Miele PROFESSIONAL
9 Independence Way
Princeton, NJ 08540
800-843-7231

Miele G 7881 Preventative Maintenance (PM) Schedule

The purpose of this PM schedule is to ensure all component replacements and inspections are complied with annually and performed correctly. Doing so will increase the life expectancy of the appliance and ensure proper operation. When all items have been completed, make two copies and fax one copy to Miele Professional Service at 609-419-0171 or e-mail it to proservice@mieleusa.com and leave the second copy with the customer.

This PM schedule is meant as a guide to assist you while performing a PM on the G 7881 dental disinfector. It in no way replaces the service manual for the G 7881. If you do not have access to Miele's technical information please contact your local Miele Service manager.

Client / Project Information				Contact Information	
Name				**Name**	
Address				**Phone**	
				Cell	
City / Town				**FAX**	
State		**ZIP**		**E-mail**	

Client Category *(Select and mark the one that applies)*		**Product Information**				
		Machine #	**Machine Model #**	**Machine Serial #**	**Software Version**	**Date of Inspection**
Dental Practice						
Medical Practice						
Hospital Facility						
Other						

Safety Requirements

- **The G 7881 dental disinfector may be contaminated by bloodborne pathogens! Ensure that you protect yourself by wearing your personal protective equipment (PPE), such as gloves and safety glasses, before you begin working. This is your first line of defense!**
- The warnings and instructions on detergent and neutralizer containers must be followed closely. These chemicals may be corrosive and can cause irritation. Ensure that you are wearing your PPE.
- If the machine has been operated with high temperatures above 158°F, then there is a risk of scalding when it is opened. Baskets and inserts should be allowed to cool before removal. Hot-water residues from containers in the cabinet should be drained off carefully.
- Before starting any service work, disconnect the machine from the power source. Measures must be taken to ensure that power cannot be switched on again accidentally (lockout/tagout).
- Even with the machine switched off, voltage may exist on some components.
- When the casing is removed, sharp edges may be exposed and care must be taken to avoid injury. Ensure that you are wearing your PPE.
- All repairs should be performed by a trained technician in strict accordance with national, state and local codes. Any repairs or maintenance performed by unqualified personnel could be dangerous.
- When servicing, modifying, testing or maintaining appliances, all applicable laws, regulations and accident prevention guidelines must be observed.
- After work has been completed, a visual as well as an operational check should always be performed.

Preventative Maintenance Parts Inventory

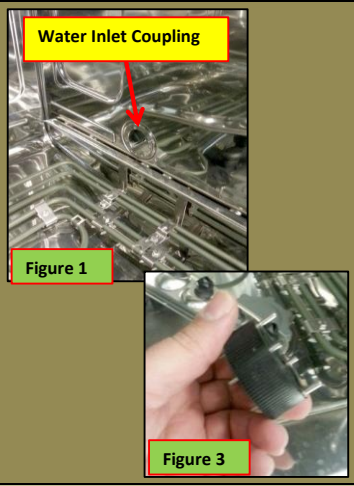
When your G 7881 PM kit arrives, ensure that you perform a parts inventory and account for each item before you begin your scheduled inspection. If any items are missing contact our Miele Professional Service Department at 800-991-9380 for assistance.

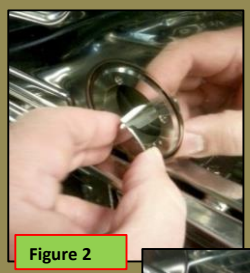
The Preventative Maintenance parts kit should consist of the following items:

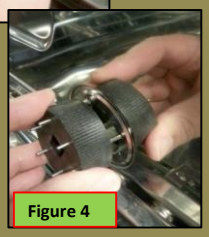
Nomenclature	Serial Number	Photo	Qty
Seal	01939571		**1**
Seal Bottom	01102422		**1**
Spray Arm Retainer	05812101		**1**
Casing DOS 60*	02317168		**2**
Casing DOS 10/30	05642002		**1**
Level Control HNBR 1500/700	09112900		**1**

Visual Checklist with Pass/Fail Grading

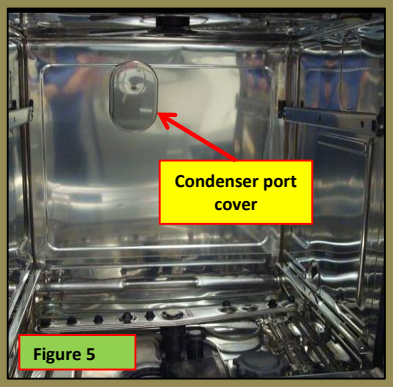
I. Check for Water Leaks	Pass	Fail
A. Check the following internal chamber fittings for tightness:		
Inspect and tighten the water diverter intake coupling		
1. Remove baskets and inserts from the washer.		
2. Remove cover to coupling; see Figure 2.		
2. Using the Miele special tool (multi-purpose spanner, P/N 5055390; see Figure 3) or needle nose pliers, tighten the coupling screw connector. Take care not to over tighten, as this could damage the diverter or the sealing ring. See Figure 4.		
3. Reinstall the cover to the coupling.		
Notes:		

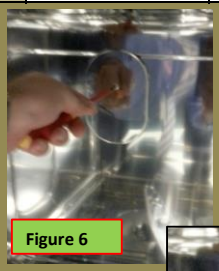


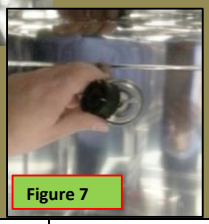




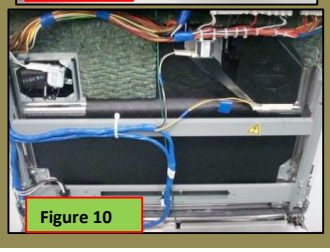
Inspect and tighten the steam condenser coupling		
1. Remove the condenser port cover by removing the T20 screw from the cover. See Figure 6.		
2. Using the Miele special tool "multi-purpose spanner" (Figure 3) or a pair of needle nose pliers, tighten the coupling screw connector. Take care not to over tighten, as this could damage the steam condenser or the sealing ring. See Figure 7.		
3. Reinstall the condenser port cover.		
Notes:		







Inspect and tighten detergent and rinse aid dispensers		
1. Check for deterioration around the soap dispenser and rinse aid dispenser; replace seals as necessary. See Figure 8.		
2. Tighten the rinse aid dispenser and indicator as needed. Take care not to over tighten, as this could damage the dispenser. See Figure 9.		
3. Remove the door panel and check for water damage; replace seals as necessary. See Figure 10.		
Notes:		



Visual Checklist With Pass/Fail Grading

A. Check the following internal chamber fittings for tightness (continued):	Pass	Fail
Inspect and tighten the heating element mounting points		

1. The washer has a total of three heating elements located in the lower cabinet. Check all three heater element seals for deterioration. See Figure 11.

2. Using a 10mm nut driver, tighten the mounting bolt for each heating element. Take care not to over tighten, as this could crush the seal and may result in a leak. See Figure 11.

Notes:

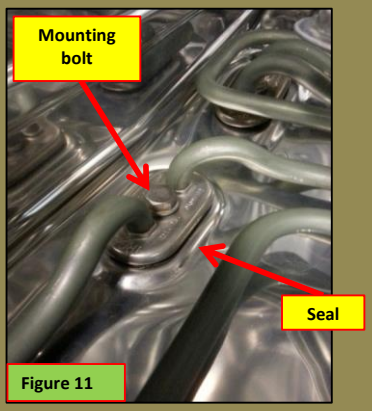


Figure 11

B. Remove side panels and check for water damage		

Notes:

Note: If the washer is an undercounter installation; remove from cabinetry and if possible maintain water and drain connections.

**** Reinstall side panels upon completion of inspection.**

C. Remove and clean the water inlet filter screens		

1. Shut off the water to the inlet valves and disconnect from the water source.

2. Remove and clean filters; see Figure 12, Items 1 and 2.

3. Check filters for damage. Replace as necessary.

4. Reassemble in reverse order.

Notes:

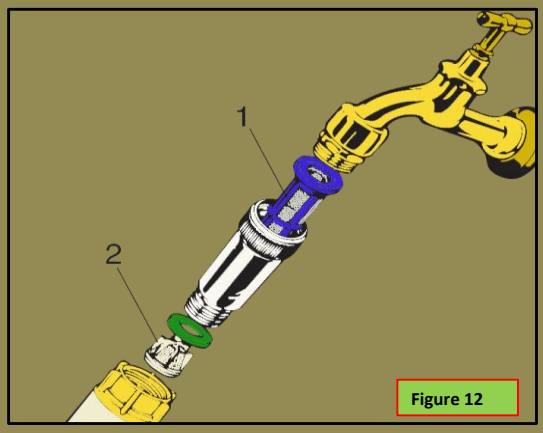


Figure 12

Note: Filters (Figure 12, Item 1) may not be installed on "RO" supplied systems.

Visual Checklist with Pass/Fail Grading

I. Check for Water Leaks (Continued)	Pass	Fail
D. Check the condition of the water inlet and drain hoses		

1. Check the water inlet hose outer sleeve for cuts or kinks. If found, verify that there is no damage to the inner water line or electrical wiring. If any damage is found to the inner water line or electrical wiring, replace the assembly.
2. Check the drain hose for cuts and kinks and replace if found; see Figure 13.
3. If the washer is to be installed under a counter, ensure both the water inlet and drain hoses are properly routed to avoid any kinks or excessive bending.

Notes:

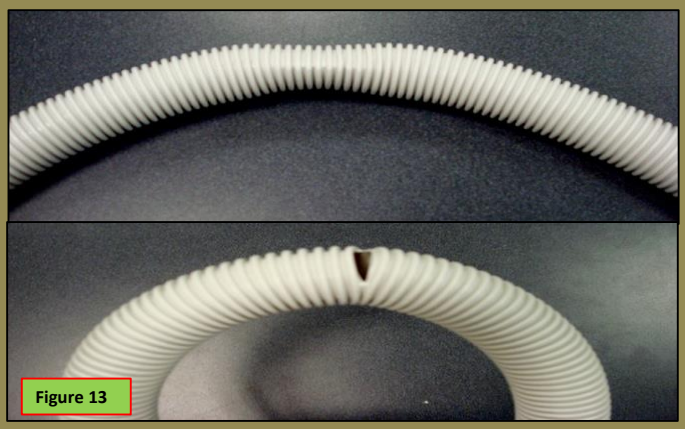


Figure 13

II. Inspect the G60 or K60 Detergent Dispensing System (DOS Modules Only)	Pass	Fail
A. Inspect the pump DOS 60 casing and tubing.		

Warning! Must use gloves and eye protection.

1. Access the G60 or K60 DOS module; see Figure 14.
2. Remove the 4 T20 screws securing the cover on the G60 or K60 box and remove. Take care not to damage the sealing ring around the cover; see Figure 15.
3. Disconnect the chemical resistant tubing from the pump casing; see Figure 16.
4. Disconnect electrical connector and grounding wire from pump motor.
5. Remove 3 T20 screws securing the pump to the mounting bracket; see Figure 17.
6. Remove the 4 T20 screws securing the pump casing to the motor; see Figure 18.
7. Remove and replace the pump casing (P/N 02317168). Take care not to damage the casing hose when placing on pump rollers; see Figure 18.
8. Re-assemble in reverse order. When installing the pump motor onto the mounting bracket, do not over tighten screws; this will damage the rubber mounts. You need only tighten until screws are snug.

Notes:

Figure 14

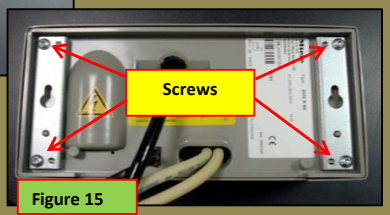


Figure 15

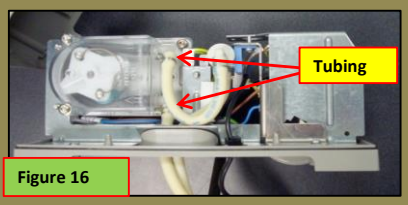


Figure 16

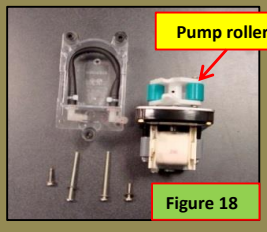


Figure 18

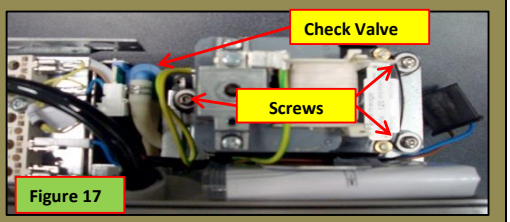


Figure 17

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Visual Checklist With Pass/Fail Grading

III. Inspect the Internal Drain Systems	Pass	Fail
A. Check the condition of the sump drain filters; clean as necessary.		
1. Remove the combination filter; check the condition of the filter screens, look for defects that would allow debris to get through. See Figures 19 & 20. Do not install filter assembly until completion of inspection "B."		
Notes:		
B. Check the non-return valve and drain pump impeller in the sump area for blockage and damage.		
1. With the filter assembly removed, remove the non-return valve; see Figure 21.		
2. Inspect the non-return valve for any debris or damage to the valve gasket; see Figure 21.		
3. Inspect the drain pump impellers for damage; check the drain sump for debris. See Figure 22.		
4. Reinstall in reverse order, including the installation of the filter assembly.		
Notes:		

Figure 19

Figure 20

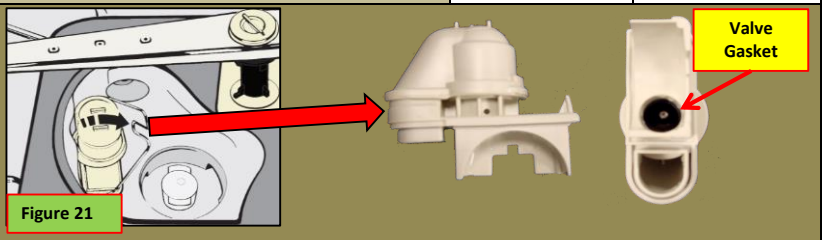


Figure 21

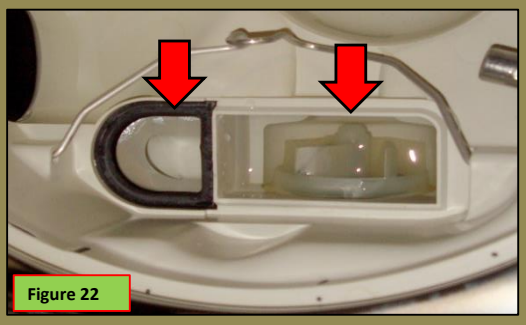


Figure 22

Visual Checklist With Pass/Fail Grading

IV. Check Underside for Leaks and Component Damage	Pass	Fail
A. Replace the neutralizer pump DOS 10/30 casing.		

1. Remove the toekick and service panel to gain access to the neutralizer pump; see Figure 23 and Figure 26

2. Remove water, if present, from the sump and remove any baskets from inside the machine.

3. Lay the machine on its side and remove the bottom drip pan to access the Steam condenser pump casing; see Figure 24

4. Remove the 3 T20 screws holding the pump assembly to the mounting bracket; see Figure 26.4. Remove the 3 T20 screws holding the pump assembly to the mounting bracket; see Figure 26.

5. Disconnect the electrical connector and grounding wire to the neutralizer pump and remove the pump.

6. Remove the 4 T20 screws holding the pump casing to the motor; see Figure 18.

7. Remove the casing and replace with casing DOS 10/30 (P/N 05642002); see Figure 18. Take care not to damage the case tubing when placing on pump rollers.

8. Re-install the neutralizing pump in reverse order. Do not install the drip pan at this time.

Notes:

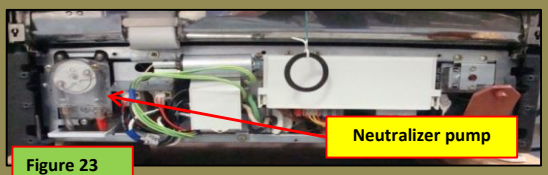


Figure 23

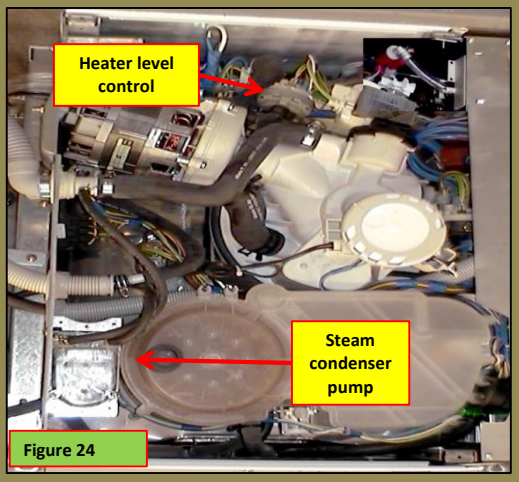


Figure 24

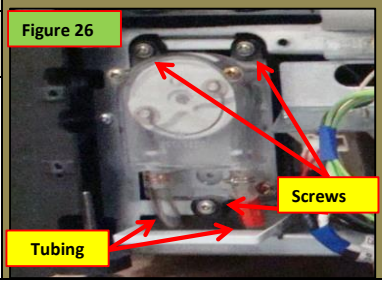


Figure 26

Visual Checklist With Pass/Fail Grading

IV. Check Underside for Leaks and Component Damage	Pass	Fail
B. Remove and replace the heater level control.		
1. With the bottom drip pan removed, locate the heater level control; see Figure 24.		
2. Using a pair of pliers, loosen the clamp securing the heater level control to the circulation pump; see Figure 27.		
3. Disconnect electrical wiring and remove and replace the heater level control (P/N 09112900).		
Notes:		

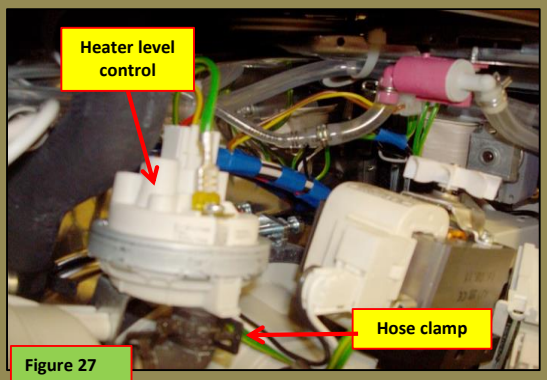


Figure 27

C. Inspect lines and hoses for deterioration and security.		
D. Replace the steam condenser pump DOS 60 casing.		
1. Locate the steam condenser pump; see Figure 24.		
2. Disconnect the tubing to the pump casing; see Figure 28.		
3. Remove the 2 screws securing the condenser pump mounting bracket to the rear panel; see Figure 28.		
4. Remove the 3 screws securing the mounting brackets to the pump casing; see Figure 29.		
5. Remove the 4 T20 screws securing the pump casing to the motor; see Figure 29.		
6. Remove and replace the pump casing (P/N 02317168). Take care not to damage the casing hose when placing on the pump rollers; see Figure 18.		
7. Reinstall the condenser pump in reverse order. Note: Pump casing is marked "in" and "out" to help with reinstalling the tubing.		
8. Reinstall the drip pan and put the machine upright.		
Notes:		

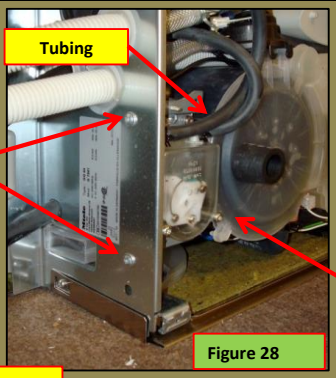


Figure 28

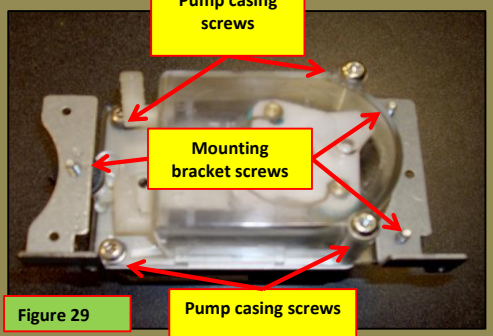


Figure 29

Visual Checklist With Pass/Fail Grading

V. Check the Condition of the Door Seals, Door Latch and Spray Arms	Pass	Fail
A. Replace the upper and lower door seals		

1. Open the washer door and remove the upper door seal; see Figure 30.

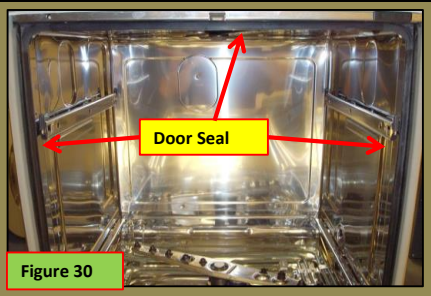


Figure 30

2. Clean the groove around the cabinet.

3. To remove the bottom seal, remove the 4 Phillips or T10 screws located on the lower inner door; see Figure 31.

4. Carefully remove the fixing plate, seal mounting plate and the lower seal from the door, Take note on how the pieces fit onto the door. This will make assembly less complicated; see Figure 32.

Note: Do not install the upper door seal until you complete the installation of the lower door seal. This will give you more room to work.

Note: Pay attention when disassembling the lower door seal and hardware. This will make installation less complicated.

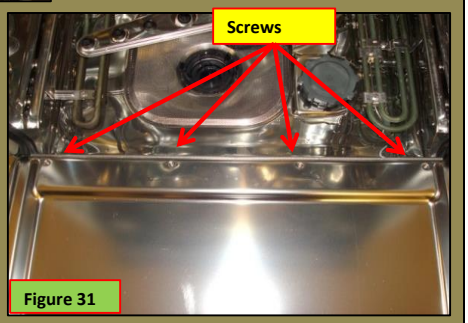


Figure 31

5. Hold the door at a 45° angle and install the mounting plate with the lip facing into the cabinet. The mounting plate should fit into place; if not, you are installing it incorrectly.

6. Replace the lower seal (P/N 01102422) with the seal lip facing inward into the cabinet. Then, working from the bottom of each side towards the middle, evenly press the seal into its groove.

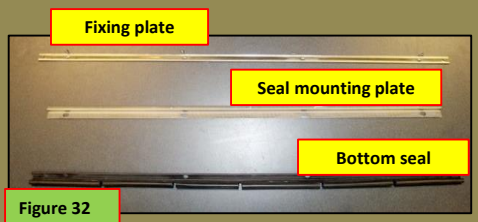


Figure 32

7. Install the fixing plate and line it up with the lower seal and mounting plate, then install the 4 T10 screws and secure.

8. Install the new upper door seal (P/N 01939571) in accordance with Figure 33. First, press in the middle of the door seal into the groove below the locking plate, Figure 33, Position 1.

9. Then press the seal into the corners, Figure 33, Position 2. The seal lip should point inwards.

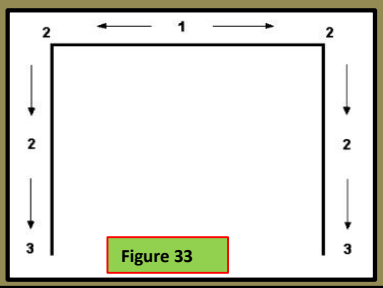


Figure 33

10. Then, working towards the middle, evenly press the seal into the groove, Figure 33, Position 3. When centered properly, both ends will line up with the door; see Figure 34.

Note: Upon completion of installing the upper door seal, if it seems too long at the ends, DO NOT CUT THE DOOR SEAL! The seal was installed incorrectly. Go back to step 8 and reinstall the upper door seal.


Figure 34

Notes:

Visual Checklist With Pass/Fail Grading

VI. Check the Condition of the Baskets	Pass	Fail
A. Check the adjustment of the coupling on the upper basket. Make adjustments, if necessary.		

1. The spring adapter for the water connection must engage correctly when a basket or injector unit is inserted in the machine. The basket coupling must be 4 to 5 mm higher than the water inlet coupling in the machine; see Figure 35.

2. If not, loosen the lock ring and push up the adapter (4-5 mm higher than the water inlet coupling in the machine); see Figure 35.

3. Tighten the lock ring and test the connection by rolling the basket into place. The two couplings should click into place; see Figure 35.

Notes:

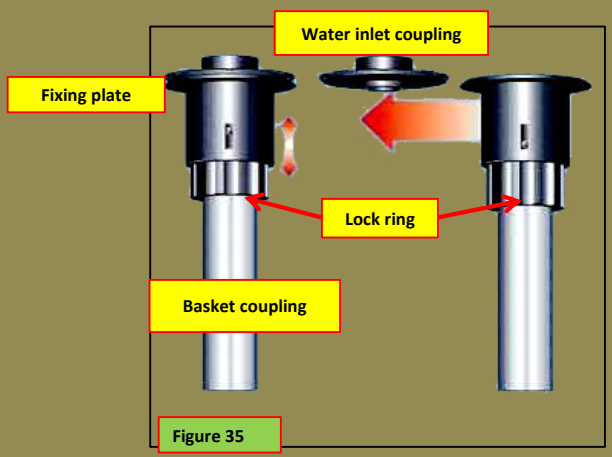


Figure 35

B. Check the condition of the wheels and rollers on the baskets; replace as needed.		
C. Check the condition of the support baskets and cassettes. Clean as necessary.		
D. Check the condition of the basket feed tubing and inserts (if equipped). Ensure there is no blockage.		

1. Remove upper and lower basket from the washer.

2. Remove inserts and check for damage or blockage (if equipped); see Figure 36.

3. Using a No. 1 Phillips, remove the screw securing the water pathway end plug (if equipped); see Figure 36.

4. Remove water pathway end plugs and inspect for blockage; see Figure 36.

5. Reinstall the end plugs and insert baskets back into the machine.

Notes:

Figure 36

Note: When inserting the instrument cassettes, ensure that they are tilted towards the back of the machine.

Visual Checklist with Pass/Fail Grading

VI. Check the Condition of the Door Seals, Door Latch and Spray Arms	Pass	Fail
B. Check that the door latch is tight and the door tension is properly adjusted		
1. After replacing the door seals, ensure the door closes with a tight seal. If a seal is not being made or the door is difficult to close, perform the following steps.		
2. Loosen the two T20 screws and slide the locking plate in or out to adjust the pressure correctly; see Figure 37.		
3. Once the locking plate is in the correct position, tighten the two T20 screws.		
Notes:		

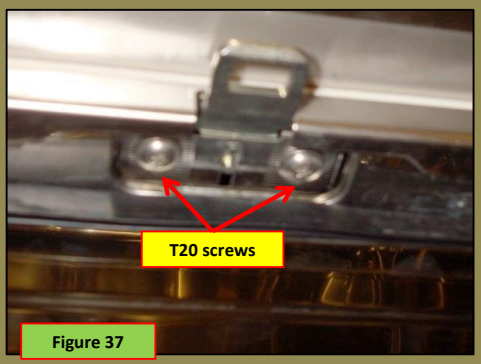


Figure 37

C. Inspect the spray arms for damage and blockage. Replace the lower spray arm retainer.		
1. Remove the upper and lower baskets for access to the spray arms.		
2. Remove the lower spray arm by turning the knurled nut counterclockwise; see Figure 38.		
3. Inspect the lower spray arm for cracks and blockage. Clean or replace as necessary.		
4. Remove the lower spray arm flange by turning it counterclockwise, then remove it from the sump assembly; see Figure 38.		
5. Remove the retainer from the flange by unscrewing counterclockwise; see Figure 38. Replace the retainer (P/N 05812101).		
6. Reinstall the flange with retainer into the sump assembly. Reinstall the lower spray arm and secure with the knurled nut.		
7. Remove the middle spray arm (located on the upper basket) by turning the knurled nut counterclockwise; see Figure 39.		
8. Inspect the middle spray arm for blockages or cracks. Replace or clean as necessary.		
9. Remove the upper spray arm by turning the coupling connector counterclockwise; see Figure 38.		
10. Inspect the upper spray arm for any blockages or cracks. Replace and clean as necessary.		
11. Reinstall spray arms in reverse order.		
Notes:		

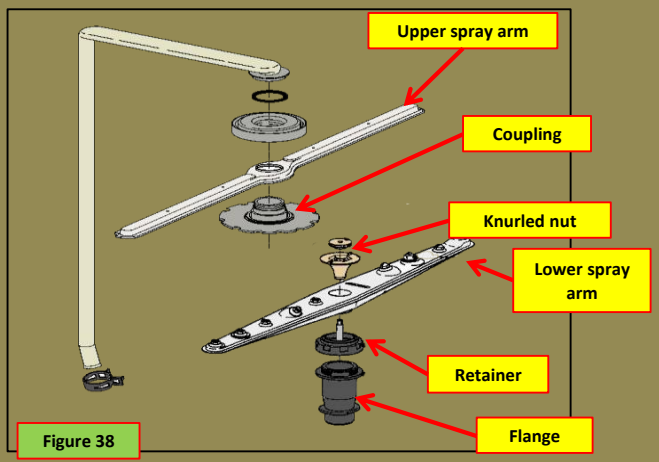


Figure 38

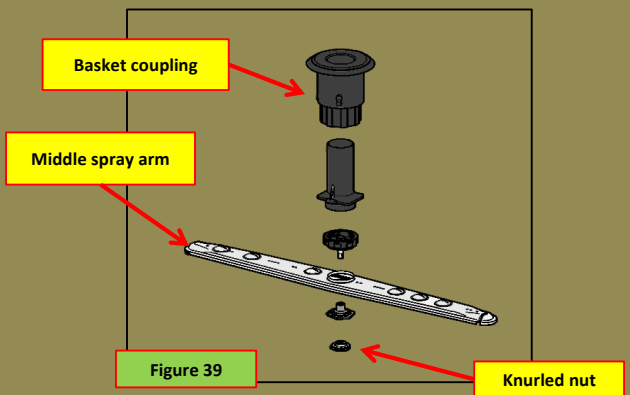


Figure 39

Visual Checklist with Pass/Fail Grading

VI. Check the Condition of the Door Seals, Door Latch and Spray Arms (Continued)	Pass	Fail
D. Check for proper operation of the manual door release		
1. Close the machine door.		
2. Open the machine door by slowly pulling the emergency release cable located at the bottom of the machine, next to the toekick; see Figure 40.		
3. If inoperable or damaged, make repairs as necessary.		
Notes:		

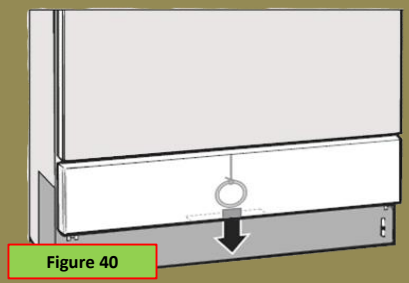


Figure 40

E. Check for proper door tension; adjust as necessary		
1. Open the door to a 45° angle; the door should remain in place. If not, the door should be adjusted so that it does not fall open or swing shut.		
2. If necessary, adjust the door by turning the T20 screw in the upper left door sill; see Figure 41. Turn counterclockwise to decrease tension (door falls open). Turn clockwise to increase tension (door swings shut).		
3. Do not use a power screwdriver to perform this task! This could cause damage to the door tension bracket.		
Notes:		

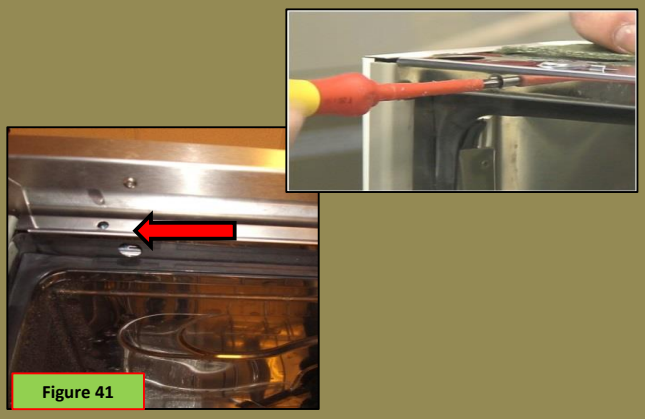


Figure 41

VIII. Priming of the Detergent (if Installed) and Neutralizer Dispensers	Pass	Fail
A. Check the detergent and neutralizer refill LED operation		
1. Apply power to the machine and move the float up on the siphon tubes. The "detergent" and "neutralizer" LEDs should go out; see Figure 42.		
2. Place the siphon tube into the detergent container and secure; see Figure 43.		
Notes:		

Figure 42

Figure 43

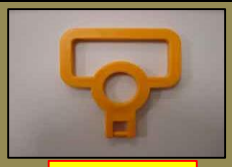
Visual Checklist with Pass/Fail Grading

VIII. Priming of the Detergent (if Installed) and Neutralizer Dispensers (Continued)	Pass	Fail
B. Prime the detergent and neutralizer dispensers		

**** After replacing the hoses and casings for the DOS dispensing systems they will need to be primed by accessing programming mode and using the following procedure.**

To access programming mode:

1. Shut off the machine and bypass the door lock with the Miele special tool or by using a flat-tip screwdriver (this will allow you to monitor the flow of chemical agents into the cabinet); see Figure 44.



Bypass tool

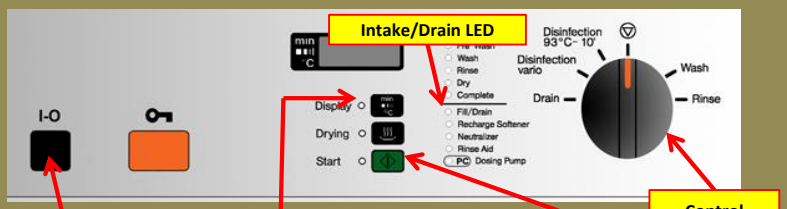
Figure 44

2. Turn the program **"control knob"** to the 12 o'clock position.

3. Press and hold the top **"Display"** and bottom **"Start"** program function buttons together.

4. Turn on the machine and release the buttons.

Acknowledgement indicator:
***** The display shows the current software index, **e.g., P0x.**
* The **"Intake/Drain"** LED lights up.
* If this is not the case, repeat the process.
An exception is the **"Rinse Aid"** LED. If this lights up, rinse aid or an external disinfectant must be added to the appropriate dispenser.



On/Off button

Display button

Start

Control Knob

Accessing the priming steps:

1. Press the middle **"Drying"** program function button as necessary to advance to the desired programming level, **E02.**

2. For DOS 1 (detergent DOS 60) turn the **"control knob"** to the 1 o'clock position.

3. Press the top **"Display"** button; the priming will begin and run for 90 seconds. Towards the end of the 90 seconds the detergent should flow out of the inlet tube located in the lower left corner of the interior cabinet. The flow should be smooth with no air bubbles. If not, prime for another 90 seconds; see Figure 45.

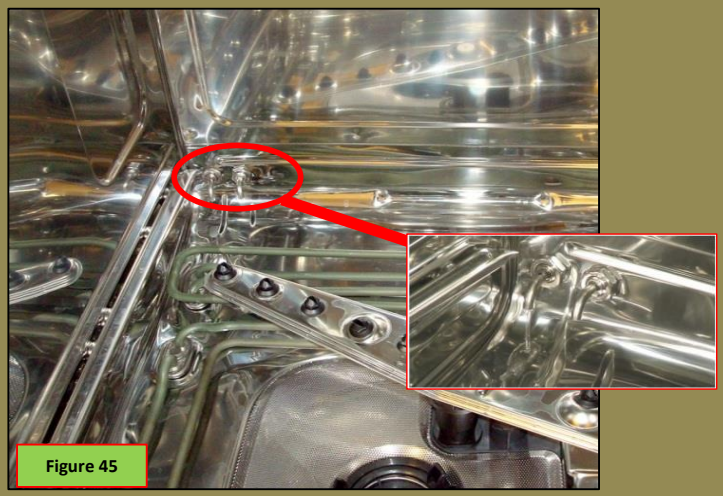


Figure 45

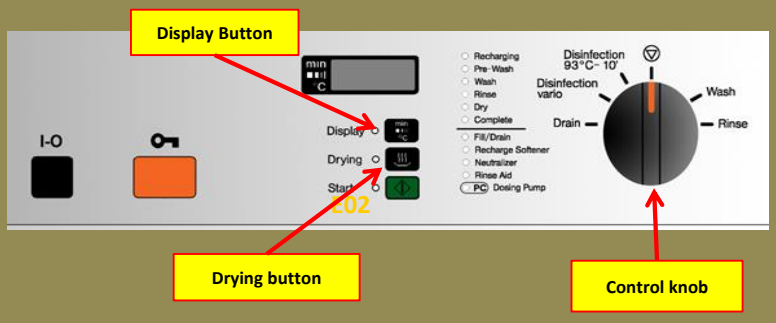
4. Press the door button to remove the bypass tool and close the door.

5. Run a rinse program to remove the detergent before priming the neutralizer.

Note: Do not run a rinse program with the bypass tool installed and the door open.

Visual Checklist With Pass/Fail Grading

VIII. Priming of the Detergent (if Installed) and Neutralizer Dispensers (continued)	Pass	Fail
Accessing the priming steps (continued):		
6. Again, insert the bypass tool and access the programming mode and move to programming level "E02" as stated above.		
7. For DOS 3 (neutralizer DOS 10/30), turn the **"control knob"** to the 5 o'clock position.		
8. Press the top **"Display"** button and the priming will begin and run for 210 seconds. The flow out of the inlet in the lower left corner of the interior cabinet should be smooth with no air bubbles towards the end of the priming cycle; see Figure 45.		
9. Press the door button to remove the bypass tool and close the door.		
10. Run a rinse program to remove the neutralizer agent from the cabinet.		
Notes:		



VII. Perform an Operational Check - Run a "Disinfection 93°C -10" program	Pass	Fail
Note: For undercounter machines, do not install at this time. If possible, run the machine outside of cabinetry to save time if repairs are needed.		
A. Check the machine for leaks. Internal leaks will trigger an "F26" fault to be displayed.		
1. Inspect the lower plinth (toe Kick) area. Using a flashlight check for leaking from the temperature limiter and around the sump seal.		
2. From the lower plinth area, check the drip pan for accumulation of water.		
3. Verify a proper seal around door by checking for leaks. Improper installation of door seal or latch placement may cause a leak.		
B. Verify washer reaches a temperature of 199°F (93°C) during the main wash.		
C. Verify completion of wash cycle without fault. The "Complete" LED lights and all other indicators show a running light.		
Notes:		

Visual Checklist With Pass/Fail Grading

IX. Installation and Verification Check		Place your initials in the box after each step.
	1. Install all panels removed; take care when installing the plinth cover behind the toekick.	
	2. Verify that the machine is level. If not, level the machine.	
	4. If the machine is an undercounter installation, you may install it at this time. Ensure that all hoses, tubing and utility connections are properly routed and verify no kinking or bending of hoses occur during the installation process.	
	5. If a detergent dispensing module is being used, secure the module and chemical containers. Check to make sure the tubing and electrical cables are properly routed and there are no kinks.	
	6. Verify the non-return valve, sump filters and baskets are installed properly. Verify the upper basket coupling clicks into place.	
	7. Run a "Rinse" program to verify that no damage or kinks to any of the utility lines were caused during the installation process.	
Technician's Signature		
Facility's Signature		Revised 12/13
Date Completed		
Final Notes:		