

Cleaning Work Procedure Using Menu [WASH]

This instruction manual covers the cleaning work procedure using menu [#ADJUST – INK CHANGE - WASH] for JV400LX series models with firmware version 2.30 and after.

List of Components

Part names and codes used for during the cleaning work procedure using menu [WASH] are shown in "Table 1 List of Components".

For kits and assembly products, please refer to " Table 2 Kit and Assembly Product Component List " when placing an order of the parts, please refer to "Table 1 List of components ".

Table 1. List of Components

Parts codes	Parts name	Qty	Remarks	Reference
C-FL003-Z-22-1-KA	Flushing Liquid 03	220ml	Cartridge	#1
(Except EU area) C-ML003-Z-K1-1-KW (For EU area) C-ML003-Z-K1-1-KE	Washing Liquid 03 Maintenance kit	200ml	Bottle	#3
MP-M014439	JV400 cleaning kit II	(Table 2)		

Table 2. Kit and Assembly Product Component List

Parts codes	Parts name	Qty	Remarks (see * I)	Reference
MP-M014439	JV400 cleaning kit II			
***	(1)Cleaning solution filling syringe Assy	1pcs	(It cannot order individually.) ◎	#4
SS-20ESZ	(2)Syringe	1pcs	▲	#2
1080249	(3)Tube, Supply, φ2 ; N	50cm 1pcs	▲	#5
6-586-07	(4)Silicon rubber tube (2*4)50M	3cm 1pcs	◎	#6
M700782	(5)φ2 rubber plug	2pcs	Used for Circulation Path in the rear. The same as #13. ◎	#7
7-653-01	(6)Non-woven fabric	1pack	◎	
VFI236	(7)Fitting	1pcs	Unnecessary in this work	
M700727	(8)Damper rubber plug 2	2pcs	Used for Circulation Path in the front. ▲	#8

* I .

Components that are marked with a "◎" are included in the MP-M012543 JV400 cleaning kit. Components that are marked with a "▲" are not included in the MP-M012543 JV400 cleaning kit. We plan to start shipping the MP-M014439 JV400 cleaning kit II from the end of July. If you wish to perform ink replacement before this time, please prepare the MP-M012543 JV400 cleaning kit, and prepare Damper rubber plug 2, tube and, syringe that are marked with a "▲" .

(The VFI236 fitting is required for storage of the unit. It is not required if you are only performing ink replacement.)

Work Preparation

- Make sure to upgrade the firmware version 2.30 or later.
- Empty the waste ink tank and clear its level indicator information so that it reads 0%.
 - ◆ : For more information regarding how to clear the waste ink tank level indicator, please refer to "5. Supplementary Information - Supplement 1. Clearing waste ink tank Level Indicator Information".
- Cover the station surroundings with a material such as paper towels. This protects against ink dripping from the print head.

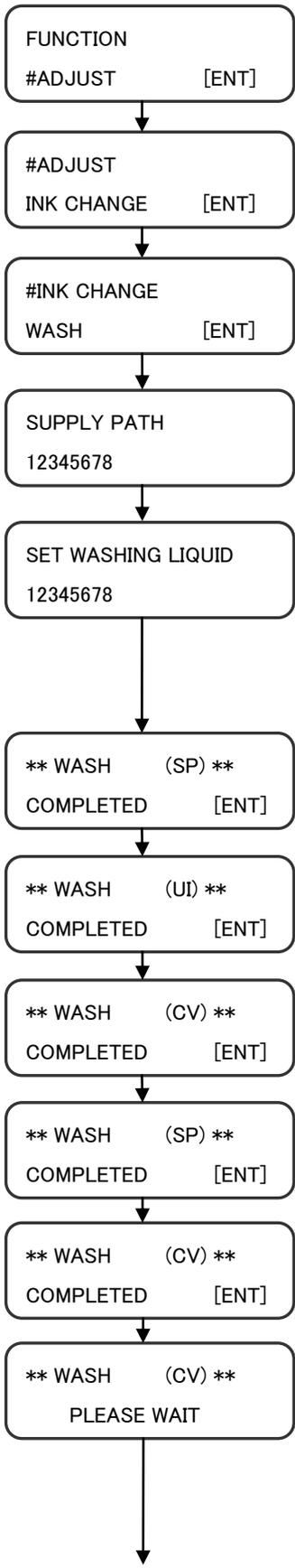
Precautions During Work

- **Always wear protective goggles and gloves when handling ink or cleaning solutions.**
- To prevent waste solution from dripping out of the waste ink tank, please pay attention to the level of waste ink.
- Do not leave the carriage for a long time in a state where the carriage is out.

Cleanup After Work

- Empty the waste ink tank and clear its level information.
- Remove coverings such as paper towels from around the station.
- Attach the cover that was removed during the work procedure. (Rear cover LU, Head cover Assy)

Cleaning work procedure



1. Select [#ADJUST] -> [INK CHANGE] -> [WASH] and press the ENTER key.

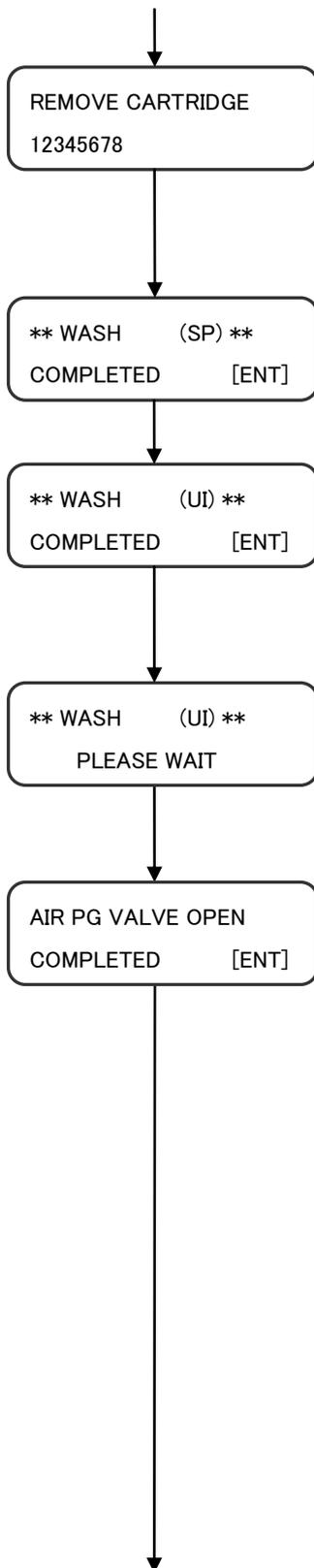
2. Select all paths that require cleaning and press the ENTER key.

★ Please select all eight paths.

3. Insert a Flushing Liquid 03 cartridge (#1) into each slot of the selected paths.

4. Cleaning solution filling operation is started.

- (SP) Filling of the main ink path: 1 minute, 30 seconds
- ↓
- ↓
- (UI) Filling of the UISS path: 2 minutes, 30 seconds
- Only if the ink set includes the UISS path
- ↓
- (CV) Filling of the check valve: 1 minute
- ↓
- ↓
- (SP) Filling of the main ink pat: 5 minutes
- ↓
- ↓
- (CV) Filling of Check valve : 1minute
- ↓
- ↓
- (CV) Negative pressure released: 30 seconds



5. Remove all Flushing Liquid 03 cartridge (#1).

6. Cleaning solution discharge operation is started.

(SP) Discharge of the main path: 1 minute, 30 seconds



(UI) Discharge of the UISS path: 3 minutes

· Only if the ink set includes the UISS path.

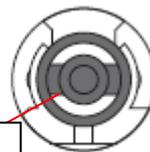


(UI) Negative pressure released: 30 seconds

7. The screen appears for work completion of opening the air purge valve.

Open the air purge valve.

- (1) Make sure that the opening shafts of air purge valves for all paths to be cleaned are in the horizontal position.

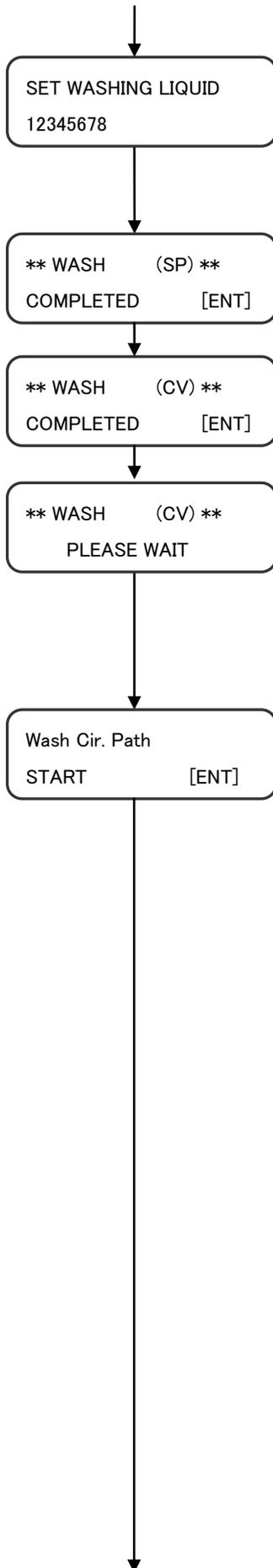


Valve opening shaft

Fig 1. Air purge valve is open (Valve opening shaft: horizontal)

- (2) Press the ENTER key.
-

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8. Insert the Flushing Liquid 03 cartridge (#1) into each slot of the selected paths.

9. Cleaning solution filling operation is started.

(SP) Filling of the main ink path: 5 minutes



(CV) Filling of the check valve: 1 minute
- Only if the ink set includes the UISS path.



(CV) Negative pressure released, wiping, carriage out: 1 minute, 30 seconds

※ Note: Please be aware of carriage moving since carriage-out is automatically performed.

10. The screen appears for start washing the circulation path.
Carry out cleaning preparation.

- (1) Remove the Rear cover LU.
- (2) Remove the cartridge-side paths for circulation paths 7 and 8. Connect the removed circulation paths 7 and 8 with the silicon rubber tube (#6) and seal the original hole with a rubber plug (#7).

★ Please mark circulation paths 7 and 8 so that you can easily tell them apart.

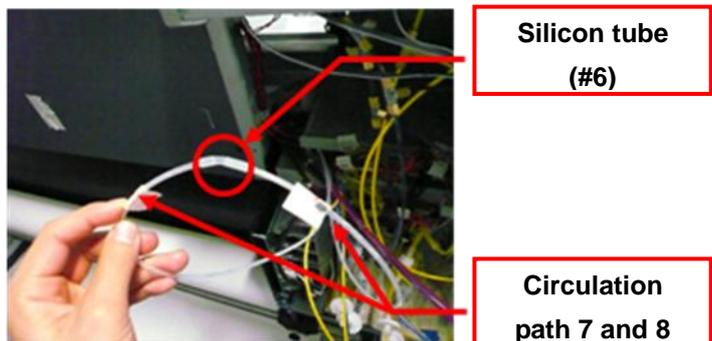


Fig 2. Connection path 7 and 8

- (3) Open the Maintenance cover R.
- (4) Remove the Head cover Assy.

- (5) Pull out the damper side of the tube through which it passes from the right circulation valve to the damper.
Connect it to the 1080249 tube (#5) and seal the damper-side hole with a rubber plug (#8).
- (6) Insert the other end of the 1080249 tube (#5) into the waste ink tray.
- (7) Pull out the damper side of the tube through which it passes from the left circulation valve to the damper.
Connect it to the cleaning solution filling syringe assy (#4) and seal the damper-side hole with a rubber plug (#8).

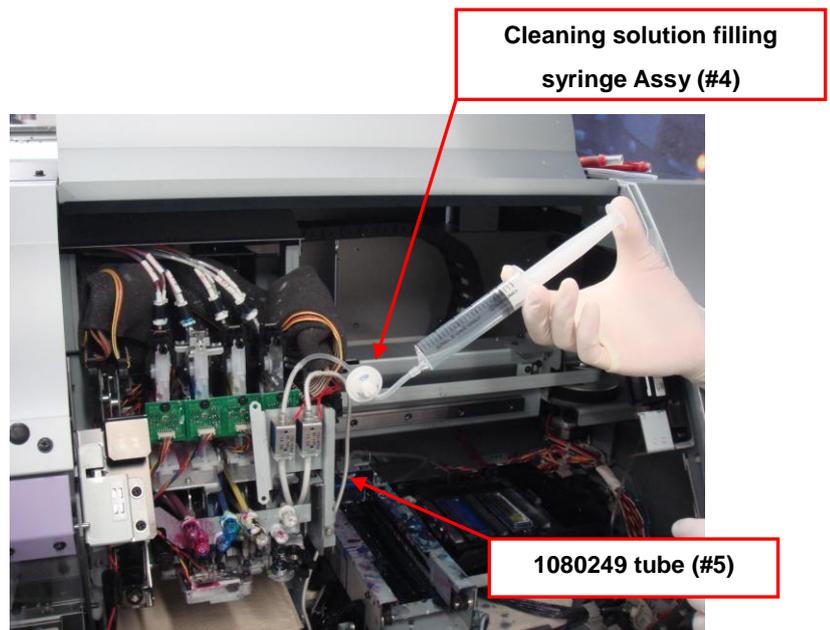
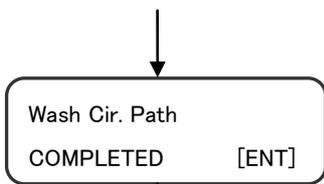


Fig 3. Preparation for cleaning of the circulation path

- (8) Press the ENTER key when preparation is complete.
The circulation valve will open automatically.



11. The screen appears for completion of washing the circulation path.
Carry out circulation path cleaning.

- (1) Remove the syringe from the fitting in front of the cleaning solution filling syringe Assy (#4) filter.
- (2) Suck the washing liquid 03 into the removed syringe from the Washing Liquid 03 bottle (#3).
- (3) Attach the syringe back to the fitting.
- (4) Slowly push the washing liquid 03 out of the syringe (around 0.5 ml per second) to fill the circulation path with washing liquid 03.
- (5) Remove the syringe again from the fitting.
- (6) Suck the air into the removed syringe.
- (7) Attach the syringe back to the fitting.
- (8) Slowly push the air out of the syringe (around 0.5 ml per second) to discharge the washing liquid 03 from the circulation path.

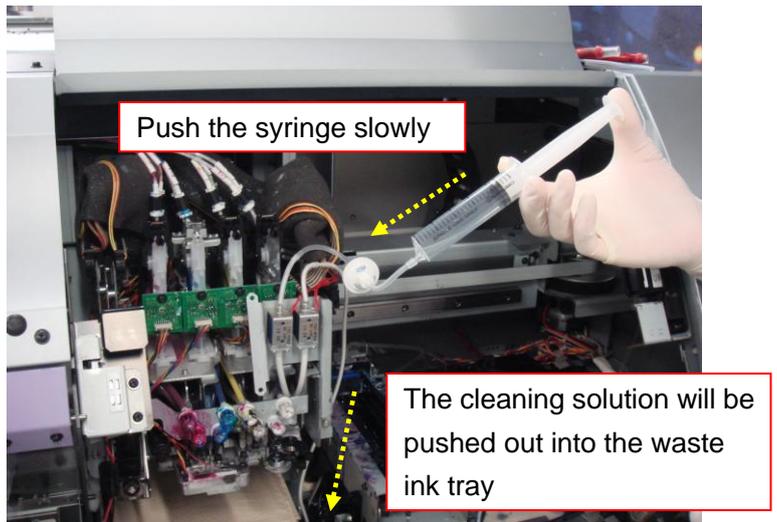


Fig 4. Circulation Path cleaning solution Discharge

- (9) Repeat steps (1) to (8) until all the discharged cleaning solution shows no discoloration of the ink.

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- (10) Return the path connected to the cleaning solution filling syringe Assy (#4) to the upper side of the damper.
- (11) Return the path connected to the 1080249 tube (#5) to the lower side of the damper.
- (12) Return circulation paths 7 and 8 to their original positions.
- (13) Press the ENTER key when the work is completed.

The circulation valve will close automatically.

Wash AirPG Port
START [ENT]

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12. The screen appears for start washing the air purge port.
Carry out the air purge port cleaning preparation.

- (1) Remove one of air purge port cap and insert a syringe (#2).

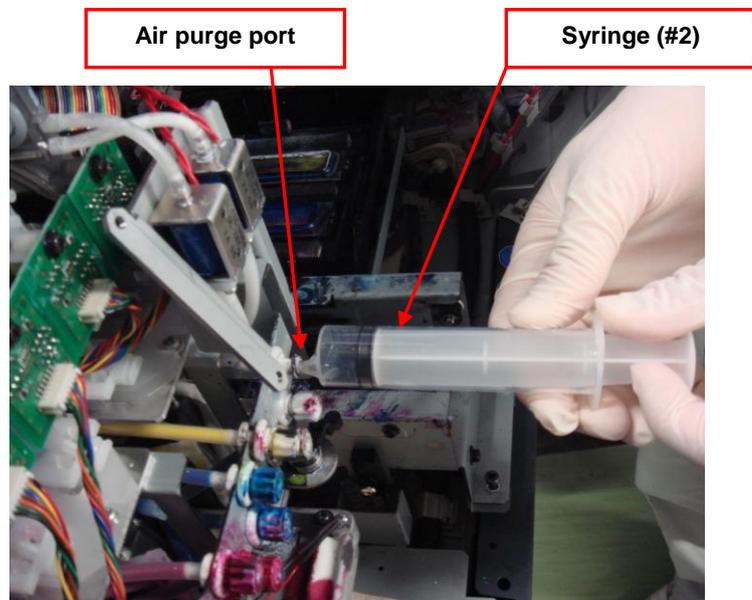
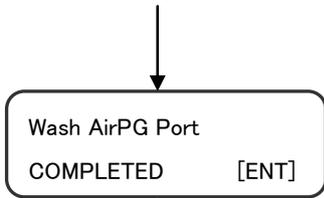


Fig 5. Preparation for cleaning of the air purge port

- (2) Press the ENTER key when preparation is complete.
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13. The screen appears for complete washing the air purge port.
Carry out the air purge port cleaning.

- (1) Slowly suck the syringe (#2) (around 0.5 cm per second) until all the cleaning solution 03 has been discharged from the air purge port.

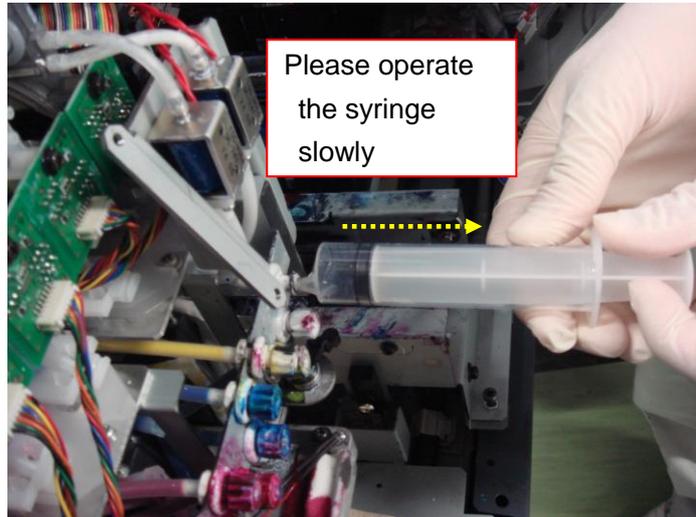


Fig 6. Cleaning of the air purge port

- (2) Once no more cleaning solution comes out, remove the syringe (2) and close the air purge port cap.
- (3) In the same manner, please remove the cleaning solution from the remaining seven ports.
- (4) Press the ENTER key once the work is completed.



14. The screen appears for completion of closing the air purge valve.
Close the air purge valve.

- (1) Make sure that the opening shafts of air purge valves for all paths are in the vertical position.

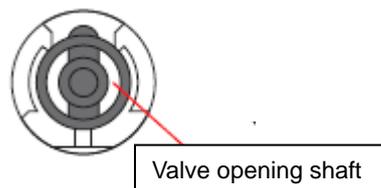
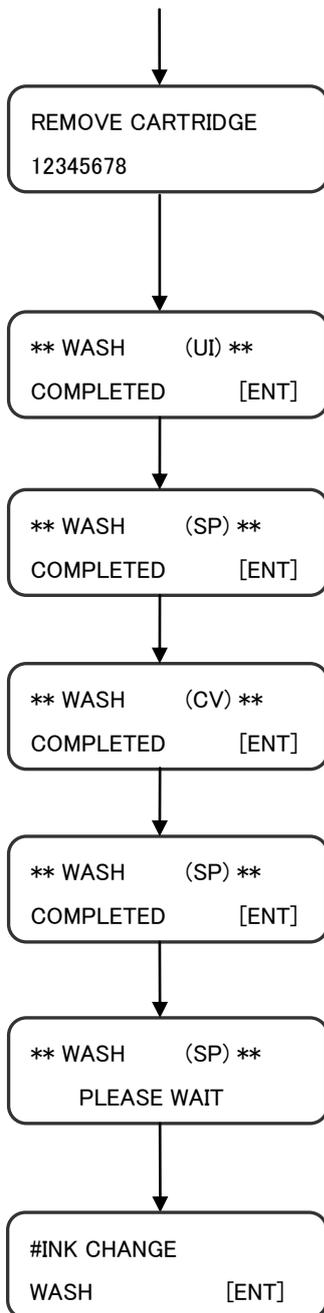


Fig 7. Air purge valve is close (Valve opening shaft: vertical)

- (2) Press the ENTER key.
Capping will be carried out automatically.

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15. Remove all Flushing Liquid 03 cartridge (#1).

16. Cleaning-solution-discharge is started.

(UI) Discharge of the UISS path: 4 minutes
· Only if the ink set includes the UISS path.



(SP) Discharge of the UISS path: 5 minutes



(CV) Discharge of the Check valve: 1 minute



(SP) Discharge of the main path: 10 minutes



(SP) Negative pressure released: 2 minutes

17. The Ink replacement/Cleaning menu will close.

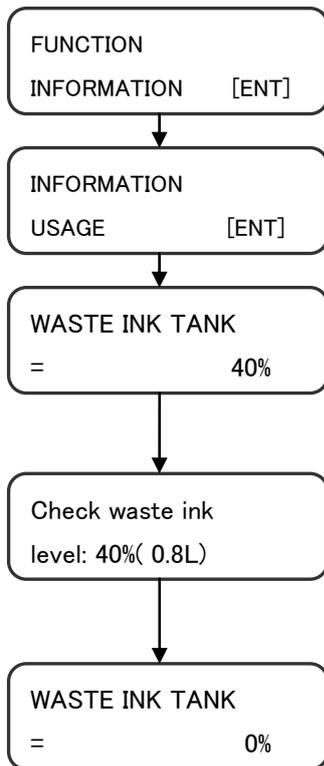
※ Please remove the Head Cover Assy and the Back Cover LU and check whether the damper and the path has been washed. When the damper and the path cannot be being washed, please check whether there are any problems around cap, path, and damper and please carry out Step.1 again after coping with a problem.

Supplementary Information

In this section we will introduce supplementary information.

Supplement 1. Clearing Waste ink tank Level Indicator Information

Clear the waste ink tank level indicator information to show 0%.



1. Select [WASTE INK TANK] from the [INFORMATION] -> [USAGE] options and press the MAINT key.

2. Use the up and down keys (▲▼) to change the "Level" to 0% and press the ENTER key.

3. The waste ink tank level indicator information will now show 0%.

Revision History

No.	Version	Description	Date of update	Modified by
1	10	First draft.	2013/7/5	3P.FW.Ichikawa