

X20 X26 Series
Gas Oven
Domestic & Standard Export



P/N: 79396
Revision D
August 4th, 2026
ENGLISH



X20/X26 Series Gas Ovens

Model:

- X20 Gas
- X26 Gas

Combinations:

- Single Oven
- Double Oven (Two-Stack)
- Triple Oven (Three-Stack)

OWNER'S OPERATING AND INSTALLATION MANUAL

for Domestic & Standard Export Ovens

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NOTICE:

This Owner's Operating and Installation Manual should be given to the user. The operator of the oven should be familiar with the function and operation of the oven.

This manual must be kept in a prominent, easily reachable location near the oven.

Ovens are shipped from the factory configured for use with Natural gas. If permitted by local, national, and international codes, at the time of installation the oven may be converted to Propane gas operation. This conversion requires the use of a Gas Conversion Kit that is supplied with the oven.

For CE-approved ovens, the conversion is described in the Installation section of this manual.

For domestic and standard export ovens, instructions are included in the Gas Conversion Kit.

Middleby Marshall suggests a service contract with a Middleby Authorized Service Agent (ASA).

DEFINITIONS

DANGER

INDICATES A HAZARDOUS SITUATION THAT, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.

WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates situations not related to physical injury that, if not avoided, could cause damage to the machine or surrounding property and could affect warranty coverage.

IMPORTANT

Includes other information required by the operator or installer.

WARNING

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- ***Children should be supervised to ensure that they do not play with the appliance.***
- ***Cleaning and user maintenance shall not be made by children without supervision.***

RETAIN THIS MANUAL FOR FUTURE REFERENCE

WARNING

In a prominent location, post the emergency telephone number of your local gas supplier and instructions to be followed in the event you smell gas. Instructions to be followed in the event the user smells gas shall be obtained by consulting the local gas supplier. If the smell of gas is detected, immediately call the emergency phone number of your local gas company. They will have personnel and provisions available to correct the problem.

WARNING

Do not spray aerosols in the vicinity of this appliance while it is in operation.

WARNING

For your safety, do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

AVERTISSEMENT

Mesure de sécurité, ne pas entreposer ni utiliser d'essence ni autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operation, and maintenance instructions thoroughly before installing or servicing the equipment.

AVERTISSEMENT

L'installation, le réglage, la modification, la réparation ou l'entretien incorrects de cet appareil peuvent causer des dommages matériels, de blessures ou la mort. Lire attentivement les instructions d'installation, de fonctionnement et d'entretien avant de procéder à son installation ou entretien.

WARNING

Do not place articles on or against this appliance.

WARNING

Do not modify this appliance.

IMPORTANT

An electrical wiring diagram for the oven is located inside the machinery compartment.

IMPORTANT

It is the customer's responsibility to report any concealed or non-concealed damage to the freight company. Retain all shipping materials until it is certain that the equipment has not suffered concealed shipping damage.

NOTICE

Contact your Middleby Authorized Service Agent to install and perform maintenance and repairs and if necessary to convert equipment for use with other gases. An authorized service agency directory is supplied with your oven and available here: <https://middlebymarshall.com>

NOTICE

Using parts other than genuine Middleby Marshall Factory manufactured parts relieves the manufacturer of all warranty and liability.

NOTICE

Middleby Marshall (Manufacturer) reserves the right to change specifications at any time.

NOTICE

The equipment warranty is not valid unless the oven is installed, started, and demonstrated under the supervision of a factory certified installer.

NOTICE

The equipment is only for professional use and shall be used by qualified personnel.

RETAIN THIS MANUAL FOR FUTURE REFERENCE

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Model No. _____ Serial No. _____ Installation Date _____

MIDDLEBY MARSHALL
NO QUIBBLE LIMITED WARRANTY
(U.S.A. ONLY)

MIDDLEBY MARSHALL HEREINAFTER REFERRED TO AS "THE SELLER", WARRANTS EQUIPMENT MANUFACTURED BY IT TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR WHICH IT IS RESPONSIBLE. THE SELLER'S OBLIGATION UNDER THIS WARRANTY SHALL BE LIMITED TO REPLACING OR REPAIRING AT SELLER'S OPTION, WITHOUT CHARGE, ANY PART FOUND TO BE DEFECTIVE AND ANY LABOR AND MATERIAL EXPENSE INCURRED BY SELLER IN REPAIRING OR REPLACING SUCH PART. SUCH WARRANTY SHALL BE LIMITED TO THE ORIGINAL PURCHASER ONLY AND SHALL BE EFFECTIVE FOR A PERIOD OF ONE YEAR FROM DATE OF ORIGINAL INSTALLATION OR 18 MONTHS FROM DATE OF PURCHASE, WHICHEVER IS EARLIER, PROVIDED THAT TERMS OF PAYMENT HAVE BEEN FULLY MET.

This warranty is valid only if the equipment is installed, started, and demonstrated under the supervision of a factory-authorized installer.

Abuse, acts of God, belt jams, cleaning, customer abuse, insufficient utilities, lubrication, maintenance, non-oven related issues, preventative maintenance, or normal maintenance function including adjustment of airflow, burners, conveyor components, door mechanisms, microswitches, pilot burners, thermostats, and replacement of bushings, light bulbs, fuses, indicating lights and wear points, are not covered by this **no quibble limited warranty**.

Seller shall be responsible only for repair or replacement of defective parts performed by Seller's authorized service personnel. Authorized service companies are located in principal cities throughout the contiguous United States, Alaska, and Hawaii. This warranty is valid in the 50 United States and is void elsewhere unless the product is purchased through Middleby International with warranty adder included.

The foregoing warranty is exclusive and in lieu of all other warranties, expressed or implied. There are no implied warranties of merchantability or of fitness for a particular purpose.

The foregoing shall be the Seller's sole and exclusive obligation and Buyer's sole and exclusive remedy for any action, including breach of contract or negligence. In no event shall Seller be liable for a sum in excess of the purchase price of the item. Seller shall not be liable for any prospective or lost profits of the buyer.

This warranty is effective on Middleby Marshall equipment sold on, or after January 1st, 2007.

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MIDDLEBY MARSHALL
OVEN LIMITED WARRANTY
(Non U.S.A.)

The Seller warrants equipment manufactured by it to be free from defects in material and workmanship for which it is responsible. The Seller's obligation under this warranty shall be limited to replacing or repairing, at Seller's option, without charge, F.O.B. Seller's factory, any part found defective and any labor and material expense incurred by Seller in repairing or replacing such part. Such warranty is limited to a period of one year from the date of original installation or 15 months from date of shipment from Seller's factory, whichever is earlier, provided that terms of payment have been fully met. All labor shall be performed during regular working hours. Overtime premium will be charged to the Buyer.

This warranty is not valid unless equipment is installed, started, and demonstrated under the supervision of a factory-authorized installer.

Normal maintenance functions including lubrication, adjustment of airflow, thermostats, door mechanisms, microswitches, burners and pilot burners, and replacement of light bulbs, fuses, and indicating lights, are not covered by warranty.

Any repair or replacement of defective parts shall be performed by Seller's authorized service personnel. Seller shall not be responsible for any costs incurred if the work is performed by anyone other than the Seller's authorized service personnel.

When returning any part under warranty, the part must be intact and complete, without evidence of misuse or abuse, freight prepaid.

Seller shall not be liable for any consequential damages of any kind which occurs during the course of installation of equipment, or which results from the use or misuse by Buyer, its employees, or others, of the equipment supplied hereunder, at Buyer's sole and exclusive remedy against Seller for any breach of the foregoing warranty or otherwise shall be for the repair or replacement of the equipment or parts thereof affected by such breach.

The foregoing warranty shall be valid and binding upon Seller if and only if Buyer loads, operates and maintains the equipment supplied hereunder in accordance with the instruction manual provided to Buyer. Seller does not guarantee the process of manufacture by Buyer or quality of product to be produced by the equipment supplied hereunder and Seller shall not be liable for any prospective or lost profits of Buyer.

The foregoing shall be Seller's sole and exclusive obligation and Buyer's sole and exclusive remedy for any action, whether in breach of contract or negligence. In no event shall Seller be liable for a sum in excess of the purchase price of the item.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, SPECIFICALLY THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

NOTES

SECTION 1 - DIMENSIONS

I. X20 Dimensions

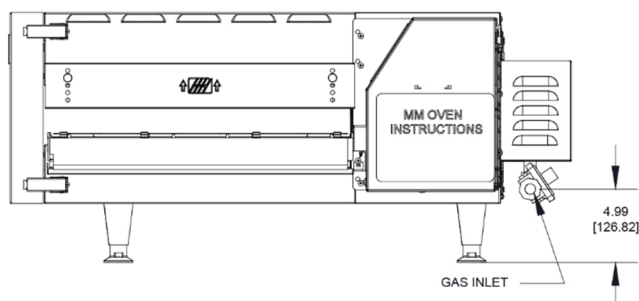


Figure 1: X20 Oven Dimensions – Side

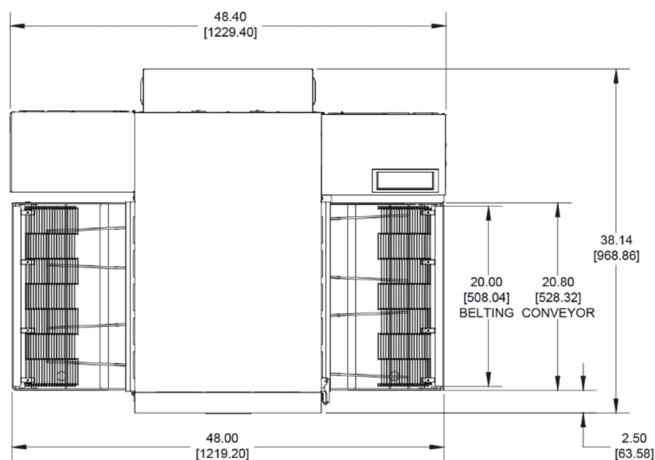


Figure 2: X20 Oven Dimensions – Top

Figure 3: X20 Oven Dimensions – Front (Single)

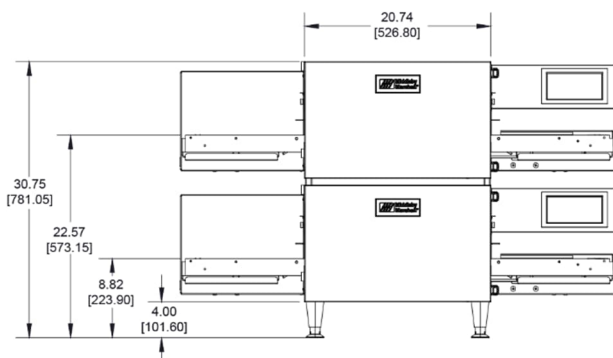


Figure 4: X20 Oven Dimensions – Front (Double)

Exterior

Height	13.0" (330 mm)
--with legs	17.0" (432 mm)
Width	48.40" (1229 mm)
Depth	38.14" (969 mm)

Conveyor

Length	48.4" (1229 mm)
Width	20.80" (528 mm)

Electrical Specifications

North America

1 Phase
208/240 VAC
50/60 Hz
4.5 Amp-Run
3-wire supply
6 ft cord with NEMA# L6-20P plug for 250V, 1 phase.
Customer to provide NEMA# L6-20R receptacle.
20A minimum or breakers per local codes. Each oven to be on an individual branch circuit.

Europe (CE)

1 Phase
220-230 VAC
50/60 Hz
4.5 Amp-Run
3-wire supply
No cord provided
20A minimum or breakers per local codes. Each oven to be on an individual branch circuit.

Natural Gas

Supply (Inlet)	
--Pressure	6-8" W.C. (14.9-19.9 mbar)*
--Injector Size	45" (2.08mm)
Manifold	
--Pressure	3.5" W.C. (8.7mbar)
Rated	
--Heat Input	40,000 BTU (11.7 kW)

Propane Gas

Supply (Inlet)	
--Pressure	12-14" W.C. (30.0-34.9 mbar)*
--Injector Size	0.051" (1.3mm)
Manifold	
--Pressure	10" W.C. (24.9 mbar)
Rated	
--Heat Input	40,000 BTU (11.7 kW)

* The required gas supply pressures of other locations are dependent on the local gas type and on all applicable local codes.

II. X26 Dimensions

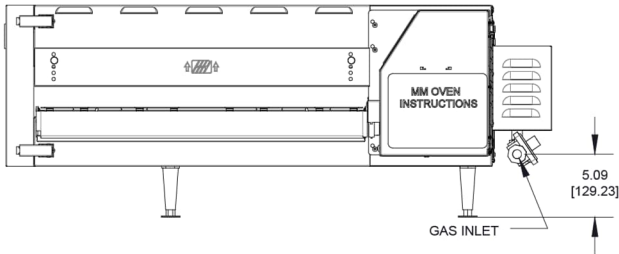


Figure 1: X26 Oven Dimensions – Side

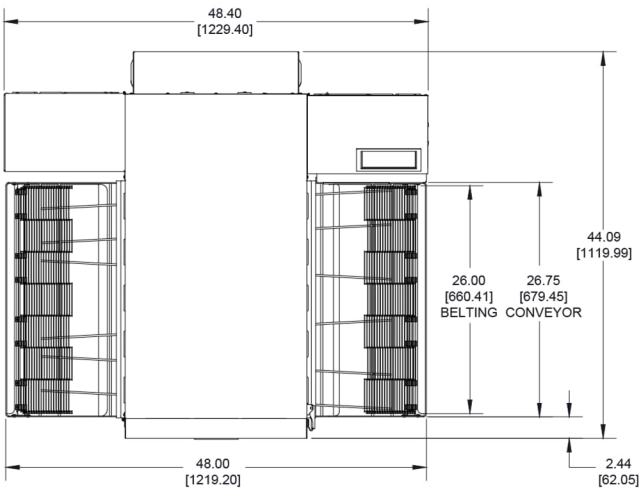


Figure 2: X26 Oven Dimensions – Top

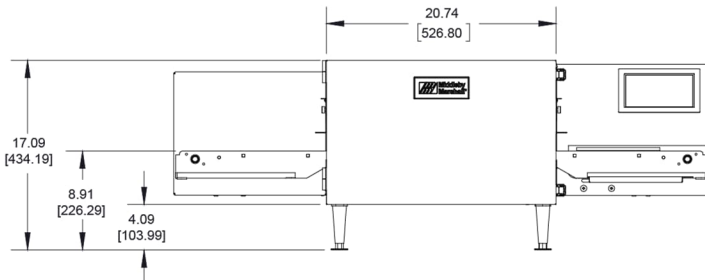


Figure 3: X26 Oven Dimensions – Front (Single)

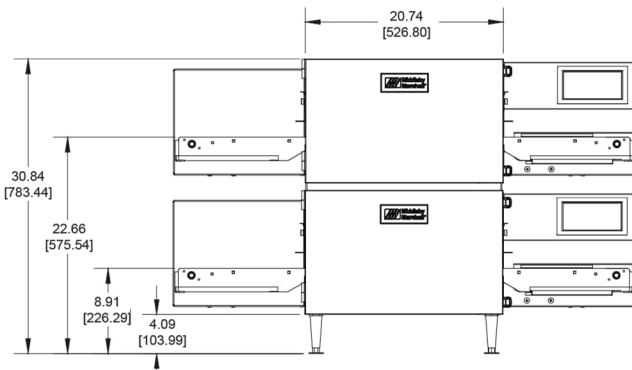


Figure 4: X26 Oven Dimensions – Front (Double)

Exterior

Height	13.1" (333 mm)
--with legs	17.1" (434 mm)
Width	48.40" (1229 mm)
Depth	44.09" (1120 mm)

Conveyor

Length	48.0" (1219 mm)
Width	26.75" (679 mm)

Electrical Specifications

North America (Option and Export)

1 Phase
 208/240 VAC
 50/60 Hz
 4.5 Amp-Run
 3-wire supply
 6 ft cord with NEMA# L6-20P plug for 250V, 1 phase.
 Customer to provide NEMA# L6-20R receptacle.
 20A minimum or breakers per local codes. Each oven to be on an individual branch circuit.

Europe (CE)

1 Phase
 220-230 VAC
 50/60 Hz
 4.5 Amp-Run
 3-wire supply
 No cord provided
 20A minimum or breakers per local codes. Each oven to be on an individual branch circuit.

Natural Gas

Supply (Inlet)
 --Pressure 6-8" W.C. (14.9-19.9 mbar)*
 --Injector Size 45" (2.08mm)
 Manifold
 --Pressure 3.5" W.C. (8.7 mbar)
 Rated
 --Heat Input 40,000 BTU (11.7 kW)

Propane Gas

Supply (Inlet)
 --Pressure 12-14" W.C. (30.0-34.9 mbar)*
 --Injector Size 0.051" (1.3mm)
 Manifold
 --Pressure 10" W.C. (24.9 mbar)
 Rated
 --Heat Input 40,000 BTU (11.7 kW)

* The required gas supply pressures of other locations are dependent on the local gas type and on all applicable local codes.

III. X20 Gas Oven Layouts

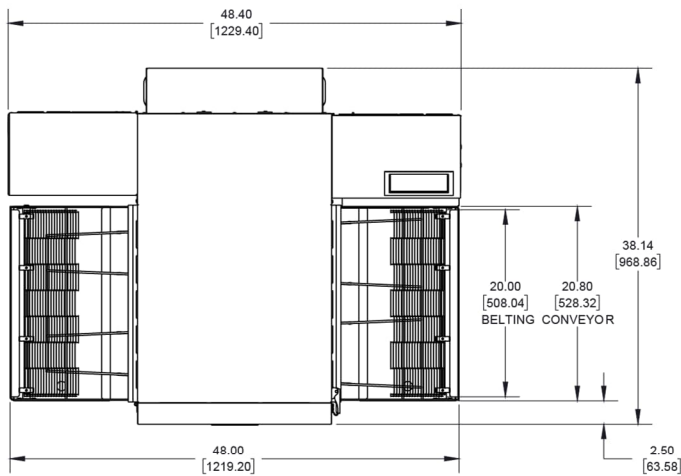
A. Single Oven



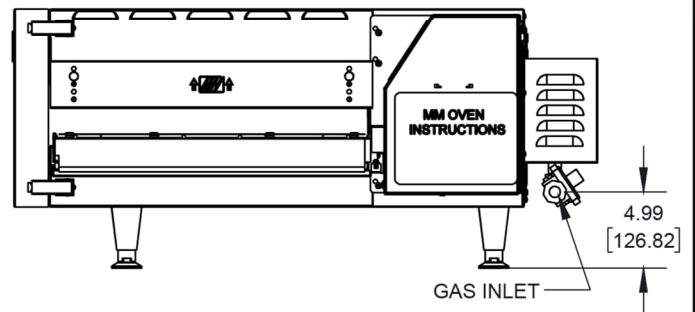
X20 Series Direct Gas Fired Conveyor Oven

NOTE: Drawings show ovens equipped with casters.

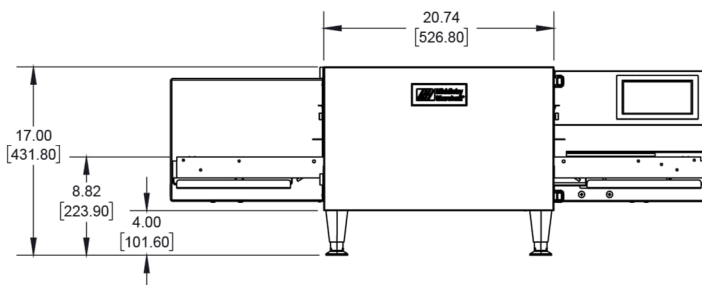
X20 Single Oven



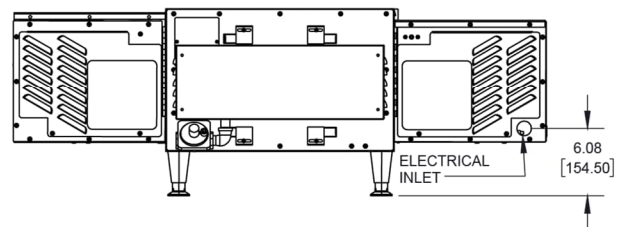
TOP VIEW



SIDE VIEW



FRONT VIEW



BACK VIEW

B. Double and Triple Oven

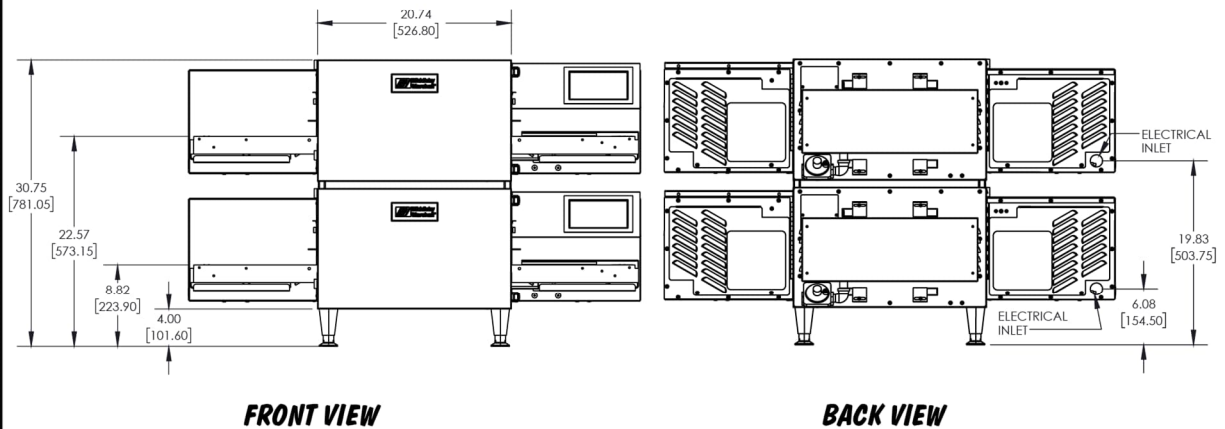


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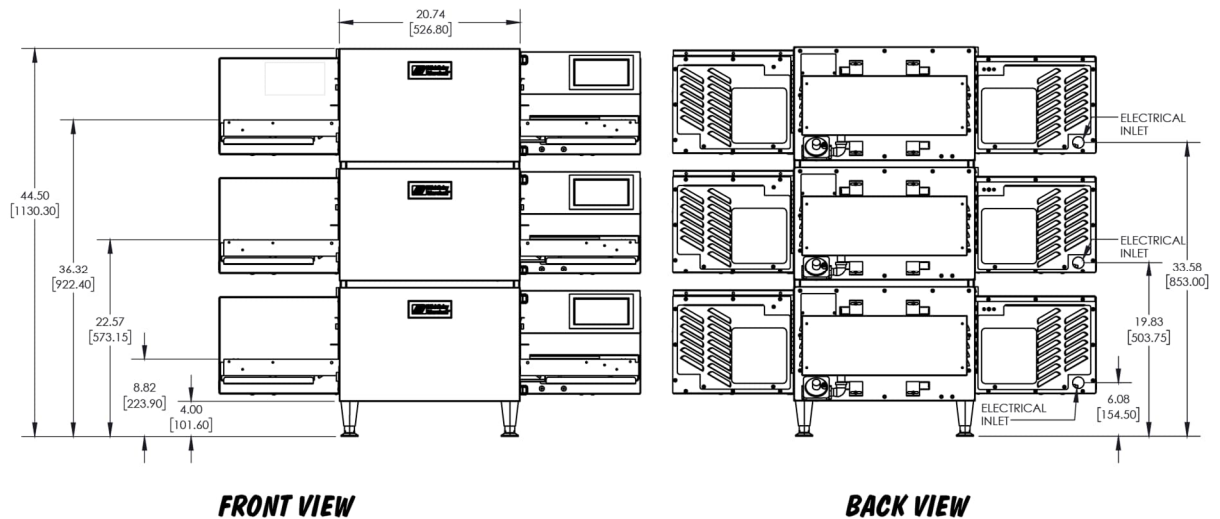
X20 Series Direct Gas Fired Conveyor Oven

NOTE: Drawings show ovens equipped with casters.

X20 – 2 Double Oven



X20 – 3 Triple Oven



IV. X26 Gas Oven Layouts

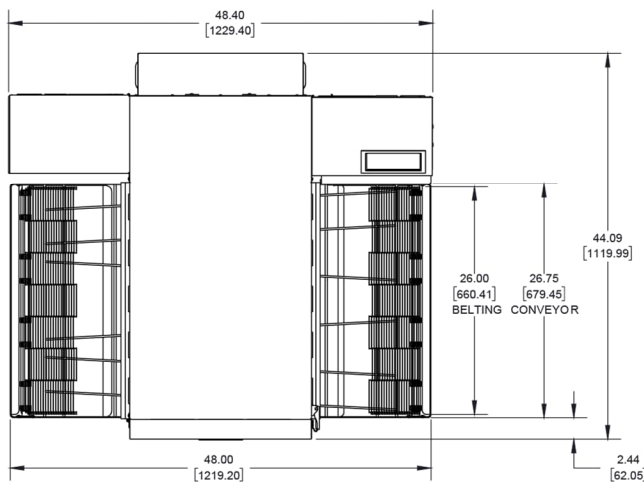
A. Single Oven



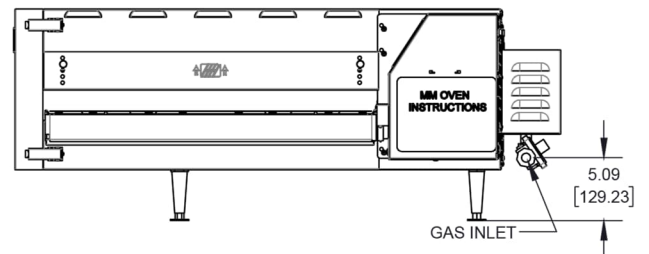
X26 Series Direct Gas Fired Conveyor Oven

NOTE: Drawings show ovens equipped with casters.

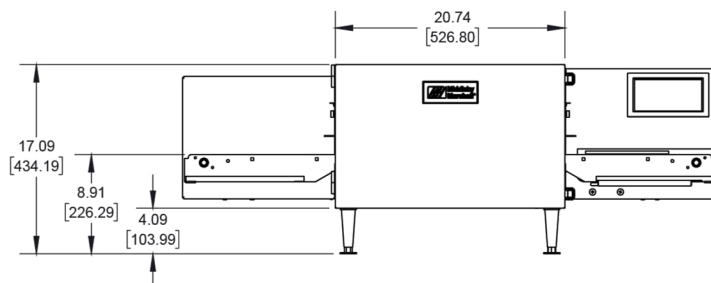
X26 Single Oven



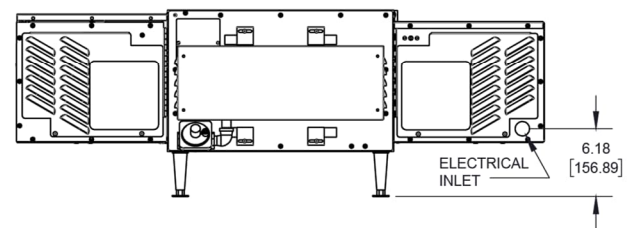
TOP VIEW



SIDE VIEW



FRONT VIEW



BACK VIEW

B. Double and Triple Oven

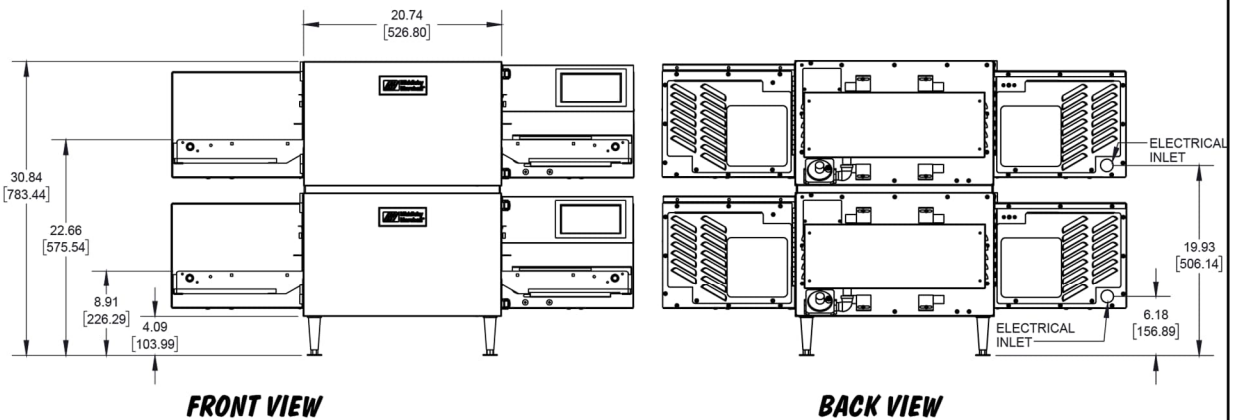


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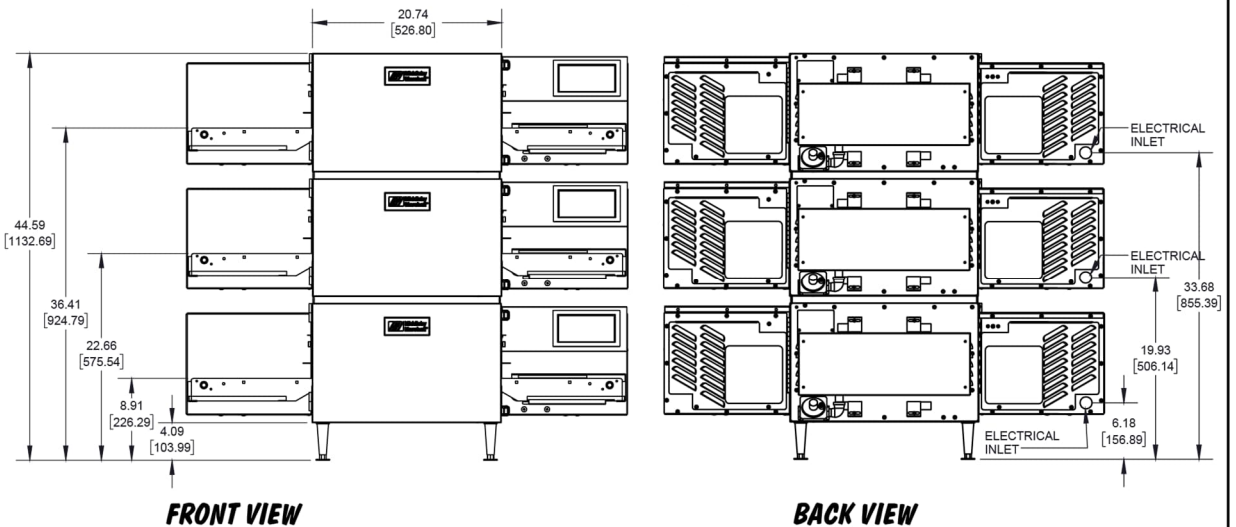
X26 Series Direct Gas Fired Conveyor Oven

NOTE: Drawings show ovens equipped with casters.

X26 – 2 Double Oven



X26 – 3 Triple Oven



SECTION 2 - INSTALLATION

I. General

WARNING – After any conversions, readjustments, or service work on the oven:

- Perform a gas leak test
- Test for proper combustion and gas supply
- Test for correct air supply, particularly to the burner
- Check that the ventilation system is in operation

WARNING – Keep the appliance area free and clear of combustibles.

WARNING – The oven must be installed on even (level) non-flammable flooring and any adjacent walls must not be flammable. Recommended minimum clearances are specified in Section 1, Description of this manual.

WARNING – Do not obstruct the flow of ventilation air to and from the oven. There must be no obstruction around or underneath the oven. Constructional changes to the area where the oven is installed shall not affect the air supply to the oven.

CAUTION: To reduce the risk of fire, the appliance is to be mounted on floors of non-combustible construction with noncombustible flooring and surface finish and with no combustible material against the underside thereof, or on noncombustible slabs or arches having no combustible material against the underside thereof, such construction shall in all cases extend not less than 12 inches (304 mm) beyond the equipment on all sides.

CAUTION: For additional installation information, contact your local Authorized Service Agent.

NOTE – There must be adequate clearance between the oven and combustible construction. Clearance must also be provided for servicing and proper operation.

NOTE – An electrical wiring diagram for the oven is located inside the machinery compartment.

NOTE: All aspects of the oven installation, including placement, utility connections, and ventilation requirements, must conform to any applicable local, national, and/or international codes. These codes supersede the requirements and guidelines provided in this manual.

NOTE: In the USA, the oven installation must conform to local codes. In the absence of local codes, gas oven installations must conform to the National Fuel Gas Installation Code, ANSI Z223.1. Gas and electric ovens, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electric Code (NEC), or ANSI/NFPA 70.

NOTE: In Canada, the oven installation must conform to local codes. In the absence of local codes, gas oven installations must conform to the Natural Gas Installation Code, CAN/CGA-B149.1 or Propane Gas Installation Code, CAN/CGA-B149.2, as applicable. Gas and electric ovens, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with Canadian Electrical Code, CSA C22.2.

NOTE: In Australia, the oven installation must conform to AS/NZ5601 and carry local Authority or any other relevant statutory regulations.

II. Construction

- 430 stainless steel front, top, sides, and back
- Cool to touch covers and panels
- Stainless steel interior
- 20-inch-wide cook chamber

III. Installation Instructions

The oven is designed and certified for safe operation when installed in accordance with local and/or national codes. It is the owner and/or installer's responsibility to comply with any codes that may exist. Install this oven according to the policies and procedures outlined below and throughout this manual.

WARNING

Death, injury, and equipment damage can result from improper installation of a unit damaged during shipment or storage.

WARNING

Do not install an oven suspected of damage. Improper installation or the installation of a unit damaged during shipment or storage may void the Limited Warranty.

IV. Delivery and Initial Inspection

All Middleby Marshall ovens are shipped so as to prevent damage.

Upon delivery, inspect the shipping container for external damage. Any evidence of damage should be noted on the delivery receipt which must be signed by the driver.

Upon removing the oven from its shipping carton, check for damage. Make note of any damage and contact the shipping company to file a claim. Carriers will accept claims for concealed damage if notified within fifteen days of delivery and if the shipping container is retained for inspection.

Remove and properly discard any of the packing materials that were used for the shipping process.

Middleby Marshall does not assume responsibility for any loss or damage suffered in transit. The carrier assumes full responsibility for delivery in good order when the shipment is accepted. However, when necessary, Middleby Marshall can assist in filing a claim.

V. Lifting the Oven

WARNING

Two or more people are required to lift the X20 (195 lb. [88.5 kg]) and X26 (260 lb. [118 kg]).

Position one or more people on either side of the oven. Lift from the bottom. Never lift the oven from the front and rear.

Once properly positioned on the counter, plug the oven into a wall mounted electrical receptacle. See Electrical Specifications on page 1 for the X20, page 2 for the X26.

VI. Oven Location and Placement

WARNING

Death, injury and equipment damage may result from improper positioning.

WARNING

DO NOT stack ovens without stacking brackets. Contact Customer Service for more information.

WARNING

DO NOT stack ovens more than three high.

It is the operator's responsibility to ensure the oven is properly positioned on countertop. Middleby Marshall will not warrant any damage or injury to ovens that fall off countertops due to improper placement.

Proper placement of the oven will enhance long-term operator convenience and satisfactory performance. Be sure to place the oven in an area accessible for proper operation and servicing.

The surface on which the oven is placed must be at least 30" (762 mm) deep and capable of supporting 200 lb. (90.7 kg) for the X20, and 265 lb. (118 kg) for the X26 (weights are per oven). The manufacturer shall not assume liability for damage or injury resulting from the improper installation of this equipment including temporary or unstable workstations or countertops.

The oven must be installed level front to back and side to side. For additional stability, the oven legs may be bolted to the countertop if desired.

VII. Installation Near Open Heat Source

When placing a Middleby Marshall oven near an open heat source (see Figure 11), adhere to the following:

- If the oven is being placed near a grill or stove, a divider must exist between the oven and the open heat source, with a minimum of 6" (152 mm) between the oven and the divider.
- If the oven is being placed near a fryer, a divider must exist between the oven and fryer, with a minimum of 12" (305 mm) between the oven and the divider.
- The height of the divider must be greater than or equal to the height of the oven(s) – 13" (330 mm) without legs or 17" (432 mm) with legs.
- Verify oven location has a minimum 0" (0 mm) clearance on each side.

VIII. Ventilation Requirements

X20/X26 should be operated underneath a ventilation hood.

To ensure continued compliance with all health, building, and fire codes, you are required to maintain clean and sanitary conditions around your oven at all times.

NOTE: In no event shall the manufacturer assume any liability for damages or injuries resulting from installations which are not in compliance with the instructions and codes previously listed. Failure to comply with these instructions could result in the issuance of a temporary cease and desist order from the local health department until the environment concerns are addressed.

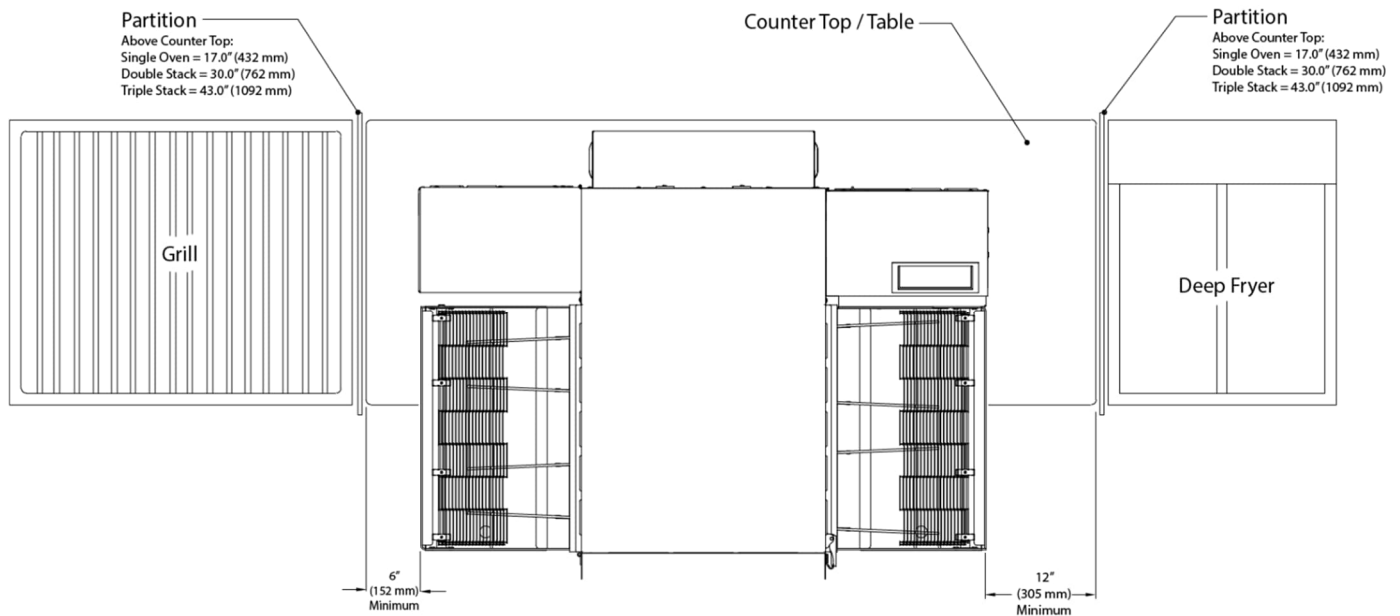


Figure 11: Installation Near Open Heat Source

IX. Gas Supply

CAUTION

During pressure testing note all of the following:

- 1. The oven and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psi (3.45 kPa).**
- 2. The oven must be isolated from the gas supply piping system by closing its individual manual shutoff during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 psi (3.45 kPa).**
- 3. If incoming pressure is over 14" W.C. (35 mbar), a separate regulator MUST be installed in the line BEFORE the individual shutoff valve for the oven.**

CAUTION

To prevent damage to the control valve regulator during initial turn-on of gas, it is very important to open the manual shutoff valve very slowly.

After the initial gas turn-on, the manual shutoff valve must remain open, except during pressure testing as outlined in the above steps or when necessary, during service maintenance.

A. Gas Utility Rough-In Recommendations

The following system specifications are **STRONGLY RECOMMENDED**. Deviating from these recommendations may affect the baking performance of the oven.

Gas Meter

- One or two cavities: 250 CFH meter
- Three oven cavities: 425 CFH meter

Gas Line

- DEDICATED GAS LINE from the gas meter to the oven
- 1" (25.4 mm) pipe for Natural gas
- 1" (25.4 mm) pipe for Propane gas
- Maximum length: 200' (61 m). Each 90° elbow equals seven additional feet (2.13 m) of pipe.

B. Connection

Check the oven's gas supply requirements before making the gas utility connection. Gas supply requirements are listed on the oven's serial plate.

Check the serial plate to determine the type of gas (Propane or Natural) to be used with the oven.

Refer to the instructions in the gas hose package (included in the Installation Kit) before connecting the gas line. Compliance with the applicable standards and regulations is mandatory.

Inlet, regulated, and pilot gas pressure readings can be taken using a digital tube manometer at the tap location shown in Figure 12. Figure 12 shows the burner assembly and Figure 13 shows the gas valve.

NOTE: The installation must conform with local codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-latest edition.

Certain safety code requirements exist for the installation of gas ovens; refer to the beginning of this manual for a list of the installation standards. In addition, because the oven is equipped with casters, the gas line connection shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 (in U.S.A.), as well as a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41 (in U.S.A.).

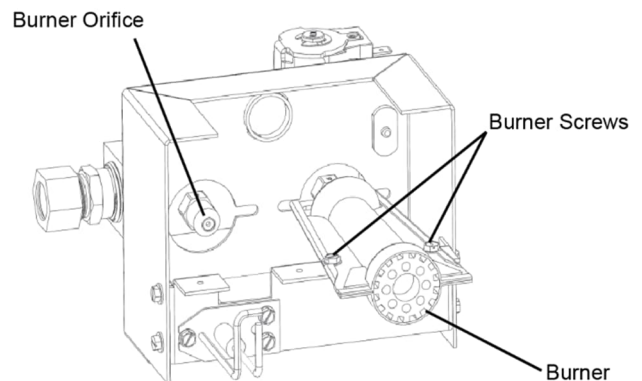


Figure 12. Gas Burner Assembly

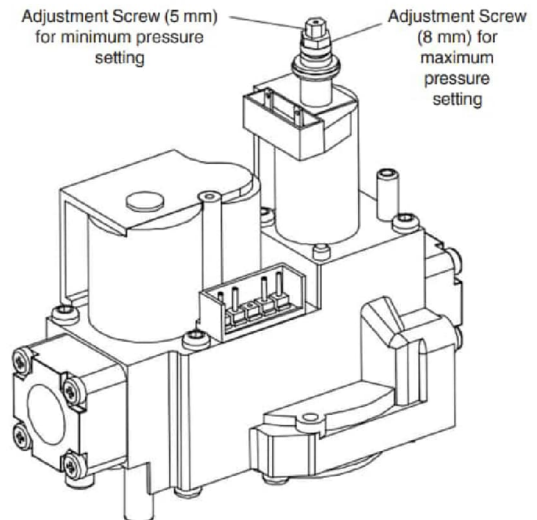


Figure 13. Gas Valve

C. Gas Conversion

Where permitted by local and national codes, it is possible to convert ovens from natural to propane gas, or from propane to natural gas. Use the appropriate Middleby Gas Conversion Kit for the specific oven model.

The primary aeration adjustment must not be altered from the position specified by the manufacturer.

CAUTION

The terms of the oven's warranty require all start-ups, conversions and service work to be performed by a Middleby authorized service agent.

D. X26 Propane Conversion (See Fig. 12 and 13)

Two items have to be changed, to change the oven to LP:

1. Replace main orifices: Disconnect the compression fitting on the burner manifold and remove the gas burner assembly. Remove the four burner screws to remove the burners. This will expose the burner orifices. Using a 9/16" open end wrench or 9/16" socket, remove the Natural Gas orifices. Install the LP orifices into the manifold assembly. Reinstall the burners and secure with burner screws. Insert the burner box assembly into place. Reconnect the tube with the compression fitting to the manifold. Secure the compression fitting. Do not over-tighten.
2. Adjust main gas regulator: Remove the regulator cap and rotate the adjuster clockwise until it stops with no additional force. This should put the output at approximately 12" water column.

E. Adjusting the Maximum Pressure Setting

1. Disconnect pressure feedback connection (if applicable).
2. Connect a suitable pressure gauge to pipeline or to outlet pressure tap of gas control concerned, to measure burner pressure (measuring point must be as near to burner as possible).
3. Make sure that the appliance is in operation and the Moduplus® coil is energized with maximum current.
4. If maximum rate pressure needs adjustment, use an 8 mm wrench to turn adjustment screw for maximum pressure setting (clockwise to increase or counter-clockwise to decrease pressure), until the desired maximum outlet pressure is obtained.
5. Disconnect electrical connection of the Moduplus®.
6. Check minimum pressure setting and readjust if necessary. (See Adjusting Minimum Pressure Setting for proper adjusting procedure.)
7. Reconnect pressure feedback connection (if applicable).
8. If minimum and maximum pressures are set, wire the Moduplus® in circuit.
9. Close pressure tap screw.

F. Adjusting the Minimum Pressure Setting

1. Disconnect pressure feedback connection (if applicable).
2. Connect a suitable pressure gauge to pipeline or to outlet pressure tap of gas control concerned, to measure burner pressure (measuring point must be as near to burner as possible).
3. Disconnect electrical connection of the Moduplus®.
4. Energize operator, set control in operation and wait until an outlet pressure is recorded on pressure gauge.
5. If minimum rate pressure needs adjustment, use a 5 mm nut driver to turn adjustment screw for minimum pressure setting (clockwise to increase or counter-clockwise to decrease pressure), until the desired minimum outlet pressure is obtained.
6. Check if main burner lights easily and reliably at minimum pressure.
7. Reconnect pressure feedback connection (if applicable).
8. Close pressure tap screw.

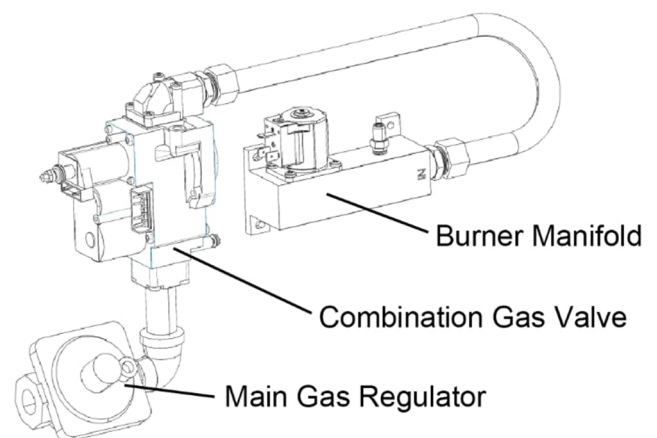
G. Checkout

After any adjustment, set appliance in operation and observe through a component cycle to ensure that burner system components function correctly.

NOTE: The installer MUST verify oven operation prior to putting oven into service.

H. Maintenance

IT IS RECOMMENDED TO CHECK YEARLY THE MINIMUM AND THE MAXIMUM SETTING AND READJUST THEM IF NECESSARY.



X. Daily Cleaning Instructions



= Wash, rinse, sanitize.
(Use only mild detergent soap).



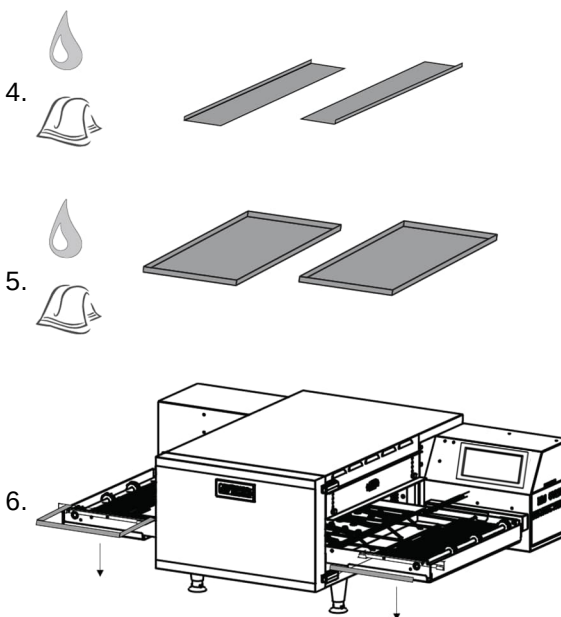
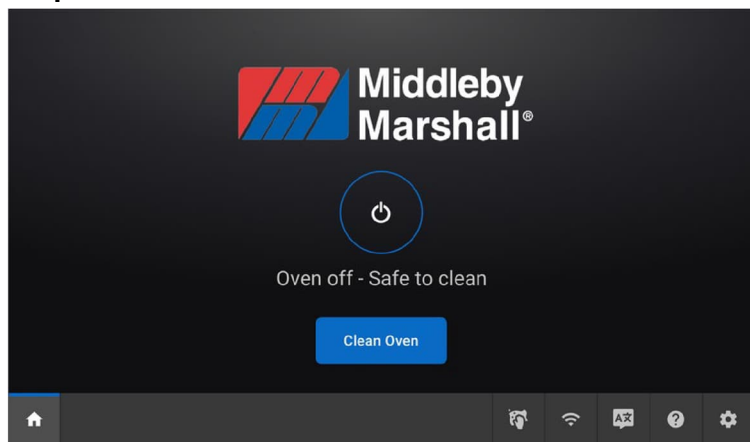
= Completely dry with clean towel.

WARNING – Always disconnect power before cleaning or servicing oven.

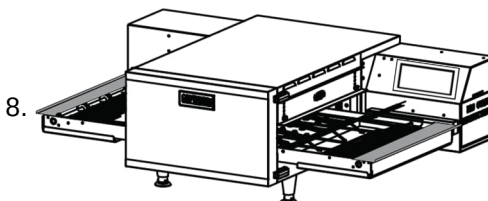
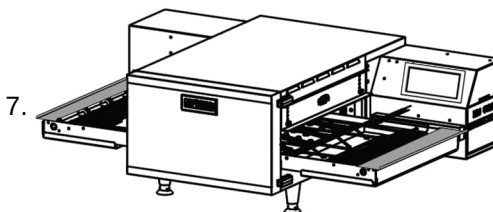
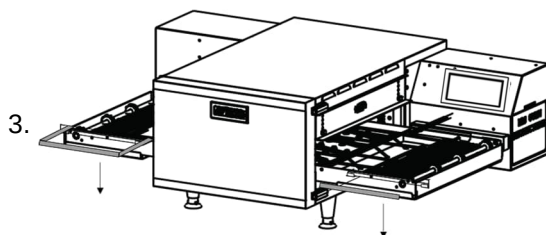
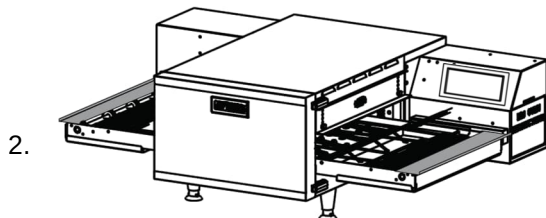
WARNING – DO NOT attempt to clean the oven until it has cooled (screen reads "Oven Off").

WARNING – DO NOT use a water jet when cleaning the oven.

Step 1: Turn the Oven Off



Step 2: Remove Outer Oven Components



XI. Weekly Cleaning Instructions



= Wash, rinse, sanitize.



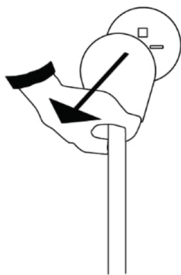
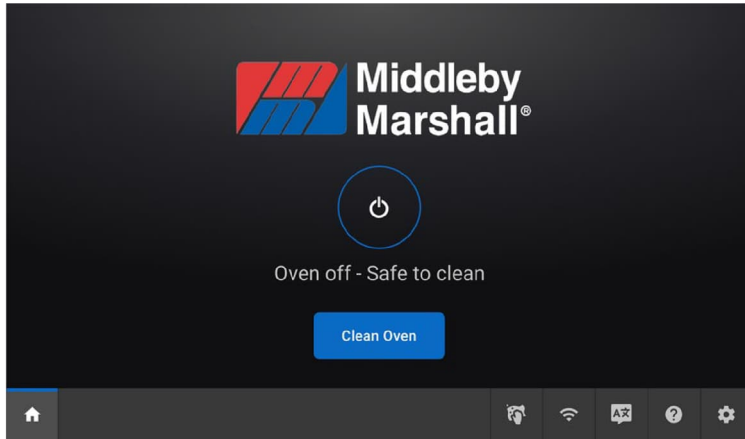
= Completely dry with clean towel.

WARNING – Always disconnect power before cleaning or servicing oven.

WARNING – DO NOT attempt to clean the oven until it has cooled (screen reads "Oven Off").

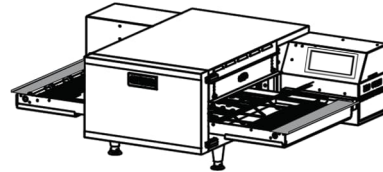
WARNING – DO NOT use a water jet when cleaning the oven.

Step 1: Turn the Oven Off

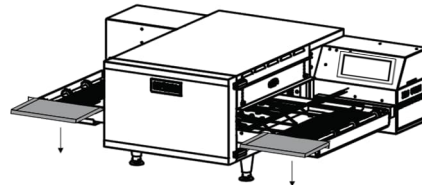


Step 2: Remove Outer Oven Components

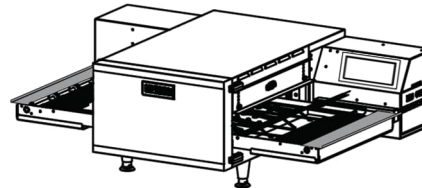
1.



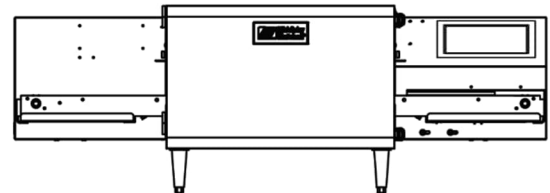
2.



3.

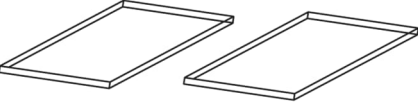
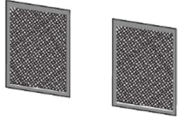
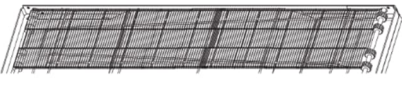
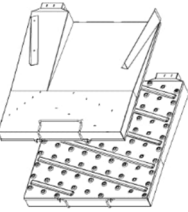


4.

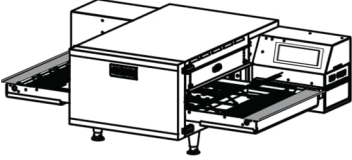
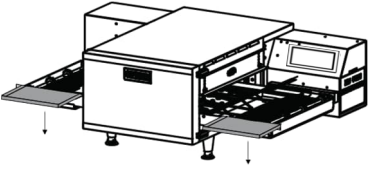
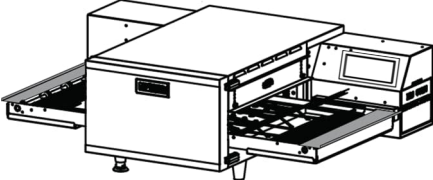


Step 3: Remove Inner Oven Components

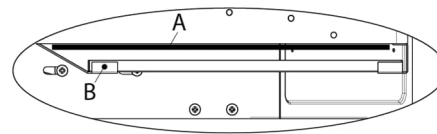
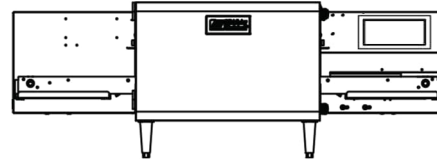
Step 4: Clean Oven Components

1.   
2.   
Replace filters if damaged or torn.
3.   
4.   

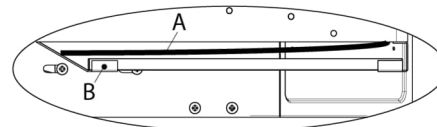
Step 5: Replace Oven Components

1. 
2. 
3. 

Step 6: Verify Chain Tension

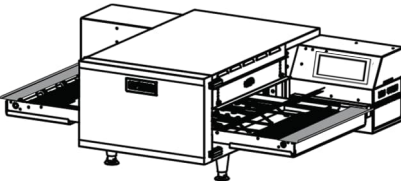
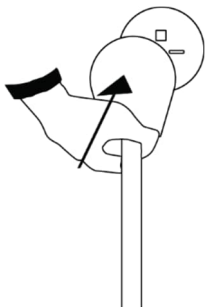


Acceptable – Chain (A) is tight and easily clears crumb tray holder (B).



Call service to have link removed – Chain (A) is loose, and risks contact with crumb tray (B).

Step 7: Ready the Oven for Use

1. 
2. 

SECTION 3 – OPERATION

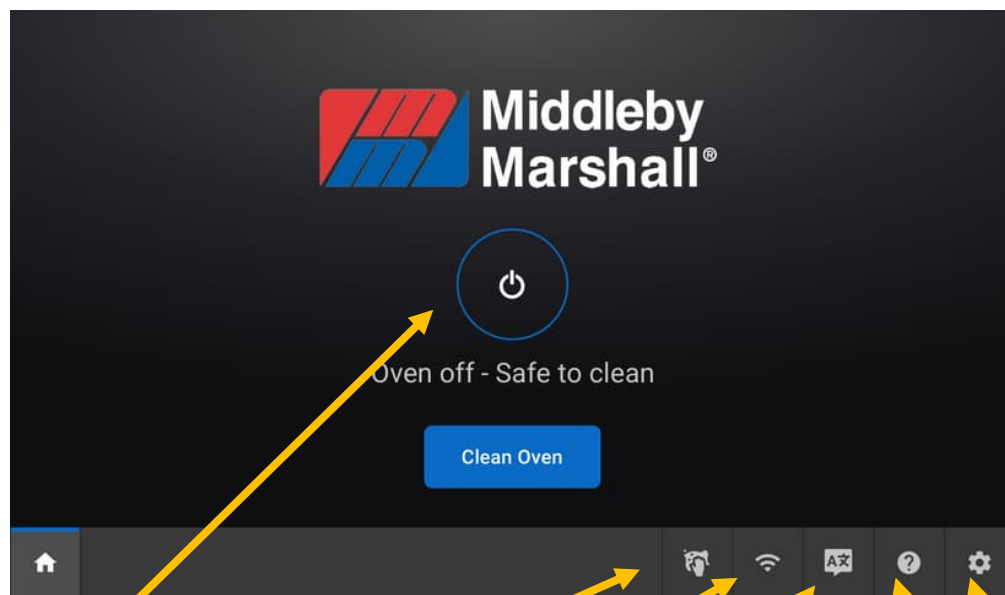
I. Description Of Controls – User Interface

The X20/X26 oven control performs a variety of functions, including:

- Temperature control
- Belt speed control
- Blower speed setting
- Energy management
- Oven diagnostics and system testing
- Conveyor speed calibration (Service use only)

The oven control will have power delivered to it and initialize when the oven is connected to the power supply. Upon initialization, the control will display a splash screen consisting of a white background with MIDDLEBY MARSHALL text. The application will then load, showing the main off splash screen.

A. Standby/Splash Screen



POWER BUTTON:
Press to initiate oven startup.

CLEAN SCREEN: Locks screen for 5 seconds to allow screen cleaning.

WIFI: Displays WiFi Status (if WiFi is connected).

LANGUAGE: Allows language selection (if enabled).

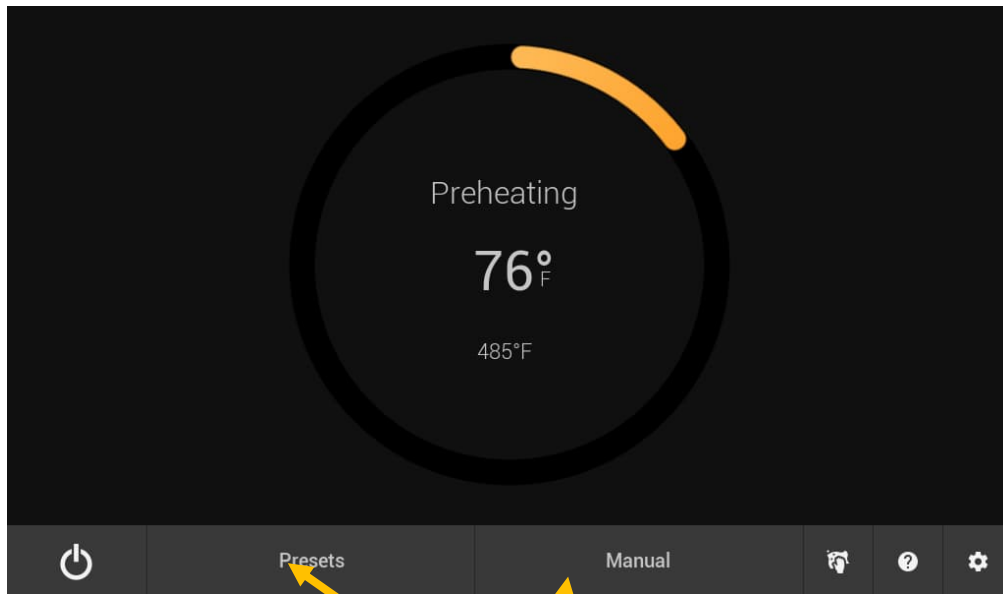
HELP: Shows help documents.

SETTINGS: Allows access to settings for Managers and Service Agents

Figure 14: Standby/Splash Screen

B. Preheat Screen

Displays preheat status, allows access to oven settings by selecting PRESETS or MANUAL tab and shows preheat progress.



PRESETS: Press to switch to presets screen.

MANUAL: Press to switch to manual cooking screen.

Figure 15: Preheat Screen

C. Manual Cooking

In this screen you can change:

- Temperature in 5 degree intervals between 300°F and 600°F
- Belt times in 1 second intervals
- When logged in as manager, blower speed by 1 percent intervals between 25% and 100%.

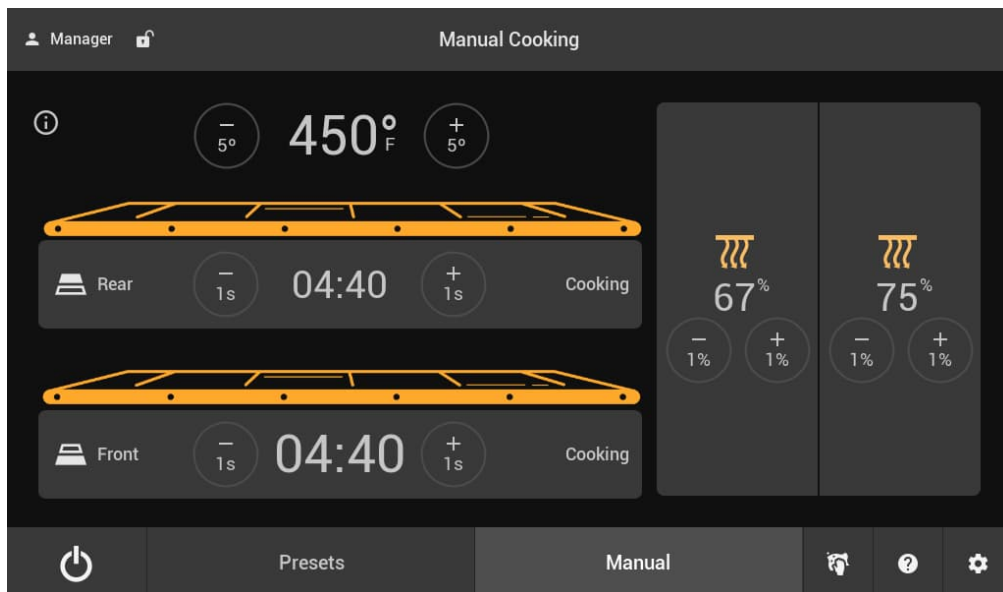


Figure 16: Manual Cooking Screen

D. Preset Cooking

This screen allows the application of presets.

Presets may be created and edited by pressing the pencil icon in the top right of the screen. Alternatively, they may be accessed in the manager section of the settings screens.

Each preset contains three settings: Temperature, blower percentage, and a single belt time.

A preset must be applied to each belt in the oven. For single belt ovens, a single preset is applied. For split belt ovens, two presets must be applied, but the presets must have matching cavity settings (temperature and blower percent settings). The same preset can be applied to both belts.

To apply a preset to a belt, press the “plus” button above the desired belt and a list of available presets will be shown on the right side of the control. Presets that match the current cavity settings will be grouped together at the top of the list and shown in green. Other presets will also be grouped based on common cavity settings and will be shown in orange.

If a preset is selected that does not match the current cavity settings, a warning will appear on screen. You may either “Cancel” the selection or “Continue” to accept the new cavity settings. If the cavity settings are changed, any presets that are not compatible will be de-selected.

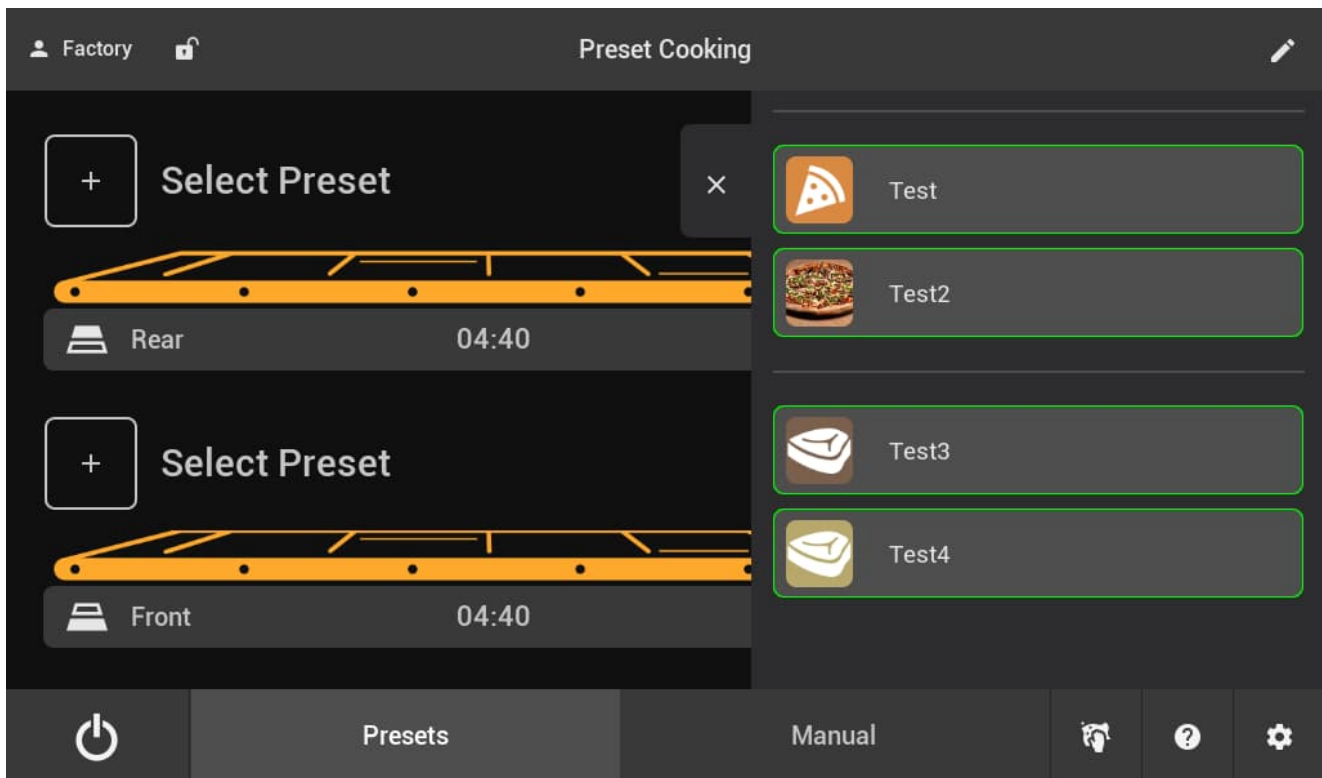


Figure 17: Preset Cooking Screen

When selecting a preset, presets that match the current cavity settings will be at the top and outlined in green. Other presets will be highlighted in orange. Attempting to apply a preset that does not match the current cavity settings will show a warning. Accepting the warning will apply the preset and de-select the preset from the other belt. The user may switch to the manual screen and change settings, which will de-select the presets as well. Presets may be created and edited with the pencil icon, or in the manager section of the settings screens.

II. Normal Operation

A. Daily Start-up Procedure

To start the oven, press the power button. The display will transition to the preheat screen. The blower will begin and the blower proving switch will engage, permitting the heat circuit relay to engage. The gas ignition module will begin its cycle and ignite the burner.

B. Adjusting the Temperature – Manual Mode

To adjust the set temperature, press the “+5” or “-5” button next to the set temperature to adjust the temperature in five-degree increments (in Celsius, the temperature increment is one degree). Larger adjustments can be made by pressing and holding the desired button.

C. Adjusting the Belt Time – Manual Mode

To adjust the belt time, press the “+1” or “-1” button next to the belt time to adjust the time in one second increments. Larger adjustments can be made by pressing and holding the desired button.

D. Adjusting Settings – Preset Mode

To adjust the oven settings, a preset must be applied to each belt. If there are no presets that match the desired oven settings, a preset must be created, or manual mode must be used.

E. Daily Shutdown Procedure (Turning the Oven Off)

To turn the oven OFF, press and hold the power button for ~1 second. This will bring up a confirmation dialogue. Press “Cancel” to return to the previous mode or press “Confirm” to proceed. If the oven is below 200°F cool down temperature, then the display will return to the STANDBY screen. If the oven is above 200°F, the display will show “COOLDOWN” and the blowers will run at a preset cool down speed until the oven temperature falls below 200°F at which point the oven will go to the STANDBY mode. If the sleep mode timer is enabled, the screen will enter sleep mode after a set period of time. In sleep mode, the screen will dim. The oven will stay in this condition until it is started again, with no outputs energized.

III. Programming Instructions (Manager Mode)

A. Changing Baking Blower Speeds (Manual)

To change the ENTRANCE and/or EXIT blower speeds in manual mode:

1. Enter the SETTINGS page by pressing the gear icon in the bottom right corner of the screen.
2. Log in as manager (default passcode 8648) and return to the MANUAL screen.
3. The blowers will now have + and – buttons next to them. Press and hold the desired button until the desired blower speeds are set.

B. System Setup

Additional system settings can be modified in the settings screen, accessed from the gear icon in the bottom right. Without logging in, only oven details are visible. After logging in as manager, there are four categories available: General, Belt Settings, Blower Settings, and Oven Details.

General Settings Options

- Audio Feedback Enabled: Enables audio feedback, especially for alerts.
- Beep on Button Press: Enables a beep when a button is pressed (audio feedback must be enabled).
- Language: Allows language selection.
- Language Icon View: Inserts a language icon in the bottom row that can be used to change the language.
- Display Brightness: Change the brightness of the screen.
- Date/Time: Set the date and time for improved oven monitoring.
- Sleep Mode Timer Enabled: Enables sleep mode (dimmed screen in Standby).
- Sleep Mode Timer: Change the amount of time the oven remains in Standby before sleep mode is enabled.
- Temperature Units: Switch between Fahrenheit and Celsius.
- Operating Temperature: Allows restricting the operating temperature between the defaults of 300°F-600°F.
- Temperature Display Timeout: Determines how long “actuals” will be displayed when the info button is pressed. Set to “0” to disable actual temperature display.
- Manager Passcode: Allows the manager to customize the manager passcode.

Belt Settings Options

- Tweak Speed Percentage: Speed up or slow down the belt speed by up to 15% to fix small discrepancies in timing due to belt age

Blower Settings

- Blower Status: See blower speed (if rotation sensor equipped) and status of sensor (open/closed).

Oven Details

- View oven details such as customer name, oven serial number, and software versions.

C. Energy Management Information

The X20/X26 oven reduces energy usage in one way over most competitive ovens:

- Modulating gas control (Energy Management System)

The modulating gas valve within the oven controls pressure of the delivered gas to the burners to increase or reduce the energy input as needed to maintain temperature instead of cycling a gas valve on and off. This is a most efficient and accurate way of controlling the temperature and eliminates the heat losses associated with the ON/OFF cycling control.

SECTION 4 – TROUBLESHOOTING

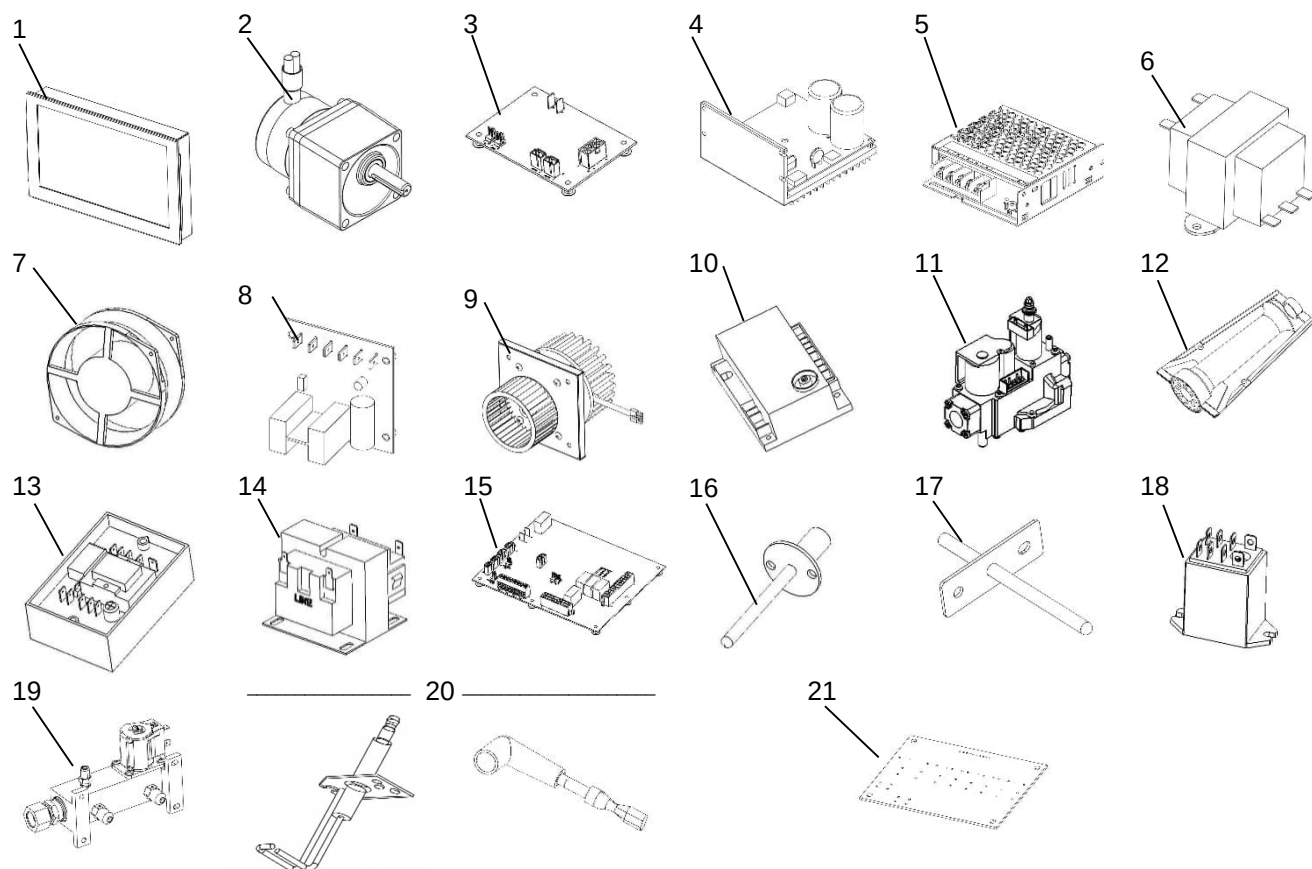
The following is a list of fault codes and error messages, along with the possible problem(s) that the oven may experience. Please attempt the recommended action before calling Customer Support (877-34-OVENS) or your Authorized Distributor. If any fault or error message occurs that is not listed below, contact Middleby Marshall Customer Support (877-34-OVENS).

WARNING

Food and oven cavity are hot! Use extreme caution when troubleshooting the issues below.

Symptom	Possible Cause(s)	Solutions
Nothing displayed on controller	1. Power not connected. 2. Main breaker not on. 3. Control circuit breaker tripped.	1. Check plug at wall. 2. Check main breaker. 3. Check control breaker.
Control display is dim	1. Control is in SLEEP mode. 2. Display Brightness is set low.	1. No problem - the control backlight dims when the oven is not turned on for use. Press I/O button. 2. Navigate to general settings and increase screen brightness.
Oven not baking properly	1. Settings have been changed. 2. Debris in oven or blowers. 3. Improper finger arrangement. 4. Kitchen airflow conditions affecting the bake.	1. Confirm correct values (time & temperature). 2. Empty drip pans/clean oven. 3. Check for proper finger settings. 4. Eliminate air cross-currents.
Conveyor noticeably running at the wrong speed	1. Time settings have been changed. 2. Drive sprocket(s) loose.	1. Confirm correct values and correct control settings. 2. Tighten drive shaft set screws.
Conveyor not moving	1. Something has jammed the conveyor. 2. Circuit breaker (behind left hand control panel) has tripped. 3. Chain, sprocket, or set screw has come loose.	1. Turn power off. Locate and remove jammed item. 2. Check conveyor for jamming and reset the circuit breaker on right side control door. 3. With power OFF, remove chain cover, tighten set screws, replace chain onto sprockets, and replace chain cover.
Baked product comes out underdone	1. Settings have been changed.	1. Check blower settings (log in as manager to modify).

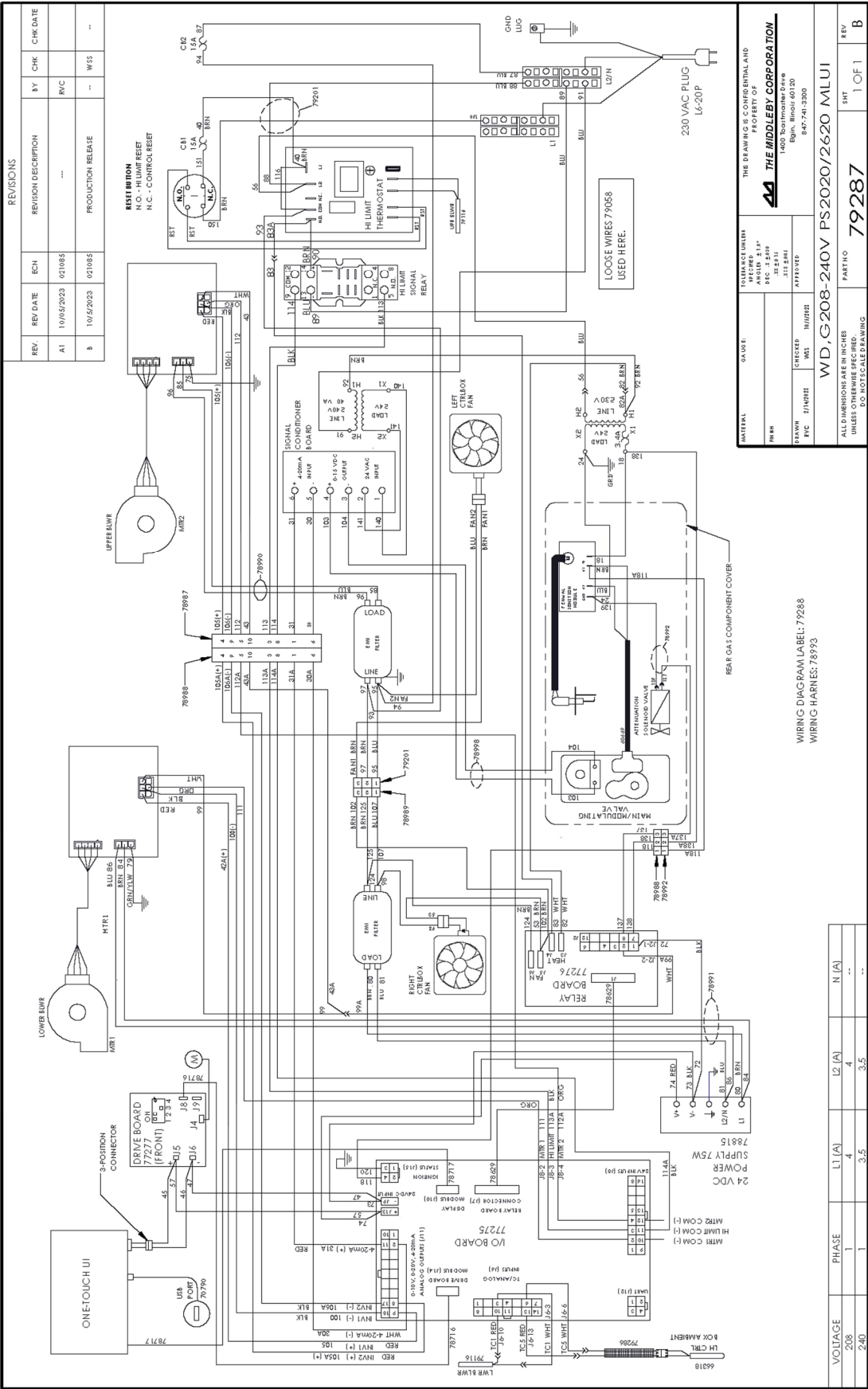
I. X20/X26 Gas Oven Key Spare Parts



KEY SPARE PARTS X26/X20 GAS OVEN

ITEM	QTY	P/N	DESCRIPTION
1	1	79324	Kit, Service One-Touch Display
2	1	74106	Motor, Conveyor Drive
3	1	77277	Conveyor Control Board
4	1	78820	Motor Control (Aspen/Moog)
5	1	78815	Power Supply, 24VDC, 75W
6	1	79196	Transformer, 208-240V / 24V 40VA
7	1	36451	Fan, Cooling
8	1	60671	Signal Conditioner, 0-15 VDC
9	1	78943	Blower/Motor Assembly (Aspen)
10	1	61602	Ignition Module
11	1	79333	Gas Valve (Modulating) w/ flanges and cable
12	1	78512	Burner, Inshot .500" Insert
13	1	33983	Hi Limit Thermostat (208-240V)
14	1	32108	Transformer, 240 primary / 24 secondary
15	1	77275	Board, Main – I/O
16	1	66318	Thermocouple, 2" Grounded (Ambient)
17	1	79116	Thermocouple, 3" Type J (control and Hi limit)
18	1	60952	Relay, DPDT 24VDC Coil
19	1	78694	Burner Manifold Assembly
20	1	77810	Kit, Igniter
21	1	77276	Relay Board

SECTION 5 – WIRING DIAGRAM



WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

NOTICE

ALL parts replacement and appliance servicing should be performed by Your Middleby Marshall Authorized Service Agent. Service that is performed by parties other than Your Middleby Marshall Authorized Service Agent may void your warranty.

NOTICE

Using any parts other than genuine Middleby Marshall factory manufactured parts relieves the manufacturer of all warranty and liability.

NOTICE

Middleby Marshall reserves the right to change specifications at any time.



Commercial Food Equipment Service Association

Middleby is proud to support the Commercial Food Equipment Service Association (CFESA). We recognize and applaud CFESA's ongoing efforts to improve the quality of technical service in the industry.

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www.middleby.com

