

Box content:

1. 4 colors ink tank set with rubber plugs - 1 pcs.
2. 4 channel silicone tube - 1 pcs.
3. Tube clincher "clip" - 3 pcs.
4. Binder - 1 pcs.
5. Drill - 1 pcs.
6. Rubber seal cartridge - 6 pcs.
7. Spare Union (short) - 1 pcs.
8. Holder pumping cartridge - 1 pcs
9. Rubber nozzle of the cartridge holder - 2 pcs.
10. Syringe with needle - 4 pcs.
11. Air filter - 4 pcs.
12. Plastic clamp (length 250-300mm. width is up to 3mm.) - 2 pcs.
13. Manual of installation - 1 pcs.
14. Gloves - 1 pair.
15. Warranty list - 1 pcs.



Recommended ink:

Black ink on choices: CW-CP510BK are pigmented inks (don't mix with CW-CW520BK); CW-CW520BK - dye inks (don't mix with CW-CP510BK). Colored - CW-CW521C; CW-CW521M; CW-CW521Y.

The exterior product view and bundling may differ. Images and photos are presented in the manual to understand the general installation and operation process of the CISS. The manufacturer reserves the rights to change product specifications, design, bundling of the goods without prior notice.

1. Installation preparation.

Installation of CISS requires having definite technical skills and experience. We insistently recommend before installation to read the entire manual. If you have difficulties in carrying out CISS installation, you can address to an authorized service centers of TM ColorWay for the further installation of CISS on payment conditions.

! We remind you that the fact of the using of non-original consumables, including Refilling cartridges can be used as a reason for refusing from warranty printer (MFP) services in the original service centers. Make sure that your MFP model is compatible with the system (the list of compatible models listed on the label side of the box).

Before directly proceeding for installation of the system, check the correct filling in of the warranty list, bundling and system integrity; make sure in the absence of mechanical damages, though system are accepted for replacement (in case of mechanical damages) only not in the filled form! During the period of CISS usage don't touch the cartridges chips with your hands, don't let ink and liquids get on chips not to bring them into fail.

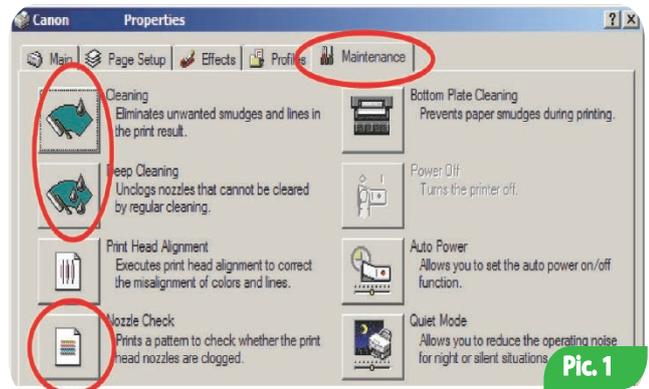
1.1. Before installation of CISS check out the operability of the printer, whether he works correctly with original cartridges, whether paper feed mechanism is in order and the other printer's mechanisms. If printer is new one and has not been used before so please go to p 1.3.

1.2. Please print test page to evaluate printer's ability to work. For this occasion click dialogue window of setting printer: in Windows push the button "Start" > "Control Panel" > "Printers and Faxes" > push the right button of the mouse on right printer (MFP) > in context menu choose "Printing setting" > in the opened window (pic.1) choosing a tab "Maintenance" > pushing the button "Checking Nozzles"

If the nozzle's test is positive so please start CISS installation. If the result is negative so please follow the recommendations on cleaning printing head via software of printer (Pic 1.) Tab "Service", button "Cleaning", "Deep Cleaning", if this does not bring positive effect so please replace broken cartridge to a new one.

1.3. Get straight a silicone tube; it should be in the working condition. Let CISS stay for a while for getting room temperature.

1.4. All procedures are recommended to be organized on preliminary spread paper or oilcloth with using gloves in a way to avoid getting inks on furniture and your clothes.



Pic. 1

2. CISS installation

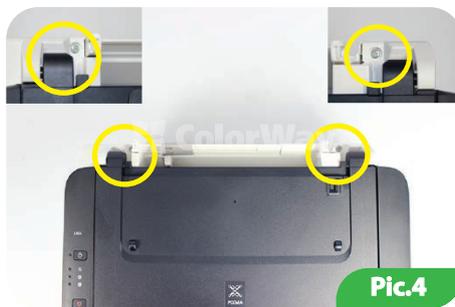
- 2.1. Lift the cover of the paper feed tray, holding it vertically, a little effort, remove it, first right, then left (Pic.2-3).
- 2.2. With the help of the cross head screwdriver remove the two screws securing the cover which are near the paper feed tray (Pic. 4-5).
- 2.3. Lift the scanner block from the rear side (Pic.6), then slide block towards the rear wall (Pic.7).
- 2.4. Carefully lift the opposite side of the control buttons the scanner block (Pic.8-9).
- 2.5. Unplug 2 informative tubes connecting the scanner's block with the control board of the printer (Pic.10-11).
- 2.6. Remove the scanner's block.



Pic.2



Pic.3



Pic.4



Pic.5



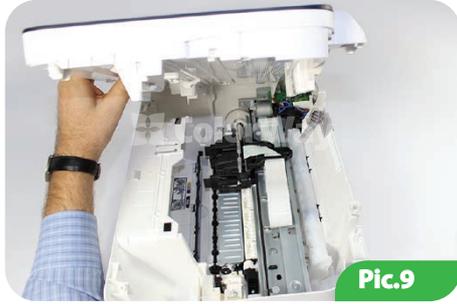
Pic.6



Pic.7



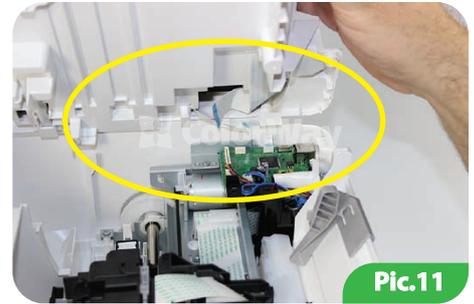
Pic.8



Pic.9



Pic.10



Pic.11

3. Upgrading of the original cartridges.

3.1. Turn on the printer. Open the lid covering the print cartridges. When the carriage will leave for replacement of the cartridges, turn off the MFP, pulling the power cord. Remove the cartridges from the printer.

3.2. Remove the label from the cartridge. (Pic.12).

3.3. With the help of a drill you need to make 4 holes in the cartridge. (Pic.13-14). **Note: all openings except Magenta to be done in the field of ventilation holes (Pic.13-14), and Magenta 1 mm. is lower than ventilation aperture. When drilling be careful not to put much effort to drill, to avoid damaging of the internal components of the cartridge (Pic.15). Do not ream the hole on the diameter of the drill. Drilled holes must have smooth edges without burrs and ragged edges. From the quality of the holes depends on the tightness of the CISS and further exploitation.**



Pic.12



Pic.13



Pic.14

Cartridge of the black device MG2440 differs from cover's construction. The air hole is on the left in the center (Pic 14). **If the print cartridges were used in the MFP or they are empty, before installing you should fill them with ink (3.4.-3.7.). If cartridges are new go to the step 3.8.**

3.4. For cartridge refilling, type in the ink into the syringes. Place the cartridge of the printing head down on a napkin, if you tuck in more ink than is necessary, wipe absorbs excess ink and will not give them to spread.

3.5. Insert the needle into the cartridge for 5-6 mm. slowly and carefully pour 5ml. colored ink into colored ink cartridge (do not confuse the color) and 8 ml. of black ink into the black cartridge (do not overfill). If it is necessary, reduce the dose filling, drawing excess ink back into the syringe. Repeat the operation for each color. During refilling, do not release the cartridge from the napkin; otherwise the ink can be mixed.

3.6. After refilling, wipe the cartridge nozzles and contacts with tissue (Pic. 15). Inks must be not accumulated on the print head. If this happens, insert the syringe needle into the filler hole and retract any excess ink back into the syringe. Lean clean wipe to the cartridge nozzles after correctly filling in on the napkin should be remained clear trace of all colors of the cartridge (Pic.16).

3.7. Insert the cartridge into the MFP. Turn on and follow the paragraph 1.2. this guide.



Pic.15



Pic.16

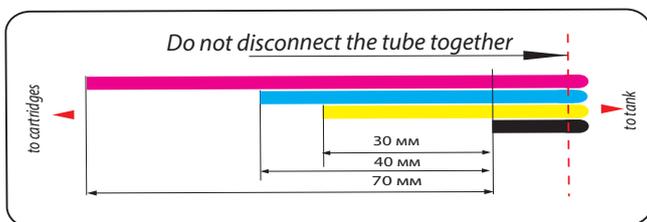


Pic.17

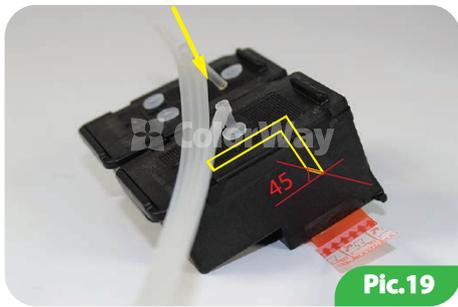


Pic.18

3.8. Insert the rubber seals into the drilled holes of the cartridge, (Pic.17-18). **In the black cartridge MG2440 MFP must insert a long rubber seal.**



3.9. Check the size of the tube and the color's order according to this pattern. In some configurations it may be different. In this case, make your own tube, using the dimensions indicated in the picture.



Pic.19



Pic.20



Pic.21

3.10. For MFP E404: Connect the tube with the ink cartridge, inserting the L-shaped fittings tubes into rubber seals of the cartridges (Pic.19). The end of fitting that is inserted into the black cartridge, it is desirable to cut the angle under 45 degrees. Watch closely matched colors (Pic 20).

3.11 For MFP MG2440: connect the cable with the ink cartridge, inserting the L-shaped fittings tube into rubber seals of the cartridges (Pic.19). Fitting, is inserted into the black cartridge should be longer than the others. Watch closely matched colors (Pic 21).

3.12. Clamp the tube with the binder (Pic.22)



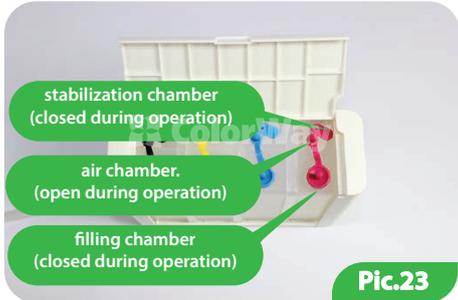
Pic.22

4. Ink tank filling

In these CISS are used new improved constructions of the tanks. Every tank has three sections (refilling, stabilization, air channel (Pic. 23, 24)), it is important to fill ink tank correctly to monitor the levels of inks in these sections, it is for the subsequent correct work of CISS.

! Attention! If you have previously used the supplies of uncertain quality, and when changing the pigment ink into the dye and vice versa. Before installation of the printer, you need to wash the print head with a special washing liquid. If you use the original supplies or materials produced by Colorway, then washing is not necessary, we can guarantee you a quality result. The offered inks are fully compatible with original ink and so when you install the system you will not have to resort to flushing the print head.

The peculiarity of these containers consists of ability to set the operating level of ink in the stabilization section, though until the filling section has the ink (Pic.24), the level of ink in the stabilization chamber will be supported at the given level.



Pic.23



Pic.24



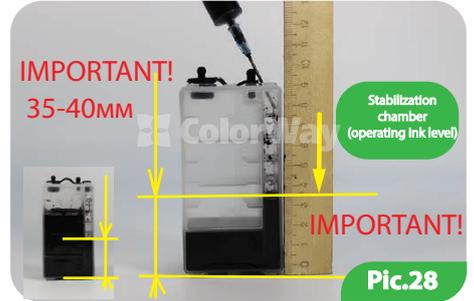
Pic.25



Pic.26



Pic.27



Pic.28

Ink tank filling comprises of the next operations:

1. The chamber stabilization is filled with syringe of ink at 30 ml. (Pic.25), but still remains the air in the section.
2. Close the container with a lid, it must be tipped to displace an air (Pic.26). After returning the camera into a vertical position, we can see that the lower part of the chamber stabilization is filled with ink and reduced operating level (Pic.27).
3. Topping up to the desired level of ink into chamber stabilization, we set the operating level of ink in the system. For this printer it is about 3.5-4 cm. (Pic.28)
4. Filling the section.

Using this example, to fill in the capacity of the CISS.

Check the color sequence. If it is necessary, change the colored covers in some places, or install them in the proper order.



Pic.29



Pic.30



Pic.31

The sequence of colors BK / Y / C / M

- 4.1. Remove the bar from the back side of the tank and open the top decorative cover of the containers (Pic.29).
- 4.2. Open the small cover tube of chamber stabilization, using a syringe with a needle refill 30ml with the ink (Pic.30)
- 4.3. Tilt the container (putting to one side), preliminary closing all the plugs to fill the lower part of the (Pic.31) section stabilization with ink (no more air in the bottom of the camera). Reopen the plug of section stabilization and top it up, ink to be at operating level of 3.5-4.0 cm. (Pic.32). Close the plug.
- 4.4. Open large rubber plug of the dosing tank capacity (Pic.33), use a syringe with a needle to fill the tank with the ink (Pic.34).



Pic.32



Pic.33



Pic.34

4.5. Using clean needles, refill the same way all of the remaining capacity of the CISS.

4.6. To avoid airing of tanks sections must be closed after filling all the plugs and CISS and tilt it in different directions (Pic.35-36).

4.7. Open little plugs of the air chamber, during exploitation these apertures must be opened, but the rest ones are closed. (Pic.37).



Pic.35



Pic.36



Pic.37

You cannot refill the ink into the air chamber.

4.8. During operation of CISS visually monitor the presence of the ink in the filling chamber (Pic.38), when the ink level falls below the minimum, the ink will be consumed from the camera stabilization, there drops the operating level of ink, in that case it will be necessary to make refilling of the tank again.

4.9. For topping up the tank, close the air holes (average), open the filling hole camera and top up the required amount of ink.



Pic.38

5. System pumping.

5.1. Insert the rubber pad-connector into refill tool. Make sure that there is through hole inside the rubber pad (Pic.39). Rubber pad connector with a long cut is used for pumping black cartridge; with smaller part for color one. These cartridges require insert holder using.

5.2. Insert the cartridge into the holder in turn, replacing the corresponding nozzles (Pic.41). Insert the cartridge requires some effort. Efforts to be made as shown in pic. 40. Insert the syringe without a needle it is spout into a rubber nozzle. Slowly pull the plunger of the syringe (Pic.42), at this point you will see how the ink will start to arrive at the tube of the cartridge. Do not release the



Pic.39



Pic.40



Pic.41



Pic.42



Pic.43



Pic.44

plunger of the syringe, do not remove the syringe sharply, wait until the tube completely fills the syringe and pressure stabilizes. If you are unable to insert the cartridge into the holder, it is possible to use rubber attachments without the holder (Pic.43). In this case, it is recommended to press hard with fingers the cartridge's nozzle. As originally black cartridge contains pigment ink, in case of future using of dye ink, it is necessary while pumping of the black cartridge to pump through it about 20ml. of ink.

5.3. Remove the cartridge from the holder and wipe the print head and the cartridge's contacts. If it is necessary, hold the napkin on the nozzle of the cartridge so it could absorb excess or mixed ink.

5.4. After pumping, back down on the tube from the cans of 5-6 cm. fold and press the tube with the binder (Pic.44), to avoid overflow (outflow) of ink cartridges during installation in the MFP.

6. Installation of the tube.

Before you begin the process of fixing the tube, you must clearly understand the principle of its movement during operation of the printer and clear the basic principles of attachment:

Rule 1: The lengths of the tube should be enough for the free movement of the print head from the extreme right to the extreme left;

Rule 2: Tube can be bent and touch the hull of the printer while moving print head, but at the same time the tube cable should not get stuck between moving and fixed parts of the printer!

6.1. Insert the cartridge into the MFP (Pic.45). CISS tube rewind around the carriage, counterclockwise (Pic.46).

6.2. Pass the plastic clamp through the carriage (Pic.47-49). Make sure that the clamp does not interfere with the ink cartridge. They should be free to snap in the carriage. It is also possible to pass a clamp with fully inserted cartridges. Clamp's lock should be located on the left (Pic.49).

6.3. Tightly put the tube around the carriage and tighten the clamp. Make sure that during the tightening not to jam the tube. Gradually tightening the clamp, pull gently and correct the tube. Lock of the clamp should be located to the left of the carriage (Pic.50).



Pic.45



Pic.46



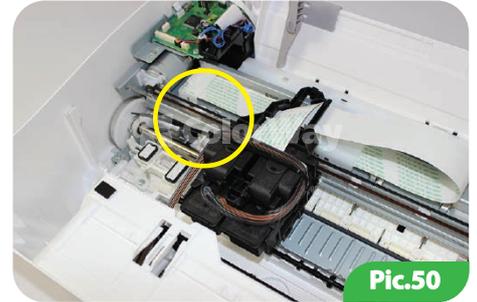
Pic.47



Pic.48



Pic.49

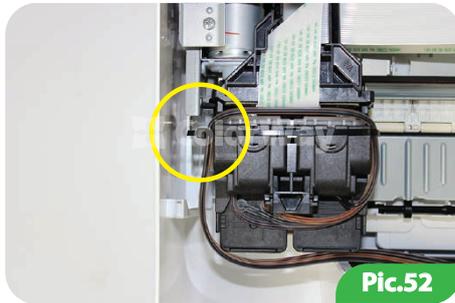


Pic.50

6.4. Excess end of the clamp is necessary to bite, leaving the possibility to tighten it later, if it is necessary (Pic.51). Make sure that the left end of the carriage does not hinder, when it is in the leftmost position (Pic.52). The tube should be simply clamped to the carriage (Pic.53), but not pinched.



Pic.51



Pic.52



Pic.53

6.5. Using a flat screwdriver as a lever, remove the cartridge's cover (Pic.54). Do this carefully not to damage the cover, first to the right, then to the left (Pic.55-56).

6.6. On the right side of the cover you need a knife to make a cut on the width of the trail, about 1.5 cm (Pic.57).

6.7. On self adhesive stick two wide holders on the cover in places as shown in pic.58.

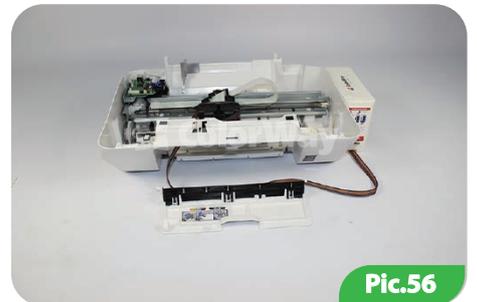
6.8. Set the carriage to the left (Pic.59).



Pic.54



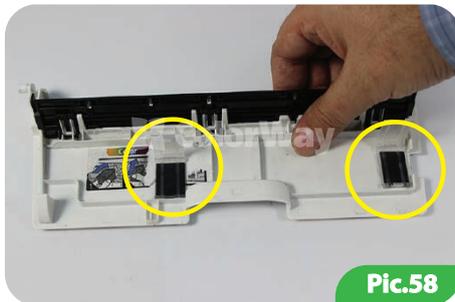
Pic.55



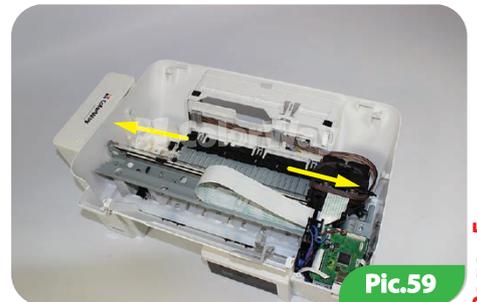
Pic.56



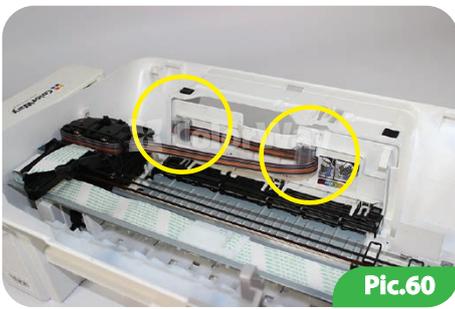
Pic.57



Pic.58



Pic.59



Pic.60



Pic.61



Pic.62



Pic.63

- 6.9. Install the ink cartridge cover, paving the tube into the slot cover (Pic.59-60).
- 6.10. Fix the tube cable by means of clips (Pic.60).
- 6.11. Move the carriage from the extreme left to the extreme right, and of the extreme right to the extreme left. At the movement of the carriage tube should not bend and hinder the movement of the carriage. If it is necessary, tighten or release the tube.
- 6.12. Install the scanner in reverse order. Carefully insert the information tubes. Tighten the screws and set the paper tray cover.
- 6.13. Tube should be removed not to interfere with the exit of the paper. Optionally, the tube can be fixed on the right side (Pic.61).
- 6.14. Remove the binder, level the tube (Pic.62).
- 6.15. Remove the protective film from the holder block and stick the tanks block to the hull of MFP (Pic.63).

7. System starting.

- 7.1. Turn on the MFP. Wait until all operations of MFP until it enters standby mode.
- 7.2. Using the MFP driver, make 2-3 cleanings of nozzles, then print the nozzles test and verify that all nozzles print normally (item 1.3 manual). If a portion of the nozzle does not print, leave the printer for 5-10 hours, during this time the air will come out, which could get into the print head during installation and also stabilize the pressure within the system.



If the MFP (printer) makes a message that is **low or out** of ink, press and hold for 5-8 seconds a release button on the front panel. This way you will disable tracking of ink levels, after that the printer may report a low level of ink or it cannot determine the amount of ink remaining, but it will be printing. Or, follow the prompts on the screen of MFP, selecting actions to continue the printing.

Do not forget to refill the ink in time. If the printer has not been used for a long time and there is a lot of air in the tubes, do the point (1.3. Instructions). Inks are cooling element of the print head of the cartridge and their absence in the cartridge can cause damage of the print head. The reason for the frequent presence of the air in the tube cannot leak in the connection area of the cartridge system

8. How to use the CISS

- 8.1. External tanks of CISS must be properly installed. In the small section must have been a minimum amount of ink (see. Section 4. Tank ink refilling).
- 8.2. Large plugs in the tanks must be closed and the small ones are opened.
- 8.3. External tanks should be located on the same level with the printer, in any case, they cannot be risen above the level of cartridges (print head), as Ink will independently (under the influence of excess pressure) flow into the printer and the print head and electronic circuits. Air filters (their membranes) must be clean and dry, if the filter has been watered with ink or other liquid, it will cease to pass the air and the system will not operate (begins to disappear the color). In this case it is better to remove the filter and use the system without it.
- 8.4. CISS tube must be properly fixed and don't stuck the print head's movement of the printer..
- 8.5. Print not less than 1 time per week, in order to prevent drying of the print head. Unused ink tanks are in more than six months can lose their properties.
- 8.6. Use only high-quality ink, don't mix the ink with different types and brands. This can damage the cartridge.
- 8.7. During printing, do not turn the ink tank.
- 8.8. Use the CISS in a clean room with an air temperature at 15-35 ° C.
- 8.9. Do not disassemble the capacity of CISS. For maximum print quality, use the paper brand by Colorway, which can be purchased at retail or from our distributors.
- 8.10. In exceptional situations of the buildings of some printers can pour waste ink. To avoid such situations, it is strongly recommended that you install the "Conclusion of ink." For more information please contact the official representative in your city.
- 8.11. During long-term storage, please do not tilt or turn the CISS, remove the air filters and close with plugs are small sections of CISS external tanks to prevent leakage of ink.
- 8.12. Avoid direct sunlight to the printer and CISS.
- 8.13. Keep the ink out of children; do not drink the ink; prevent ink from getting into your eyes.

9. Transportation of MFP with CISS.

- 9.1. Remove the air filters and close with plugs small section of CISS external tanks, to prevent leakage of ink.
- 9.2. Fold and press with the help of clothespin the tube's coming from the CISS tanks inside the MFP.
- 9.3. Transport the printer with CISS installed in a horizontal position, do not turn the MFP. Otherwise, ink may get on the MFP electronics and disable it. Try to keep the capacity on the same level with the printer during transport. For convenience, you can stick the tank to the printer with tape.

10. Questions and Answers.

1. Air bubbles in the tube / disappears when printing a particular color:

In case if the cleaning is not led to a positive result and the test printing problems happen to nozzle each time in different places, or when printing the nozzle does not print the same color, while cleansing the nozzles in one or more colors are not available in the cartridge. Solving ways: the system is bad or not properly pumped; resulting there is a lot of air in the cartridges, make cartridge re-pumping of desired color; (see. section of this manual №4).

Solving ways: holes are drilled in the cartridge over or damaged rubber seal. Replace compactor, the junction's cartridge tubes, stick with silicone.

Solving ways: L-shaped fitting inside the cartridge abuts in its foam. Remove the fitting from the cartridge and trim it up to 2 mm.

Solving ways: the external tanks are below the level of the printer. Insert the tanks on the same level with the printer.

Solving ways: print nozzle test, determine which of the colors is not received, and check the tube along the entire length for inflections. In case of clamping space unclench the tube to give an access to the ink print head. After eliminating the inflections, take a purge of the print head.

Solving ways: the main reason for this problem is drying the print head's nozzles, due to long downtime of the printer without printing or using low quality ink. Use the driver for regular cleaning of nozzles, make 2-3 cleanings, and print 5-10 color pages - if improvement does not occur, repeat these steps again after 2-3 hours.

Solving ways: the cartridge has an irremovable defect and needs to be replaced.

2. Wrong colors / color inversion

In case if all unnatural color photos, color printing are in the form of negativity.

Solving ways: Open the graphics editor, paint some colored squares, start printing if the colors are printed incorrectly (for example, instead of yellow blue or green), then the tube of the CISS is not connected correctly. You need to replace the cartridge and connected properly train.

3. Blots on the printouts, there is permanent air in the pipes.

In the case while printing on a sheet of randomly generated ink blots. Solving ways: tanks are not on the same level with the printer, the wrong ink levels in the dosing chamber. (See. Section №3 of this manual). Place the tanks on the same level with the printer, check up correctness of filling.

4. Carriage positioning error.

In case, if the computer displays the message "General error, please remove foreign object from the printer or "your printer service is required."

Solving ways: while printing the carriage can not move the printer and the printer produces a rattle. Perhaps tube of CISS is too long or too short; please adjust the optimal length of the tube. If something has got into the corps of the printer, please check the printer's corps for foreign object.