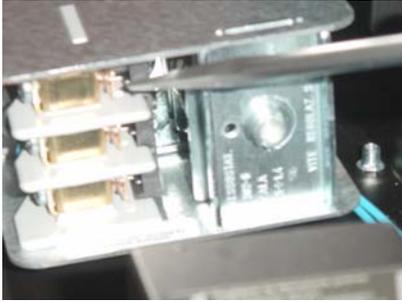
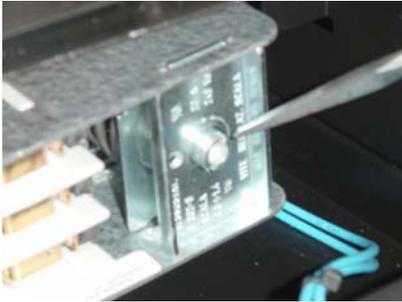


2



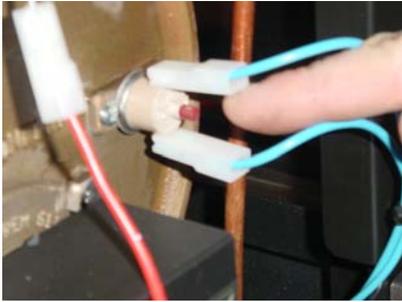
Inspection of the pressure stat is very important. Picture 2 shows the cover removed. This allows inspection of the points. The points will wear over time. The life expectancy of the pressure stat is 2 years before replacement is required.

3



Picture 3 is showing adjustment screw which will allow to change the set pressure inside the boiler. Counterclockwise will increase pressure, clockwise will decrease pressure. **Pay attention to your gauge and do not exceed 1.5 bar.**

Element safety thermostat check



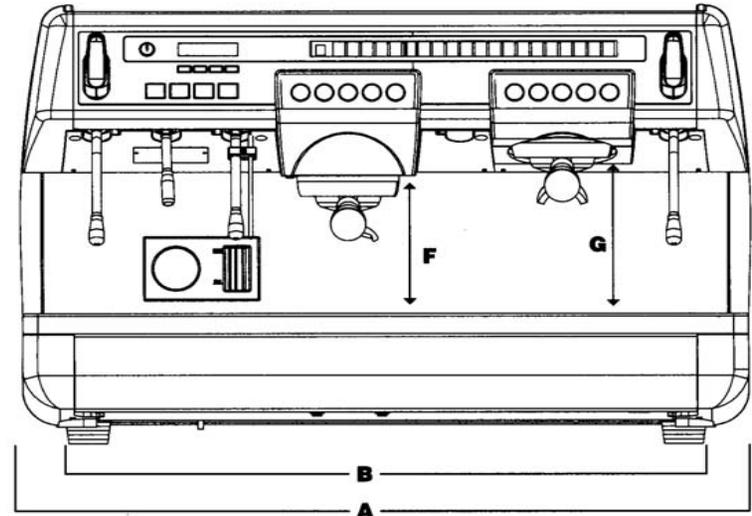
The high limit is located on the right side of the boiler. The high limit will cut power to the heating element if the pressure or temperature gets greater than 375F. The high limit is resettable by pressing the red or brown button. Caution, if this has occurred check other parts of the machine before resetting: Water level, Pressure stat. Also it is possible the highlimit has failed. We suggest replacing this part at least once a year.

This booklet has been created to assist qualified technicians when servicing Nuova Simonelli products. Nuova Simonelli will not be held liable for improper operation or malfunction do to workmanship. Nuova Simonelli suggest services in this booklet every 6 months or when service is needed due to high volume.

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Service manual and PM Checklist for Nuova Simonelli traditional espresso machines



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Group Head Seals



Shower filter



If you need to replace the group gasket there are two ways of removal. The Au-relia brew head can be removed using 5mm allen key, Once removed there will be an oring (02280033) sealing the group ring. Please replace this oring and the group gasket (40200004) . The picture below shows the method that would be used on the other models. In the picture we are using a pick to remove the gasket . Please make sure when you remove the gasket that the surface is clean.

This picture shows the removal of the shower filter or screen. This will be inspected for cleanliness or damage. It is recommend to replace the shower screen and group gasket if they get dirty or damaged. Please refer to the picture below.

In this picture show on the left a dirty shower screen. On the right is brand new clean shower screen.

2

Auto fill system check



Building voltage



Steam recovery check



Pressure switch inspection

1



This picture is showing auto fill valve.

This test will tell you if the voltage to your machine is correct. Operating voltage for a 2 group machine will be 208-240 volts. If the voltage falls under 208 there could be potential problems. If voltage is over 240 volts voids warranty.

This test is performed by opening both levers and watching the steam pressure drop. Wait 30 seconds and close the steam valves. Watch the gauge and see if the pressure builds back-up to a set pressure.

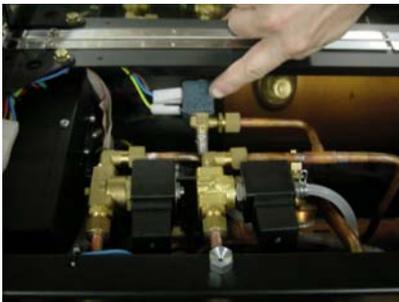
The pressure stat is located on the right lower section of the machine. The pressure stat is a switch that is controlling voltage to the heating element via pressure inside the boiler.

Steam valve servicing



This picture shows the lever section of the swivel wand. This section of the wand can become worn. To remove, unthread the nut from the valve. When removed, replace the lower oring in the bottom of the nut and upper oring on valve body. **Beware there is a spring and a bushing that will come out with the wand.**

Cup warmer valve



The cup warmer valve is used to relieve false pressure inside the boiler. Check this valve for any leaking and proper operation.

Water filter \ softener check



Please check the water system for replacement. Please understand when replacement should be scheduled, and talk it over with your customer. Also please check the water hardness using a test strip. The hardness should not exceed 3 grains per gallon.

Auto fill system check



This picture is showing the level probe on the right side of the tank. Picture 2 is showing the auto fill valve. To test this function, pull the wire of the fill probe. The pump should kick on with auto fill valve. Also watch the sight glass for a change in level. The fill probe should be removed for inspection and cleaning to ensure proper water level and function.

Filter Basket check\ Portafilter check



This inspection shows the person if there are any dents, dings or cracks in the basket Also look for dirty baskets. This check also needs to inspect the handle for cracks.

Portafilter Alignment Check



On this check you are checking the Alignment of the portafilter. The portafilter should not exceed 15 Degrees past center. If this occurs one of 3 options will solve your problem: replace the group gasket, add shims or replace the portafilter.

Dispersion nut \ plates check



This inspection checks the dispersion plate for any coffee or liquid build up. Which could cause uneven distribution of water over the fresh ground coffee. If caked with coffee, please demonstrate hot to backflush the machine and recommend doing this once a day.

Brew valve Check



For this inspection, please remove the drain tray. Once the drain tray is removed look for the drain box. Also engage the portafilter with the blind filter. Press the continuous pro button and look for water seeping of the coffee tubing in drain cup.

Brew valve check



In this picture, watch the discharge tube for leakage when you are back flushing the brew head. If water comes out during the brew cycle there is a problem with the group valve. Possible replacement will be necessary. Aggressive back flushing with detergent may resolve the problem as well.

Brew valve seals orings



During the back flush procedure, if you see dripping down around the group ring. It may be possible your group valve is leaking. Replacement of Two orings will correct the problem.

Extraction Volumes Check



Please check the volumes for each espresso drink. If necessary make adjustment to the drink size that fits your customer menu.

Flowmeter Check



This inspection checks the flowmeters for any corrosion that may have built up on the terminals. Please make sure there is no water, coffee or foreign substance. This could cause a short circuit.

Steam valve servicing



When the housing has been reversed this will allow you to gain access to the steam valves. Pay careful attention to the ribbon cable.

1



To remove the lever and fork, release the set screw using 3 mm allen wrench. When the screw is released you will be able to remove the fork and lever together, as show in picture 2. **Note when replacing the fork and lever system make sure there is no play in the lever.**

2



This picture is showing the removal of the piston rod. The piston rod has two orings. These should be replaced and lubricated every 6 months.

General leak check



Do a visual of the machine to see if there are any leaks.

Back Wash Brew Valve



This procedure allows the machine to be worked with extreme pressures. During this time its important to inspect all parts of the machine for leaking.

Steam valve leak check

1



When the espresso machine has reached a certain age or usage, parts start to fail. Those parts are usually orings. Each steam valve has a set of orings. When there is a problem typically the problem will show itself. The steam wand will leak continually when the lever is in the off position. This would require service. This booklet will show you how to access the Aurelia front panel to service the steam valve.

2



Step 1 remove several screws that hold the housing together as shown in the picture 1. Each point in picture 1 either needs to be removed or loosen to begin, you must remove the cup warmer trays and then the stainless steel flashings. Remove two screws that hold down rear of the control housing. Picture 2 shows the loosening of 4 Philips screws under the front housing. Refer to picture 1. When all the screws have been loosened or removed picture 3 shows the housing being opened. Grasp both sides, pull forward, then reverse towards the rear of the machine.

3

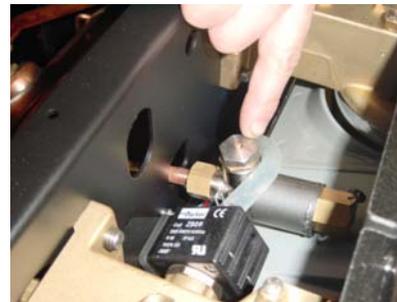


Expansion valve check



This test is going to tell you if the expansion valve is leaking. To perform the test you must back-flush the group and watch the valve for any leaking. If it leaks during this cycle replacement is necessary.

Anti-suction valve check



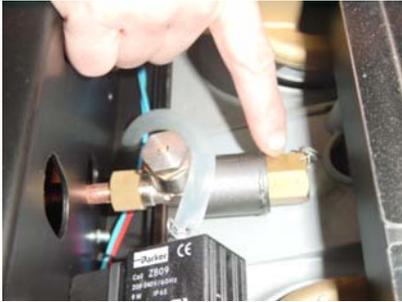
This valve needs to be inspected for leaking or proper operation. This allows any vacuum that has occurred in the boiler to be removed during heat up.

Standing line pressure



Standing line pressure should range between 3 and 5 bars of pressure. If pressure exceeds 5 bar, a pressure regulator will need to be installed. Less than 2 bar of pressure will require external pump system .

Safety Valve Check



This valve is for steam pressure. If the pressure in the boiler gets greater than 1.8 bar this valve will open. Also inspect this valve for leaks due to age.

Steam pressure reading



Your steam pressure gauge should read in the green zone between 1-1.4 bar. Normal operation will be 1.2 bar.

Pump pressure reading



When you switch the brew switch on, you will see the pump pressure increase to 9 bar. This pressure is standard pressure when brewing espresso. The diagram below shows the pump adjustment.

Pump adjustment



Pump adjustment clockwise will increase pressure, counterclockwise will decrease pressure. All adjustments for this pump are underneath the machine. Be sure to unlock the locking nut before making the adjustment.

Manual boiler fill valve #2



This valve is only used when you need to bypass the auto fill valve or drain valve. Normally it remains closed.

Hot water valve



Many of the Nuova products use a hot water dispenser. In some models we use a hot and cold water mixing system. If a failure of any valve occurs, you will have water leaking out the hot water wand continually. Replacement of the valve may solve the problem.

Water level leak check



Most all Traditional espresso machines use a level glass to show the water level in the tank. It is important to take note of the water level during servicing of the machine. Water level will range from 1/2 to 3/4 full.

Drainage system



The drainage system needs to be checked often by the owner and when service is scheduled. The drain could or will be clogged with coffee or other foreign material.