

Henny Penny Corp. Open Fryer - Electric LVE 30X

Cross reference (optional)

Daily maintenance tasks

FR 25D01 Maintenance Filter
& Fryer Vat
Cleaning

Weekly maintenance tasks

FR 25W01 Clean Behind
Fryer

Quarterly maintenance tasks

FR 25Q01 Check Filter
System O-Rings

FR 25Q02 Deep Clean

Annual maintenance tasks

FR 25A1-T Inspection

Model LVE 30X



⚠ Hazards

These icons alert you to a possible risk of personal injury.

🔧 Equipment alerts

Look for this icon to find information about how to avoid damaging the equipment while doing a procedure.

★ Tips

Look for this icon to find helpful tips about how to do a procedure.

Why Cleans the vat of crumbs and filters the oil thoroughly to prolong the life of the oil

Time required 5 minutes to prepare 10 minutes per vat to complete.

Time of day During low volume hours.

Hazard icons  Chemicals  Electricity  Hot Liquids/Steam  Hot Oil  Hot Surfaces
 Manual Handling  Moving Parts  Sharp Objects/Surfaces  Slippery Floors

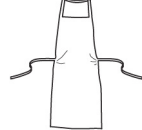
Tools and supplies



Heat-Resistant Gloves, filtering



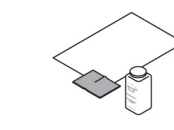
Face shield



Apron, heat-resistant



Hi-Temp Tool with Multi-Use Pad and Detail Brush



McFiltering Kit for built-in filtering system, sample



KAY® QSR Fryer Cleanser



KAY® QSR Heavy Duty Degreaser Solution



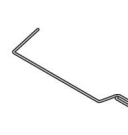
Clean, Sanitizer-soaked towels



Bucket, soiled towels



3-Compartment Sink - KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution



Goofer Tool

Procedure

1 Put on protective gear

Use all McDonald's approved safety equipment, including apron, face shield and heat-resistant gloves.



Hot oil can cause severe burns



2 Check filter pan

Make sure filter drain pan and pan cover are properly in place with the filter pipe tightly connected.

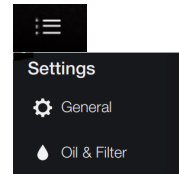


If the filter drain pan or pan cover is not properly installed, an alert will display.



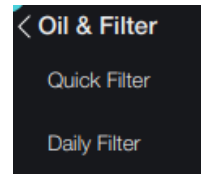
3 Enter the Oil and Filter menu

Make sure the oil is hot, to get the best results from filtering. Tap the Settings button, and then tap to enter the Oil & Filter menu.



4 Enter Daily Maintenance Filter

Tap Daily Filter to enter the Daily Maintenance Filter procedure.



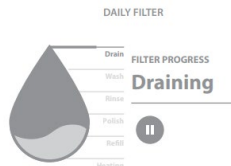
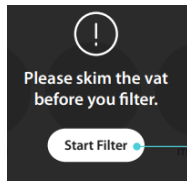
continued ►

Maintenance Filter & Fryer Vat Cleaning (continued)

5 Start Daily Filter

Follow prompts to start the Daily Filter.

- For split vats, choose left or right side.
- As prompted skim the vat to remove floating crumbs.
- Tap Start Filter to drain the oil. Draining displays.
- Tap X to exit the Daily Filter screen and return to normal operation.



6 Lift elements

Once oil has drained, remove basket support, and use lift tool to raise the hinged elements from the vat.



Hot Surfaces

Use heat-resistant gloves when lifting elements or burns could result.



Equipment Alert

Be careful not to damage high limit probe(s) in center of elements.



7 Scrub inside vat

Attach the Pad to the Hi-Temp Pad Holder and moisten with shortening. Sprinkle KAY® QSR Fryer Cleanser on the Pad and scrub the walls, corners, and bottom of the inside of the vat. Use the Hi-Temp Detail Brush to remove soil built up and debris from heating element coils, corners and bottom of vats and other hard-to-reach areas.



Equipment Alert

Be careful not to damage the sensing probes and DO NOT scrub elements or breading will stick and burn.

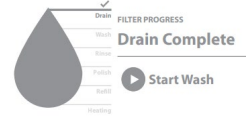


Chemicals

KAY® QSR Fryer Cleanser

8 Drain complete

Once the vat is clean, Drain Complete displays.



9 Washing

Lower the elements and then tap the Start Wash, play button. Washing displays. Oil is circulated through the vat.



10 Wash complete

Once wash cycle is complete, Wash Complete displays. Buttons for Repeat Wash or Start Rinse are available. If vat is not yet clean, tap the Repeat Wash arrow and step 9 is repeated.



11 Rinsing

If vat is clean, tap the Start Rinse, play button. Rinsing displays. The oil is pumped into the vat and rinses it.



12 Rinse complete

Once completed, Rinse Complete displays with buttons for Repeat Rinse or Start Polish. If vat is not yet clean, tap the Repeat Rinse arrow and step 11 is repeated.



13 Polishing

If vat is clean, tap the Start Polish, play button and oil is circulated through the filter system for 5 minutes.

- A Skip Polish action button is available to exit the polish step at any point in the process.
- Continue to step 14.



14 Refilling

Once the polish cycle is complete, Refilling displays and the vat fills with oil.



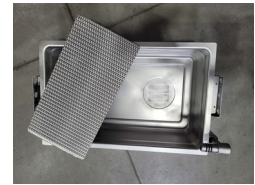
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Maintenance Filter & Fryer Vat Cleaning (continued)

- 15 Refill complete**
Once vat is full, Refill Complete displays.
- Tap the Start Heat play button to begin heating the oil.
 - A Skip Heat action button is also available to proceed without heating the oil.



- 21 Remove bottom screen**
Pull the bottom screen from pan set aside.





- 16 Change filter pad**
Open the door, pull-out the filter drain pan assembly using the handle on the drain pan.



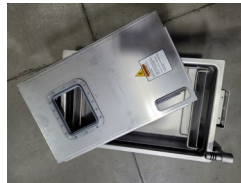
- 22 Clean drain pan**
Take the removable parts to the 3-compartment sink to wash in KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution and rinse thoroughly with warm water. Allow to air dry before reassembling.



 **Hot Surfaces**
This pan could be hot!
Use heat-resistant gloves or severe burns could result.

 **Chemicals**
KAY® SolidSense™ All-Purpose Super Concentrate (APSC)

- 17 Remove filter drain pan cover**
Lift the pan cover from the drain pan and set aside.




- 23 Reassemble**
Reassemble in reverse order, placing the bottom screen into the filter pan first, followed by the new filter pad, retaining ring, crumb catcher, and then lid.



- 18 Remove crumb basket**
Lift the crumb basket from the drain pan. Wipe the oil and crumbs from the crumb basket and discard. Set aside.



 **Tip**
Be sure that the drain pan, bottom screen, crumb catcher, and the retaining ring are thoroughly dry before placing filter pad into pan as water will dissolve the filter pad

- 19 Remove filter pad retaining ring**
Remove the filter pad retaining ring set aside.



- 20 Remove filter pad from pan**
Pull the filter pad from the pan and discard pad.



- 24 Activate screen lock**
On the control panel, swipe up and tap the lock icon. The screen locks for 10 seconds for cleaning.



continued ▶

Maintenance Filter & Fryer Vat Cleaning (continued)

25 Clean control panel

Wipe the control panel with a clean, sanitizer-soaked towel sprayed with KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution.



Tip

Do not splash water on or around controls or damage to the control may occur.

26 Clean exterior of Fryer

Wipe down the exterior of the fryer with a clean, sanitizer-soaked towel sprayed with KAY® QSR Heavy Duty Degreaser Solution. Rinse with a separate clean, sanitizer-soaked towel.



Chemicals

KAY® QSR Heavy Duty Degreaser Solution

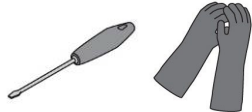
Why To seal the drain pan tube and fryer plumbing connection, allowing for proper filter pump suction.

Time required 5 minutes to examine and replace if necessary

Time of day Start of day or any time the fryer is not filtering.

Hazard icons  Hot Oil  Hot Surfaces  Moving Parts  Slippery Floors

Tools



Small flat-head screwdriver

Heat Resistant Gloves

Procedure

- 1 Pull-out filter drain pan**
Open the door and pull the filter drain pan assembly out, using the handle on the drain pan.



Hot Surfaces
This pan could be hot! Use heat-resistant gloves or severe burns could result.

- 2 Check O-rings**
Visually check the O-rings on the tube of the filter drain pan for any cracks or breaks and replace quarterly or as necessary.



Tip
O-ring failure will cause the filter pump to not return oil from the pan to vats during filter cycles.



- 3 Remove old O-rings**
Using a small, flat-bladed screwdriver, pry up on the O-rings and pull all 3 off the end of the tube.



Tip
Only use Henny Penny approved replacement O-rings which will withstand high temperatures.



Replace

- 4 Install new O-rings**
Roll new O-rings into the notches on the tube.



Tip
Use cool cooking oil to aid in O-ring lubrication during replacement.




Good

Why To thoroughly clean the vat by removing caramelized oil from vat


Time required 1 hour
15 minutes to prepare & complete per vat

Time of day After close if not 24-hour store For 24-hour restaurants: The task can be performed one vat at a time. You will be able to serve customers with remaining vats not immediately adjacent.


Hazard icons




Chemicals




Electricity




Hot Liquids/Steam




Hot Oil




Hot Surfaces




Manual Handling



Moving Parts

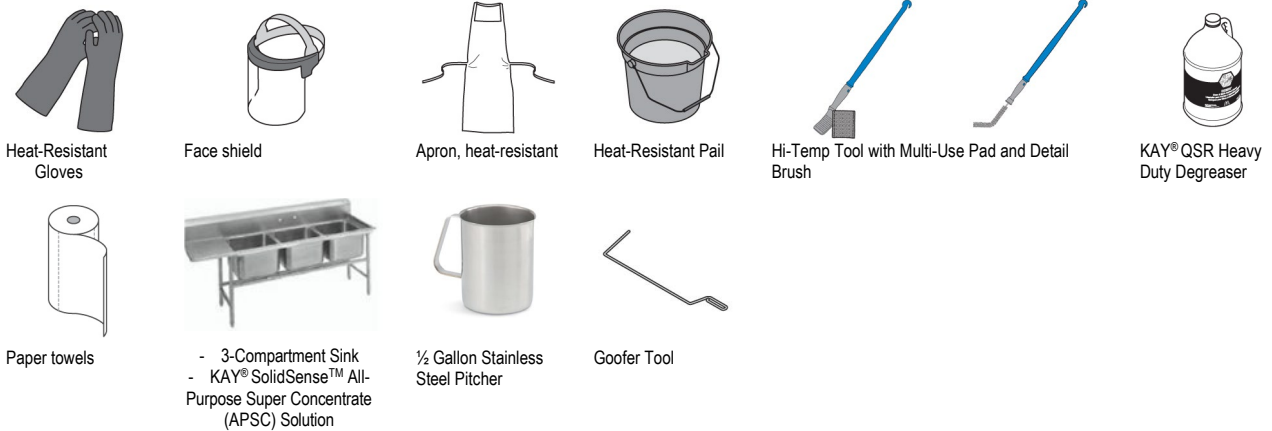


Sharp Objects/Surfaces



Slippery Floors

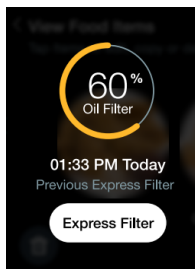
Tools and supplies



Procedure

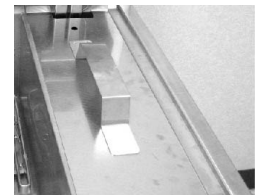
1 Perform Filter Cycle

To get the best results from the deep clean process, perform a filter cycle before proceeding to deep clean mode. To activate a filter cycle, tap the Oil Info icon and then tap the Express Filter button that appears in the Oil Info screen.



2 Cover Vats

Cover adjoining vats to avoid accidentally contaminating oil with fryer Deep Clean solution.



Tip
Do not cook product in an adjoining vat when the Deep Clean process is in progress to avoid contaminating the oil and product.

continued ►

Vat Deep Clean (continued)

3 Put on protective gear

Use all McDonald's approved safety equipment, including apron, face shield and heat-resistant gloves.



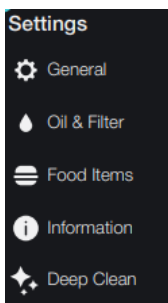
Hot Oil

Hot oil or water can cause severe burns.



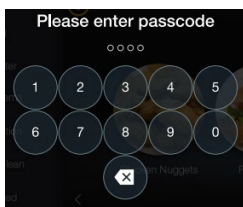
4 Enter Deep Clean Mode

Tap the **Settings** button to display the Settings menu, and then tap **Deep Clean** to enter Deep Clean Mode.



5 Enter Code

Enter passcode **1234** by tapping the number buttons.

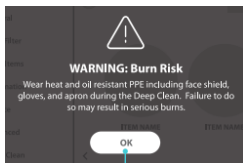


6 Vat Choice (Split Vats Only) and Warnings

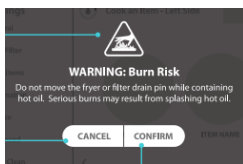
For split vats, select **deep clean one or both sides**. The display shows Deep Clean Left Side, Deep Clean Right Side, or Deep Clean Both Sides.



- Tap the choice for the deep clean to be performed.
- Full vats do not have this option.



Burn Risk warnings display.

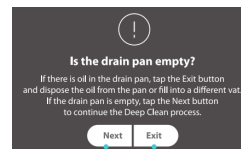


- Ensure all PPE is properly worn.
- Tap OK and Confirm to proceed with the Deep Clean.
- Or tap Cancel to exit.

7 Filter Drain Pan Empty

A deep clean requires an empty filter drain pan. Check the filter drain pan for oil, and then tap:

- **No**, if oil is not present tapping No will proceed to a draining the vat step.
- **Yes**, if oil is present tapping Yes will ask the user to re-evaluate the filter drain pan status.
- Tap **Next** if the filter drain pan is empty.
- Tap **Exit** if the filter drain pan is not empty and the Deep Clean mode is exited.



8 Confirm Oil in Vat

For Full Vat:

- Tap **Yes** if the vat has oil in it.
- Tap **No** if the vat is empty.



For Split Vat:

- Tap **Yes** if the left split vat has oil in it.
- Tap **No** if the left split vat is empty.



If tapping:

- **Yes**, proceed to step 9.
- **No**, proceed to step 10.

9 Disposing of Oil

To dispose the oil from a vat, use the **Dispose the oil to** prompts.

Cart: Units without bulk oil systems tap the Cart button.

Rear: For units with bulk oil systems, tap the Rear button. After the oil drains into the pan, the door mounted dispose switch may be used.

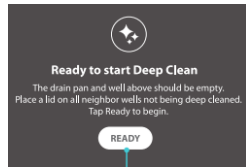


continued ►

Vat Deep Clean (continued)

10 Start Deep Clean

"Ready to start Deep Clean" is displayed. Tap **Ready** to begin the deep clean process.



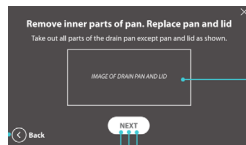
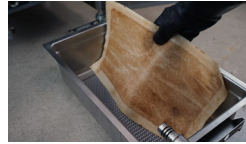
11a Prepare Filter Pan

Empty filter drain pan of internal filtering components and take the components the 3-compartment sink to wash and rinse. Wash with KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution and rinse thoroughly with warm water. Allow to air dry. Return the empty filter drain pan and cover to the fryer. Tap **Next** on the control to confirm this step is complete.



Chemicals

KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution



11b Prepare Solution:

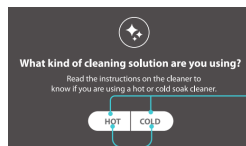
For Cleaning Full Vats:

Pour 2/3 of 1 gal. (3.8L) bottle of full-strength KAY® QSR Heavy Duty Degreaser into empty vat and fill with hot water to approximately 1" (25 mm) over the oil fill lines.



For Cleaning Split Vats:

Pour 1/3 of 1 gal. (3.8L) bottle of full-strength KAY® QSR Heavy Duty Degreaser into empty vat and fill with hot water to approximately 1" (25 mm) over the oil fill lines.



Chemicals

KAY® QSR Heavy Duty Degreaser

Make sure the vat is filled to 1 in. (25 mm) above the top fill line. Then tap **Next** to proceed to start the soak. Start the soak when ready displays. **Tap the play button to start the soak sequence.**

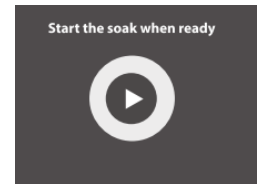


Tip
Add water as needed during cleaning process to keep solution 1 in. (25 mm) above the top fill line.



Chemicals

KAY® QSR Heavy Duty Degreaser Solution



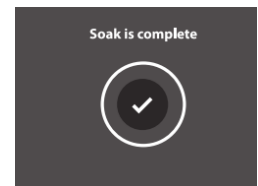
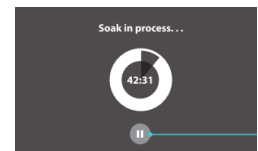
12 Soak

"Soak in process" is displayed along with a countdown timer. Heat is regulated to 195°F (91°C) for one hour.

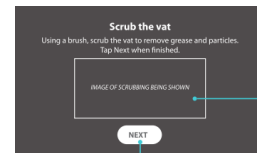


Tip
Tap the button to:

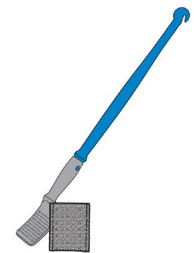
- Pause
- Resume
- Stop



After the 60-minute countdown timer expires, "Soak is complete" is displayed. Tap the checkmark button to proceed to the **Scrub the vat step.**



Attach the Pad to the Hi-Temp Pad Holder. Frequently dip the Hi-Temp Pad Holder into the Degreaser Solution and gently brush area above solution level to remove solution from upper portion of vat. After scrubbing the vat, tap **NEXT**.



Chemicals

KAY® QSR Heavy Duty Degreaser

continued ▶

Vat Deep Clean (continued)

13 Discarding Solution

"Remove the water mix from vat" is displayed with a drain pan or manual option. Tap preferred selection to proceed.

CAUTION! Ensure the drain pan is empty prior to initiating.

Using a 1/2 gal. (2 liter) stainless steel pitcher, remove the solution from the vat, pouring it into a heat-resistant pail for disposal.

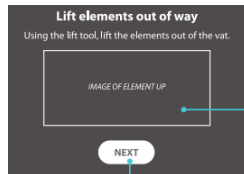
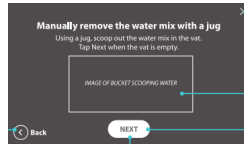
Tap NEXT to confirm most of the water mix has been manually removed. "Lift elements out of way" is displayed. Use the element lift tool to fully raise the elements and tap NEXT.



Hot Liquids/Steam
Hot solution can cause severe burns, wear heat-resistant gloves and protective gear.



Chemicals
KAY® QSR Heavy Duty Degreaser Solution



14 Clean Vat

"Scrub the vat" is displayed.

Use the Hi-Temp Detail Brush to clean heating elements and use the Hi-Temp Pad Holder and Pad to clean the inside of the vat walls, corners and top.



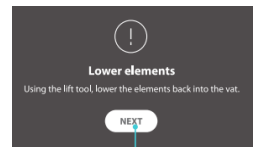
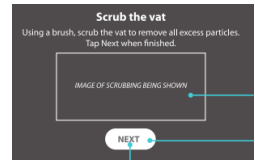
Tip
Use the lift tool and lift the hinged element from the vat as needed.



Equipment Alert
Do not scrape the electric fryer elements or use the scouring pad on the elements or breading will stick and burn.

Do not use steel wool, wire brush, putty knife, other abrasive cleaners, or cleaners/sanitizers containing chlorine, bromine, iodine, or ammonia chemicals as these will deteriorate the stainless-steel material and shorten the life of the unit.

Tap NEXT to proceed. Lower the elements as prompted and tap NEXT again.



continued ►

Vat Deep Clean (continued)

15 Multiple Rinse and Remove Cleaning Solution

Using clean cool water rinse the remaining cleaning solution and debris.

Tap NEXT once to remove water manually with a container.

--OR--

Tap NEXT twice to drain water into the filter pan.

CAUTION! Ensure the drain pan is empty prior to initiating.

Tap and hold the DRAIN button to open the drain valve. Releasing the drain button will close the drain valve.

CAUTION! Ensure the drain pan is empty prior to initiating.

Continue following rinse prompts to thoroughly rinse the vat multiple times.

CAUTION! Before draining rinse water each time, ensure the filter pan is empty.

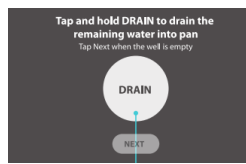
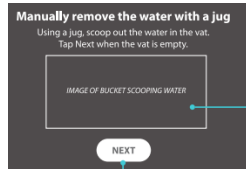
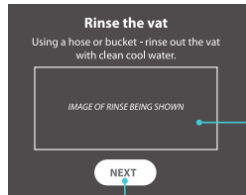
16 Purge Oil Lines

To purge oil lines, tap and hold the PURGE button.

With the Purge button held the filter pump will run.

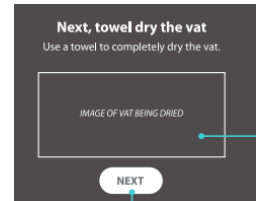
Release the Purge button when a small amount of clean oil begins to flow into the vat.

Tap NEXT to continue.



17 Dry Vat

Dry vat with a paper towel. Tap NEXT to continue.



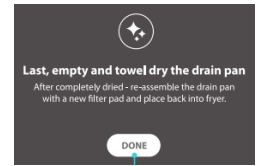
18 Empty and Dry Filter Drain Pan

Remove filter drain pan and empty into mop sink.

Rinse drain pan with clean water and dry with a paper towel.

Tap DONE to continue.

Properly assemble filter drain pan components and insert a new filter pad.



19 Fill Vat









"Fill vat from" is displayed with action buttons to fill the vat from different oil sources.

- For units with bulk oil tap **Bulk**.
- For units without bulk oil tap **Manual Fill**.



Filling from the JIB should only be used for vats that are partially full and require



Why	To prevent grease build-up and to meet McDonald's cleanliness standards	
Time required	5 minutes to prepare	45 minutes to complete.
Time of day	End of workday	For 24-hour restaurants: Late night or early morning when volume is low
Hazard icons	 Chemicals  Electricity  Hot Liquids/Steam  Hot Oil  Hot Surfaces  Manual Handling  Sharp Objects/Surfaces  Slippery Floors	

Tools and supplies



Nylon Brush



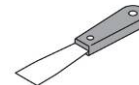
KAY® QSR Heavy Duty Degreaser Solution



Towels



Mop Bucket with clean Kay® SolidSense™ Floor Care A or B Solution



Putty Knife



Clean Hi-lo Deck Brush



Clean Mop



Clean, Sanitizer-soaked towels



Bucket, soiled towels



KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution

Procedure

1 Switch power off

Make sure the main power switch is in the OFF position.



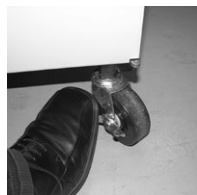
2 Remove grease trap

Remove grease trough and cup in hood and pour contents into oil disposal shuttle



3 Release casters

Release the locks on the fryer casters.

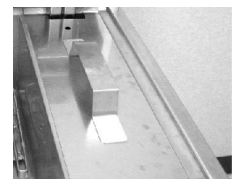


4 Cover fryer vats

Place vat covers on all vats.



CAUTION! Hot cooking oil may splash when moving the fryer.



5 Roll fryer from hood

Carefully roll the fryer from the hood far enough to get behind the fryer.



CAUTION! Hot cooking oil may splash when moving the fryer.



continued ►

Clean Behind Fryer (continued)

- 6 Disconnect fryer power cords**
Disconnect the power cords by pulling on the plug, not the wire.



Verify power is disconnected and switch OFF during all component and wiring inspections.



- 7 Clean hood**
Use a putty knife to carefully clear grease from the hood and behind the fryer. Check for oil on the floor.



- 8 Cleaning Order**
Clean the area behind the fryer with a clean, sanitizer-soaked towel sprayed with KAY® QSR Heavy Duty Degreaser Solution in this sequence:

- A. Accessible parts of stack
- B. Back of hood
- C. Sides of hood
- D. Grease filter recess
- E. Sheet metal around fryer



- 9 Scrub**
Use a nylon brush and hot Degreaser Solution to clean areas behind fryer.
Note: Wash, rinse and sanitize nylon brush in 3-compartment sink after use.



KAY® QSR Heavy Duty Degreaser Solution



- 10 Towel dry**
Rinse all areas with a clean, sanitizer-soaked towel. Dry with a paper towel. Have manager inspect.



- 11 Wash casters**
Use nylon brush and hot KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution to clean casters.

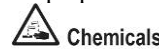
Note: Wash, rinse and sanitize nylon brush in 3-compartment sink after use.



KAY® SolidSense™ All-Purpose Super Concentrate (APSC) Solution



- 12 Clean Fryer Floor Area**
Place a wet floor sign in immediate area. Use a clean mop and hi-lo deck brush to apply clean, hot Floor Cleaner Solution to clean the floor around the fryer area.
Note: Deck brush area then mop up remaining solution.



KAY® SolidSense™ FloorCare A or B Solution



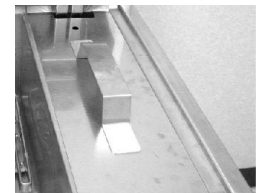
- 13 Return fryer**
Reverse steps 1 - 7 to return fryer to hood and replace grease filters. Remove vat covers.








CAUTION! Hot cooking oil may splash when moving the fryer.

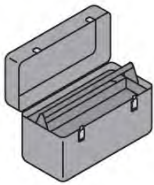


Verify power is disconnected and switch OFF during all component and wiring inspections.



Why	Henny Penny recommends a Factory Certified Service Agent inspect this appliance at least annually. This will help ensure the equipment is in safe working order and operating at peak performance.
Time required	1 hour per fryer to complete inspection
Time of day	The inspection should be scheduled by the store to ensure business is not interrupted and to give the servicer adequate access to the equipment.
Hazard icons	 Electricity  Hot Oil  Hot Surfaces  Sharp Objects/Surfaces  Slippery Floors

Tools and supplies



Tools supplied by technician

Procedure

HENNY PENNY LOV QUALIFIED TECHNICIANS ONLY

1 Fryer Inspection

Inspect the fryer, inside & out, front & rear, for excessive oil buildup.



2 Element Inspection

Verify that heating elements are in good condition with no carbon/caramelized oil buildup.

- Inspect the elements for signs of extensive heating without oil.
- Inspect the high limit RTD probe(s) attached to each element.

3 Tilt Inspection

Verify that the tilt mechanisms and safety switches are working properly when lifting and lowering elements and that the element wires are not binding and/or chafing.

4 Check fryer recovery time

Check the fryer's most recent recovery time for all vats. Control: **Settings > Information > Vat Usage and Heat System**

- The most recent recovery time should be less than 1:40 (one minute, forty seconds).
- If the fryer's recovery time is less than 1:40 (one minute, forty seconds). The procedure is complete for this vat. Go to step 6.

5 Inspect heat system power supply

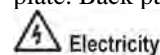
If the fryer's recovery time is not acceptable, check the following items on the fryer. If you find any problems, correct them. List of items to check:

- Power plug fully connected
- Check that the casters do not interfere with the Power Cord and the Outlet's connection
- Heating element wiring to proper phases

Continue to step 6.

6 Amp-draw check

Verify the heating element amp-draw is within the allowed range as indicated on the appliance's rating plate. Back panel off using Amp Clamp.




Annual Inspection (electric fryers only) (continued)


7 Safety / Primary contactor check
Verify the safety / primary contactor is operating within safety limits. Refer to the technical manual for test and replacement steps. Control: **Settings > Information > Heat System**

8 Probe check
Verify that all thermocouples are properly connected, tightened, functioning properly and the probe guards are present and undamaged.

9 Heating element hardware inspection
Inspect and tighten all heating element hardware and high limit RTD probe mount(s).

10 Electrical component inspection
 Electricity
Verify power is disconnected and switch OFF during all component and wiring inspections.


Verify that components (power supplies, all PCBs, HMI enclosure, contactors, etc.) are in good condition and free from oil buildup or other debris.

11 Wiring connection
 Electricity
Verify power is disconnected and switch OFF during all component and wiring inspections.

Verify that component's wiring connections at contactors, terminal blocks, switches, etc. are tight and wiring is in good condition.


12 Safety device check
Verify that all safety features (i.e. drain pan magnetic proximity switch, high limit reset switches) are present and functioning properly. Control: **Settings > Information > Filter System and Heat System**

13 Frypot examination
Verify that all frypots are in good condition and free of leaks and that the frypot insulation is in serviceable condition.

 Hot Surfaces

14 Wiring connection inspection
Verify that all wiring harnesses and harness connectors are tight and in good condition.

15 Oil line inspection
Inspect all oil-return and drain lines for leaks and verify that all connections are tight.

 Hot Surfaces

16 Filter drain pan and pump inspection
Inspect filter drain pan assembly to make sure all parts are present. Manually check:
- The pan engages the drain pan magnetic proximity switch properly.
- The o-rings are in good shape.
- Inspect filter pump and motor for shaft seal leakage and oil buildup on motor.

17 Filter system component test
Verify filter system components are working properly (i.e. drain valve, drain valve actuator, selector valve, filter pump, ATO (JIB) pump, check valves). Control: **Settings > Information > Filter System**