

# KRATOS

## MANUAL FOR ELECTRIC DRAWER WARMERS



|         |   |
|---------|---|
| 28W-535 | SINGLE STAINLESS STEEL DRAWER WARMER - 120V, 450W             |
| 28W-536 | DOUBLE STAINLESS STEEL DRAWER WARMER -120V, 900W              |
| 28W-537 | TRIPLE STAINLESS STEEL DRAWER WARMER - 120V, 1350W            |
| 28W-538 | SINGLE STAINLESS STEEL DRAWER WARMER - 120V, 450W. NARROW DES |
| 28W-539 | DOUBLE STAINLESS STEEL DRAWER WARMER -120V, 900W. NARROW DES  |
| 28W-540 | TRIPLE STAINLESS STEEL DRAWER WARMER - 120V, 1350W. NARROW DE |

### NOT INTENDED FOR RESIDENTIAL USE

RETAIN THIS MANUAL FOR FUTURE REFERENCE  
UNIT MUST BE KEPT CLEAR OF COMBUSTIBLE AT ALL ITEMS



#### FOR YOUR SAFETY:

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.



#### 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 this equipment.

Do not operate this equipment unless you have read and understand the content of this manual! This manual contains important safety information concerning the maintenance, use and operation of this product. Keep this manual in a safe location for future reference.



*Installation and Operation Instruction*

9555 Dry Fork Road Harrison, OH 45030 800-222-5107 sales @ centralrestaurant.com

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# 1. OWNER`S INFORMATION

## General information:

1. Always clean equipment thoroughly before first use.  
(See general cleaning instruction)
2. Check rating label for your model designation and electrical rating.
3. For best results, use stainless steel countertops.
4. All dimensions in parenthesis in centimeters unless noted.

## General operation instructions:

1. All foodservice equipment should be operated by trained personnel.
2. Do not allow your customers to come in contact with any surface labeled"CAUTION HOT"
3. Where applicable: Never pour cold water into dry heated units.
4. Where applicable: Do not cook, warm or hold food directly in liner pans (well pans).  
Always use steamtable pans/inset, etc.
5. Never hold perishable food below 150°F(66°C).

# 2. SAFETY INFORMATION

Warmer drawers are designed, built and sold for commercial use and should be operated by trained personnel only. Clearly post all CAUTIONS, WARNINGS and OPERATING INSTRUCTIONS near each unit to insure proper peration and to reduce the chance of personal injury and/or equipment damage.

Always disconnect power before serving the Warmer Drawer. Surfaces will remain hot after power has been turned off. Allow unit to cool before cleaning or servicing. Never clean the Warmer Drawer by immersing it in water. The warmer drawer is not protected against water jets, DO NOT CLEAN WARMER DRAWER WITH A WATER JET. Always clean equipment before first use.

# 3. SPECIFICATIONS

## Cordset configuration:

120V: NEMA5-15P plug, 6 foot,3 wire grounded cord.

208/240V: NEMA6-20P Plug,6 foot, 3 wire ground cord.



If the supply cord is damaged, the manufacturer or an authorized service agent or a similarly qualified person must replace it to avoid a hazard or voiding the warranty.

## STANDARD DRAWER WARMERS

| ENDW    | ELECTRIC              | DIMENSIONS                                   | DRAWER# | SHIPPING WEIGHT    |
|---------|-----------------------|--|---------|--------------------|
| 28W-535 | 120V,450W,3.75A       | 14 7/8"x 27 3/4"x 21"<br>(378mmx704mmx534mm) | 1       | 103.60 lbs (47kgs) |
| 28W-536 | 120V,900W,7.50A       | 24 1/4"x 27 3/4"x 21"<br>(616mmx704mmx534mm) | 2       | 152.50 lbs(69kgs)  |
| 28W-537 | 120V,1350W,11.25<br>A | 33 5/8"x 27 3/4"x 21"<br>(852mmx704mmx534mm) | 3       | 203.50 lbs(92kgs)  |
|         |                       |  |         |                    |

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## NARROW DRAWER WARMERS

| ENDWS   | ELECTRIC              | DIMENSIONS                                   | DRAWER# | SHIPPING WEIGHT    |
|---------|-----------------------|--|---------|--------------------|
| 28W-538 | 120V,450W,3.75A       | 14 7/8"x 20 1/4"x 29"<br>(378mmx515mmx737mm) | 1       | 103.60 lbs (47kgs) |
| 28W-539 | 120V,900W,7.50A       | 24 1/4"x 20 1/4"x 29"<br>(616mmx515mmx737mm) | 2       | 152.50 lbs(69kgs)  |
| 28W-540 | 120V,1350W,11.25<br>A | 33 5/8"x 20 1/4"x 29"<br>(852mmx515mmx737mm) | 3       | 203.50 lbs(92kgs)  |
|         |                       |  |         |                    |

## 4. WARNING

**IN THE EVENT OF A POWER FAILURE , DO NOT ATTEMPT TO OPERATE THIS DEVICE.**

**WARNING:**

ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

1. Plug unit into a properly grounded electrical receptacle of the correct voltage, size and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install proper voltage and size electrical receptacle.
2. DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
3. Do not pull unit by power cord.
4. Do not use an extension cord with this appliance.
5. Check with a qualified electrician if you are unsure as to whether the appliance is properly grounded.
6. Turn OFF power switch, unplug power cord, and allow unit to cool before performing any cleaning, adjustments or maintenance.
7. Unit is not waterproof. Locate unit indoors where the ambient air temperature is a minimum of 70° F (21°C).
8. Do not steam clean or use excessive water on the unit.
9. This unit is not "Jet -proof" construction. Do not use jet-clean spray to clean this unit.
10. Discontinue use if power cord is frayed or worn.
11. Do not attempt to repair or replace a damaged power cord. The cord must be replaced by an authorized agent or a person with similar qualifications.

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**This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.**

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**CAUTION :**


**Some exterior surface on the unit will get hot. Use caution when touching these areas. Use caution when opening drawer. Hot air escapes when drawer is open.**

**NOTICE:**

**DO NOT lay unit on front or back side. Damage to unit could occur.**

**FIRE HARZARD:**

1. Locate unit a minimum of 1"(25mm)from combustibile walls and materials.If safe distances are not maintained,discoloration or combustion could occur.
2. Do not harsh Chemicals such as bleach(or cleaners containing bleach), oven cleaners, or flammable cleaning solutions to clean this unit.

|  |
|--|
|  Make sure food pproduct has been heated to proper food-safe temperature before placing in the unit. Failure to heat food product properly may result in serious health risks.This unit is for holding preheated food product only. |
|--|

**5. OPERATION**

1. Initial heating of unit may generate smoke or fumes and must be done in well ventilated area.
2. Set the thermostat control knob to desired setting and preheated each drawer for 30 minutes.
3. Place food product directly in stainless steel drawer pans or use any combination of full or fractional pans up to 6"(152mm)deep.
4. Set front vent knob to desired position for maintaining food product moisture.
5. Perforated pans may be used with damp towel or small amount of hot water in the drawer pan to prevent food "dry out".

CAUTION: Use no more than 1 quart(1 liter) for wet operation.

6. If too much moisture accumulates around drawer front or vent, reduce temprature setting or move vent knob to "Dry"position.

| PRODUCT      | TEMPERATURE SETTING  | VENT  |
|--------------|----------------------|-------|
| Rolls, Bread | 160°-180°F(71°-82°C) | MOIST |
| Vegetable    | 170°-180°F(77°-82°C) | MOIST |
| Meats        | 170°-180°F(77°-82°C) | MOIST |

NOTE: Temperature and vent settings will require adjustment according to type and quantity of food, and number of times drawer is opened during operation.

**The equipment is for heating only,not for cooking.**

## 6.CLEANING

### **General Cleaning Instructions:**

1. Never clean any electrical unit by immersing it in water. Turn off before surface cleaning.
2. Always clean equipment thoroughly before first use. Clean unit daily except where noted on charts:  
Use warm, soapy water. Mild cleansers and PLASTIC scouring pads may be used to remove baked-on food and water scale.
3. Turn off electrical units before cleaning or servicing. All service should be performed by authorized service agency.

### Daily cleaning:

1. Follow general cleaning instructions (above).
2. Remove any inset pans and drawer pans. Wash thoroughly in the sink or dishwasher.
3. Remove drawers: Remove pans and pan inserts, extend drawer and lift up on the front to clear the drawer stop. Low drawer and pull straight out.

### **PREVENTIVE CARE:**

To prevent stainless steel break-down, follow these steps:

1. Never use any metal tools, scrapers, files, wire brushes, or scouring pads. (except for stainless steel scouring pads.)
2. Never use steel wool-which will leave behind particles that will rust.
3. Never use acid-based or chloride containing cleaning solutions-which will break down the protective film.
4. Never rub in a circular motion. Always rub gently in the direction of the steel grain.
5. Never leave food products or salt on the surface. Many food are acidic. Salt contains chloride.

## 7. TROUBLESHOOTING GUIDE

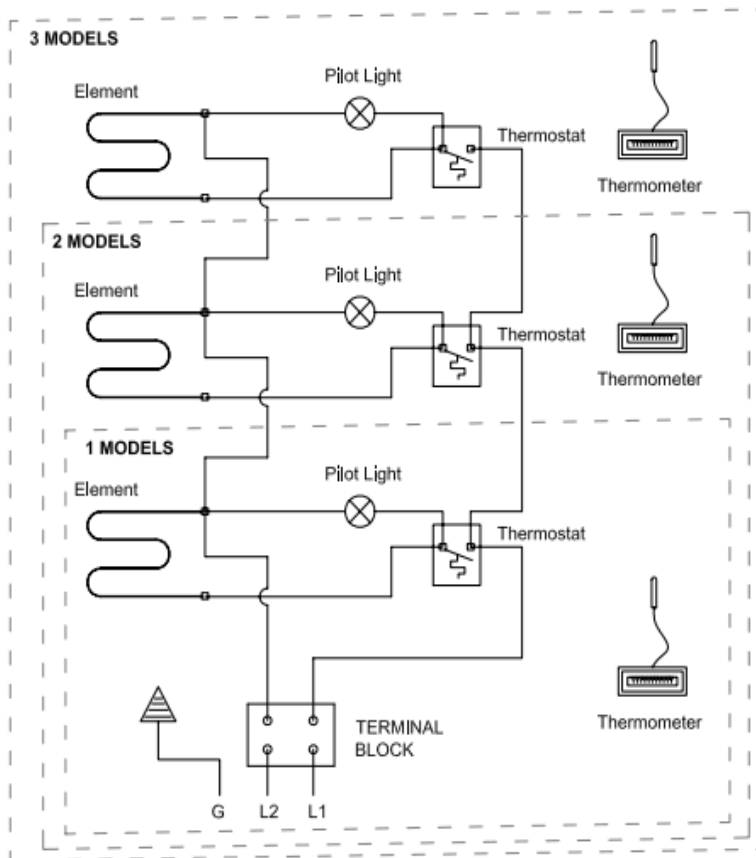
### Always ask and check the following:

1. Is the unit connected to a live power source of the proper voltage?
2. Check the circuit breaker.
3. Is power switch "ON" and pilot light glowing?
4. Check the rating label. Is the unit connected to the correct power source.

| SYMPTOMS  | POSSIBLE CAUSES  | REMEDY   |
|---|--|--|
| Warmer not operating  | Warmer not connected to power source                     | Connect cabinet to power source.                         |
|   | No power   | Check circuit breaker and/or check CFCI switch on outlet |
| CFCI or Ground Fault Circuit Indicator tripped.                                     | Moisture problem   | Dry moisture problems                                    |
|   | Shorted element  | Contact authorized service provider                      |
|   | Pinched/damaged wire                                     | Contact authorized service provider                      |
|   | Damaged power cord                                       | Contact authorized service provider                      |
| Warmer is connected to power source, thermostat is turned on but warmer not heating | Defective: Heating element, thermometer, thermostat etc. | Contact authorized service provider                      |

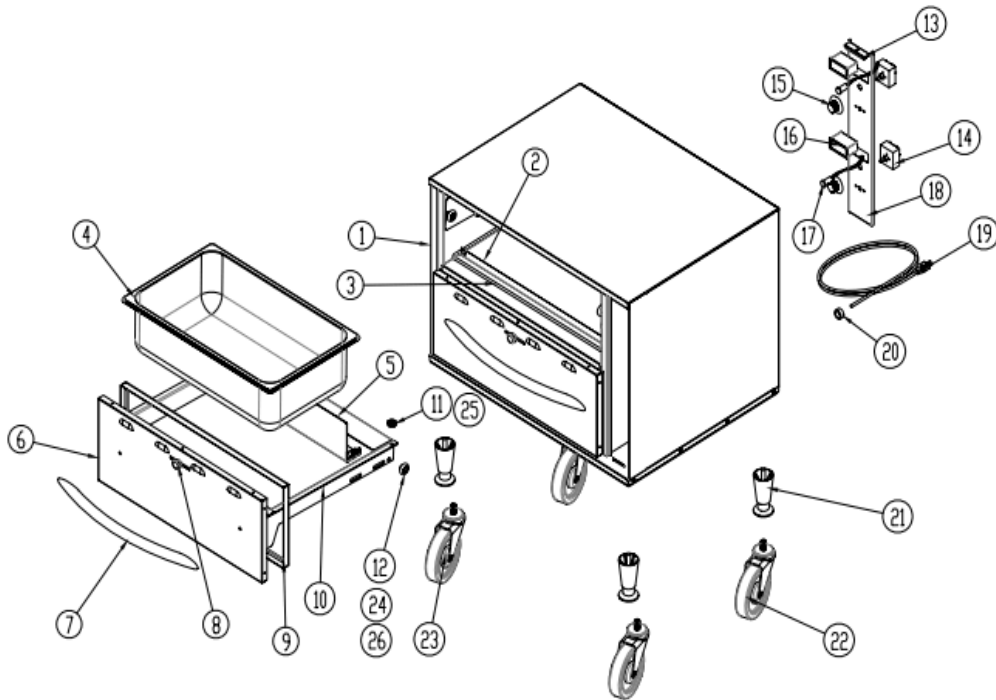
## 8.WIRING DIAGRAM

Knob Control Unit



## 9.PARTS LISTS & EXPLODED VIEW

### Standard Drawer Warmer Exploded View

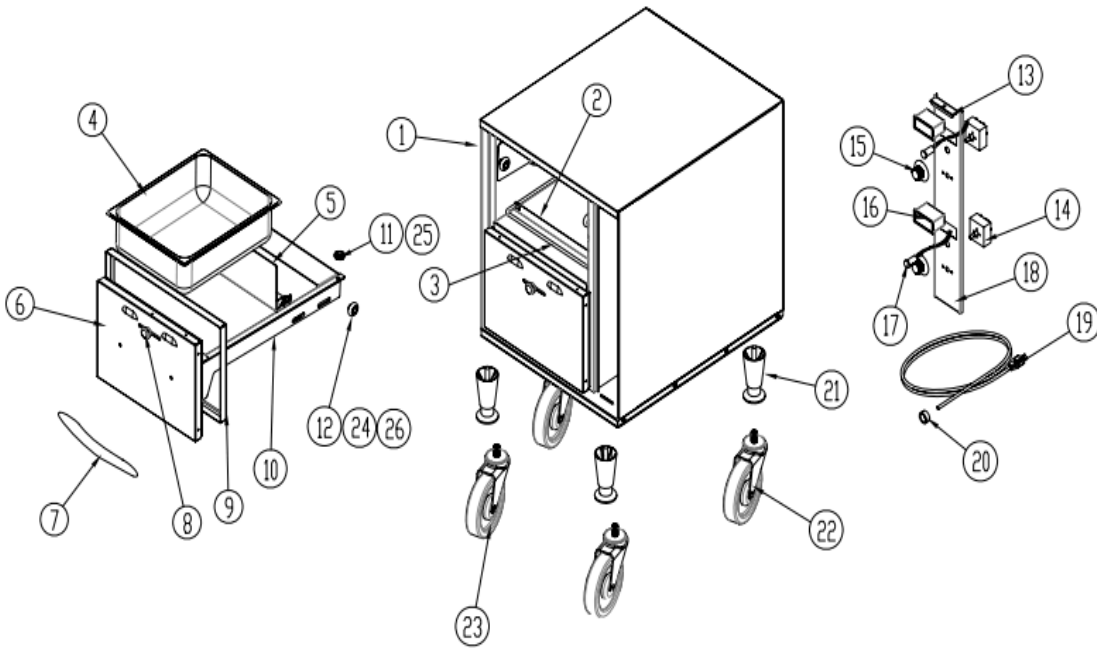


Casters are not included. They are available as a separate accessory - item 28W-541

## Standard Drawer Warmer Parts List

| PARTS (QTY) |            |  | 28W-535 |     |    | 28W-536 |     |     | 28W-537 |     |     |
|-------------|------------|--|---------|-----|----|---------|-----|-----|---------|-----|-----|
| ITEM        | P/N        | DESCRIPTION                                | 120     | 208 | ## | 120     | 208 | 240 | ##      | 208 | 240 |
|             |            |  | VOLTS   |     |    | VOLTS   |     |     | VOLTS   |     |     |
| 1           | DW1-010001 | Body Assembly                              | 1       | 1   | 1  |         |     |     |         |     |     |
|             | DW2-010001 | Body Assembly                              |         |     |    | 2       | 2   | 2   |         |     |     |
|             | DW3-010001 | Body Assembly                              |         |     |    |         |     |     | 3       | 3   | 3   |
| 2           | DW-010321  | Element Bracket                            | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 3           | DWFRG-120  | Heating Elements                           | 1       |     |    | 2       |     |     | 3       |     |     |
|             | DWFRG-208  | Heating Elements                           |         | 1   |    |         | 2   |     |         | 3   |     |
|             | DWFRG-240  | Heating Elements                           |         |     | 1  |         |     | 2   |         |     | 3   |
| 4           | DW-030001  | Pan  | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 5           | DW-020301  | Center Pan Support Assembly                | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 6           | DW-020201  | Drawer Face Assembly                       | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 7           | DW-020401  | Drawer Handle                              | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 8           | N/S        | Drawer Vent Knob                           | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 9           | DW-020701  | Gasket                                     | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 10          | DW-020101  | Drawer Inner Frame Weldment                | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 11          | DW-020501  | Guard Bearing                              | 2       | 2   | 2  | 4       | 4   | 4   | 6       | 6   | 6   |
| 12          | DW-020601  | Slide Bearing                              | 6       | 6   | 6  | 12      | 12  | 12  | 18      | 18  | 18  |
| 14          | N/S        | Thermostat 250V 105°C                      | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 15          | N/S        | Knob                                       | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 16          | N/S        | mechanical Temperature Indicator(0-120 °C) | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 17          | N/S        | Power Indicator Light                      | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 18          | N/S        | Control Panel                              | 1       | 1   | 1  | 1       | 1   | 1   | 1       | 1   | 1   |
| 19          | N/S        | Cord+Plug NEMS(5-15)                       | 1       |     |    | 1       |     |     | 1       |     |     |
|             | N/S        | Cord+Plug NEMS(6-20)                       |         | 1   | 1  |         | 1   | 1   |         | 1   | 1   |
| 20          | N/S        | Cabel Bushing                              | 1       | 1   | 1  | 1       | 1   | 1   | 1       | 1   | 1   |
| 21          | N/S        | Leg  | 4       | 4   | 4  | 4       | 4   | 4   | 4       | 4   | 4   |
| 22          | N/S        | Caster with Brake(Optional)                | 2       | 2   | 2  | 2       | 2   | 2   | 2       | 2   | 2   |
| 23          | N/S        | Caster(Optional)                           | 2       | 2   | 2  | 2       | 2   | 2   | 2       | 2   | 2   |
| 24          | N/S        | Screw 1/4-20X1.25"                         | 6       | 6   | 6  | 12      | 12  | 12  | 18      | 18  | 18  |
| 25          | N/S        | Screw 1/4-20X0.75"                         | 2       | 2   | 2  | 4       | 4   | 4   | 6       | 6   | 6   |
| 26          | N/S        | Nylon Lock Nut 1/4-20"                     | 8       | 8   | 8  | 16      | 16  | 16  | 24      | 24  | 24  |

## Narrow Design Drawer Warmer Exploded View



Casters are not included. They are available as a separate accessory - item 28W-541

## Narrow Design Drawer Warmer Parts List

| PARTS (QTY) |             |                             | 28W-538 |     |    | 28W-539 |     |     | 28W-540 |     |     |
|-------------|-------------|-----------------------------|---------|-----|----|---------|-----|-----|---------|-----|-----|
| ITEM        | P/N         | DESCRIPTION                 | 120     | 208 | ## | 120     | 208 | 240 | ##      | 208 | 240 |
|             |             |                             | VOLTS   |     |    | VOLTS   |     |     | VOLTS   |     |     |
| 1           | DWS1-010001 | Body Assembly               | 1       | 1   | 1  |         |     |     |         |     |     |
|             | DWS2-010001 | Body Assembly               |         |     |    | 2       | 2   | 2   |         |     |     |
|             | DWS3-010001 | Body Assembly               |         |     |    |         |     |     | 3       | 3   | 3   |
| 2           | DWS-010321  | Element Bracket             | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 3           | DWFRGS-120  | Heating Elements            | 1       |     |    | 2       |     |     | 3       |     |     |
|             | DWFRGS-208  | Heating Elements            |         | 1   |    |         | 2   |     |         | 3   |     |
|             | DWFRGS-240  | Heating Elements            |         |     | 1  |         |     | 2   |         |     | 3   |
| 4           | DW-030001   | Pan                         | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 5           | DWS-020301  | Center Pan Support Assembly | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 6           | DWS-020201  | Drawer Face Assembly        | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 7           | DWS-020401  | Drawer Handle Strip         | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 8           | N/S         | Drawer Vent Knob            | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 9           | DWS-020701  | Gasket                      | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 10          | DWS-020101  | Drawer Inner Frame Weldment | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 11          | DW-020501   | Guard Bearing               | 2       | 2   | 2  | 4       | 4   | 4   | 6       | 6   | 6   |
| 12          | DW-020601   | Slide Bearing               | 6       | 6   | 6  | 12      | 12  | 12  | 18      | 18  | 18  |
| 14          | N/S         | Thermostat 250V 105°C       | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 15          | N/S         | Knob                        | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 16          | N/S         | Mechanical Temperature      | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 17          | N/S         | Power Indicator Light       | 1       | 1   | 1  | 2       | 2   | 2   | 3       | 3   | 3   |
| 18          | N/S         | Control Panel               | 1       | 1   | 1  | 1       | 1   | 1   | 1       | 1   | 1   |
| 19          | N/S         | Cord+Plug NEMS(5-15)        | 1       |     |    | 1       |     |     | 1       |     |     |
|             | N/S         | Cord+Plug NEMS(6-20)        |         | 1   | 1  |         | 1   | 1   |         | 1   | 1   |
| 20          | N/S         | Cabel Bushing               | 1       | 1   | 1  | 1       | 1   | 1   | 1       | 1   | 1   |
| 21          | N/S         | Leg                         | 4       | 4   | 4  | 4       | 4   | 4   | 4       | 4   | 4   |
| 22          | N/S         | Caster with Brake(Option)   | 2       | 2   | 2  | 2       | 2   | 2   | 2       | 2   | 2   |
| 23          | N/S         | Caster(Option)              | 2       | 2   | 2  | 2       | 2   | 2   | 2       | 2   | 2   |
| 24          | N/S         | Screw 1/4-20X1.25"          | 6       | 6   | 6  | 12      | 12  | 12  | 18      | 18  | 18  |
| 25          | N/S         | Screw 1/4-20X0.75"          | 2       | 2   | 2  | 4       | 4   | 4   | 6       | 6   | 6   |
| 26          | N/S         | Nylon Lock Nut 1/4-20"      | 8       | 8   | 8  | 16      | 16  | 16  | 24      | 24  | 24  |