12 HF
M-500

Installation Instructions
for Electronically Controlled FLOW-THRU Humidifier

Please read the instructions carefully before starting the installation.

Version 3 - June 2001

For assistance please contact:

Hamilton Home Products, Inc.
P.O. Box 12039, Columbus, Ohio 43212
www.HamiltonHomeProducts.com

This humidifier is a flow through model and MUST be connected to a drain.

BEFORE YOU START - GENERAL SAFETY AND INSTALLATION PRECAUTIONS

Please read and understand these instructions fully before you begin this installation and save them for future reference. The manufacturer will assume no responsibility and the warranty will be void if the user does not adhere to the following precautions.

WARNINGS AND DISCLAIMER

Installation Precautions

1) This humidifier will be connected to and used under water pressure and it must be installed in such a way that if a leak occurs, the water could not cause any damage to the property. Make sure all water connections are properly installed or water spill could occur.

2) This humidifier is intended for use on forced warm air circulation furnaces, as well as multi-fuel furnaces where temperature does not exceed 180°F (82ºC). Higher temperatures will damage your humidifier and possibly cause overflow condition and water damage to your home.

3) Do not install a humidifier where surrounding temperatures may be 32°F (0ºC) or colder. Freezing water will damage the humidifier and burst the supply pipe, resulting in home damage.

4) Do not install the humidifier or the bypass connection directly on the furnace housing.

5) Do not install the humidifier or the bypass connection on a plenum side where a cooling coil could restrict or inhibit the airflow through the humidifier.

6) Always check that you are not about to cut or drill into any air conditioning or electrical accessories during installation.

7) Do not install a humidifier on the supply duct where the static pressure exceeds 0.4" Water Column.

8) Do not install a humidifier if the city water pressure exceeds 90 psi. Check the local codes related to pressure reduction.

9) The installation, wiring and plumbing of the humidifier must comply with national and local electrical, plumbing and building codes.

10) Electrical wiring and water tubing must not come into contact with sharp edges or hot surfaces. For the drainable models, please make certain the drain tube has no bends, its end placed in a floor drain and there is no resistance to the flow of the discharged water.
11) The transformer supplied is rated for 120 V power supply. Do not connect it to an installation supplied with another voltage.
12) Do not set the humidity level higher than normally recommended, or condensation damage could occur.

Safety Warnings

1) Please beware of sharp edges when you cut into a metal duct.

2) Always shut the power off before starting the installation. An electric shock from 120 volts could cause injury.

3) Hot water temperature higher than 125°F (52ºC) could burn you seriously. Please make sure the main water supply is shut off before connecting the humidifier water supply.

1. Required tooling

Tin snips, **3/32"** drill bit, **3/8"** drill bit, pliers, flat and Phillips screwdrivers, electric drill, hammer, center punch, small adjustable wrench, small open keys, safety goggles.

IMPORTANT NOTE:
This humidifier is supplied with **RECEX®** screws that allow the use of either a Robertson or Phillips screwdriver.

2. Principles of operation

- This humidifier uses a vertical evaporator pad, wetted by a pulsed water flow. Warm air is by-passed from the warm air plenum and forced through the evaporator pad. Humid air is drawn back into the return duct.
- The pad is enclosed in an easy to replace cartridge. They are marks on the frame to clearly indicate its normal position. It is designed to retain water before it is evaporated. The excess of water is sent to the drain, at the same time flushing away the minerals that have been left on the pad.

- This humidifier is equipped with an electronic control that allows a controlled water flow on the evaporating pad. Installed on the warm air duct, it "senses" when heat is produced by the furnace. It then opens the electric valve for an average of 3 seconds and then closes the valve for another 30 seconds, and so on. This gives time for the water retained on the pad to be evaporated in the system, without wasting a lot of water, which normally would go directly to the drain. *This is one of the main features of this humidifier and compared to other continuous flow trough models, this one saves up to 80% of water consumption.*
- It is normal to have a bit of water flowing in the drain tube, though. This flushing-away method removes the dissolved minerals that are always left on the pad in a normal evaporation process before they settle and dry up. Just consider that little water waste as a "rinse n' drain cycle".
- Although all flow-through humidifiers improve performance and evaporative capacities if they are used with constant blower operation and are connected to the service hot water max 140°F (60ºC), **this exclusive pulse action model** optimizes performance and reduces water consumption.

3. Typical installations (Please see **Fig. 20**)

There are two frequently encountered types of installations: LOWBOY furnace **(Fig. 20.1)** and HI-BOY furnace **(Fig. 20.2)**.

4. Humidifier location

- This type of humidifier can be installed on either the supply or the return duct. It is reversible and the air input can be located on either the left or right side. However, the pictures represent the humidifier installed on the return duct.
- Identify the cold air duct and choose the side of the furnace that allows the best access for installation and maintenance.
- Please refer to the general view of a typical installation **(Fig. 21)**.
- Select the position in which the humidifier will be installed and determine what will be the top of the humidifier.
- The humidifier must be installed in such a way that if a leak occurs, the water could not cause any damage to the property.

5. Assembling the humidifier: *This humidifier must be assembled before installation*.

NOTE: All the parts are contained in the carton box inside the humidifier except the drain tube.

- Open the humidifier body by unsnapping the top and the bottom from the two sides.
- Remove the evaporator pad from the humidifier.
- Open **Kit No. 6** and take two screws #6 x 1/2".
- Install and fasten the water diffuser **(25.1)**, the long black plastic piece **(**Please see **Fig. 25)**, with two screws #6 x 1/2" **(25.2)** inside of the top part of the humidifier.
- Install the electric valve outside of the top of the humidifier. **Kit No. 7** contains all the material you need to install the electric valve. The valve is factory mounted on a plastic bracket. There is only one way to install the valve. While supporting the water diffuser with one hand, insert the plastic tube protruding from the valve into the hole in the middle of the top part of the humidifier.
- **(**Please see **Fig. 23)**, making sure that the plastic tube is firmly seated in the hole of the water diffuser.
- Fasten the valve assembly to the humidifier body with screws #6 x 1/2" **(28.11)**.
- Install the fastener for the cover at the bottom of the unit with screws #6 x 1/2" **(**Please see **Fig. 35)**.

6. Installing the humidifier

- Please refer to the general view of a typical installation **(Fig. 21)**.
- Shut the furnace power off.
- **Kit No. 6** contains all the material you need to install the humidifier body.
- Choose the location of the template and make sure that a distance of approximately 14" between the furthest left vertical line of the humidifier opening and the center of the air take-off collar can be obtained **(**Please see **Fig.22).**

This 14" dimension is given for a typical installation. Some installations may differ.

- Apply the humidifier template **(#1)** on the cold air duct, level it and then attach it to the duct.
- Starting from the vertical line of the opening (the one closest to the warm air duct), measure 14" and mark the center of the air take-off opening.

WARNING: Always check that you are not about to cut or drill into any air conditioning or electrical accessories during installation.

- Center punch the four screw holes and the four corner holes through the template and pierce the duct with a 3/32" drill.
- Remove the template. Make a starting hole and cut a rectangular opening that will correspond to the back opening of the humidifier (9-1/4" x 8-1/4").
- Hold the humidifier by the plastic cross in the middle of the back rectangular opening with one hand and with the other hand put the four screws (#8 x 3/4") to attach the humidifier body to the duct. The ribs around the humidifier back opening must fit into the rectangular opening in the duct.
- Check that the humidifier body is level from side to side. Then fasten the humidifier completely to the duct with the four screws.
- Close the top part of the humidifier body by locking it back to the two sides.
- Leave the bottom part of the body open until you install the evaporator pad.

7. Installing the air take-off collar (Fig. 21 & 26)

- Center the air take-off collar on the point previously marked on the return duct.
- Hold the collar **(21.3 & 26.2)** on the duct and mark the four fastening holes and the inside zone of the collar that you have to cut.

WARNING: Always check that you are not about to cut or drill into any air conditioning or electrical accessories during installation.

- Center punch and drill the four fastening holes (3/32" dia). Make a starting hole and cut a round opening for the air take-off collar.
- Fasten the air take-off collar to the duct with four screws (#8 x 3/8").

8. Installing the adjustable damper and the flexible duct (Please see the general view **Fig. 21)**

- Slide the damper assembly into the side opening of the humidifier until it snaps. Make sure to position the damper control knob in front of the unit **(21.4)** for an easy adjustment. Check that the damper is working properly.
- Measure the required flexible duct length necessary to connect the humidifier to the air take-off collar **(21.3)**, so it does not sag. Cut the excess portion.
- Slide the flexible duct **(21.1)** on the air take-off collar **(21.3)** and secure it by inserting the plastic pins **(21.2)** through the vinyl in between two reinforcement wires.
- Slide the other end of the flexible duct on the damper assembly **(21.4)** and secure it the same way.

9. Connecting the water supply tube to the electric valve of the humidifier (Please see **Fig. 28)**

The plastic tube **MUST** be kept away from hot surfaces (e.g. the warm air duct or the exhaust vent) or sharp edges. Please measure carefully before cutting.

NOTE: It is recommended to use the plastic tube supplied with the humidifier. One end of the tube has a plastic flow restrictor insert (28.3) already installed in order to reduce potential water hammer problems. This end should be installed in the electric valve. Should you use copper tubing, knocking or noise could occur because of the sudden closing of the valve.

- Slip the brass compression nut **(28.1)** onto the plastic tube **(28.4)**, then the nylon sleeve **(28.2)** (supplied with the brass valve) with its most tapered end towards the end of the tube.
- Push the tube fully into the valve. Tighten the brass compression nut with **small** wrenches, without stripping, using the double wrench method in order to apply the torque **on the fitting only** and not on the valve assembly.

10. Installing the supply valve on a copper pipe (Please see Fig. 29)

A plastic bag contains a brass valve and all the material required to install the supply valve. The water supply is taken from the nearest suitable water pipe. Shut off the main water valve.

CAUTION: Please make sure that the piercing pin is completely backed up into the valve body by turning the handle counter clockwise.

- Assemble one side of top clamp **(29.1)** to bottom clamp **(29.2)** with a screw **(29.3)** and a nut **(29.4)**.
- Make sure that the rubber gasket **(29.5)** is in place over the piercing needle and position the valve assembly on the copper water line.
- Assemble the other side of the top clamp **(29.1)** to the bottom clamp **(29.2)** with the remaining screw and nut, with the output of the valve facing towards your new installation.
- Tighten the two screws so that the valve is firmly attached to the water pipe. The two sides of the clamp must be parallel.
- Turn the valve handle completely clockwise until it stops. This will pierce the copper pipe and close the valve.
- This saddle valve is designed to be fully open or closed. Do not use it to regulate the water flow.

11. Connecting the water supply tube to the supply valve (Please see **Fig. 29)**

- Slip the brass compression nut **(29.9)** onto the plastic tube, then the nylon sleeve **(29.7)** with its most tapered end towards the end of the tube.
- Fit a brass insert **(29.8)** (1/2" long, supplied with the brass valve) into the end of tubing.
- Push the tube fully into the supply valve. Tighten the brass compression nut firmly, without stripping.

12. Installing the evaporator pad (Please see **Fig. 30)**

- The pad is enclosed in a plastic frame **(30.1)** with molded markings that clearly indicate the bottom.
- Slide the pad into the top part of the humidifier, against the water diffuser.
- Push the pad against the back opening of the humidifier.
- Close the bottom part of the body to support it and secure the bottom part to the sides with the two snap locks.

13. Installing the water drain (Please see **Fig. 31)**

***CAUTION:* Since there will be water flowing from the bottom of the unit, a drain is a must for this type of humidifier.**

- Locate the nearest floor drain for running the drain tube.
- Before you connect the tube to the drain fitting, slip the hose clamp **(31.3)** over the tube.
- Push the drain tube **(31.2, 1/2" I.D.)** over the drain fitting **(31.1)** located at the bottom of the unit and secure it in place with the hose clamp **(31.3)**.
- Make sure the tube does not come in contact with sharp edges and has no bends or kinks, so the water can flow easily to the drain without accumulating in the tube.

NOTE: If, for any reason, the draining tube has a few kinks which prevent you from installing it straight, leave it in a bucket of hot water during the time you install the humidifier. It will soften, thus enabling to install properly.

14. Installing the electronic controller (Please see **Fig. 32)**

- Apply the electronic control template **(#3)** on the warm air duct, no more than 30" from the humidifier electric valve, and attach it to the duct.

WARNING: Always check that you are not about to cut or drill into any air conditioning or electrical accessories during installation.

- Center punch the two screw holes and the sensing hole through the template and pierce the duct with a 3/32" drill.
- Remove the template from the duct.
- Enlarge the middle hole with a 3/8" dia. drill.
- Take the electronic controller and push two quick connectors **(32.4**, found in **kit #6)** on the two terminals marked 24 VAC.
- Fasten the electronic controller **(32.1)** to the duct with two screws #8 x 1/2" (32.5).

15. Installing the humidistat (Fig. 20, 21) and final wiring (Fig. 32, 33)

- This humidifier is supplied with a duct-mounted humidistat and a plug-in transformer **(33.1)**.
- Locate a 120 V outlet, which will not be shut off. **DO NOT** plug in the transformer until the installation is completed. The RETURN duct mounting method allows a better "sensing" of all the air returned to the furnace without being disturbed by a sudden increase in moisture level (kitchen or bathroom), thus offering superior humidity control.
- **Kit No. 4** contains all the material you need to install the humidistat.
- The humidistat **(21.5)** should be installed on a flat and vertical surface of the RETURN duct at 6 inches minimum from the humidifier top.
- Attach the humidistat template **(#2)** on the duct.

WARNING: Always check that you are not about to cut or drill into any air conditioning or electrical accessories during installation.

- Mark and drill the mounting holes and cut an opening for the humidistat.
- Push the two quick connectors **(33.3,** supplied in **kit # 4)** on the humidistat **(33.2)** terminals identified as **#2** (or COM) and **#3** (or NO).
- Split the wire **(33.4)** coming from the transformer **(33.1)** in two on a length of approx. 10".
- Connect one end to the terminal identified **#2** (or COM).
- Strip the colored wire **(33.5**, supplied**)** and connect it to terminal identified as **#3** (or NO).
- The mechanism of the humidistat must be exposed in the duct. Install the humidistat in the opening and make sure that you run the two "humidistat wires" through the little opening located at the bottom of the front panel.
- Check that the metal of the duct neither touches the connections nor cuts the wire insulation.
- Fasten the humidistat to the duct with four screws **(34.2)**.
- Complete the wiring of the humidistat according to **Fig. 33**.
- The electronic controller **(32.1 and 33.6)** has four terminals, two for the valve output and two for the power input.
- Connect the double wire **(33.7,** supplied**)** equipped with quick connectors to the two straight vertical terminals of the electric valve **(33.8)**. Then connect the other end to the two terminals on the electronic controller **(33.6)** (marked **"VALVE"**) while supporting the controller with one hand so as not to break the plastic brackets.
- Run the two wires left from the humidistat installation **(33.4 and 33.5)**, strip them and connect them to the 90 degree tabs (marked **"24 VAC"**) on the top of the electronic controller **(33.6)**.
- The electric installation is now complete.
- Temporarily install the control knob **(34.4)** on the humidistat.

16. Humidifier start-up

- Hook the cover at the top of the humidifier first, close it, hook the bottom and then fasten it to the bottom of the humidifier body **(35.1)** with the knurled head plastic screw **(35.2)**.
- ***NOTE:*** The furnace must be in a heating cycle for this humidifier to operate.
- Open the water supply valve on the copper pipe, put the furnace power back on, plug the transformer in the wall outlet, start the furnace in a heating cycle and turn the humidistat control knob to the maximum setting. When the electronic controller senses heat in the warm air duct, you should hear the valve open. After a few ON/OFF cycles of the electric valve, water should flow through the drain tube.
- Carefully check that both ends of the water supply tube are firmly held in place by their respective compression fitting.
- After peeling off the backing, affix the faces plate **(34.3)** to the cover of the humidistat and re-install the control knob **(34.4)**.
- Set the humidistat according to the recommended setting on the label.
- Cycle furnace several times to make sure that there is a free flow in the drain tube and that there is no leak before leaving the installation unattended.

A few tips about the electronic controller:

- The **HSP 024** controller has a temperature range of 102ºF (39ºC) to 110ºF (43ºC) which should suit almost all applications.
- If the furnace is operating at higher temperature (preventing the controller from closing the electric valve), try to adjust the fan high limit switch to a lower setting. This will allow the fan to run longer and dissipate the remaining heat into the house, its final destination.
- On the contrary, if the furnace operates at lower temperature (preventing the controller from opening the electric valve), or for heat pump applications, please call our help line and ask for a low temperature controller.

17. Controlling the humidity level - Adjusting the relative humidity setting

- A relative humidity environment of 40% is recommended. However, you should take the outside temperature in consideration before setting the humidity level in order to avoid condensation on the windows. Please refer to the table on the humidistat to help determine the proper level.
- At the beginning of the heating season it may take some time (a few days) to build up the humidity to a comfortable level, all depending on the original dryness of the house, because carpets, furniture and wood will absorb moisture before you could really feel it.
- Each adjustment of the humidistat should be followed by a period of 24 hours to allow the general humidity level to stabilize in the house.
- If your house remains unoccupied during the winter season set the humidistat to a lower set point in order to prevent condensation.

18. By-pass air adjustment

- Sometimes there can be a sufficient pressure differential that may cause an excess of air to flow through the by-pass flexible duct, thus reducing the airflow to some distant heat outlets in the house. It may also blow water off the evaporator pad. In either case the air damper **(21.4)** should be gradually closed until the condition is corrected.

19. Humidifier maintenance tips

- To remove the pad:

1- Shut off power by unplugging the transformer **(33.1)** and shut the water supply valve **(29.1)**.
2- Open the humidifier door by removing the screw at the bottom.
3- Remove the drain tube **(31.2)** from the bottom of the unit.
4- Unsnap the bottom of the humidifier to free the evaporator pad.

NOTE: It is recommended to replace the evaporator pad once per heating season.

20. Summer season

- If the system is equipped with a cooling coil for the summer, reduce the air volume by closing the air damper on the humidifier.
- It is recommended to simply shut off the humidifier system:
  1- Close the water supply valve **(29.1)**
  2- Turn the humidistat knob **(34.4)** to the "OFF" position
  3- Unplug the transformer **(33.1)**.

WARRANTY: This humidifier is guaranteed against any defects in material and workmanship, under normal use, for one (1) year from the date of purchase. The frame and door are guaranteed for life against defects in material and workmanship, under normal use. This warranty applies only if the unit is properly installed and operated according to the instructions provided with this product. This warranty will not cover defects due to misuse or faulty installation. The manufacturer will not be held responsible for any bodily injuries or damages to personal property or real estate, whether caused directly or indirectly by the humidifier. If warranty service is required during the warranty period, the distributor will, at its sole discretion, repair or replace the product, without charge, upon delivery of the product to the store where it was purchased, with proof of purchase.

Spare parts for this flow-thru model are available in kits only.
Quantity per kit UPC code

Fig.	Description	Quantity
	Electric Valve	**Kit #7**
28.1	Brass compression nut	1
28.2	Nylon sleeve for plastic tubing (in the supply valve Kit)	1
28.3	Plastic insert	1
28.5	Electric valve body & solenoid	1
28.6	Hexagonal nut 5/16 - 24	1
28.7	Plastic tube 1/4” x 1”	1
28.9	Plastic bracket for electric valve	1
28.10	Plastic spacer factory installed in the valve	1
28.11	Bracket fastening screw #6 x 1/2”	2
	Supply valve	
29.1	Needle valve body & top bracket	1
29.2	Valve bottom bracket	1
29.3	Machine screw 1/4-20 x 1-3/4”	2
29.4	Hexagonal nut 1/4-20	2
29.5	Rubber gasket	1
	Brass sleeve for copper tubing	1
29.7 & 28.2	Nylon sleeve for plastic tubing	2
29.8	Brass insert	2
29.9	Brass compression nut	1
30.1	**Cartridge Evaporator Pad**	1
31.2	**Drain tube 1/2”**	1
28.4	**Water supply tube 1/4”**	1
	Electronic controller HSP 024	
32.1	Electronic module	1
32.4	Quick wire connector (supplied in Kit #6)	2
32.5	Sheet metal screw #8 x 1/2” (supplied in Kit #6)	2
33.1	**Plug-in transformer**	1
	Humidistat	**Kit #4**
34.1	Humidistat assembly	1
34.2	Flat head metal screw #6 x 1” 4	4
34.3	Self-sticking label	1
34.4	34.4 Adjustment knob	1
33.3	33.3 Quick wire connector	2

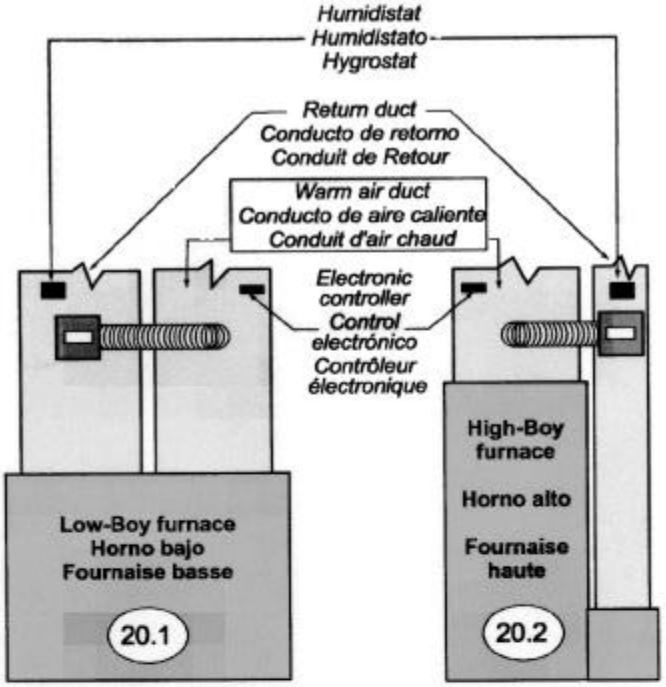


Fig.20 Typical installations
Instalaciones típicas
Installations type

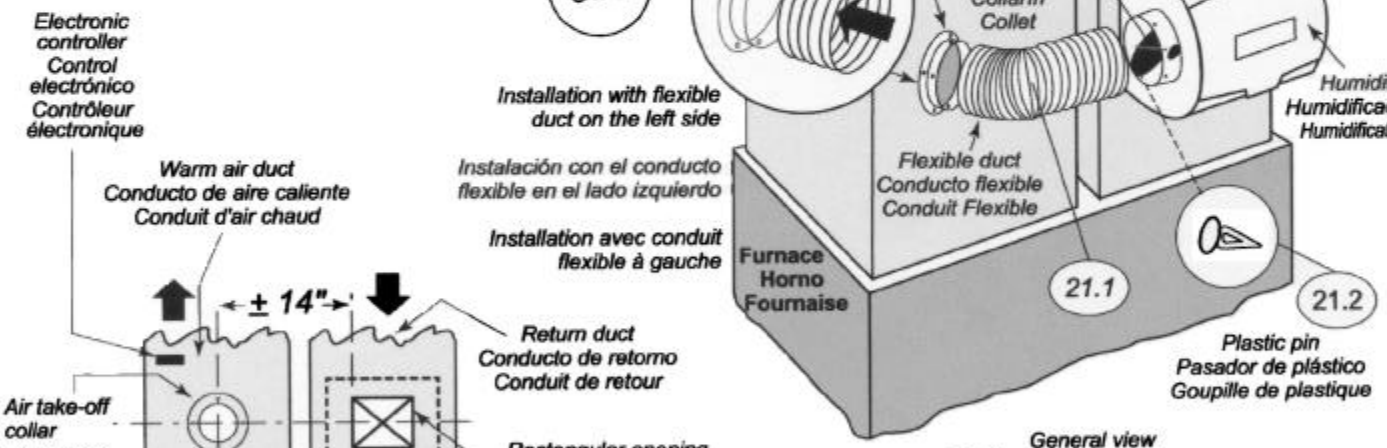
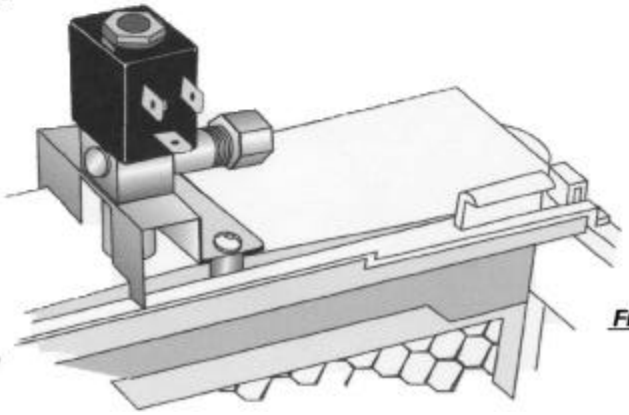


Fig.21 General view
Vista general
Vue générale

Template and collar location
Plantilla y lugar del collarín
Emplacement du gabarit et du collet

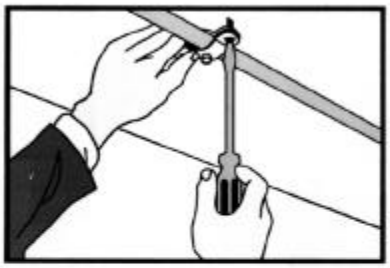
Fig.22



Installation of the electric valve
Instalación de la válvula eléctrica
Installation de la valve électrique

Fig.23

Version 3



Tap into a water supply line with the saddle valve supplied.

Capte el agua a partir de la línea de suministro por medio de la válvula de asiento.

Faire la prise d'eau sur une conduite existante au moyen de la valve à collier fournie.

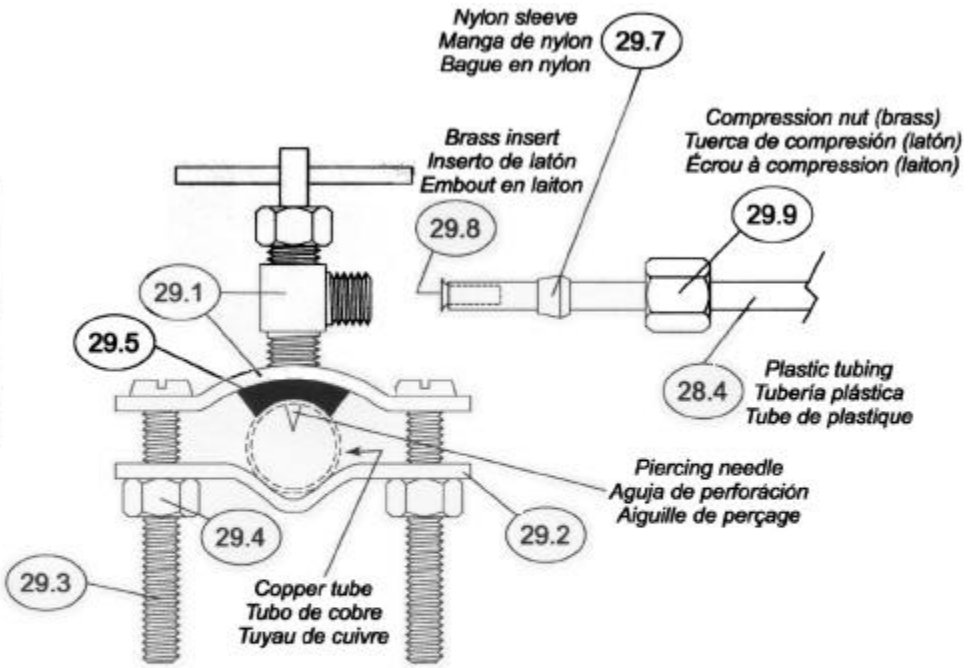


Fig.29 *Installing the saddle valve and connecting the tubing to it*
Instalación de la válvula de suministro
Installation de la valve et du tube d'alimentation d'eau

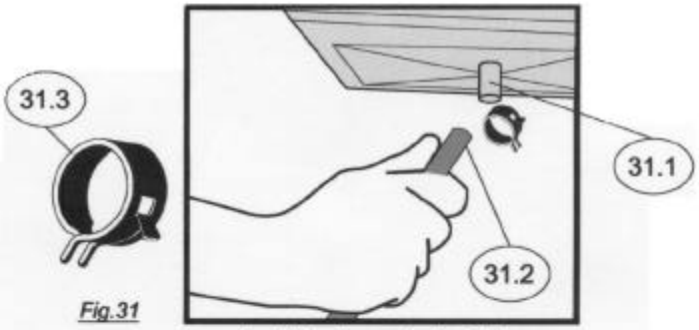
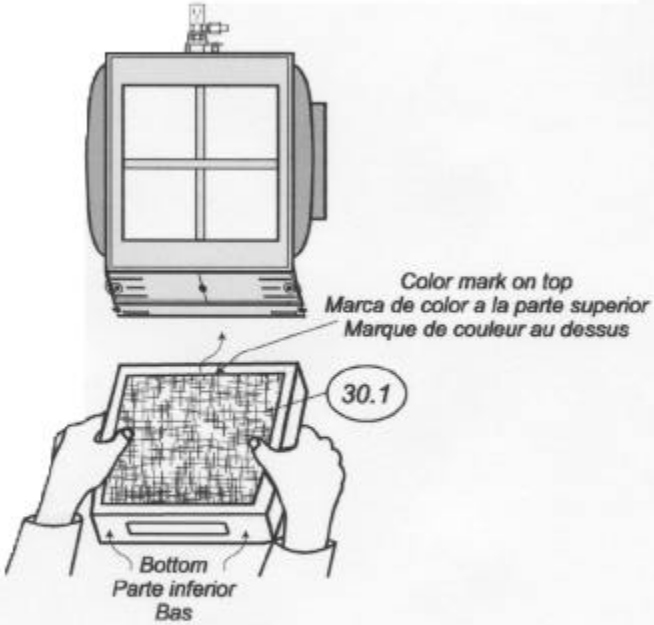


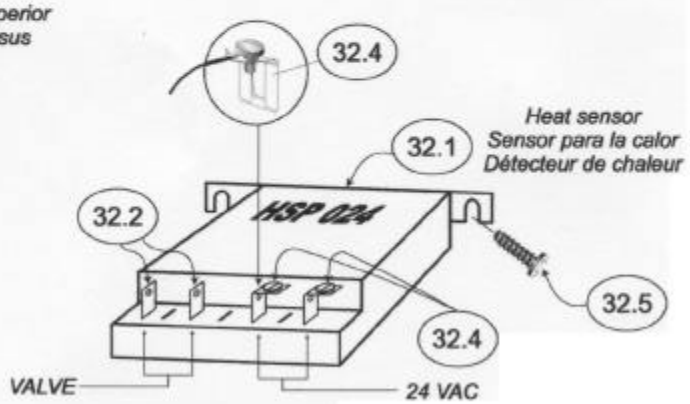
Fig.31

Installing the water drain tube
Instalación de la tubería de drenaje
Installation du tuyau de drain



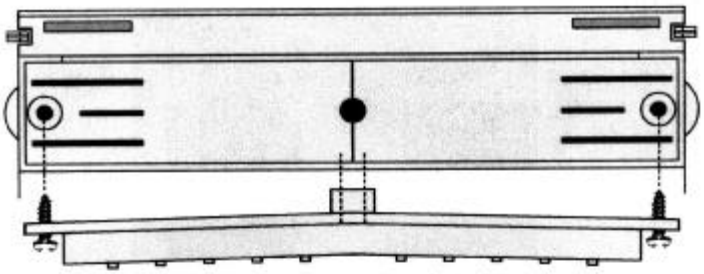
Evaporator pad installation
Instalación de la esponja de evaporación
Installation du tampon évaporateur

Fig.30



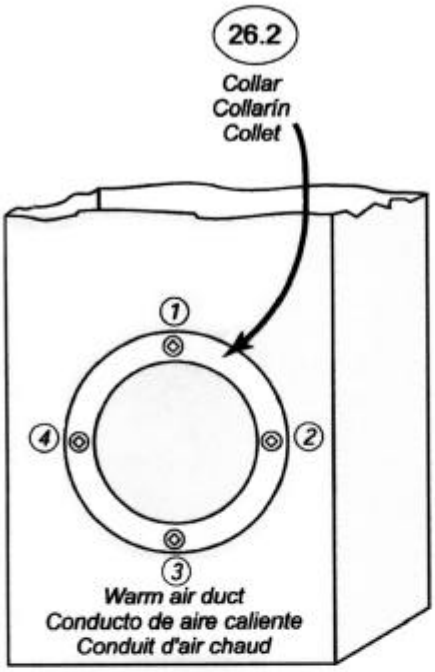
Electronic controller
Control electrónico
Contrôleur électronique

Fig.32



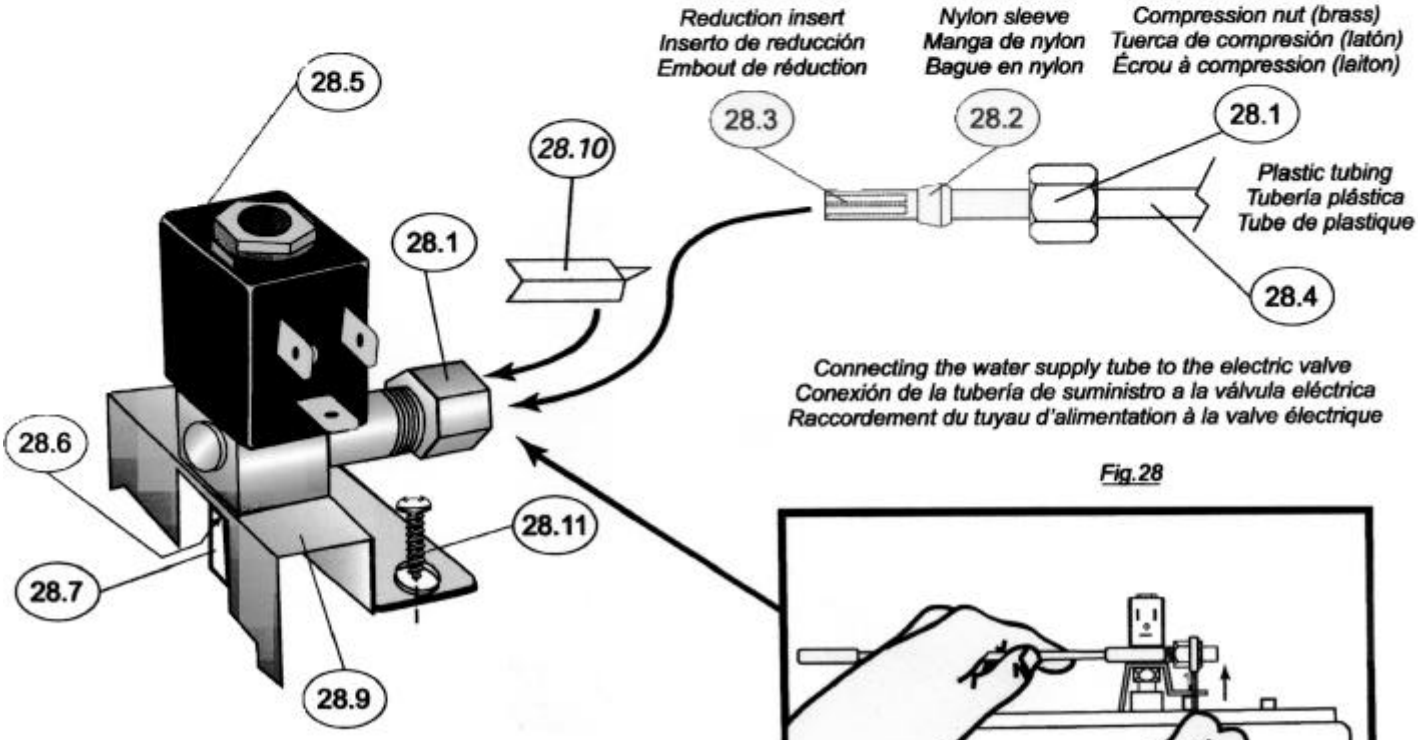
Installation of the water diffuser
Instalación del difusor de agua
Installation du diffuseur d'eau

Fig.25



Air take-off collar installation
Montaje del collarín de salida de aire
Installation du collet de prise d'air

Fig.26



Connecting the water supply tube to the electric valve
Conexión de la tubería de suministro a la válvula eléctrica
Raccordement du tuyau d'alimentation à la valve électrique

Fig.28

Double wrench method
Método de la doble llave
Méthode à deux clés

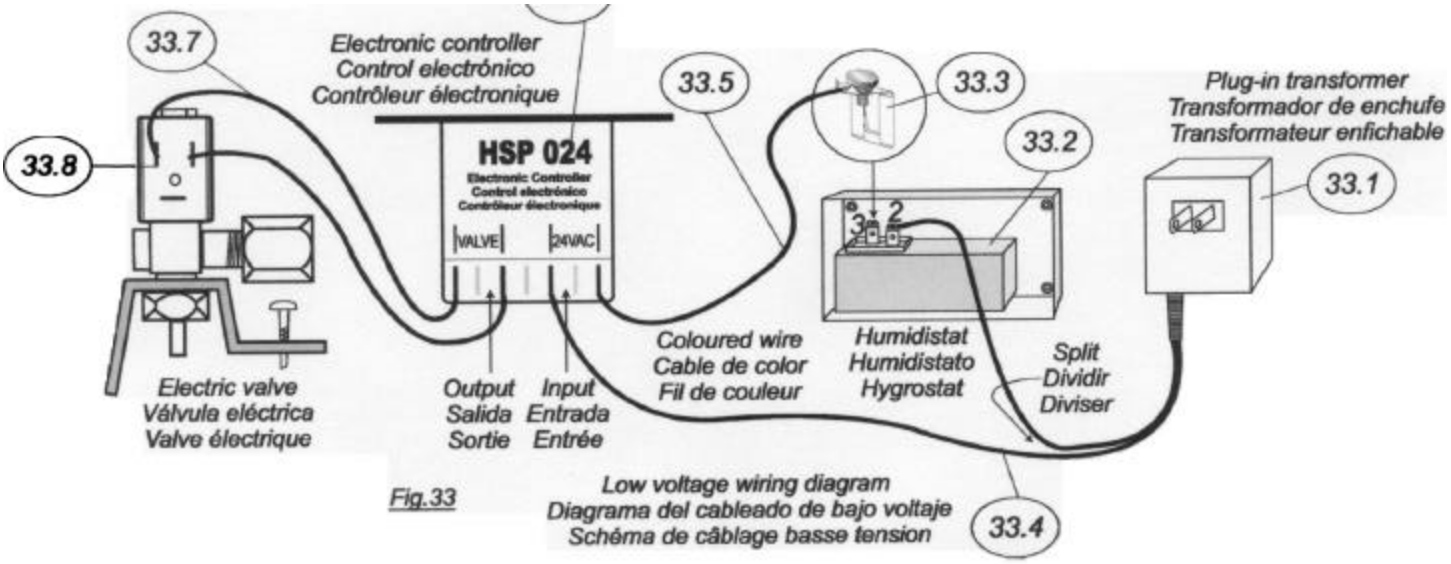


Fig.33

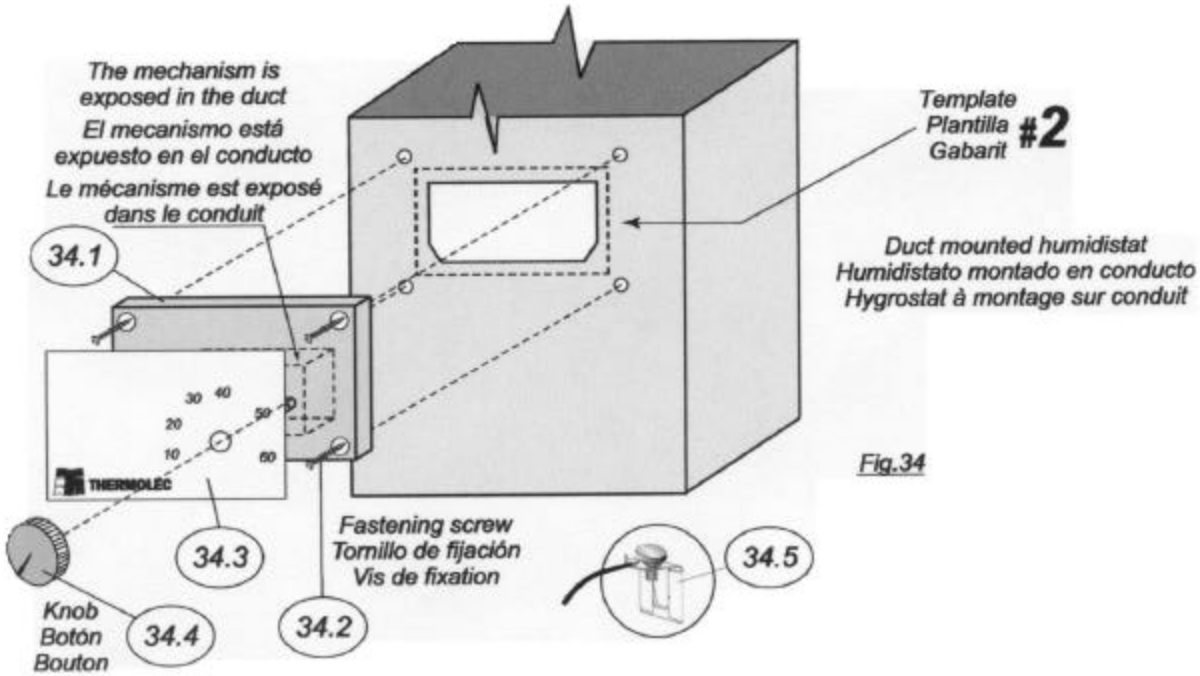


Fig.34

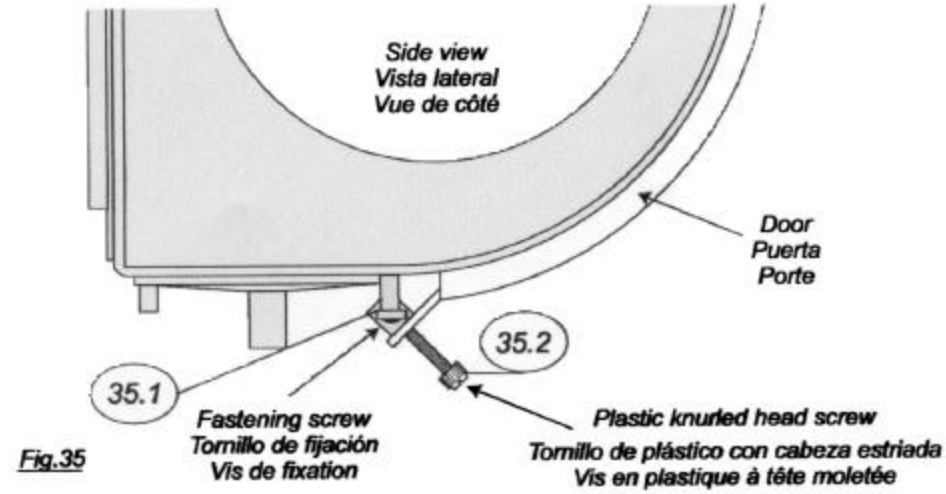
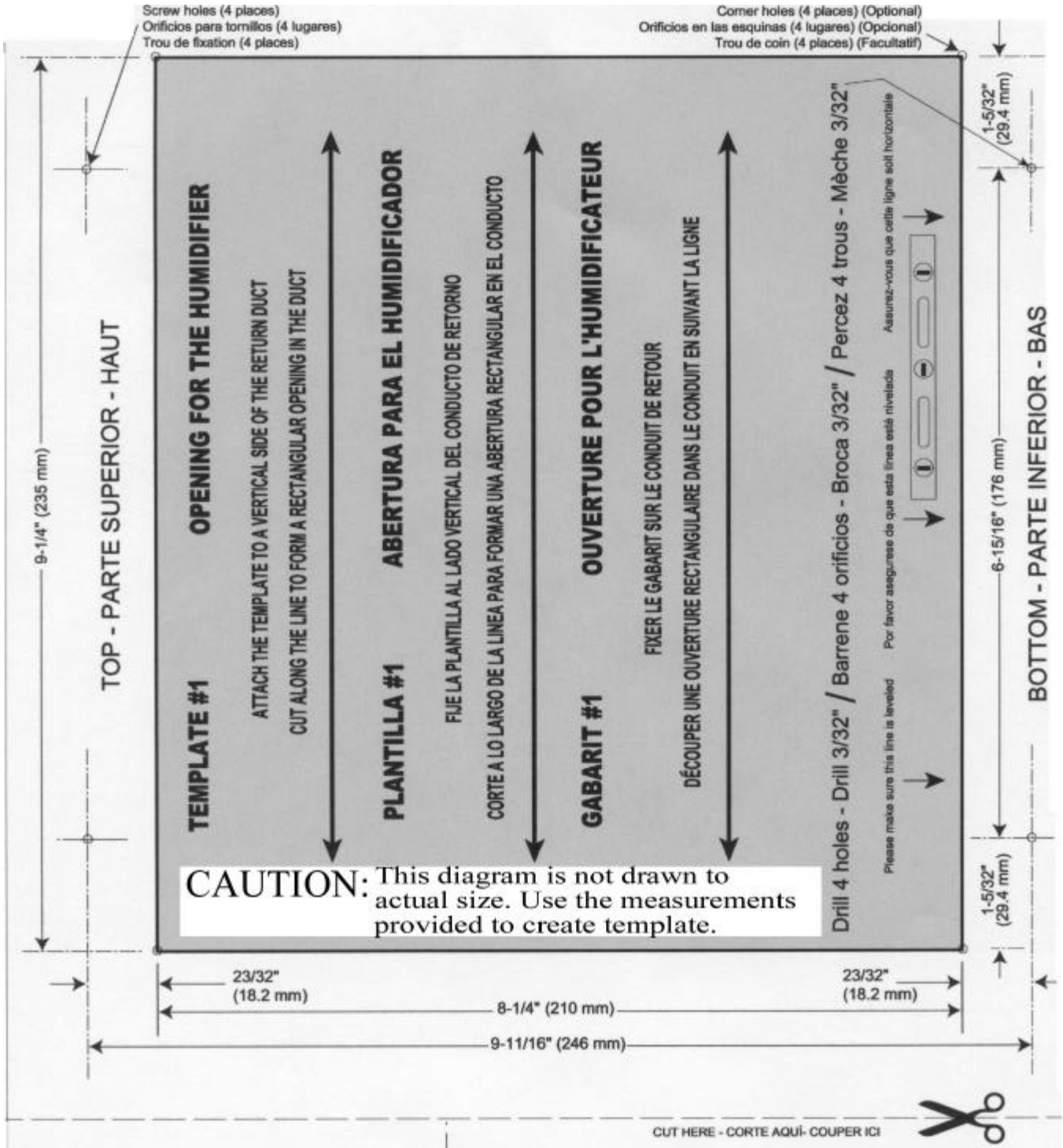


Fig.35


Screw holes (4 places)
Orificios para tornillos (4 lugares)
Trou de fixation (4 places)
Corner holes (4 places) (Optional)
Orificios en las esquinas (4 lugares) (Opcional)
Trou de coin (4 places) (Facultatif)
TOP - PARTE SUPERIOR - HAUT
BOTTOM - PARTE INFERIOR - BAS
9-1/4" (235 mm)
6-15/16" (176 mm)
1-5/32" (29.4 mm)
1-5/32" (29.4 mm)
TEMPLATE #1
OPENING FOR THE HUMIDIFIER
ATTACH THE TEMPLATE TO A VERTICAL SIDE OF THE RETURN DUCT
CUT ALONG THE LINE TO FORM A RECTANGULAR OPENING IN THE DUCT
PLANTILLA #1
ABERTURA PARA EL HUMIDIFICADOR
FIJE LA PLANTILLA AL LADO VERTICAL DEL CONDUCTO DE RETORNO
CORTE A LO LARGO DE LA LINEA PARA FORMAR UNA ABERTURA RECTANGULAR EN EL CONDUCTO
GABARIT #1
OUVERTURE POUR L'HUMIDIFICATEUR
FIXER LE GABARIT SUR LE CONDUIT DE RETOUR
DÉCOUPER UNE OUVERTURE RECTANGULAIRE DANS LE CONDUIT EN SUIVANT LA LIGNE
Drill 4 holes - Drill 3/32" / Barrene 4 orificios - Broca 3/32" / Percez 4 trous - Mèche 3/32"
Please make sure this line is leveled
Por favor asegurese de que esta linea esté nivelada
Assurez-vous que cette ligne soit horizontale
CAUTION: This diagram is not drawn to actual size. Use the measurements provided to create template.
23/32" (18.2 mm)
8-1/4" (210 mm)
23/32" (18.2 mm)
9-11/16" (246 mm)
CUT HERE - CORTE AQUÍ- COUPER ICI
Drill 3/32" (2.4 mm)
3/8" dia. (9.5 mm dia.)
2-11/16" (68.25 mm)
Template for electronic controller
Plantilla para el control electrónico
Gabarit pour le contrôleur électronique
TEMPLATE PLANTILLA GABARIT #3
TEMPLATE PLANTILLA GABARIT #2
Screw hole (4 places)
Orificios para tornillos (4 lugares)
Trou de fixations (4 places)
3 3/8" 86 mm
Humidistat outline
Contorno del humidistato
Contour de l'hygrostat
OPENING FOR THE HUMIDISTAT
ABERTURA PARA EL HUMIDISTATO
OUVERTURE POUR L'HYGROSTAT
2 1/8" 54 mm
1 7/16" 36 mm
2 1/2"

THIS PLASTIC INSERT IS FACTORY INSTALLED.
IT PREVENTS POTENTIAL WATER HAMMER PROBLEMS.

CETTE EMBOUT DE PLASTIQUE EST INSTALLÉ À L'USINE.
IL PRÉVIENT LES PROBLÈMES POTENTIELS DE COUP DE BÉLIER.

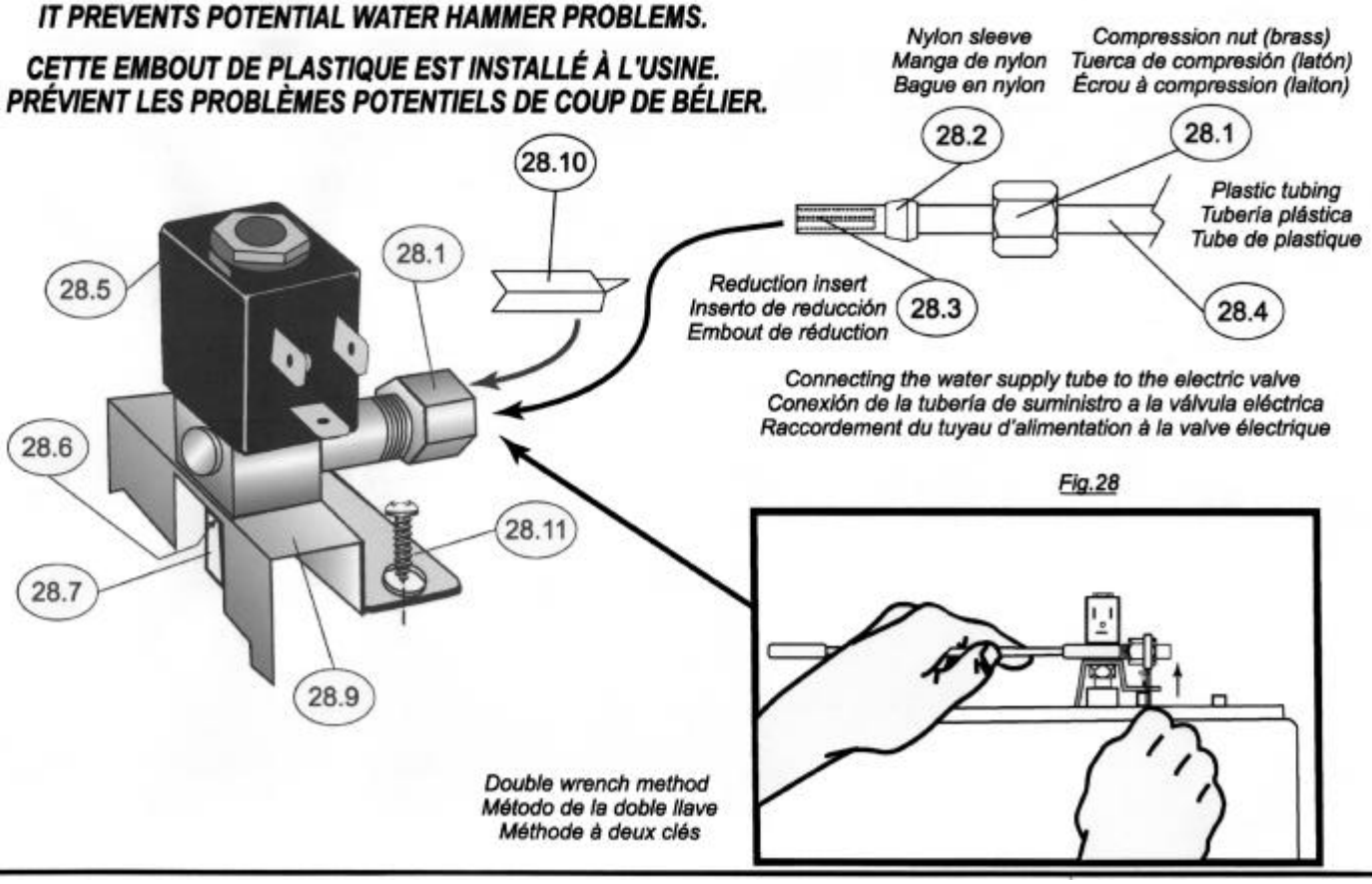


Fig.28

MODEL 12HF Humidifier

Limited One-Year Product Warranty
Lifetime Frame and Cover Guarantee

This limited one-year warranty and lifetime frame and cover guarantee cover this Hamilton Humidifier as designated on the return portion of the warranty registration card, excluding wiring, plumbing, and installation.

Hamilton Home Products, Inc. warrants that all new Hamilton Humidifiers are free from defects in material and workmanship under normal, non- commercial use and service. Hamilton will remedy any such defects as they appear within 12 months from the date of original installation as evidenced by receipt of the warranty registration card, subject to the terms and conditions of this limited one-year warranty stated below:

1) This limited one-year warranty is granted by Hamilton Home Products, Inc. PO Box 12039, Columbus, Ohio 43212
2) This warranty shall extend only to any non-commercial owner who has purchased this residential product other than purpose of resale.
3) The completion and return of the warranty registration card is a condition precedent to warranty coverage and performance. Warranty is not valid unless this card is completed and mailed to the factory within 15 days of equipment installation. This warranty only applies if the unit is properly installed and operating according to the manufacturer's instructions provided with this product.
4) All components are covered by this limited warranty except expendable items. **The frame and cover are guaranteed for life against defects in material and workmanship, under normal use.**
5) If within the warranty period any Hamilton product requires service, Hamilton will not pay shipping charges or, or labor charges to remove or replace such defective parts or components. If the part or component is found by inspection to contain such defective material or workmanship, it will be either repaired or exchanged, free of charge, at Hamilton's option, and returned freight collect.
6) In order to obtain the benefits of this limited one-year warranty, the owner must notify the seller of any defects within 30 days of discovery. If after reasonable time you have not received a satisfactory response, notify in writing, Hamilton Home Products, Inc. PO Box 12309, Columbus, Ohio 43212. HAMILTON WILL RECEIVE, FREIGHT PREPAID, ONLY REMOVABLE PARTS OR COMPONENTS OF SUCH DEFECTIVE PRODUCTS.
7) This limited one-year warranty does not apply to any part or component that is damaged in transit or handling; has been subject to abuse, neglect or accident; has not been installed, operated and serviced according to Hamilton's instructions; has been operated beyond factory rated capacity; altered in any such way that its performance is affected. There is no warranty due to neglect, alteration, or ordinary wear and tear. Hamilton's liability is limited to replacement of defective parts or components and does not include payment of the cost of labor charges to remove or replace such defective components or parts.
8) Hamilton will not be responsible for loss of use of any product: loss of time, inconvenience, or any other indirect, incidental, or consequential damages with respect to person or property, whether caused directly or indirectly by the product, or as a result of breach of contract, neglect or otherwise. **Some states do not allow the exclusion or limitation of incidental or consequential damages, so the limitation of exclusion in the preceding sentence may not apply to you.**
9) THIS WARRANTY GIVS YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VERY, FROM STATE TO STATE.
10) Any warranty work will be performed within a reasonable time, usually within 120 days after notice of defect and delivery to Hamilton's factory, subject to delays beyond the manufacturer's control.
11) Any warranty by Hamilton of merchantability, fitness for use or any other warranty (expressed, implied, or statutory), representation or guarantee other than what is set forth herein shall expire at the expiration date of this limited one-year warranty. **Some states do not allow limitation on how long an implied warranty lasts, so the limitation in the preceding sentence may not apply to you.**
12) Hamilton reserves the right to make changes in the design and material of its products without incurring any obligation to incorporate such changes in the units completed on the effective date of such change.

Hamilton Home Products, Inc.
PO Box 12039, Columbus, Ohio 43212
1-800-879-0123 / *www.hamiltonhomeproducts.com*