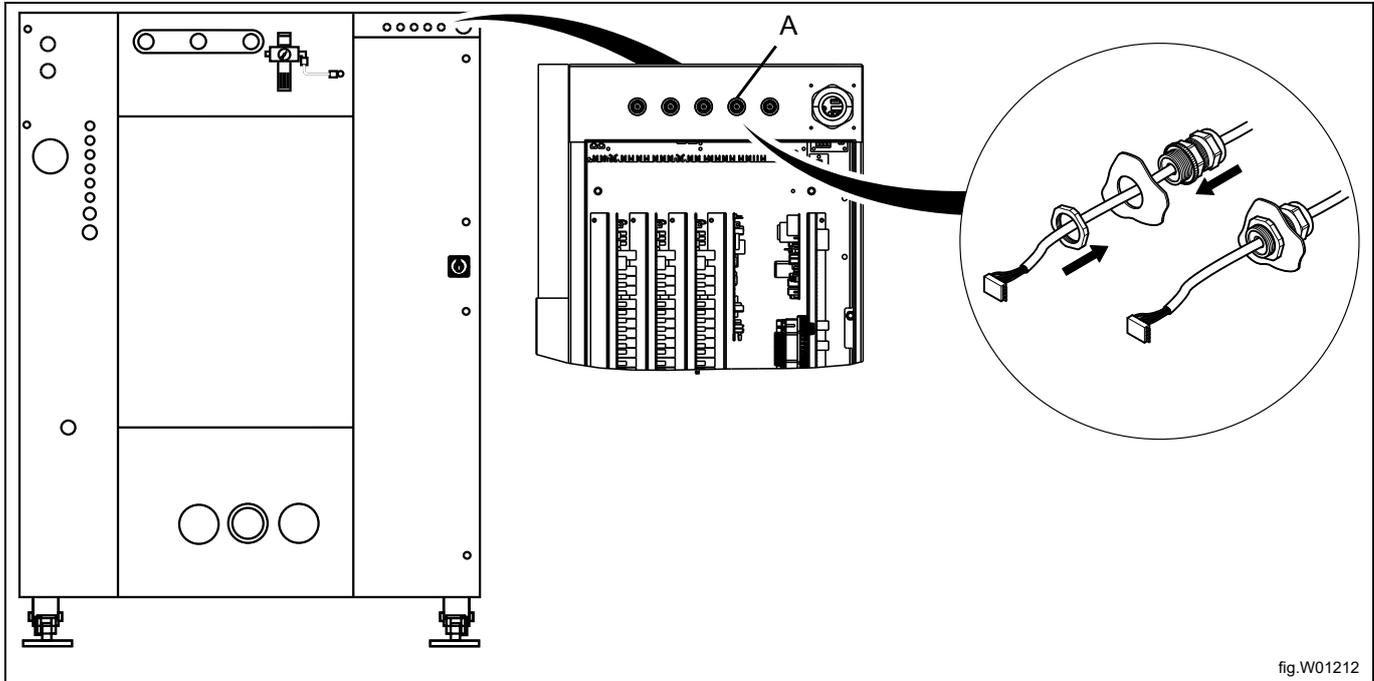
Connect the cable from the RJ11 port on the EDS controller to the X10 connection on the CPU card A1.

Strap the cable at suitable positions.

fig.W01212A
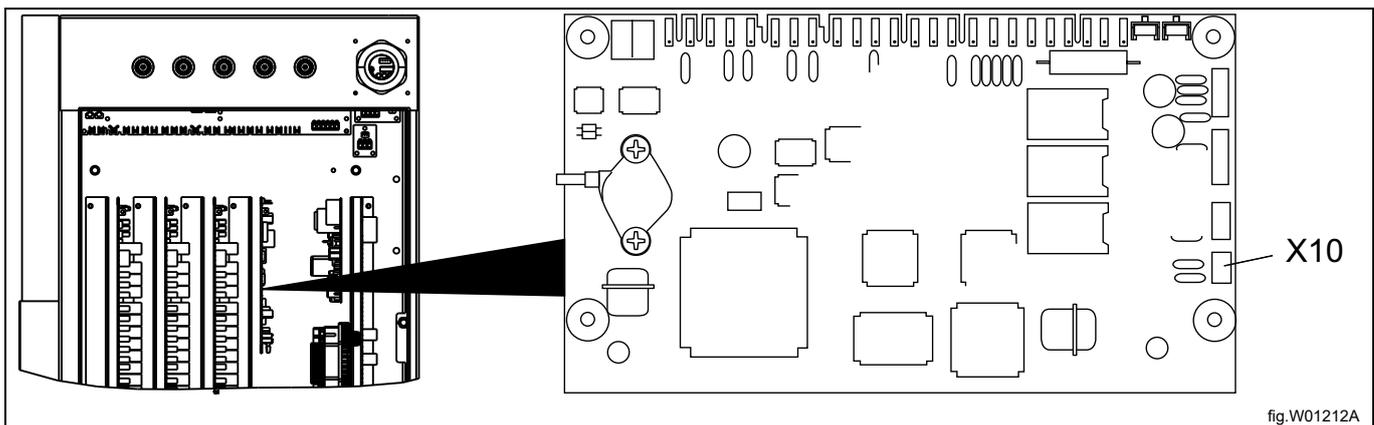
On W4400H/W4600H machines with serial number up to –980/1287 and W4850H/W41100H machines with serial number up to –1220/636, the X10 connection is NOT located at the back of the machine but in the front. In this case, the X10 connection shall not be used. Instead, it is necessary to install a DMIS kit (the art. No. for the DMIS kit is 988916197).

Install the DMIS kit according to the instructions enclosed with the kit.

When the DMIS kit has been installed, cut the 3-pole X10 connector and strip the three wires approx. 6 mm (1/4 inch). Connect the wires to the terminal (B) enclosed with the DMIS kit.
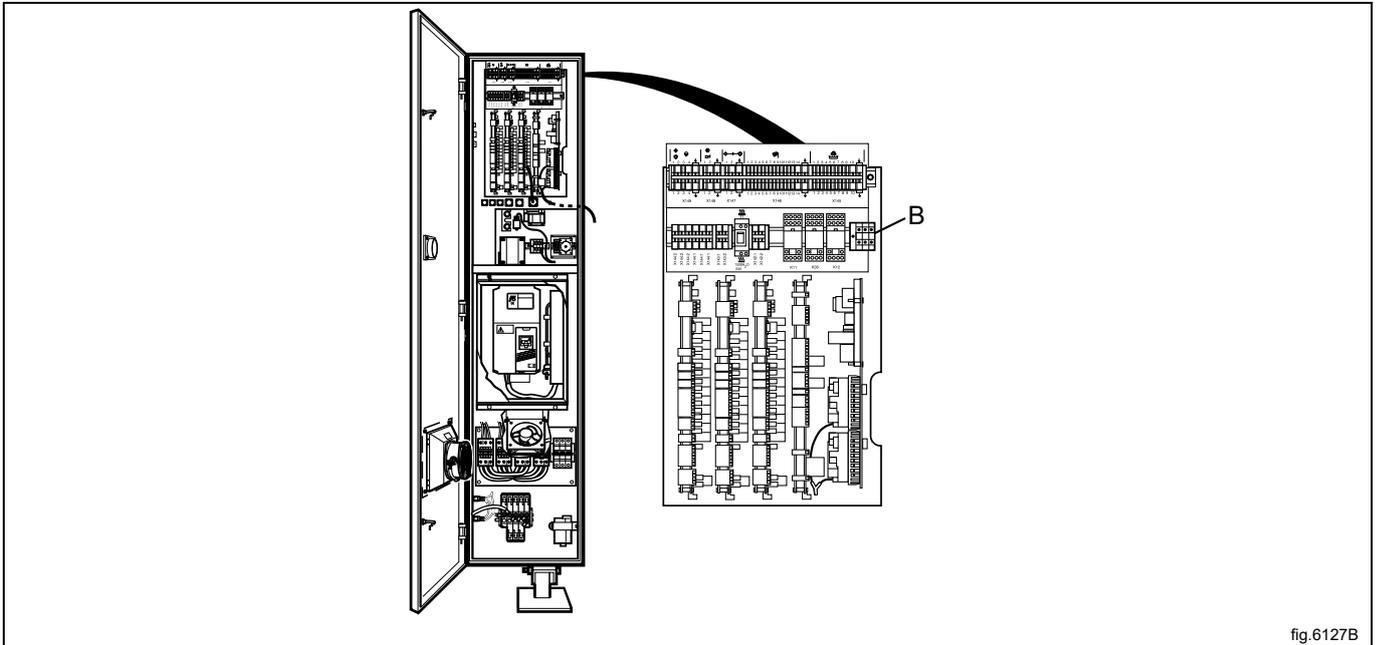
fig.6127B

You can easily check if the machine already has DMIS installed by locating the terminal (B). If terminal (B) is connected; DMIS is installed.

If the machine already has DMIS installed, replace the wires to the terminal (B) with the new. Cut the 3-pole X10 connector and strip the three wires approx. 6 mm (1/4 inch). Connect the wires to the terminal (B) enclosed with the DMIS kit.

7 Programming

7.1 Operating panel

The buttons on the operating panel are used to scroll around in the menu tree.

To activate a menu and to save a setting press Enter.
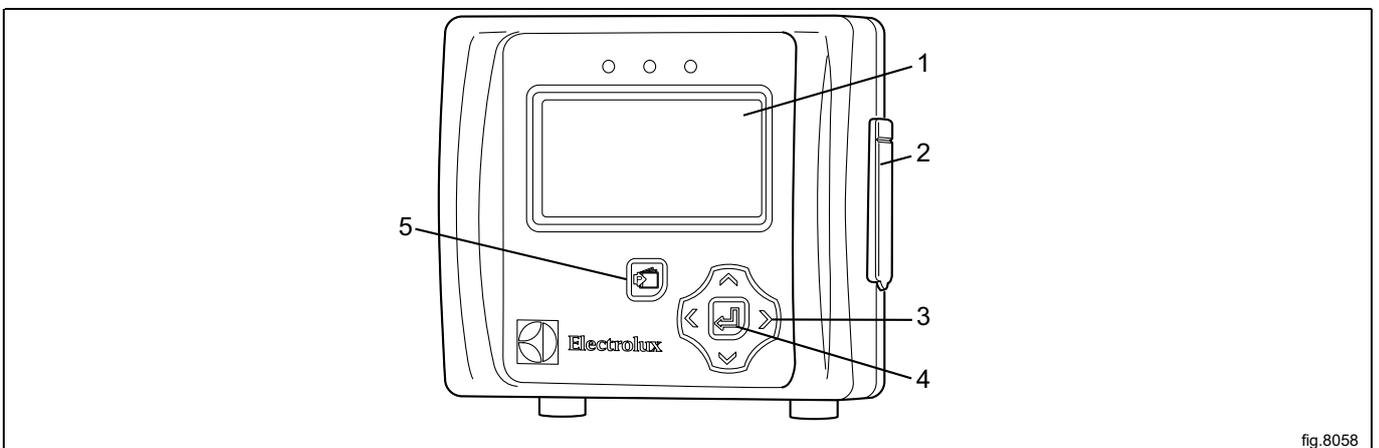
fig.8058

1	Display
2	Lid to USB connection
3	Arrows to scroll right, left, down and up
4	Enter
5	Enter/Exit the Main menu

7.2 Language settings

The EDS controller is pre-set from factory with English and Spanish languages. Other languages can be downloaded from the ELS website directly to a USB stick (16 GB or smaller).

If changing from one of the pre-set languages, the language-enabled USB stick must be connected **before** powering up the EDS controller.

Insert the language enabled USB stick. Power up the EDS controller, select language and press Enter to save.

7.3 Time and date settings

When the language has been set the "Date and time menu" appears automatically on the display.

Set the date and time and press Enter to save.

The date is set as YYYY-MM-DD.

The time is set as HH:MM.

7.4 Priming the products

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                MAIN MENU
EMERGENCY PUMP STOP
USER PRIME
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `INSTALLER SERVICE` menu.

```
              INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE
ELECTROLUX SETUP
```

Activate the `SERVICE PRODUCTS` menu.

```
              INSTALLER SERVICE
SERVICE PRODUCTS
VIEW LOAD WEIGHT
VIEW AMT DISPENSED

CLEAR DATA LOG
```

Activate the `PRIME` menu.

```
              SERVICE PRODUCTS
  PRIME
  CALIBRATION
  NAME PRODUCTS
  ENTER PRODUCT COSTS
  DATE TUBE CHANGED

```

Select product from the list to and press Enter to start and stop the water flow.
The hose shall be filled all the way to the Venturi inlet.

```
               SET PRIME PUMP
  P1
  P2
  P3
  P4
  P5
  P6

```

7.5   Calibrating the products

Make sure the Venturi unit has been primed before calibrating.
Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                 MAIN MENU
  EMERGENCY STOP
  USER PRIME
  USER MANUAL FLUSH
  MANAGER REPORTS
  INSTALLER MENU
  VIEW LOAD FACTOR

```

A password is needed to continue.
The default password is set to 01234.
When the password is set you will enter the `INSTALLER MENU`.
Activate the `INSTALLER SERVICE` menu.

```
               INSTALLER MENU
  INSTALLER SERVICE
  INITIAL SYSTEM SETUP
  PROGRAM FORMULAS
  DATA TRANSFER
  SET UNITS OF MEASURE
  ELECTROLUX SETUP

```

Activate the `SERVICE PRODUCTS` menu.

```
              INSTALLER SERVICE
  SERVICE PRODUCTS
  VIEW LOAD WEIGHT
  VIEW AMT DISPEND

  CLEAR DATA LOG

```

Activate the PUMP CALIBRATION menu.

```
              SERVICE PRODUCTS
 PRIME
 PUMP CALIBRATION
 NAME PRODUCTS
 ENTER PRODUCT COSTS
 DATE TUBE CHANGED
```

Activate the CALIBRATE VOLUME menu.

```
              PUMP CALIBRATION
 VIEW CALIBRATION
 CALIBRATE (TIME)
 CALIBRATE (VOLUME)
 CALIBRATE (MANUAL)
```

Fill a container with ml markings (minimum volume 300 ml) with the product to be calibrated and place the tube from the Venturi unit to be calibrated into the container.
Select the product from the list and press Enter to start.

```
                 SET PRIME
 P1
 P2
 P3
 P4
 P5
 P6
```

Press Enter to stop when 250 ml has been drawn out of the container.
Repeat the calibration for all of the pumps.
The CALIBRATE MANUAL menu allows a known amount to be entered in ml per min.

250 ml

fig.8052A
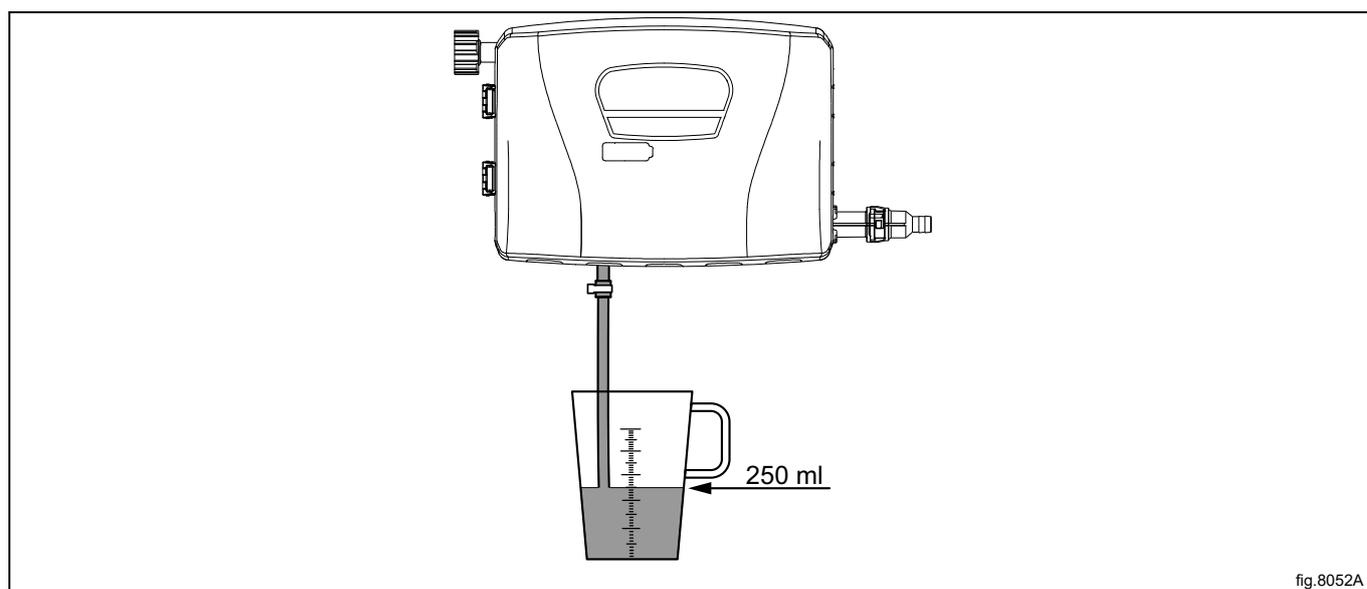
Note!
If the Venturi unit is not calibrated it will not dispense product even if there is an amount programmed.

7.6 Basic settings in the EDS controller

In order for the EDS system to work the following basic settings must be made in the EDS controller.

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                    MAIN MENU
EMERGENCY STOP
USER PRIME
USER MANUAL FLUSH
MANAGE REPORTS
INSTALLER MENU
VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the SET UNITS OF MEASURE menu and select unit.

```
                  INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE
ELECTROLUX SETUP
```

Activate the ELECTROLUX SETUP menu.

```
                  INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE
ELECTROLUX SETUP
```

In the ELECTROLUX SETUP menu the following sub menus are available.

Activate any of the menus to view or change the parameters.

- ELECTROLUX MACHINE
- ELECTROLUX ADDRESS
- MACHINE WEIGHT
- DUAL CONTROLLER

ELECTROLUX MACHINE

Activate the ELECTROLUX MACHINE menu and set the correct control system.

```
                ELECTROLUX MACHINE
COMPASS PRO
COMPASS
CLARUS CONTROL
```

ELECTROLUX ADDRESS

For a Compass Control/Compass Pro machine the EDS controller's address is pre-set to 000. For a Clarus Control machine the EDS controller's address is pre-set to 001.

Make sure the washer extractor's address is also set to 0 or change the EDS controller's address to match the address in the washer extractor.

Activate the ELECTROLUX ADDRESS menu and set the address.

```
          ELECTROLUX ADDRESS



                000


```

Note!
The communication between the washer extractor and the EDS controller will not work if the addresses are not the same.

The communication is verified by the presence of an asterisk (*) in the right corner on the bottom of the display.

```
                     ELECTROLUX
                        FO1
PROG                 –
STEP                 –
SIGNAL               S12345              –
WGT                  ??
TEMP                 –
L.F.
                                              *
```

MACHINE WEIGHT

Activate the MACHINE WEIGHT menu and set the capacity weight for the washer extractor. The capacity weight is found on the label on the back of the machine.

```
          MACHINE WEIGHT



                000


```

DUAL CONTROLLER

This menu is only valid if you have two EDS Controllers and two pump stands connected to one machine.

Activate the DUAL CONTROLLER menu.

Select controller 1 or 2 or turn the function off.

```
            DUAL CONTROLLER
OFF
CONTROLLER 1
CONTROLLER 2


```

Change the address on the washer extractor

If the machine address needs to be changed on the washer extractor, proceed as follows:

- Activate Service mode in the machine.
- Activate the CONFIGURATION menu.

```
              SERVICE MENU
 FUNCTION TEST
 CONFIGURATION
 PRICE PROGRAMMING
 STATISTICS
 PROGRAM PARAMETERS
 SYSTEM
 DEFAULT LANGUAGE
```

- Activate the MACHINE ADDRESS menu and set the machine address.

7.7 Setting dispenser interface

The EDS Controller can be set to manage peristaltic pumps or Venturi delivery systems.

Enter the MAIN MENU and activate the INSTALLER MENU.

```
               MAIN MENU
 EMERGENCY STOP
 USER PRIME
 USER MANUAL FLUSH
 MANAGE REPORTS
 INSTALLER MENU
 VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the SET UNITS OF MEASURE menu and select unit.

```
             INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
 ELECTROLUX SETUP
```

Activate the SET DISPENSER INTERFACE menu.

```
              SYSTEM SETUP
 SET PRODUCT MAPS
 SET ACCOUNT NAME
 EDIT MACHINE NAME
 EDIT COMPANY NAME
 SET DISPENSER INTERFACE
 SET CYCLE TIME
```

In the `SET DISPENSER INTERFACE` menu, set `4-EDUCTOR FLUSH P.I.` or `6-EDUCTOR FLUSH P.I.`.

```
              DISPENSER INTF
NON-FLUSH P.I.
ECLIPSE FLUSH P.I.
ORION 11 FLUSH P.I.
4-EDUCTOR FLUSH P.I.
6-EDUCTOR FLUSH P.I.

```

7.8 Dosing formula set up

In the `PROGRAM FORMULA` menu it is possible to create, edit and save dosing formulas.

- Up to 50 dosing formulas may be created within the EDS controller.
- Each dosing formula can be assigned to all six of the multiple Electrolux wash programs available in the machine.
- If utilised correctly the EDS controller can be utilisied for up to 300 Electrolux wash programs.

Required software

The programming and set up are made with **Laundry Program Manager** or **Formula Editor Program**.

- For Laundry Program Manager the software is distributed as 2 kits. One kit is for Compass Pro and Compass Control and one kit is for Clarus Control. Instructions for programming with Laundry Program Manager is enclosed with the kit.
- For Formula Editor Program the software is downloaded to a Windows based PC from the manufacturers web page. The formula is when ready saved to a .SUP-file that is loaded to the EDS controller via a USB stick. Download the Formula Editor Program: http://hydrosystemseurope.com/support/downloads/

Upload dosing formulas to the EDS controller

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                MAIN MENU
EMERGENCY STOP
USER PRIME
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `DATA TRANSFER` menu.

```
              INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE
ELECTROLUX SETUP
```

Insert the USB stick with the downloaded dosing formulas in the EDS controller.

Activate the `READ SETUP` menu.

```
                    DATA TRANSFER
WRITE REPORTS
READ SETUP
WRITE SETUP
UPDATE FIRMWARE
WRITE ACTIVITY LOG
```

Activate the setup file from the list. Before uploading there will be a warning message on the display. Press Enter to upload the selected setup file.

```
                    SETUP FILE
XXXXX
XXXXX
XXXXX
XXXXX
XXXXX
```

Download dosing formulas from the EDS controller to a USB stick

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                    MAIN MENU
EMERGENCY STOP
USER PRIME
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `DATA TRANSFER` menu.

```
                   INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM ID CATEGORY
DATA TRANSFER
SET UNITS OF MEASURE
```

Insert the USB stick in the EDS controller.

Activate the `WRITE SETUP` menu.

```
                    DATA TRANSFER
WRITE REPORTS
READ SETUP
WRITE SETUP
UPDATE FIRMWARE
WRITE ACTIVITY LOG
```

Use the keypad and write a file name for the file.

Before downloading there will be a warning message on the display. Press Enter to download the selected setup file to the USB stick.

The USB stick can now be used to upload the dosing formulas to multiple machines.

7.9   Download reports to a USB stick

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                   MAIN MENU
 EMERGENCY STOP
 USER PRIME
 USER MANUAL FLUSH
 MANAGER REPORTS
 INSTALLER MENU
 VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the DATA TRANSFER menu.

```
                 INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
 ELECTROLUX SETUP
```

Insert the USB stick in the EDS controller.

Activate the WRITE REPORTS menu.

```
                 DATA TRANSFER
 WRITE REPORTS
 READ SETUP
 WRITE SETUP
 UPDATE FIRMWARE
 WRITE ACTIVITY LOG
```

Set the current date for the report and press Enter.

Use the keypad and write a name for the report and press Enter to save to the USB stick.

Reset the data log

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                   MAIN MENU
 EMERGENCY STOP
 USER PRIME
 USER MANUAL FLUSH
 MANAGER REPORTS
 INSTALLER MENU
 VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `INSTALLER SERVICE` menu.

```
              INSTALLER MENU
  INSTALLER SERVICE
  INITIAL SYSTEM SETUP
  PROGRAM FORMULAS
  DATA TRANSFER
  SET UNITS OF MEASURE
  ELECTROLUX SETUP
```

Activate the `CLEAR DATA LOG` menu.

```
             INSTALLER SERVICE
  SERVICE PRODUCTS
  VIEW LOAD WEIGHT
  VIEW AMT DISPENDED


  CLEAR DATA LOG
```

Before resetting the data log there will be a warning message on the display. Press Enter. Set the current date and press Enter to reset the data log.

Note!
Resetting the data log will not affect the main program settings.

7.10 Electrolux wash program allocation

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                MAIN MENU
  EMERGENCY STOP
  USER PRIME
  USER MANUAL FLUSH
  MANAGER REPORTS
  INSTALLER MENU
  VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `PROGRAM FORMULAS` menu.

```
              INSTALLER MENU
  INSTALLER SERVICE
  INITIAL SYSTEM SETUP
  PROGRAM FORMULAS
  DATA TRANSFER
  SET UNITS OF MEASURE
  ELECTROLUX SETUP
```

Select formula from the list and press Enter.
The example below shows `F01 HYDRO ECO`.

```
                 PROGRAM FORMULAS
 F01 HYDRO ECO
 F02 COLORS
 F03 LIGHT SOIL
 F04 GENERAL WASH
 F05 ECO COLD
 F06 SHORT
```

Activate the `PROGRAM SELECT` menu.

```
                  F01 HYDRO ECO
 PRODUCT SETTINGS
 SET DEFAULT WEIGHT
 SET COUNT PUMP
 EDIT NAME
 PROGRAM SELECT
 CLEAR FORMULA
```

Select formula from the list and press Enter.
The example below shows `E1`.

```
                 F01 PROGRAM LIST
 E1
 E2
 E3
 E4
 E5
 E6
```

Assign the selected dosing formula to the machine's Electrolux wash program.
This formula can be assigned to 6 different Electrolux wash programs.

```
                   E1 PROGRAM

                     000
 OK                                     EXIT
```

7.11 Selection of operation mode

There are two different operation modes, Standard mapping and Euro mapping.

Standard mapping

In standard mapping there are 5 available washer signals/programs. Each signal is capable of running up to 3 pumps and each pump is capable of dispensing up to 3 different amounts; A, B and C. Each product can be allocated to more than one washer signal.

The first time a product receives a signal it will dispense the "A-amount". The second time a product receives a signal it will dispense the "B-amount". The third and subsequent time it will dispense the "C-amount".

```
                    PUMP MAPS
WASHER SIGNAL 1
WASHER SIGNAL 2
WASHER SIGNAL 3
WASHER SIGNAL 4
WASHER SIGNAL 5

```

Euro mapping

Euro mapping shall only be used on machines with quick selection buttons or when rapid advance is used.

In Euro mapping there are 6 available washer signals/programs:

- Pre-wash
- Main wash
- Final rinse
- Spare 1
- Spare 2
- Spare 3

Each signal/program is capable of running up to 3 pumps.

Pumps allocated to Pre-wash will dispense the "A-amount" only. Pumps allocated to Main wash will dispense the "B-amount" only. Pumps allocated to Final rinse, Spare 1, Spare 2 and Spare 3 will dispense the "C-amount" only.

```
                    PUMP MAPS
PRE WASH
MAIN WASH
FINAL RINSE
SPARE 1
SPARE 2
SPARE 3
```

Follow the instructions to select mode:

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                    MAIN MENU
EMERGENCY STOP
USER PRIME
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `INITIAL SYSTEM SETUP` menu.

```
                INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
 ELECTROLUX SETUP
```

Activate the `SET PRODUCT MAPS` menu.

```
             INITIAL SYSTEM SETUP
 EDIT INST PASSWORD
 EDIT MGR PASSWORD
 SET PRODUCT MAPS
 EDIT ACCOUNT NAME
 EDIT MACHINE NAME
```

Select operation mode and press enter.

```
                OPERATION MODE
 STANDARD MAPPING
 EURO MAPPING
```

7.12 Dual controller mode — Lagoon advanced care

A dosing formula must be set up for each EDS controller.

The set up are made in the Formula editor or in the EDS controller.

7.12.1 Set up in the Formula editor

In the Formula editor, select the CONTROL SETUP menu and program both EDS controllers in the normal way. In the DUAL CONTROLLER box, choose CONTROLLER 1 for the first EDS controller and CONTROLLER 2 for the second EDS controller.
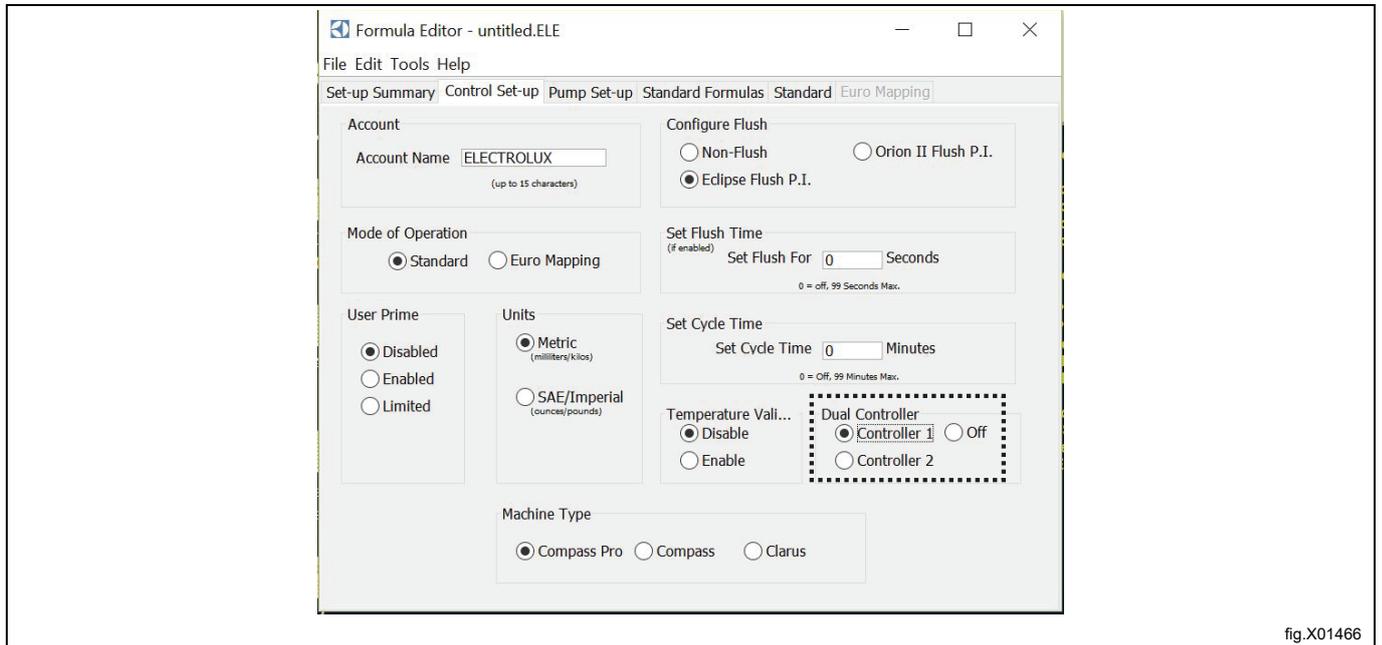

fig.X01466

Note!
In the Formula editor, whether you choose CONTROLLER 1 or 2, the pumps on both dosing formula files are numbered 1–6.

Select the STANDARD FORMULAS menu and enter the product amounts that you wish to dispense in each dosing formula for each EDS controller.

For example, if you have 12 wash programs and you want to use the first EDS controller for programs 1–6 and the second EDS controller for programs 7–12, enter the product amounts for dosing formulas 1–6 in controller 1 and leave dosing formulas 7–12 empty. Then enter the product amounts for dosing formulas 7–12 in controller 2 and leave dosing formulas 1–6 empty.

All 12 dosing formulas on both EDS controllers must be allocated to the corresponding wash program in the machine. This means that dosing formula 1 on controllers 1 and 2 must be allocated to the same wash program in the machine (normally program 1) and dosing formula 2 on controllers 1 and 2 must be allocated to the same wash program in the machine (normally program 2) and so on until all dosing formulas are allocated to the wash programs in the machine.
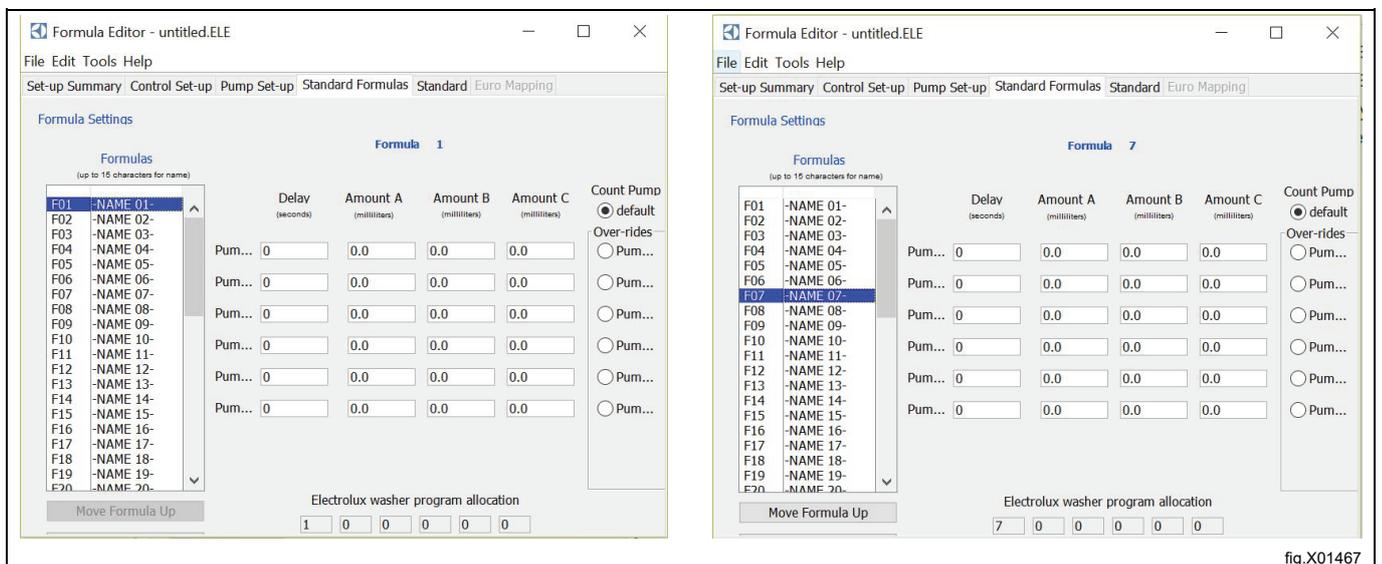

fig.X01467

7.12.2　Set up in the EDS controller

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                    MAIN MENU
 EMERGENCY STOP
 USER PRIME
 USER MANUAL FLUSH
 MANAGE REPORTS
 INSTALLER MENU
 VIEW LOAD FACTOR

```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the SET UNITS OF MEASURE menu and select unit.

```
                  INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
 ELECTROLUX SETUP

```

Activate the DUAL CONTROLLER menu.

```
                 ELECTROLUX SETUP
 ELECTROLUX MACHINE
 ELECTROLUX ADDRESS
 MACHINE WEIGHT
 DUAL CONTROLLER



```

Select CONTROLLER 1 or CONTROLLER 2.

```
                 DUAL CONTROLLER
 OFF
 CONTROLLER 1
 CONTROLLER 2




```

If you select CONTROLLER 1 on any EDS controller, the pumps will be numbered 1–6.

```
                  SET PRIME PUMP
 P1
 P2
 P3
 P4
 P5
 P6

```

If you select `CONTROLLER 2` on any EDS controller, the pumps will be numbered 7–12.

```
                    SET PRIME PUMP
P7
P8
P9
P10
P11
P12
```

7.13 Temperature validation

The EDS Controller can be used to record the time that a machine is at, or above a specific temperature. This information can be used to show thermal disinfection of a wash load.

This information can be used to show thermal disinfection of a wash load.

This temperature validation can be activated together with either EDS pump stand connection or the other separate PNC of stand alone power supply kit. For easy use, this temperature validation setting can be done only in the EDS controller, not available in the formula editor.

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                    MAIN MENU
EMERGENCY STOP
USER PRIME
USER MANUAL FLUSH
MANAGE REPORTS
INSTALLER MENU
VIEW LOAD FACTOR
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `INITIAL SYSTEM SETUP` menu.

```
                  INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE
ELECTROLUX SETUP
```

Activate the `TEMP VALIDATION` menu.

```
                INITIAL SYSTEM SETUP
SET USER PRIME
SET LCD CONTRAST
SET DATE & TIME
CLEAR SETTINGS
VIEW SOFTWARE ID
TEMP VALIDATION
```

In the `TEMP VALIDATION` menu the following menus are available.

• `DISABLE`
• `ENABLE`
• `CUSTOM RANGES`

DISABLE

DISABLE is the default setting and is used to turn off the temperature validation.

ENABLE

ENABLE activates the temperature validation.

CUSTOM RANGES

Note that TEMP VALIDATION must be enabled before activating CUSTOM RANGES.

Activate CUSTOM RANGES to set up to four custom temperature and time ranges.

The temperature is set from 50℃ up to 100℃.

The time is set from 1 minute up to 60 minutes.

The figure shows the default settings.

Activate the row you are going to change. In the example below, row 2 is activated.

CUSTOM RANGES
1. 65℃ — 10 min
2. 71℃ — 03 min
3. 82℃ — 10 min
4. 93℃ — 01 min

In the first menu you edit the temperature. Press Enter to save. You will automatically get to the second menu.

In the second menu you edit the time. Press Enter to save.

Rules of temperature validation

- When setting custom ranges, temperatures must be set in incremental order. The lowest temperature at temperature 1, up to the highest temperature at temperature 4.
- Each temperature must be different; you cannot have a temperature set more than once with different times.
- You can have different temperatures with the same time.

8 Test run

Test run the system when the installation completed.

Select a wash program, start the washer extractor and observe a test load to ensure that all products dispense only when they are supposed to dispense.

9 Technical specification

Products are dispensed one at a time (pumps will queue when more than one is triggered at the same time).

- Maximum product amount = 99.9 ml per kg
- Maximum product delay Time = 999 sec.
- Maximum flush time = 99 sec.
- Maximum pump prime time = 5 min.
- Load count pump = Highest product number in each wash program with a non-zero amount programmed
- Maximum J1 cable length = 22.8 m
- Maximum operating temperature = 49℃

This unit complies with the following directives:

- 2006/95/EC Low Voltage Directive (LVD)
- 2004/108/EC Electromagnetic Compatibility (EMC)

10 Trouble shooting and service

⚠️   ⚠️

Trouble shooting may only be carried out by qualified service personnel.
Disconnect the power and the water before carrying out any maintenance or cleaning on the units.
Do not adjust/rework items not listed in this trouble shooting without guidance from Electrolux service personnel.
If the supply cord is damaged it must be replaced, NOT repaired.

No product on signal

When trouble shooting for no product on signal:

- Confirm that calibration has been made correctly.
- Confirm that dosing formula amounts are correctly programmed in the EDS controller.
- Confirm that the product is allocated to a signal.

J1 and RS232 cable

Ensure that all cables are clean and corrosion free.

Ensure there are no cuts or kinks which can indicate broken wires.

Always replace, NOT repair, damaged cables.

Trouble shooting

Symptom	Observation	Cause	Solution
EDS controller display is not working.	1. No power to unit.	1. No power at source.	1. Reset the power to the EDS controller.
	2. Power OK, display is still not working.	2. Defective PI PCB, J1/RJ11 cable or EDS controller.	2. Change the components one at a time.
No products run on prime or on signal.	1. Is water flowing through the unit?	1. The unit needs a minimum water pressure of 1.5 bar to operate correctly.	1. Turn on the water supply or improve the pressure by installing a booster pump.
	2. Check J1/RJ11 cable connections.	2. Damaged J1/RJ11 cable.	2. Replace J1/RJ11 cable.
		3. Defective PI PCB, J1/RJ11 cable or EDS controller.	3. Change the components one at a time.
Some products do not run on prime or on signal.	1. Check Venturi valve wire connections.	1. Loose Venturi valve wire connection.	1. Reconnect loose Venturi valve wire connection.
	2. Check J1/RJ11 cable connections.	2. Damaged J1/RJ11 cable.	2. Replace J1/RJ11 cable.
		3. Defective PI PCB, J1/RJ11 cable or EDS controller.	3. Change the components one at a time.
One or more products do not run on signal but all pumps prime OK.	1. Confirm product calibration.	1. Products not calibrated.	1. Calibrate products.
	2. Confirm supply signal is reaching the controller.	2. Washer extractor not sending signal or RS232/X10 wire loose.	2. Repair washer extractor, reprogram washer extractor, reconnect signal wires.
	3. Check data cable connections.	3. Damaged data cable.	3. Replace data cable.
		4. Defective EDS controller.	4. Replace the EDS controller.

11 Disposal information

## 11.1 Disposal of appliance at end of life

Before disposing of the machine, make sure to carefully check its physical condition, and in particular any parts of the structure that can give or break during scrapping.

The machine's parts must be disposed of in a differentiated way, according to their different characteristics (e.g. metals, oils, greases, plastic, rubber, etc.).

Different regulations are in force in the various countries, therefore comply with the provisions of the laws and competent bodies in the country where scrapping takes place.

In general, the appliance must be taken to a specialised collection/scrapping centre.

Dismantle the appliance, grouping the components according to their chemical characteristics, remembering that the compressor contains lubricant oil and refrigerant fluid which can be recycled, and that the refrigerator and heat pump components are special waste assimilable with urban waste.
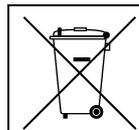
	The symbol on the product indicates that this product should not be treated as domestic waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and human health. For further information on the recycling of this product, contact the local dealer or agent, the Customer Care service or the local body responsible for waste disposal.

Note!
When scrapping the machine, any marking, this manual and other documents concerning the appliance must be destroyed.

11.2 Disposal of packing

The packing must be disposed of in compliance with the current regulations in the country where the appliance is used. All the packing materials are environmentally friendly.

They can be safely kept, recycled or burned in an appropriate waste incineration plant. Recyclable plastic parts are marked as following examples.

PE	Polyethylene: • Outer wrapping • Instructions bag
PP	Polypropylene: • Straps
PS	Polystyrene foam: • Corner protectors

Electrolux
PROFESSIONAL