

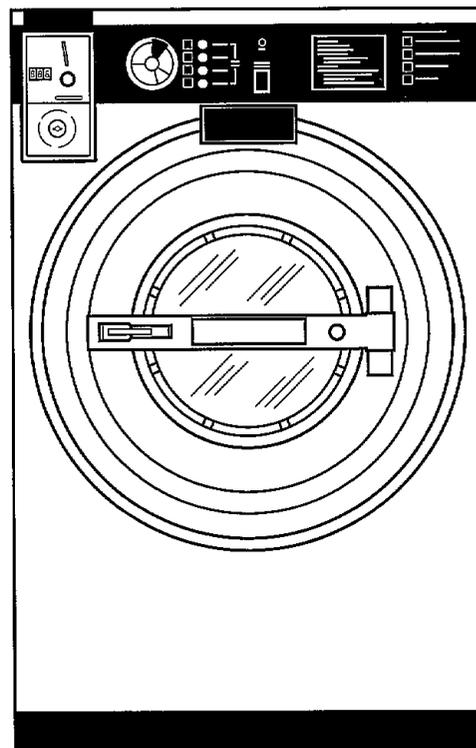
# Speed Queen

A **Raytheon** Company

## Parts and Service Manual for Commercial SuperSize V™ Washer-Extractor

Model:

WX50110,  
WX50111 and  
WX50113



X001PE1A

Speed Queen  
Shepard Street  
P.O. Box 990  
Ripon, Wisconsin 54971-0990

Part No. G134692R1  
2/95

**▲ WARNING**

**Failure to install, maintain, and/or operate this product according to the manufacturer's instructions may result in conditions which can produce serious injury, death and/or property damage.**

**Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and that you understand and have the skills to carry out.**

**Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury, or death.**

W006R1

**▲ WARNING**

**Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly to adjustments subjecting you, or the inexperienced person making such repairs, to the risk of serious injury, electrical shock, or death.**

W007

**▲ CAUTION**

**If you or an unqualified person perform service on your product, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.**

W008

**NOTE: The WARNINGS and IMPORTANT STICKERS appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and carefulness are factors which CANNOT be built into these tumblers. These factors MUST BE supplied by the person(s) installing, maintaining, or operating the tumbler.**

Always contact your dealer, distributor, service agent or the manufacturer about any problem or conditions you do not understand.

In order to locate an authorized service agency, please consult your telephone book or the dealer from whom you purchased this product. If you require further assistance, please contact:

Speed Queen Company  
Customer Service Department  
P.O. Box 990  
Ripon, Wisconsin 54971-0990  
Phone: (414) 748-3121

**Recognize Safety Symbols, Words and Labels**

- ▲ DANGER -- Immediate hazards which WILL result in serious injury or death.**
- ▲ WARNING -- Hazards or unsafe practices which COULD result in serious injury or death.**
- ▲ CAUTION -- Hazards or unsafe practices which COULD result in minor or moderate injury or product or property damage.**

W009

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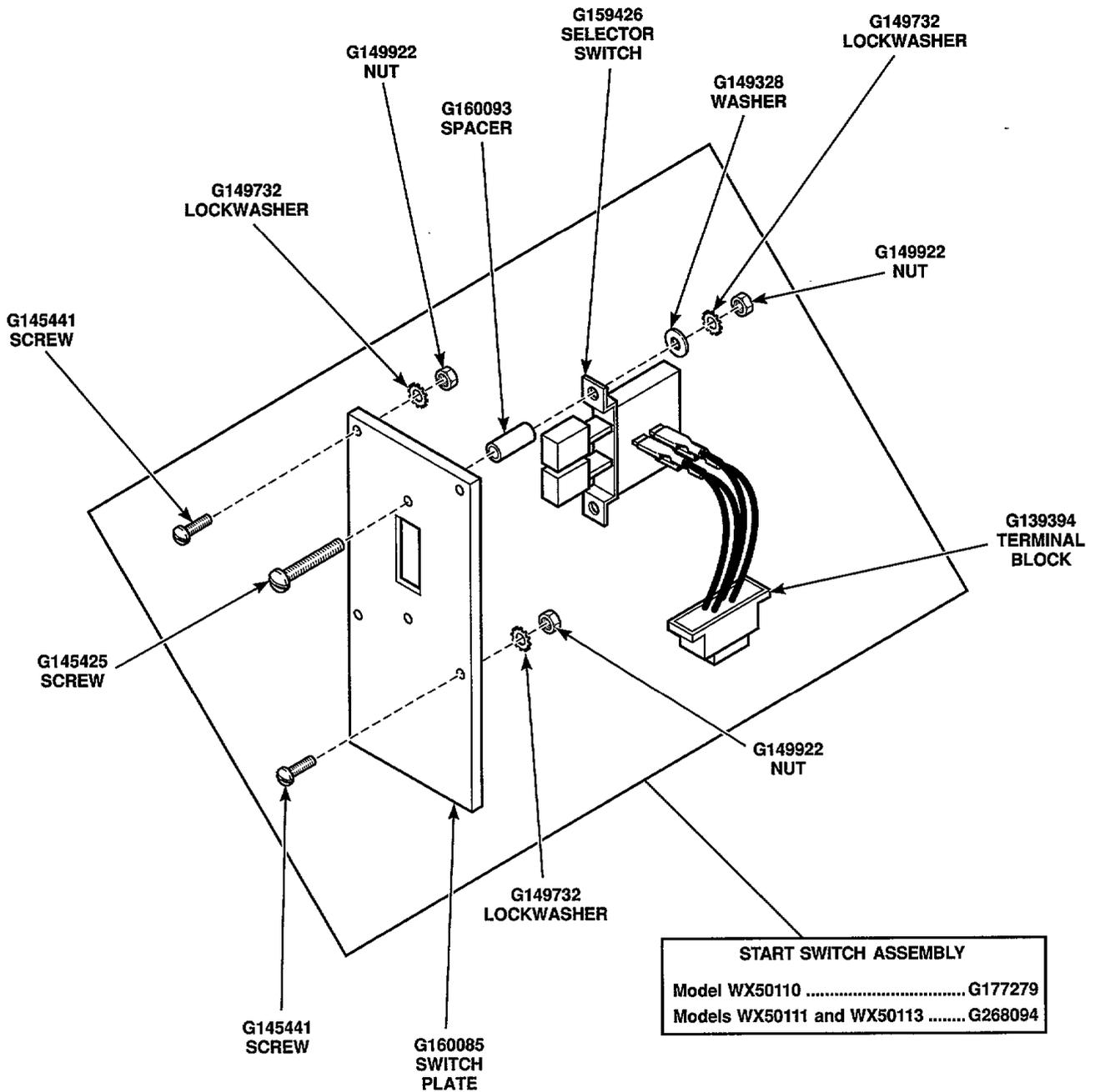
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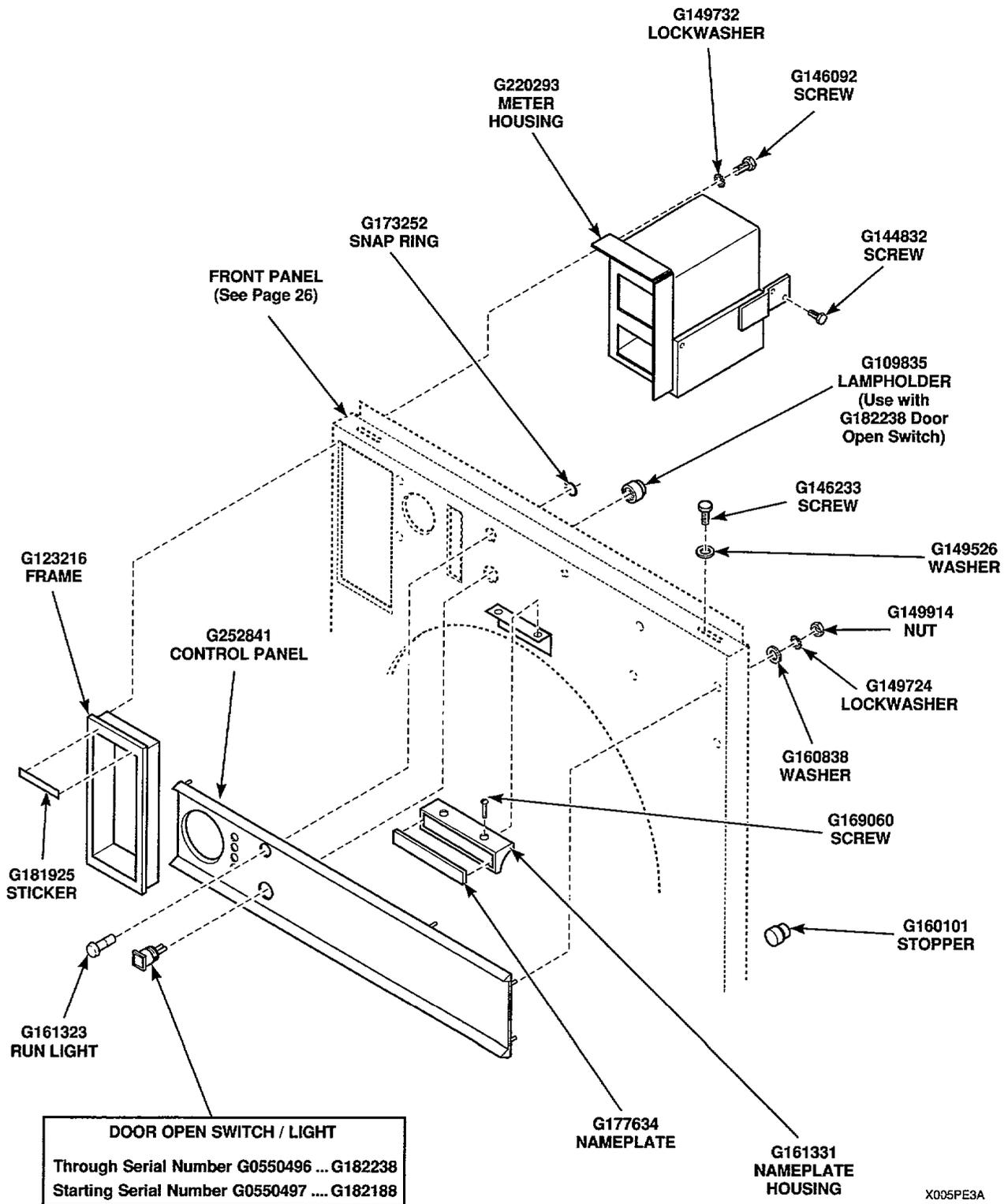
# SECTION I

## Parts

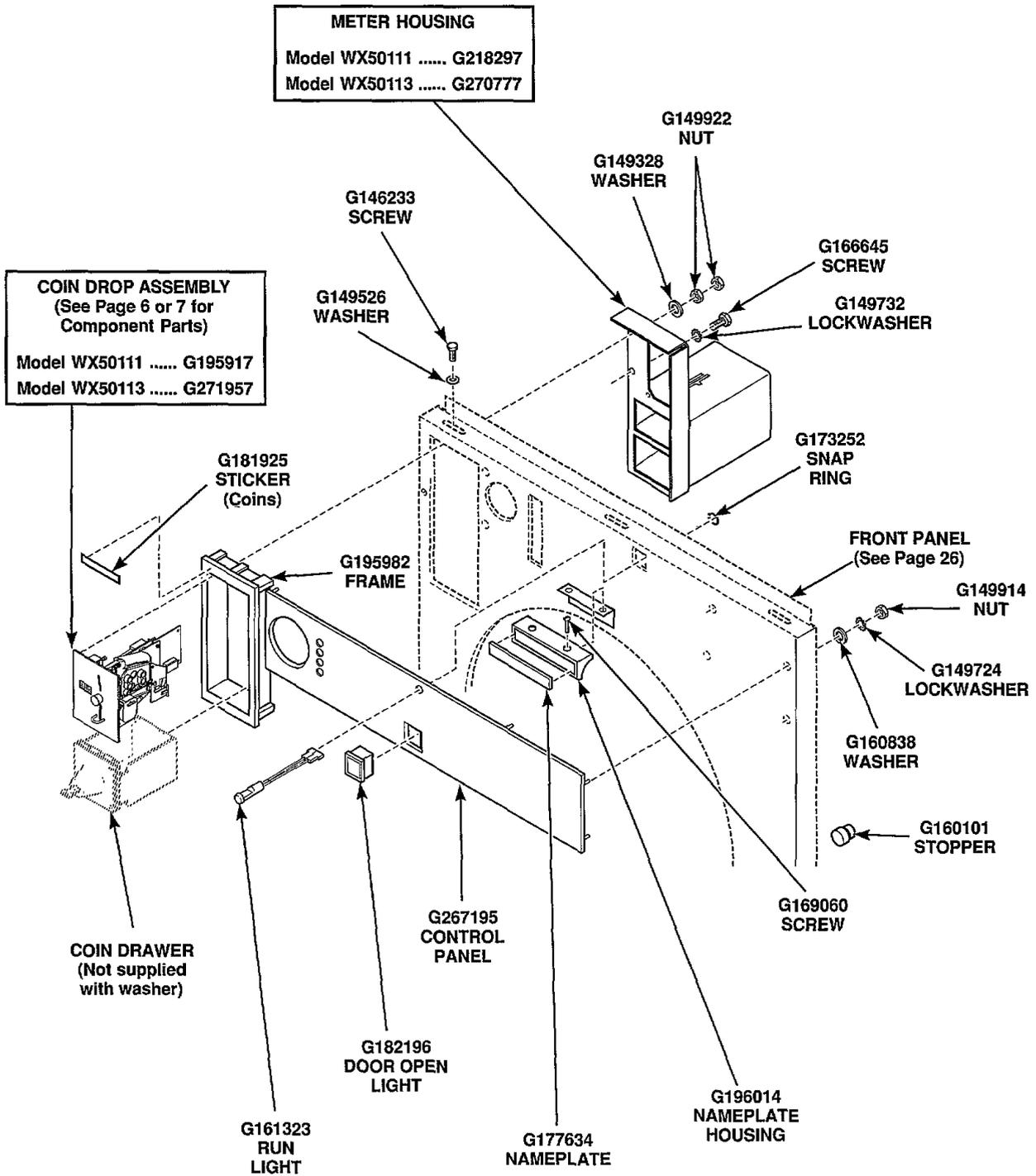


X002PE3A

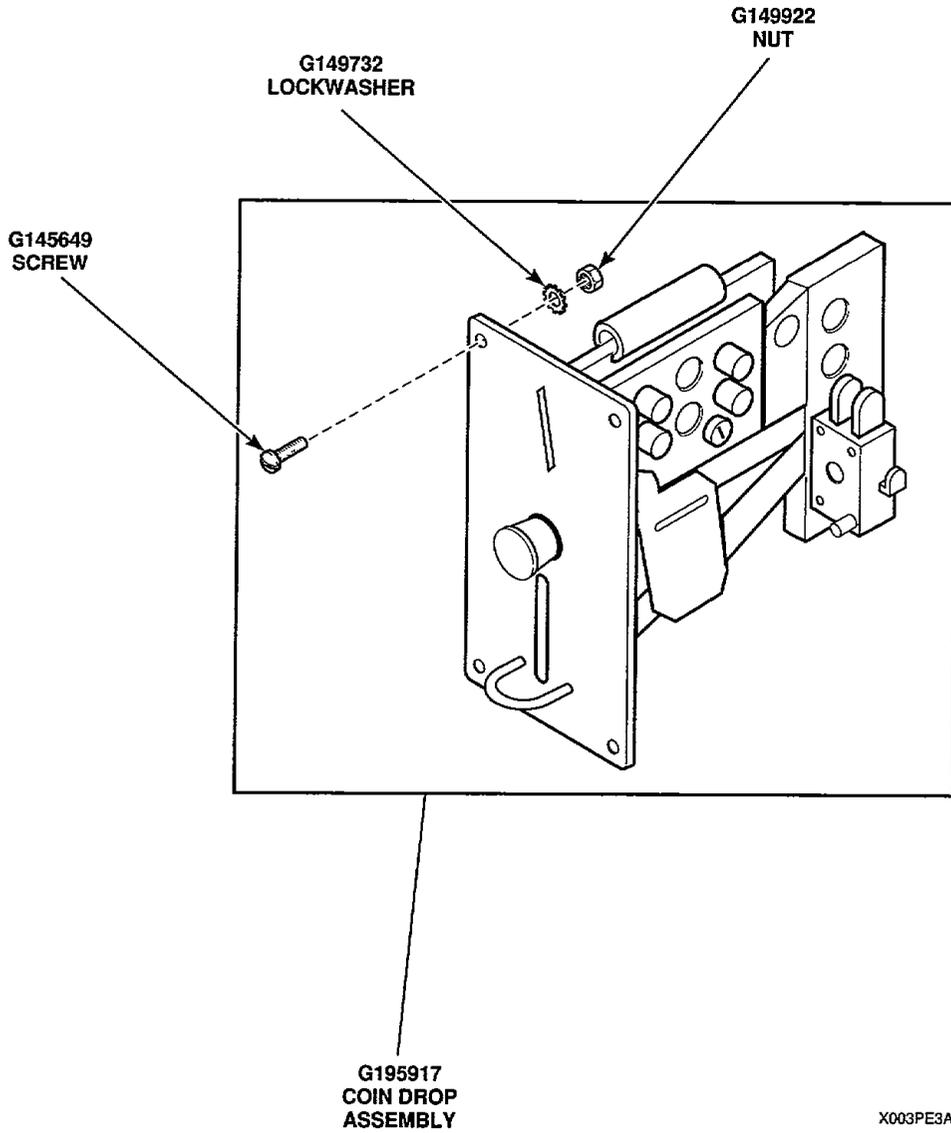
### MANUAL START SWITCH ASSEMBLY



**CONTROL PANEL AND METER HOUSING  
(Model WX50110)**

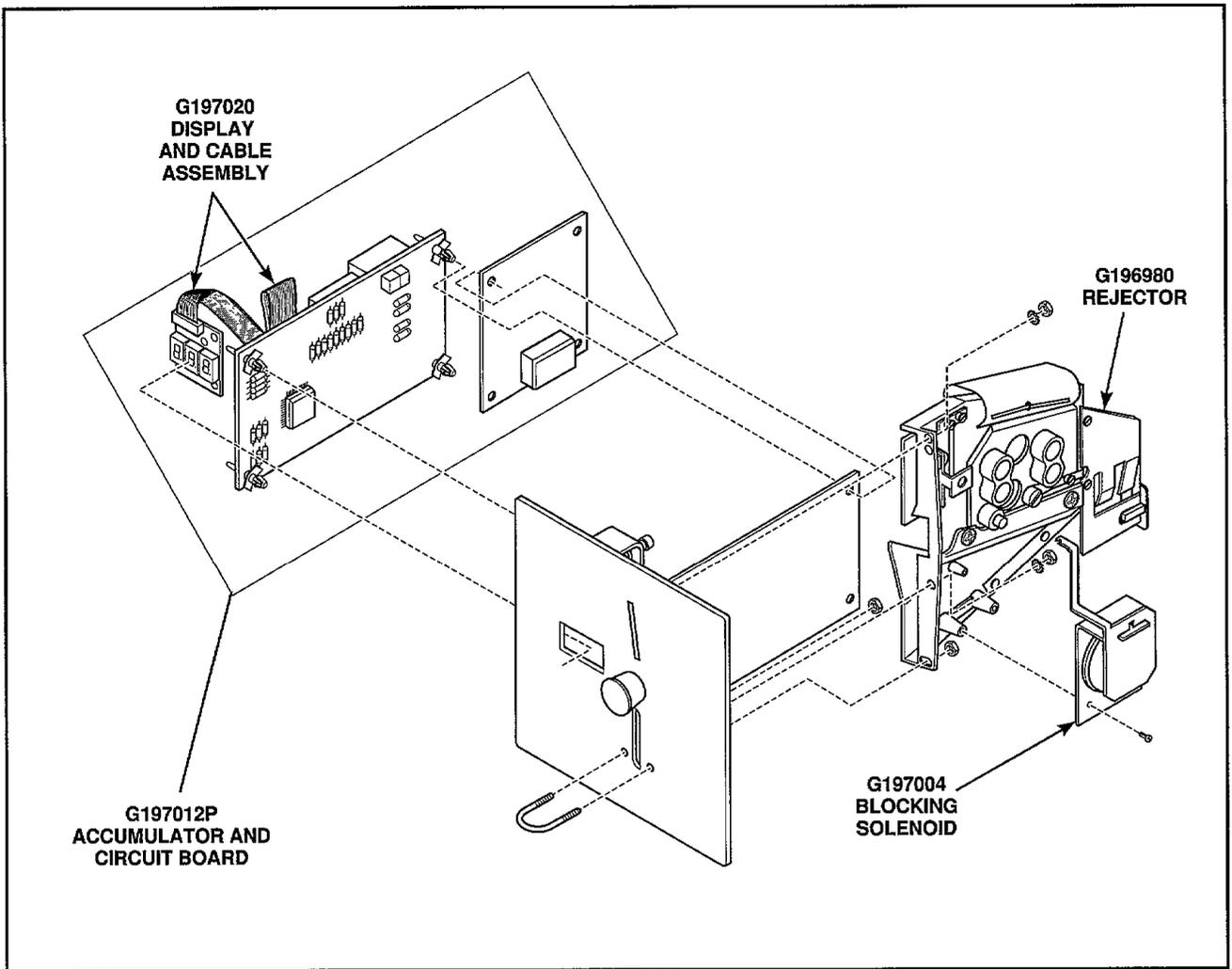


X006PE3A



X003PE3A

**COIN DROP ASSEMBLY  
(Model WX50111)**

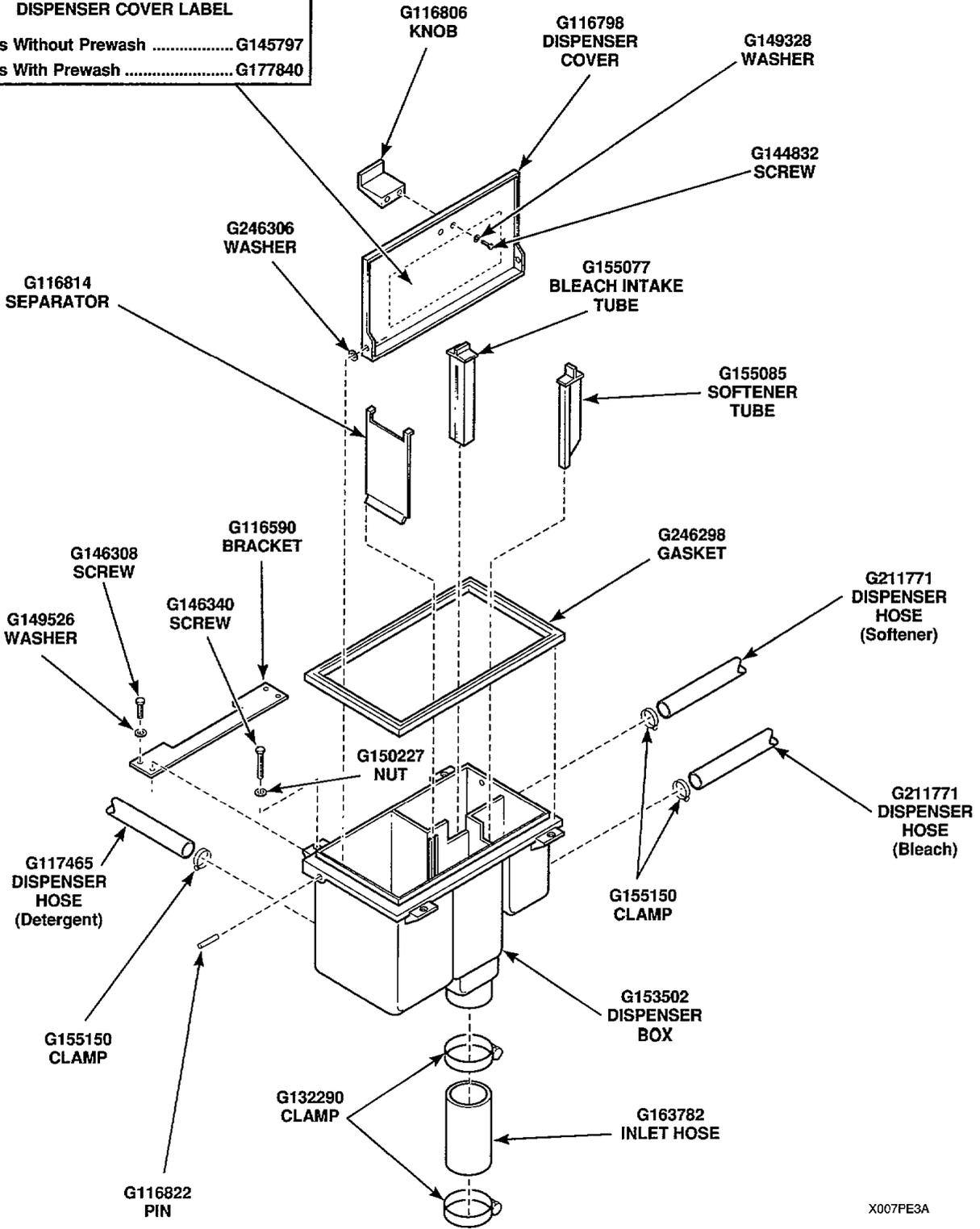


**G271957  
COIN DROP ASSEMBLY  
(Digital)**

X004PE3A

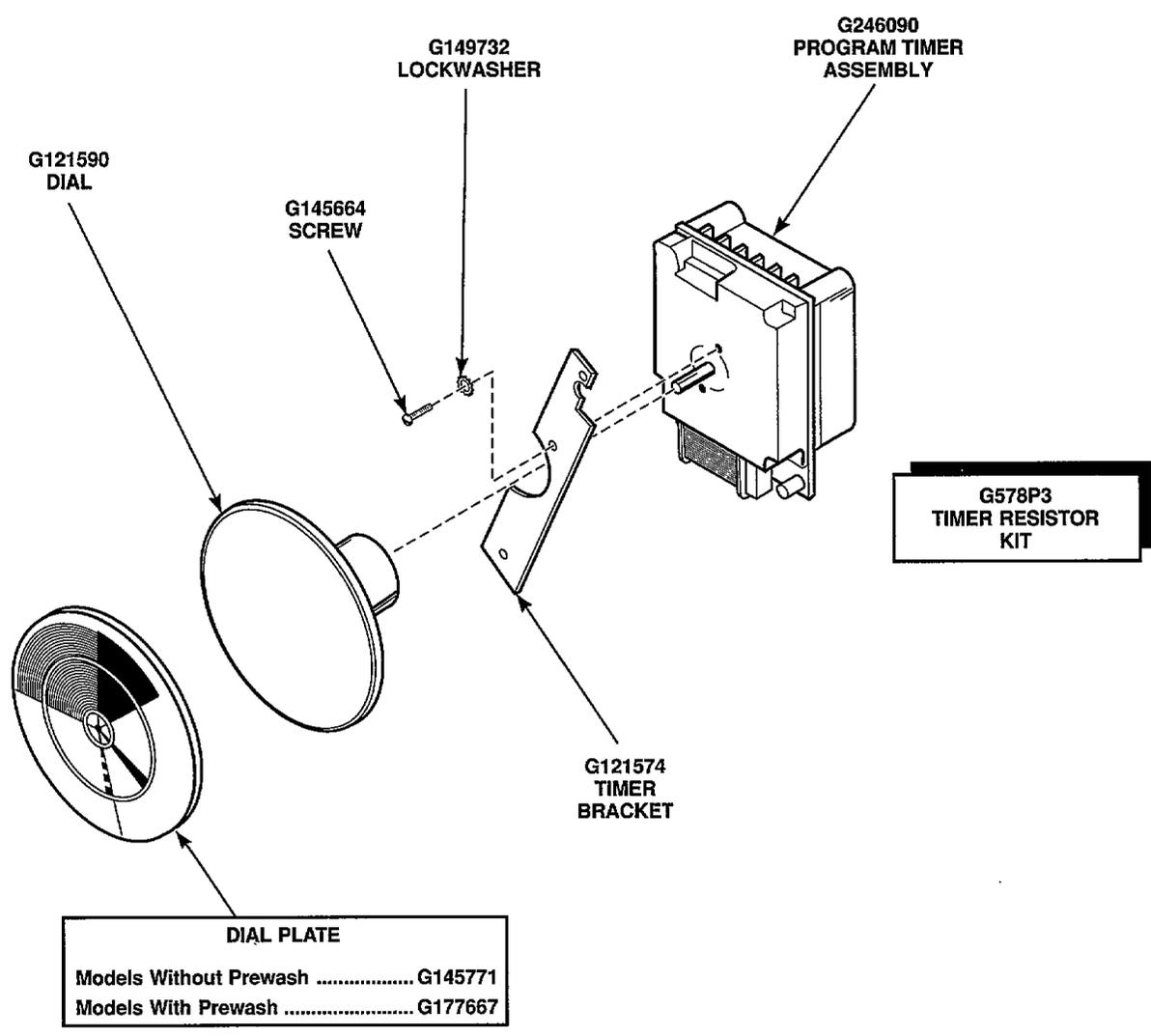
**COIN DROP ASSEMBLY  
(Model WX50113)**

**DISPENSER COVER LABEL**  
 Models Without Prewash ..... G145797  
 Models With Prewash ..... G177840



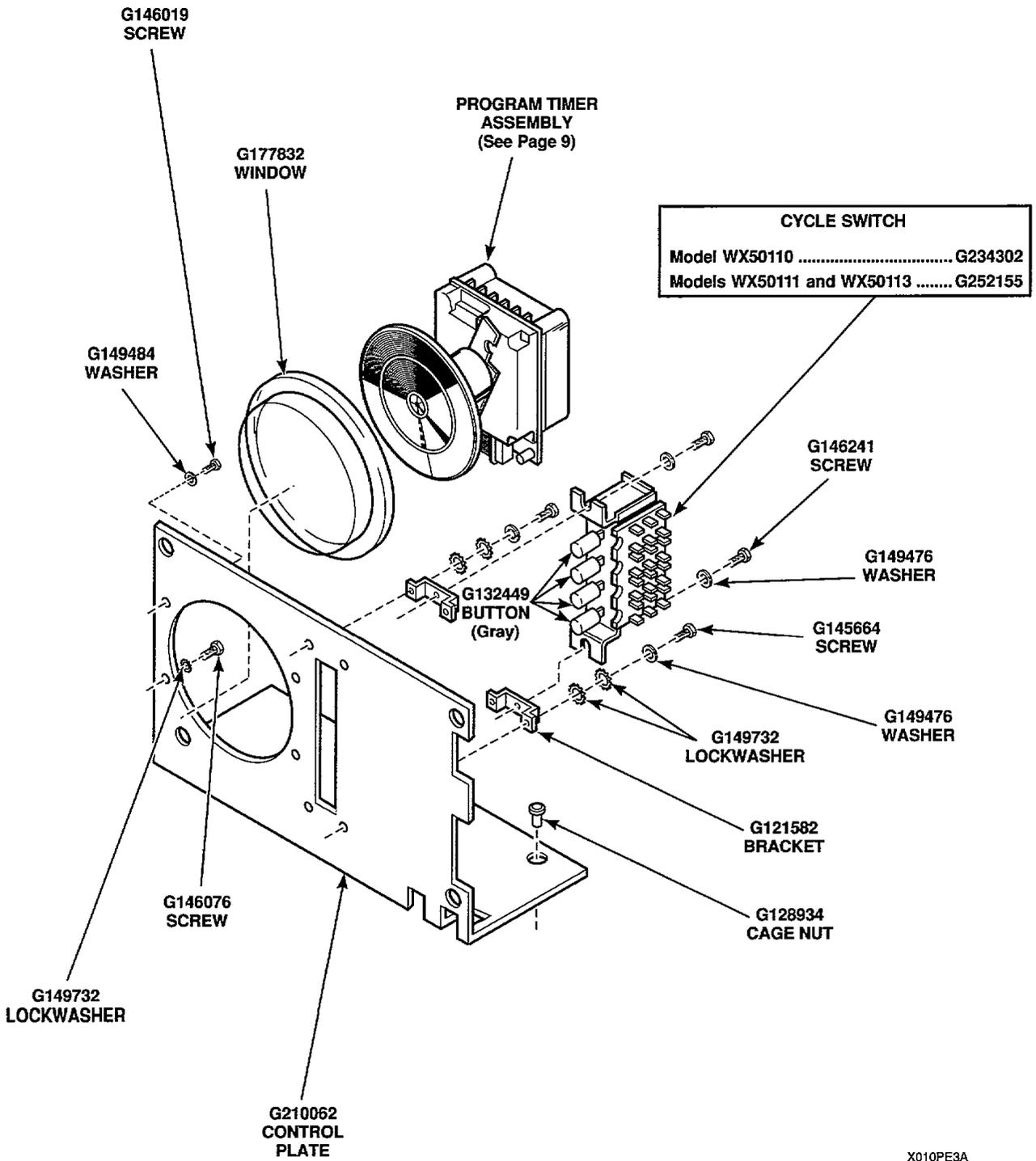
**DISPENSER BOX, COVER AND HOSES**

X007PE3A



X011PE3A

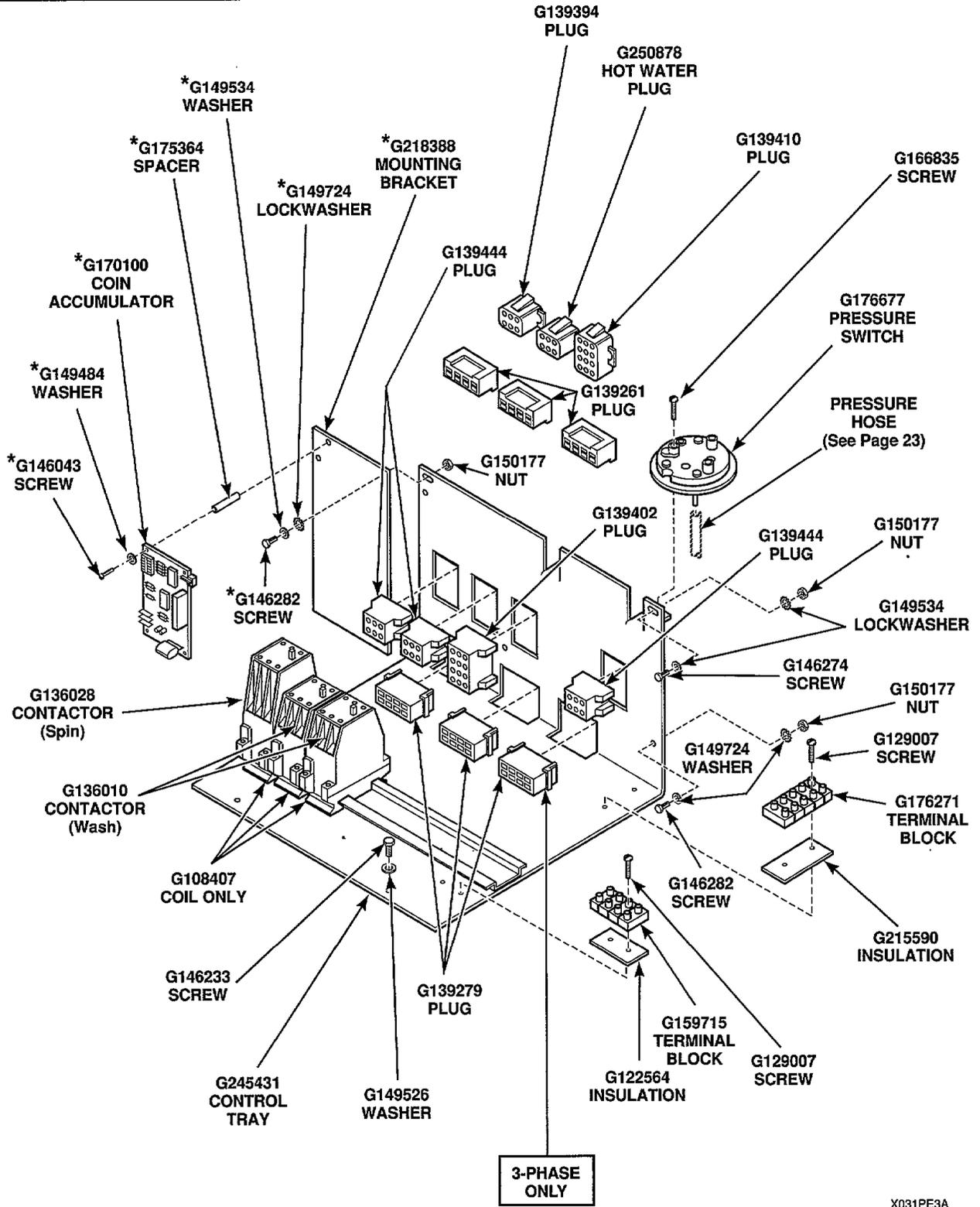
**PROGRAM TIMER ASSEMBLY**



X010PE3A

**CONTROL PLATE AND CONTROLS**

\* MODEL WX50111 ONLY  
(PARTS MARKED WITH AN  
ASTERISK.)

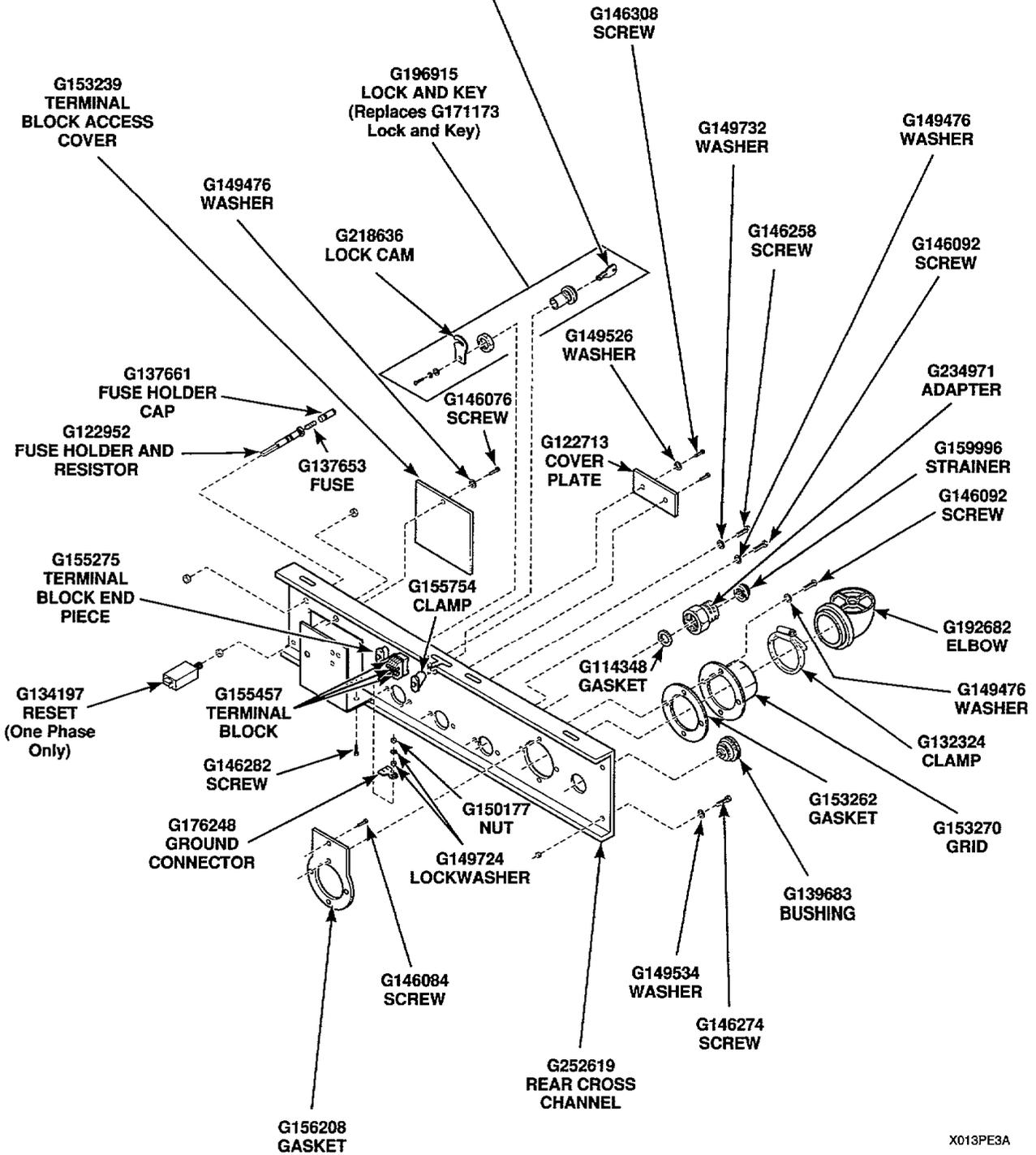


X031PE3A

**CONTROL TRAY AND CONTROLS**

**KEY**

Use with G171173 Lock ..... G176511  
 Use with G196915 Lock ..... G196923

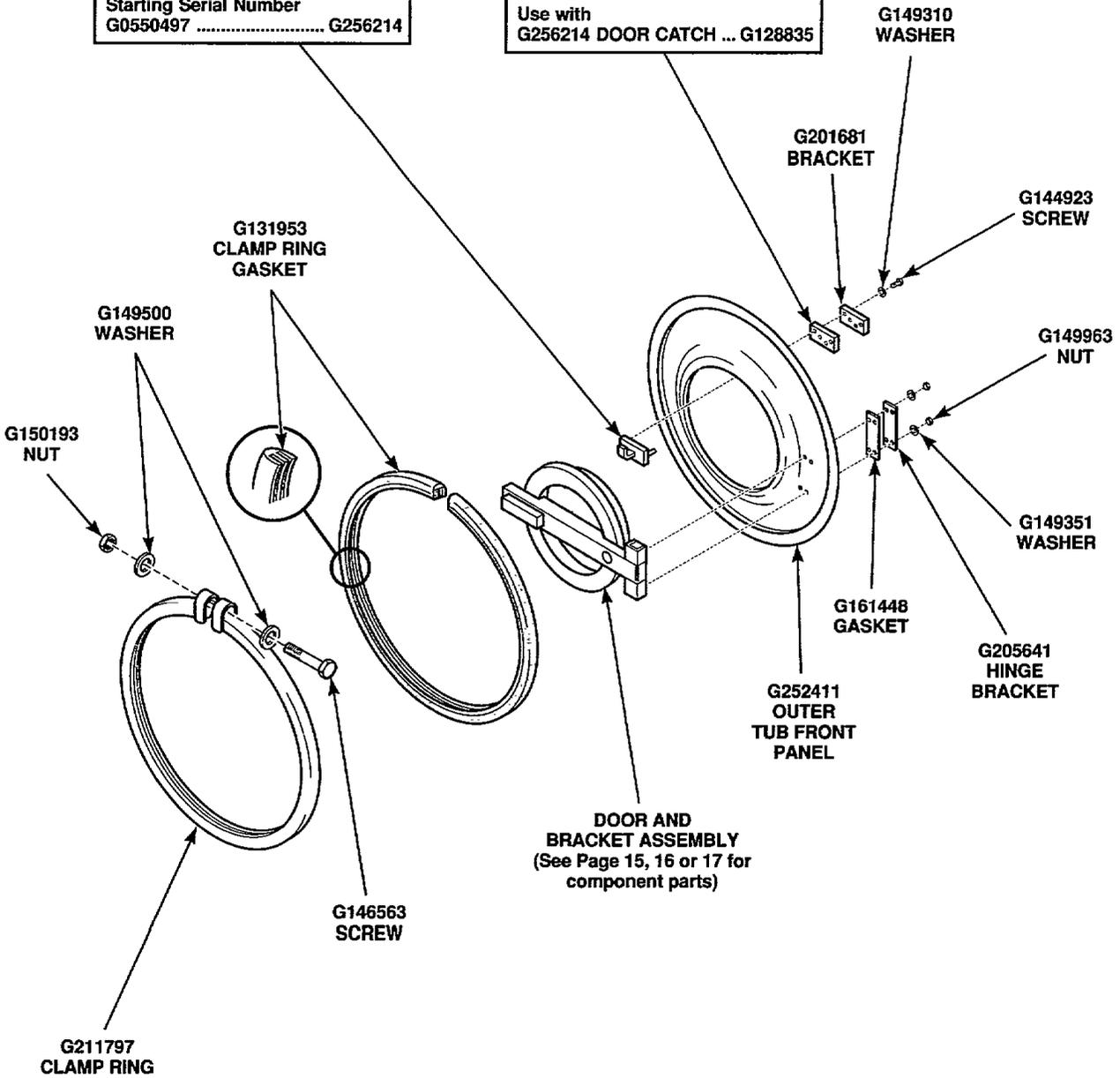


**REAR CROSS CHANNEL ASSEMBLY  
 (Model WX50110)**



**DOOR CATCH**  
 Through Serial Number  
 G0550496 ..... G161059  
 Starting Serial Number  
 G0550497 ..... G256214

**GASKET**  
 Use with  
 G161059 DOOR CATCH ... G161455  
 Use with  
 G256214 DOOR CATCH ... G128835



X016PE3A

**OUTER TUB FRONT PANEL AND DOOR ASSEMBLY**

**DOOR ASSEMBLY**  
 Through Serial Number  
 G0550496 ..... G252445  
 Starting Serial Number  
 G0550497 ..... G254920

**DOOR GASKET**  
 Through Serial Number  
 G0550496 ..... G132167  
 Starting Serial Number  
 G0550497 ..... G182642

**ADJUSTING NUT  
 (Inner)**  
 Through Serial  
 Number G0550496 ..... G254011  
 Starting Serial  
 Number G0550497 ..... G150656

**HINGE COVER**  
 Gray ..... G161380  
 Black ..... G268086

**DOOR OPEN TOOL**  
 Through Serial  
 Number G0550496 ..... G101097  
 Starting Serial  
 Number G0550497 ..... G256198

**HINGE**  
 Gray ..... G205468  
 Black ..... G268052

**HINGE**  
 Gray ..... G205484  
 Black ..... G268060

**DOOR BRACKET  
 ASSEMBLY**  
 (See Page 16 or 17  
 for component parts)

**G155515  
 HINGE  
 BEARING**

**G157735  
 STUD**

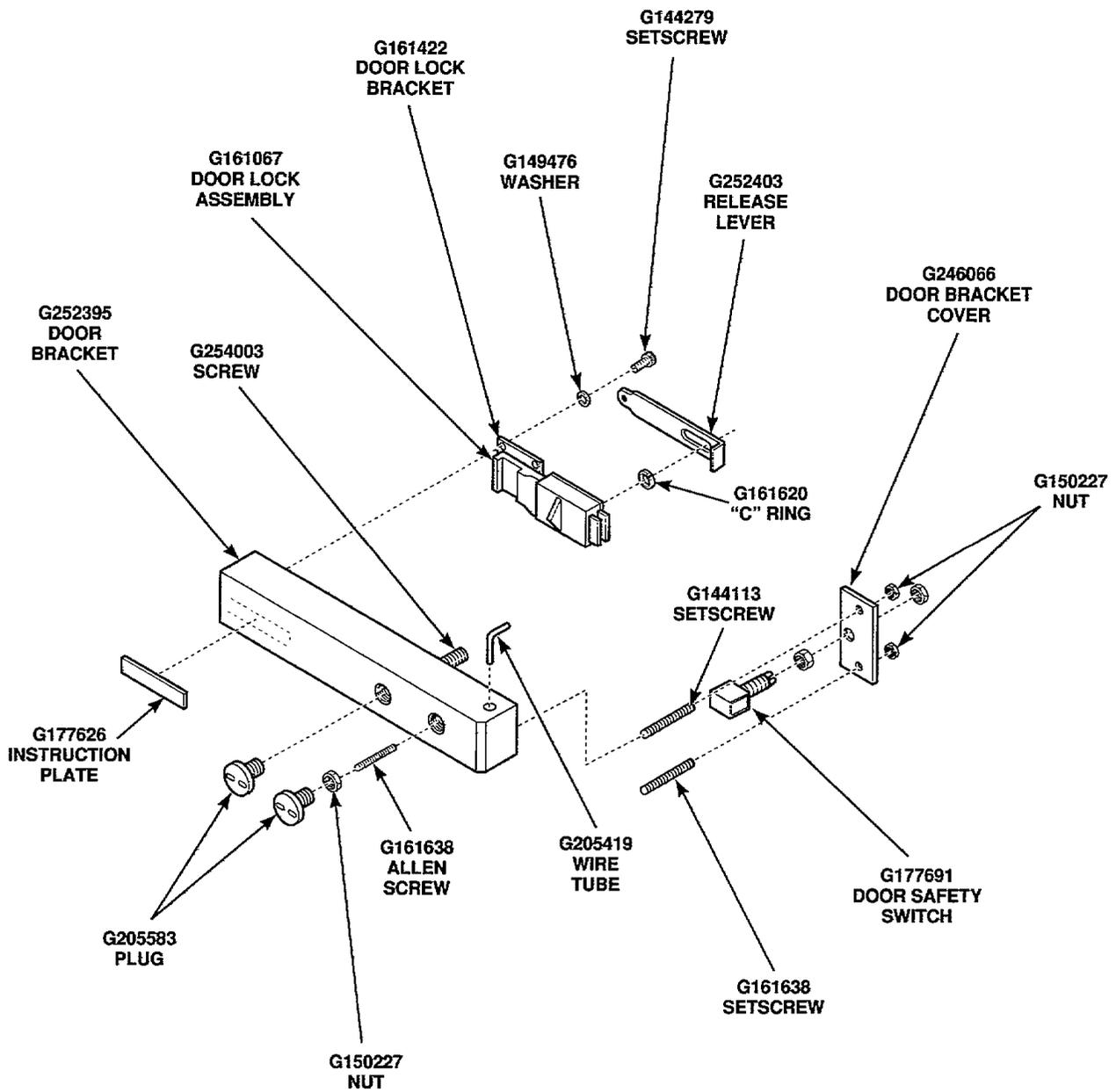
**G205633  
 HINGE  
 SHAFT**

**G161646  
 SETSCREW**

**G149948  
 NUT**

**DOOR ASSEMBLY**

X017PE3A

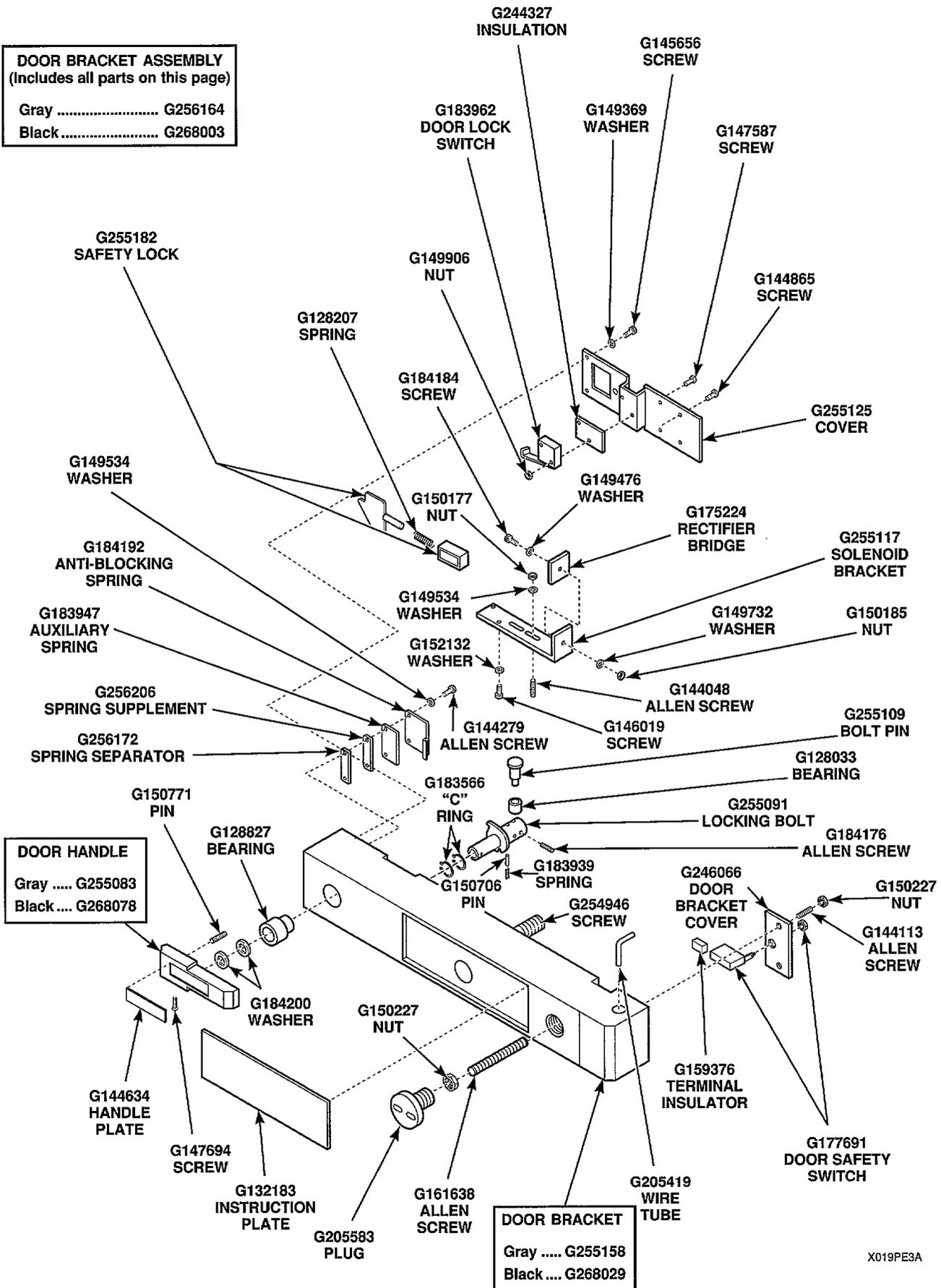


X018PE3A

**DOOR BRACKET ASSEMBLY  
(Through Serial Number G0550496)**

**DOOR BRACKET ASSEMBLY**  
 (Includes all parts on this page)

Gray ..... G256164  
 Black ..... G268003

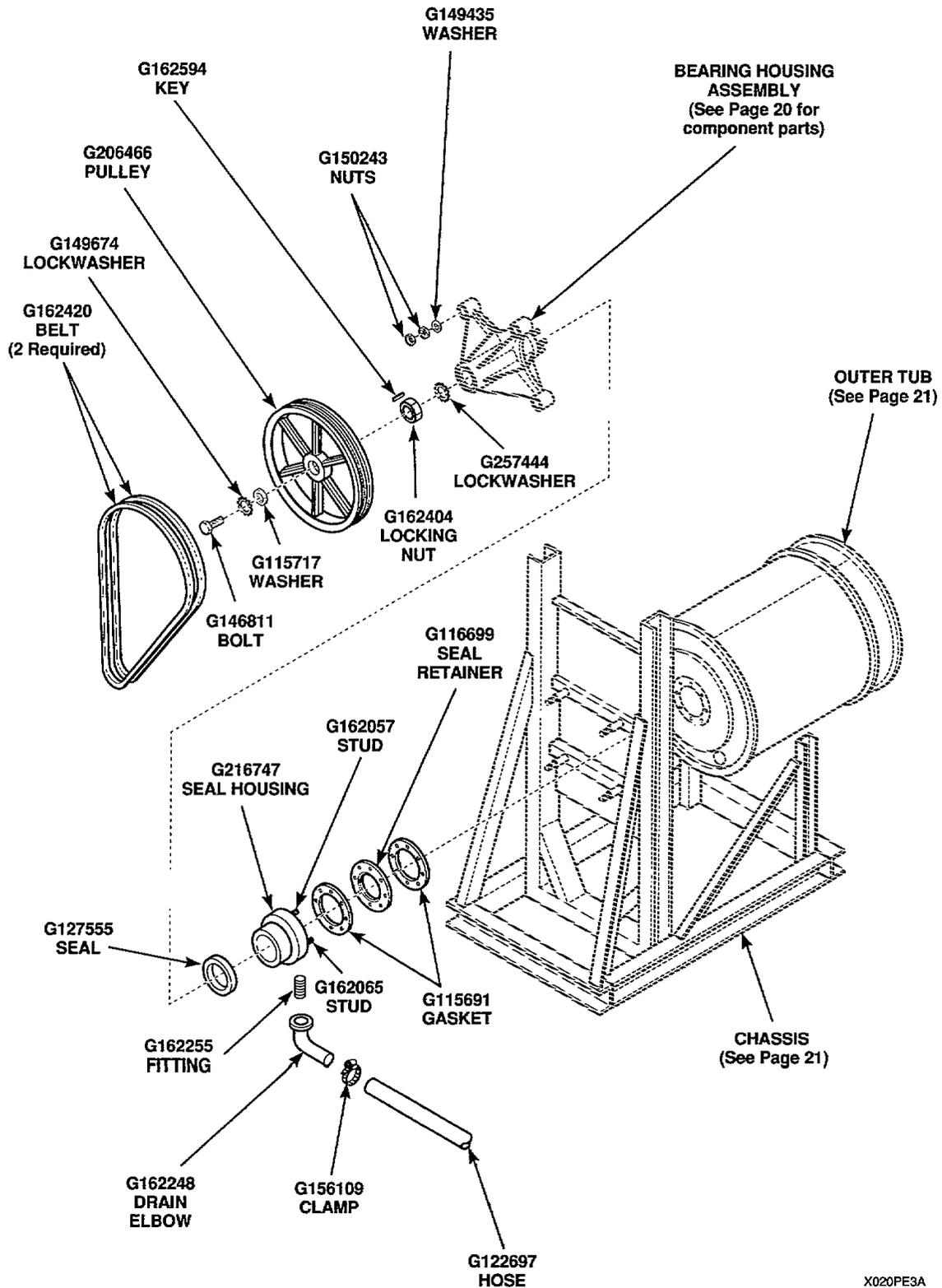


**DOOR HANDLE**  
 Gray ..... G255083  
 Black ..... G268078

**DOOR BRACKET**  
 Gray ..... G255158  
 Black ..... G268029

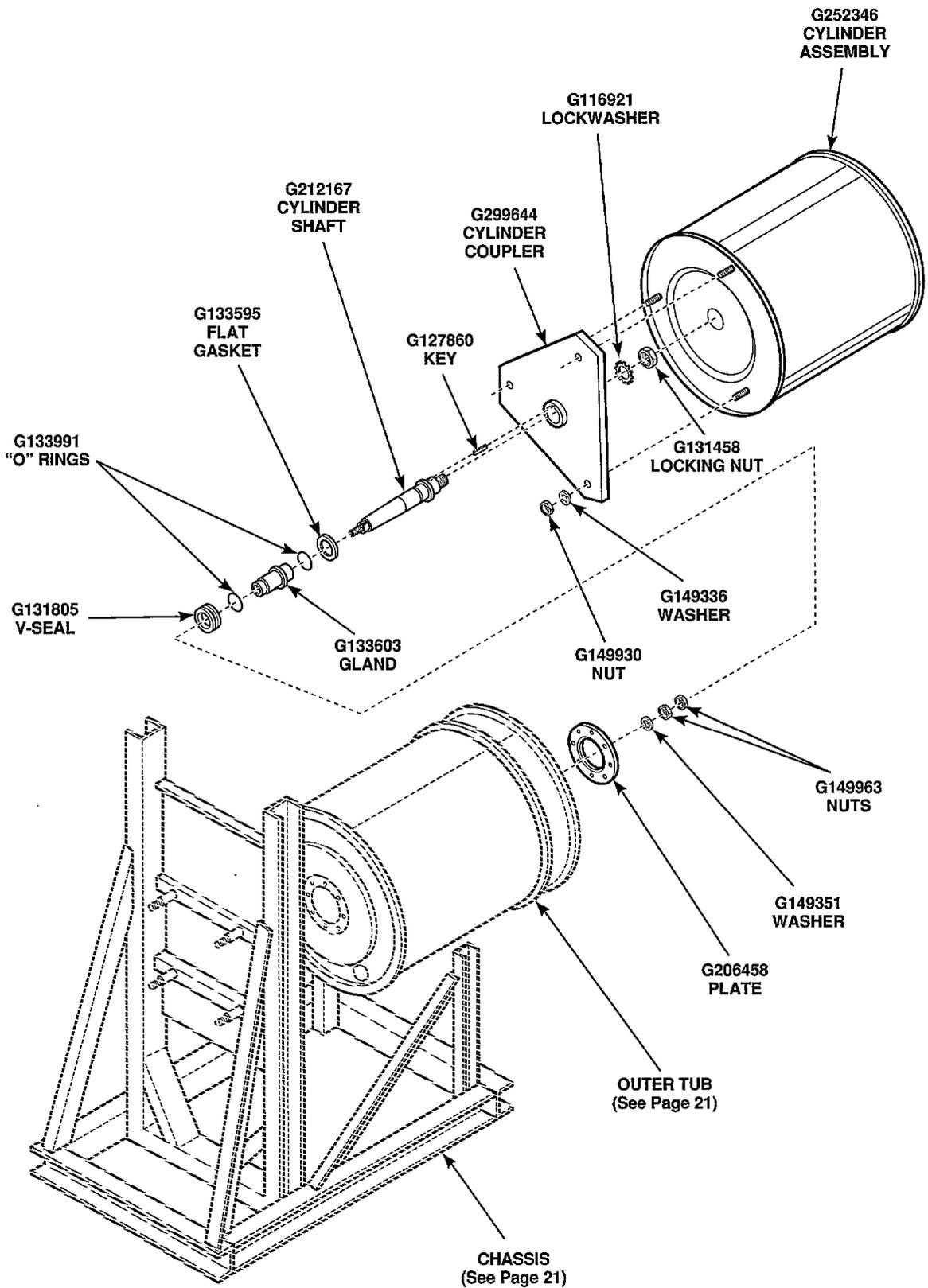
**DOOR BRACKET ASSEMBLY**  
 (Starting Serial Number G0550497)

X019PE3A



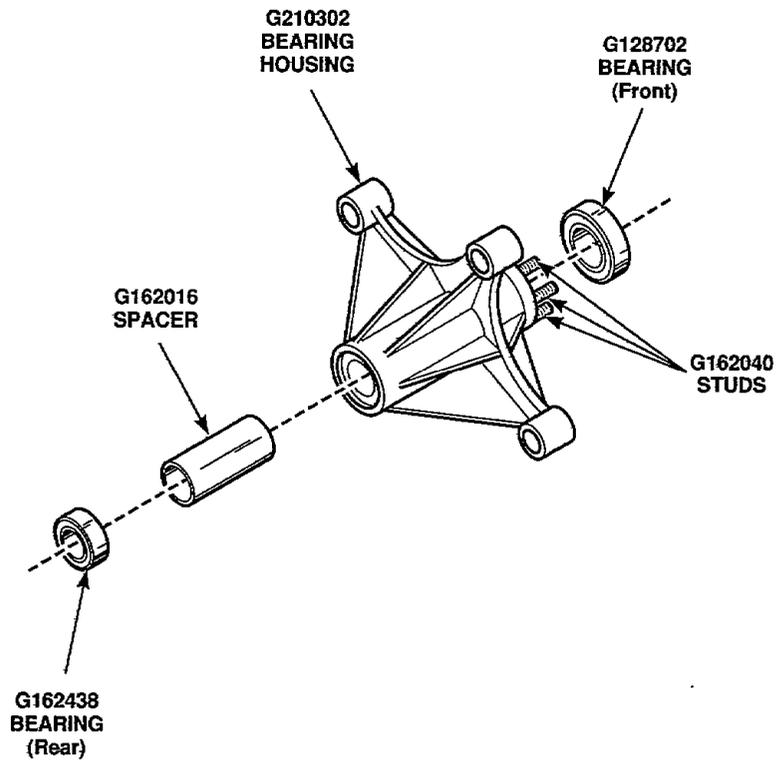
X020PE3A

**BELTS, PULLEY AND SEAL HOUSING**



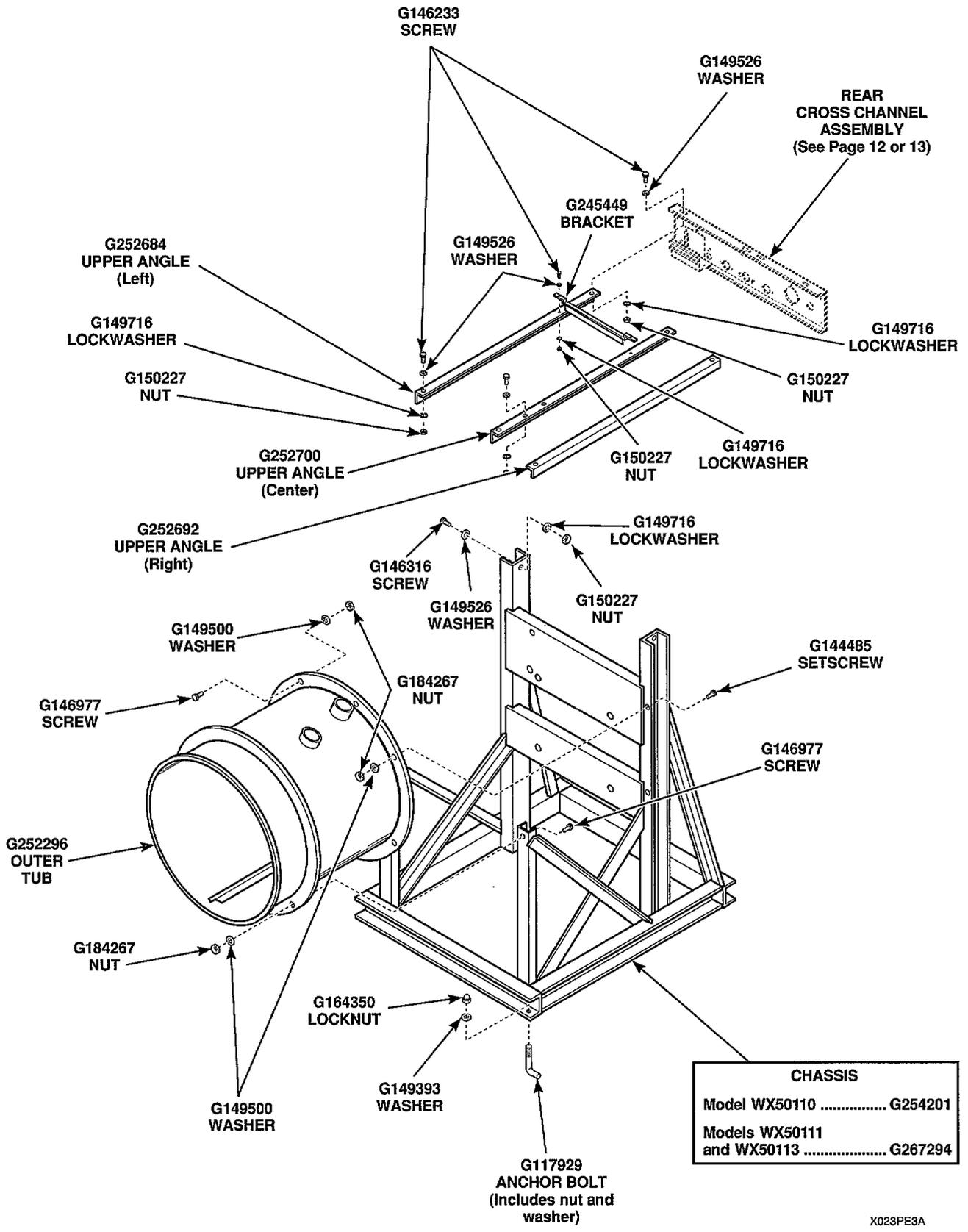
X021PE3A

**CYLINDER AND SHAFT ASSEMBLY**



X022PE3A

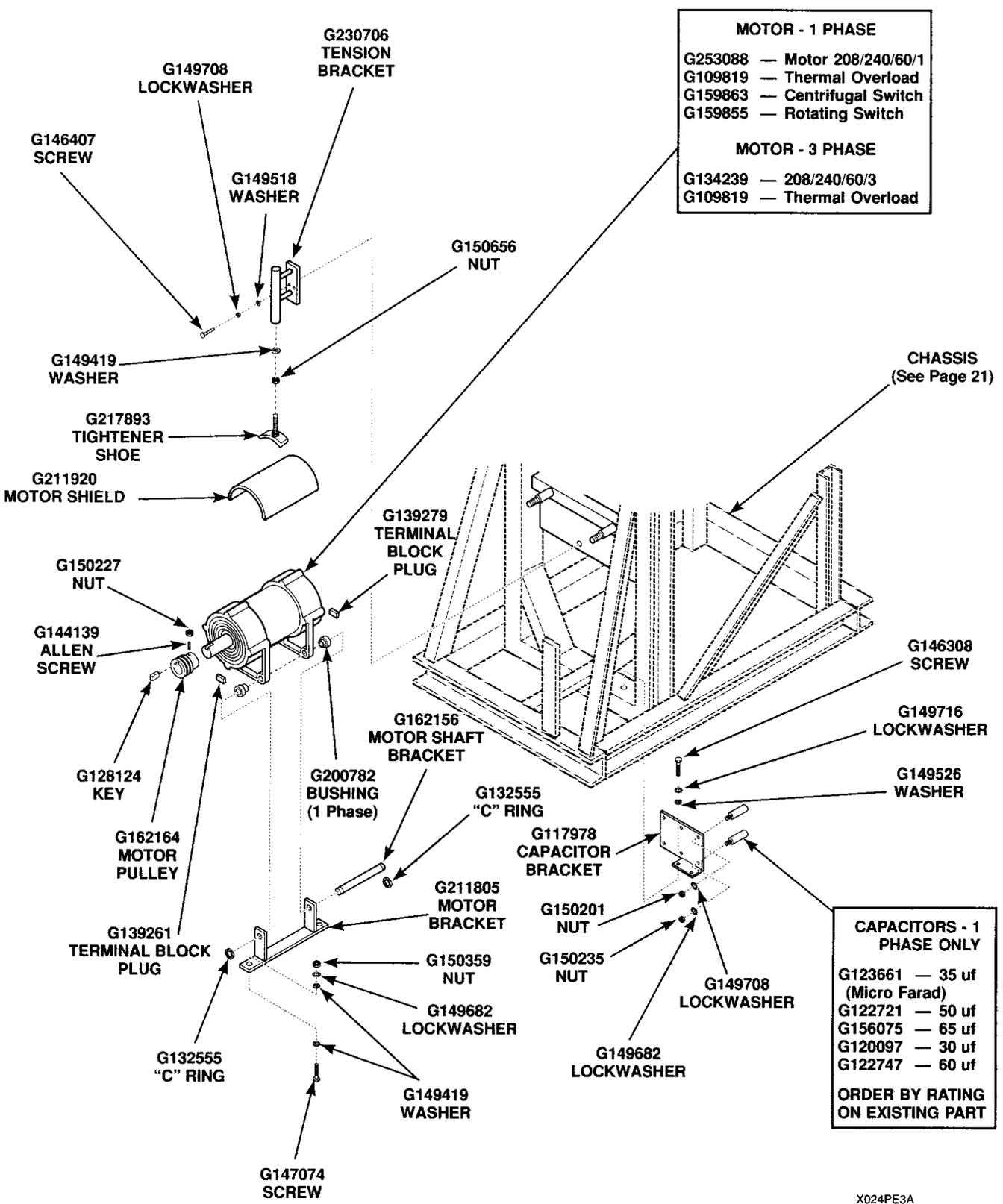
### BEARING HOUSING ASSEMBLY



CHASSIS	
Model WX50110 .....	G254201
Models WX50111 and WX50113 .....	G267294

X023PE3A

**OUTER TUB AND CHASSIS**

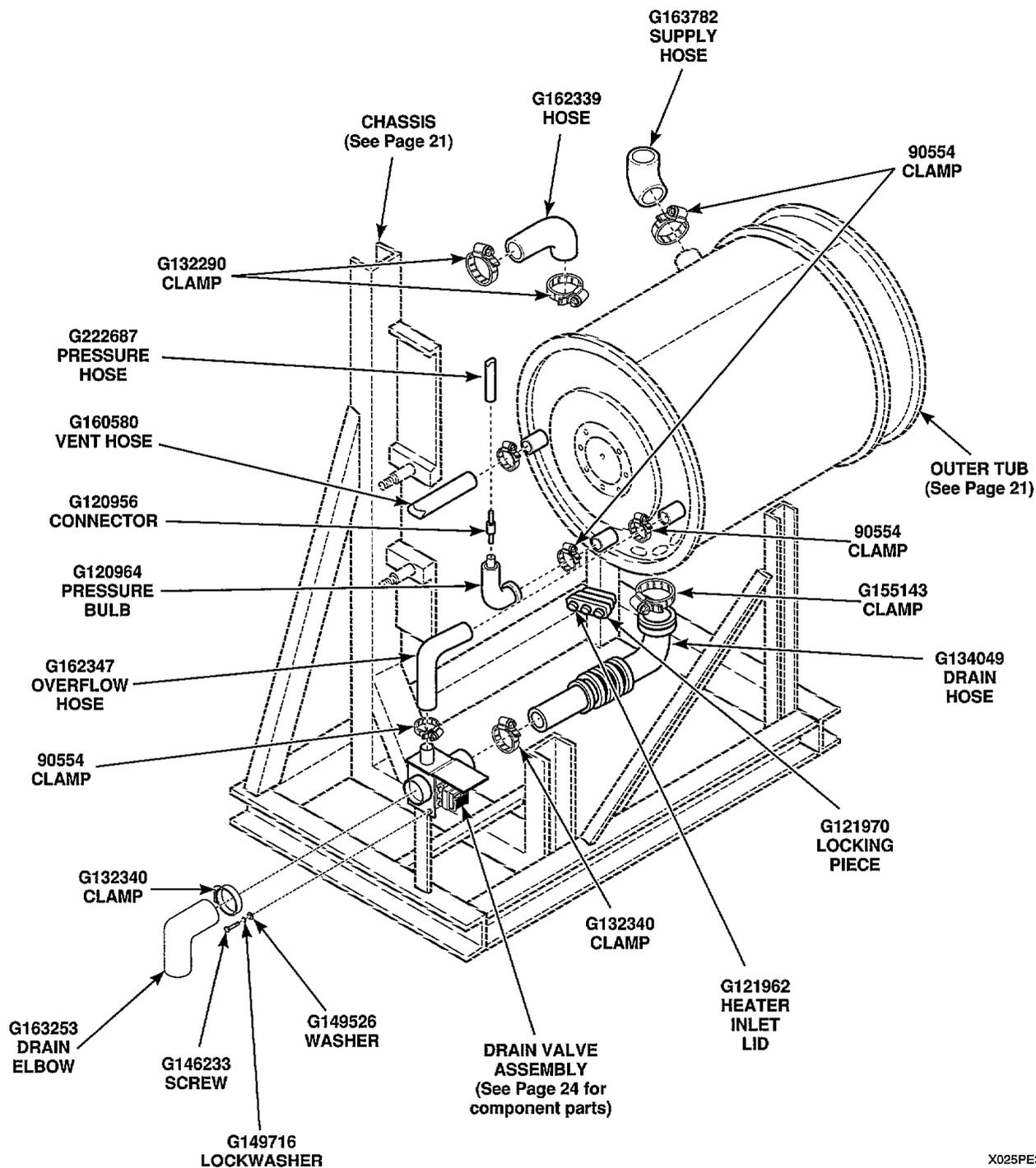


- MOTOR - 1 PHASE**
- G253088 — Motor 208/240/60/1
  - G109819 — Thermal Overload
  - G159863 — Centrifugal Switch
  - G159855 — Rotating Switch
- MOTOR - 3 PHASE**
- G134239 — 208/240/60/3
  - G109819 — Thermal Overload

- CAPACITORS - 1 PHASE ONLY**
- G123661 — 35 uf (Micro Farad)
  - G122721 — 50 uf
  - G156075 — 65 uf
  - G120097 — 30 uf
  - G122747 — 60 uf
- ORDER BY RATING ON EXISTING PART**

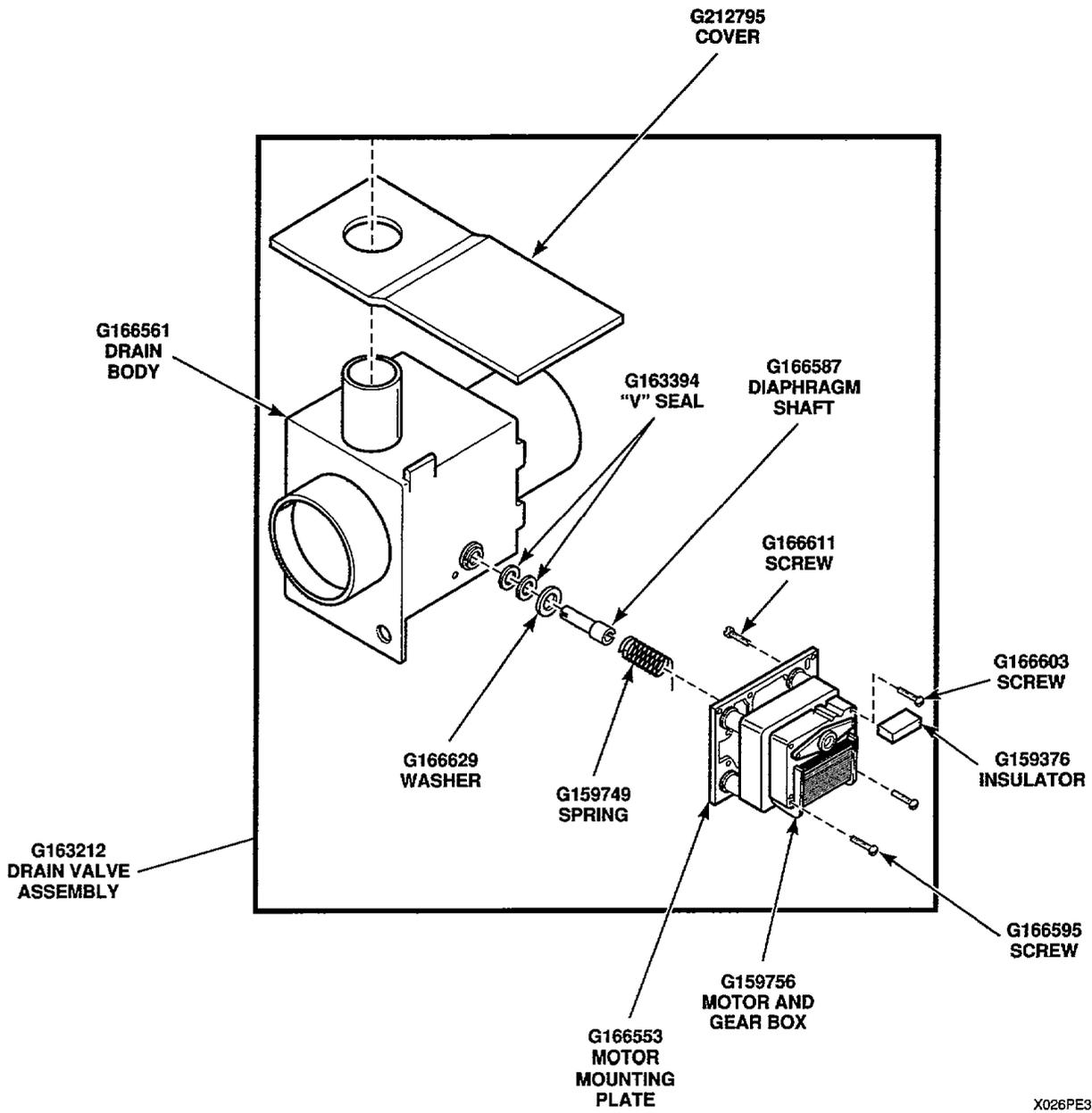
**MOTOR AND CAPACITORS**

X024PE3A



X025PE3A

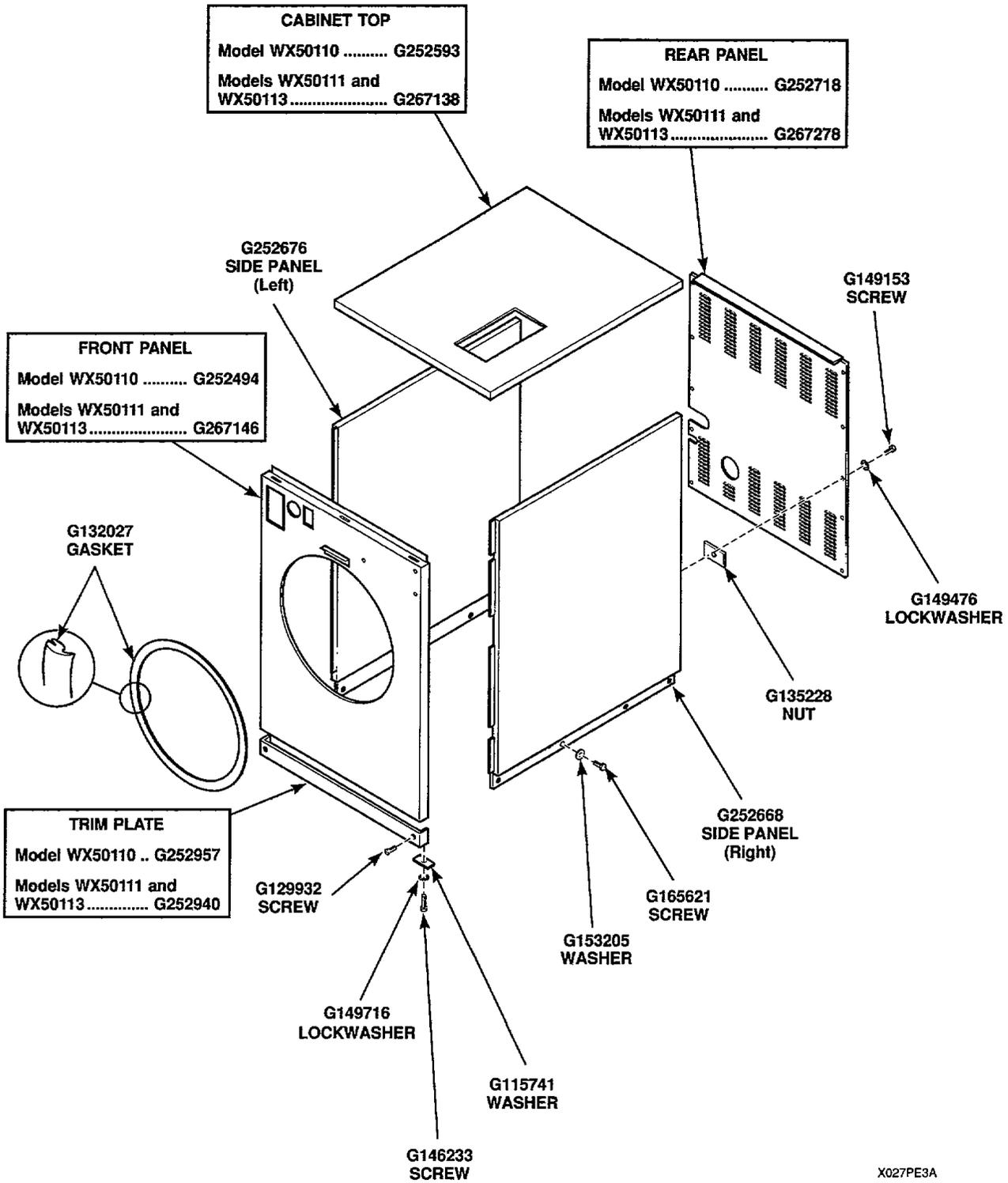
**PRESSURE HOSE, BULB, DRAIN VALVE ASSEMBLY AND HOSES**



X026PE3A

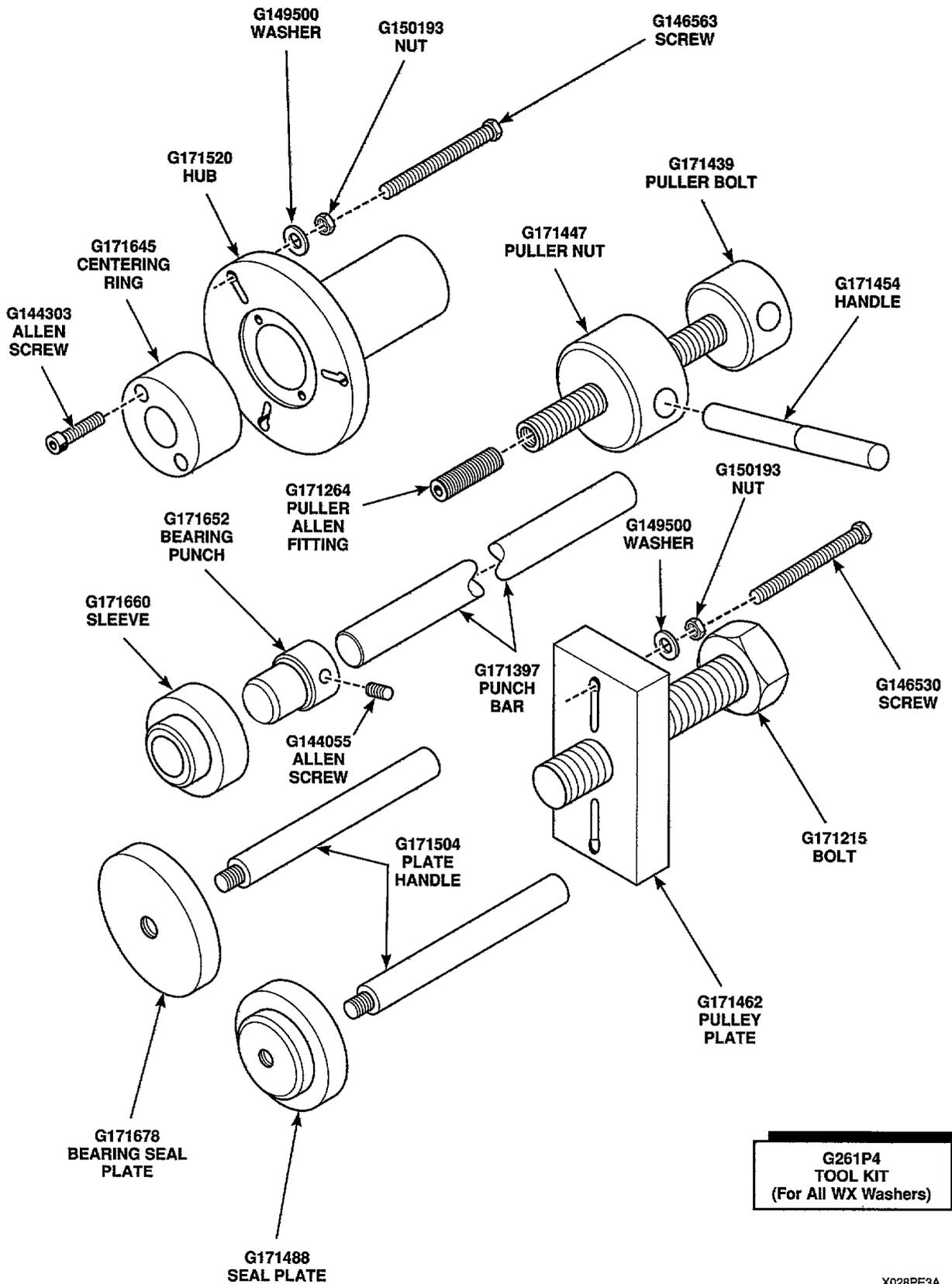
**DRAIN VALVE ASSEMBLY**





X027PE3A

**CABINET TOP, SIDE, FRONT AND REAR PANELS**



**G261P4  
 TOOL KIT  
 (For All WX Washers)**

**SPECIAL TOOLS**

X028PE3A

# SECTION II

## Service Procedures

### ▲ WARNING

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

To aid in servicing of the washer-extractor, refer to the parts section for assembly sequence.

**NOTE: When reference to directions (right or left) is made in this manual, it is from the operator's position facing front of washer.**

**IMPORTANT: Metric tools are required for servicing the washer.**

### 1. CABINET TOP

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold-down tabs on top flange of front panel.
- Lift cabinet top off washer.

### 2. COIN DROP ASSEMBLY

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold-down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Remove nuts and lockwashers holding coin drop assembly to front of washer.
- Remove coin drop assembly out through opening in front panel as far as wires permit.
- Disconnect wires from coin drop assembly.

**NOTE: Before removing wires from coin drop assembly, mark terminal connections and wire numbers so wires can be reinstalled correctly. If you have a problem in rewiring the coin drop assembly, refer to wiring diagram located on underside of cabinet top.**

### 3. MANUAL START SWITCH ASSEMBLY

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold-down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Remove screws, nuts and lockwashers holding switch assembly to front of washer and remove switch assembly out through front of washer as far as wires permit.
- Disconnect wires from switch assembly.

**NOTE: Before removing wires from switch assembly, mark terminal connections and wire numbers so wires can be reinstalled correctly. If you have a problem in rewiring the manual start switch, refer to wiring diagram located on underside of cabinet top.**

### 4. CONTROL PANEL

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert a key into lock (located on the rear cross channel) and unlock.
- Lift up back portion of cabinet top panel, slide it forward to disengage cabinet top from hold down tabs at the front.
- Lift cabinet top off washer.
- Remove six nuts and washers holding control panel to washer front panel.
- Pull control panel forward exposing door open switch and run light.
- Using a snap ring pliers, remove snap ring holding run light to control panel.
- Disconnect wires from light, then bend tabs on the four corners of light and push light out through front of control panel.

**IMPORTANT: Before disconnecting wires from switch light, mark terminal connections and wire numbers so wires can be reinstalled correctly.**

## **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

### **5. PROGRAM TIMER ASSEMBLY**

- a. Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- b. Insert a key into lock (located on rear cross channel) and unlock.
- c. Lift up on the back portion of cabinet top back panel, and slide it forward to disengage cabinet top from hold down tabs at front.
- d. Lift cabinet top off washer.
- e. Remove two screws holding program timer mounting plate to rear of display window.

**IMPORTANT: Mark all wire numbers and corresponding terminals on a separate piece of paper before disconnecting any wiring. If you have a problem in rewiring the timer, refer to wiring diagram located on underside of cabinet top.**

#### **TIMER DIAL REMOVAL**

Remove setscrew holding timer dial to timer shaft and remove timer dial.

#### **TIMER MOUNTING PLATE REMOVAL**

Remove two screws holding timer mounting plate to front of timer.

### **6. CYCLE SWITCH**

- a. Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- b. Insert a key into lock (located on rear cross channel) and unlock.
- c. Lift up back portion of cabinet top back panel, and slide it forward to disengage cabinet top from hold down tabs at front.
- d. Lift cabinet top off washer.
- e. Remove two screws holding cycle switch assembly to U-bracket mounted to backside of front panel.
- f. Loosen bottom screws holding cycle switch assembly to lower bracket. Do not remove bottom screws. We recommend that before sliding switch assembly up, bend it slightly to the rear so that buttons clear front panel and the assembly can be pulled up and out of washer.

**IMPORTANT: When replacing switch assembly, do a wire-for-wire exchange, or write down all wire terminal connections before removing any wires. If you have a wiring problem, refer to wiring diagram on underside of cabinet top.**

**NOTE: When reinstalling switch, be sure that screw head and washer are behind bottom of switch plate assembly. The switch must be aligned through panel before putting screw back in and tightened.**

## **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

WC03

### **7. PRESSURE SWITCH**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Remove screw and washer holding pressure switch to rear tab on control tray.
- Disconnect pressure hose from pressure switch.

**IMPORTANT: Before disconnecting wires from pressure switch, write down switch terminal connections and wire numbers so switch can be rewired correctly.**

- Tape pressure hose to top side of outer tub to prevent hose from falling to washer base.

**IMPORTANT: When installing pressure hose, blow air through pressure hose before connecting hose to pressure switch to remove any condensation that may have accumulated in hose.**

### **8. CONTACTORS (Wash or Spin)**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Use a small flat blade screwdriver and move side tab out (located on left side of contactor) and carefully remove contactor off rail.
- Disconnect wires from contactor.

**IMPORTANT: Before removing wires from contactor, mark terminal contactors and wire number so wires can be reinstalled correctly.**

### **9. INLET VALVE (Hot Water-Two Track Valve)**

**NOTE: Turn off water supply to washer.**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on the rear portion of cabinet top, slide top forward to disengage cabinet top from hold-down tabs located on top flange of front panel.
- Remove cabinet top.
- Remove hot water inlet hose from brass adapter at the rear of washer.
- Remove brass adapter from hot water inlet valve.

**IMPORTANT: Before removing wires from solenoids, mark terminal connections and wire number so wires can be reinstalled correctly.**

- Mark internal hoses so they can be reinstalled on correct valve outlet.
- Loosen hose clamps and remove hoses from valve.
- Remove screws holding inlet valve to rear cross channel and remove valve from inside of washer.

## **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

### **10. INLET VALVE (Cold Water-Single Track Valve)**

**NOTE: Turn off water supply to washer.**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear channel) and unlock.
- Lift rear portion of cabinet top, slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Remove cold water inlet hose from brass adapter at rear of washer.
- Remove brass adapter from inlet valve.

**IMPORTANT: Before removing wires from solenoid, mark terminal connection and wire number so wires can be reinstalled correctly.**

- Remove ground wire from inlet valve.

#### **SOLENOID REMOVAL**

- Loosen five screws holding solenoids and mounting plate to inlet valve body. **DO NOT** remove screws.
- Push coils toward rear of mounting plate and lift up. Coils will come off plunger assembly.

#### **DIAPHRAGM REMOVAL**

- Remove five screws holding solenoids and mounting plate to inlet valve body.
- Lift solenoids and mounting plate off valve body.
- Remove armature and guide from valve body, then remove diaphragm from valve body.

### **11. DISPENSER**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on the rear cross channel) and unlock.
- Lift up on back portion of cabinet top, slide top forward to disengage cabinet top from hold down located on top flange of front panel.
- Lift cabinet top off washer.
- Loosen clamps holding hoses to dispenser and remove dispenser.

**NOTE: Mark all hoses and their appropriate connection so they can be reinstalled correctly. When reinstalling hoses to dispenser, DO NOT overtighten hose clamps. If you do, water will shoot out of dispenser lid.**

### **12. DOOR OPEN SWITCH (Through Serial No. G0550496)**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Disconnect wires from door open switch.

**NOTE: Before removing wires from door open switch, mark terminal connection and wire number so wires can be reinstalled correctly.**

- Unscrew lampholder nut from inside of control panel and remove door open switch.

## **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

### 13. RUN LIGHT

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Remove six screws holding control panel to front panel.
- Disconnect wires from run light.

**NOTE: Before removing wires from run light, mark terminal connections and wire number so wires can be reinstalled correctly.**

- Using a snap ring pliers, remove snap ring holding run light to control panel.

### 14. SIPHON BREAK

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.

**NOTE: Label all hoses and their appropriate nipple on siphon break before removing hoses.**

- Loosen hose clamps and carefully remove all hoses from siphon break.

**IMPORTANT: Use a hair dryer or similar heating device to heat ends of hoses where they attach to siphon break. This will help loosen hoses and prevent nipples on siphon break from breaking off when hoses are removed.**

**Pull hoses straight off nipples. If you do not, nipples may break off siphon break.**

- Remove four screws attaching grid and gasket to rear channel and remove grid and gasket.
- Remove screw holding siphon break to rear channel and remove siphon break and gasket from rear channel.

### 15. RESET — SINGLE PHASE WASHERS

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage the cabinet top from the hold down tabs on the top flange of front panel.
- Lift cabinet top off washer.
- Disconnect wires to reset.

**NOTE: Before removing wires from reset, mark terminal connections and wire numbers so wires can be reinstalled correctly.**

- Turn nut off reset and pull reset out through top of washer.

### 16. LOADING DOOR

- Through Serial No. G0550496 —** Unscrew two round plugs from door bracket using special emergency door opening tool supplied with washer. Place your finger inside left hole and move slide bar mechanism to the right to unlock door.  
**Starting Serial No. G0550497 —** Use special door open tool (supplied with washer) and unlock door by pushing pin on tool up through hole in bottom side of door bracket, and at the same time, move door handle down to unlock door.  
Unscrew round plug from front of door bracket using special plug key (supplied with washer).
- Loosen locknut on setscrew (located inside hole in door bracket) and remove setscrew.
- Remove large nut holding door to the door bracket. Thread complete door assembly off large bolt on door bracket.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**17. DOOR LOCK ASSEMBLY OR SAFETY LOCK COIL AND BRACKET**

- a. **Through Serial No. G0550496 —**  
Unscrew two round plugs from door bracket using special emergency door opening tool supplied with washer. Place your finger inside left hole and move slide bar mechanism to the right to unlock door.  
**Starting Serial No. G0550497 —** Use special door open tool (supplied with washer) and unlock door by pushing pin on tool up through hole in bottom side of door bracket, and at same time, move door handle down to unlock door.  
Unscrew round plug from front of door bracket using special plug key (supplied with washer).
- b. Loosen locknut on setscrew (located inside hole in door bracket) and remove setscrew.
- c. Remove large nut holding door to door bracket. Thread complete door assembly off large bolt on door bracket.
- d. **Through Serial No. G0550496 —**  
Remove "C" ring holding slide bar mechanism to center bolt on door bracket. Remove four screws holding door lock assembly to door bracket. Remove slide bar mechanism. Remove two screws holding door lock assembly to door bracket.  
**Starting Serial No. G0550497 —**  
Remove six screws holding safety lock coil and mounting bracket to door bracket.
- e. Disconnect wires from door mechanism.

**IMPORTANT: Before disconnecting wires from door mechanism, write down terminal connections and wire number so door mechanism can be rewired correctly.**

**18. DOOR SAFETY SWITCH**

- a. **Through Serial No. G0550496 —**  
Unscrew left round plug from door bracket using special plug key supplied with washer. Place your finger inside hole and move slide bar mechanism to the right to unlock door.  
**Starting Serial No. G0550497 —** Use special door open tool (supplied with washer) and unlock door by pushing pin on tool up through the hole in the bottom of door bracket, and at same time, move door handle down to unlock door.  
Unscrew round plug from front of door bracket using special plug key (supplied with washer).
- b. Remove two small nuts holding door safety switch and plate to door bracket.
- c. Pull switch and plate out of door bracket far enough to permit disconnecting of wires from switch terminals.
- IMPORTANT: Before disconnecting wires from switch terminals, write down switch terminal connections and wire numbers so switch can be rewired correctly.**
- d. Remove nut holding door safety switch to switch plate.

## ▲ WARNING

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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## 19. DOOR GASKET

- Peel old door gasket from door frame channel.

**NOTE: If old gasket was adhered to door frame, it will require scraping off old adhesive before installing new door gasket. Clean and dry door frame channel.**

- Apply a bead (1/8" diameter) of good quality water and temperature resistant silicone sealer (RTV) to door frame gasket channel.

### DOOR GASKET INSTALLATION

- No. G132167 Door Gasket** — Locate split in outer edge of new gasket. Place narrow lip into door frame channel and push gasket into position. Use a screwdriver or similar tool to reach through split in gasket. Use tool to seat gasket into channel and seal all the way around. Seat thicker lip of gasket into channel.

**IMPORTANT: When installing door gasket, seam MUST be positioned in either the three o'clock or nine o'clock position. If it is not in either of these positions, gasket will leak.**

**No. G182642 Door Gasket** — Turn the new door gasket one quarter turn so wide part of gasket is facing you. Carefully tuck new door gasket into door frame channel.

**IMPORTANT: When installing door gasket, seam MUST be positioned at twelve o'clock. If it is not in this position, gasket will leak.**

## 20. OUTER TUB FRONT PANEL

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Disconnect four wires from door lock assembly to terminal block. Wire connection from right to left is "L1" first position, "55" second position, "207" third position and "56" fourth position.
- Disconnect green ground wire from control panel plate.
- Remove two screws holding nameplate housing to front of washer and remove nameplate housing.
- With nameplate housing removed, mark outer tub front panel at a position on front panel to assist with reinstallation of outer tub front panel.
- Pull door lock wires out through opening in front panel.
- Remove bolt, washers and nut holding clamp ring to front of washer and remove clamp ring.
- While supporting outer tub front panel and door assembly, carefully remove gasket.
- Carefully remove outer tub front panel and door assembly from washer.

**IMPORTANT: When reinstalling outer tub front panel and loading door, line up two panels where they were marked during disassembly, see step "h", or use a tape measure to measure distance from top of door arm to top of control panel. With door arm horizontal to control panel, distance should be 22 inches from top of each end of door arm to top of control panel.**

**IMPORTANT: Reinstallation of the outer tub front panel MUST be done with two people.**

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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- a. Position and support outer tub front panel (with door attached) to front of outer tub. Use spacers approximately same thickness as the center rib of clamp ring gasket. Place spacers at 4 o'clock and 8 o'clock positions between outer tub lip and outer tub front panel. Clamp into position using clamping pliers.

Starting at the 12 o'clock position, install clamp ring gasket. The gasket has two grooves, one groove goes over outer tub lip and the other goes over outer tub front panel lip. After installing approximately six inches of gasket, clamp gasket, outer tub and outer tub front panel with a clamping pliers at the starting point. Continue to install gasket until you are at the clamping pliers and spacer near the 4 o'clock position. Once again clamp gasket, outer tub and outer tub front panel with a clamping pliers before removing clamping pliers and spacer at the 4 o'clock position. Proceed in this manner until gasket is completely installed.

While one person holds outer tub front panel in position, the second person can remove clamping pliers and install clamp ring.

- b. With gasket in place, start at top and place clamp ring around clamp ring gasket. The tabs on clamp ring should be one quarter of the way into bracket on front panel. Do not tighten clamp ring at this time.
- c. With door assembly lined up correctly (22 inch measurement), begin tapping clamp ring with a rubber or vinyl mallet all the way around to pull two sides of clamp together. Begin tightening clamp ring using bolt, washers and nut. Continue to tap around outer edge of clamp ring as bolt is being tightened to ensure a water tight seal.
- e. Route four wires and ground wire from door switch mechanism through hole in front panel and up into control tray.

**NOTE: Be sure insulating tube is in hole in front panel to protect wires.**

- f. Reconnect wires to terminal block.

**NOTE: Wire connection from right to left is "L1" first position, "55" second position, "207" third position and "56" fourth position.**

- g. Attach nameplate housing to washer with two screws.
- h. Place cabinet top onto washer and lock it into position. Reinstall screws into each of the rear corner tabs.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**21. FRONT PANEL**

- a. Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- b. Insert key into lock (located on rear cross channel) and unlock.
- c. Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- d. Lift cabinet top off washer.
- e. Remove six nuts and washers holding control panel to washer front panel.
- f. Pull control panel forward exposing door open switch and run light.
- g. Using a snap ring pliers, remove the snap ring holding run light to control panel.
- h. **Through Serial No. G0550496** — Turn plastic nut off white barrel of door open switch and disconnect four wires.  
**Starting Serial No. G0550497** — Disconnect wires from light, then bend tabs on four corners of light and push light out through front of control panel.

**NOTE: Before removing wires from switch and light, mark terminal connections and wire numbers so wires can be reinstalled correctly.**

- i. Remove screws, lockwashers and nuts holding bottom edge of front panel to chassis and remove front panel.

**22. REAR PANEL**

- a. Remove screws holding rear panel to cabinet and remove rear panel.

**▲ WARNING**

**To reduce the risk of serious injury or death, the rear panel MUST be installed before operating washer. The rear panel keeps dust and dirt from accumulating on motor and adds rigidity to structure of washer, and provides safety protection.**

**23. BELTS**

- a. Remove screws holding rear panel to cabinet and remove rear panel.

**▲ WARNING**

**To reduce the risk of serious injury or death, the rear panel MUST be installed before operating washer. The rear panel keeps dust and dirt from accumulating on motor and adds rigidity to structure of washer, and provides safety protection.**

- b. Use a piece of two-by-four or something similar for leverage to lift motor while running belts off pulley. Once belts have been removed from pulley, lower motor gradually. **DO NOT** let it drop or you could damage the motor.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**24. CYLINDER PULLEY ASSEMBLY**

- Remove screws holding rear panel to cabinet and remove rear panel.

**▲ WARNING**

**To reduce the risk of serious injury or death, the rear panel MUST be installed before operating washer. The rear panel keeps dust and dirt from accumulating on motor and adds rigidity to structure of washer, and provides safety protection.**

- Use a piece of two-by-four or something similar for leverage to lift motor while running belt off pulley. Once belt has been removed from pulley, lower motor gradually. **DO NOT** let it drop or you could damage the motor.

**NOTE: Block cylinder at front of washer to keep cylinder from rotating when removing pulley bolt and pulley.**

- Using a 22mm socket, remove the large bolt, lockwasher and washer holding pulley to cylinder shaft.
- With No. G171215 Bolt screwed into No. G171462 Pulley Plate, attach pulley plate to tapped holes in pulley hub with two bolts, No. G146530, washers, No. G149500, and nuts No. G150193. The washers, No. G149500, go between nut and pulley plate (see Page 27). Use an 18mm wrench to turn nuts tight against pulley plate.
- Turn large bolt **clockwise** to pull pulley off shaft.

**PULLEY INSTALLATION**

- Insert No. G171264 Puller Allen Fitting into No. G171439 Puller Bolt approximately one inch.

**NOTE: Install puller allen fitting into puller bolt with allen hex end extending out from puller bolt.**

- Insert pulley key onto shaft and start pulley onto shaft with a hammer.
- Screw No. G171439 Puller Bolt, with G171264 Puller Allen Fitting, into cylinder shaft lockwasher and washer.
- Insert No. G171454 Handle into No. G171447 Puller Nut and turn drive nut **clockwise** to push pulley onto shaft.
- When pulley is seated firmly on shaft, install large washer, lockwasher and bolt into shaft and tighten firmly.

## **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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## **25. CYLINDER AND SHAFT REMOVAL**

- Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- Insert key into lock (located on rear cross channel) and unlock.
- Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold down tabs on top flange of front panel.
- Lift cabinet top off washer.
- Remove outer tub front panel, with door attached, paragraph 20.
- Remove screws holding rear panel to cabinet and remove rear panel.
- Remove belts and cylinder pulley, paragraphs 23 and 24.
- Remove key, locknut and lockwasher from shaft.
- Attach No. G171645 Centering Ring to No. G171520 Hub with No. G144303 Allen Screws.
- Turn No. G150193 Nuts onto three No. G146563 Screws and attach hub (with the centering ring attached) to bearing housing. Once bolts are tight, turn No. G150193 Nuts tight against hub (see Page 27).
- Thread No. G171215 Bolt into housing through hub and centering ring.

**NOTE: Block cylinder at front of washer to keep it from rotating.**

- Turn bolt **clockwise** to push cylinder and shaft out through front of washer. Carefully remove cylinder and shaft assembly from washer.

## **CYLINDER AND SHAFT DISASSEMBLY**

- Remove gland from shaft.
- Remove V-seal from outside of gland, and remove O-rings and flat gasket from shaft.
- Remove cylinder coupler from cylinder by removing three nuts and washers from studs attaching coupler to cylinder.
- Remove shaft from cylinder by removing locking tab and locknut located at base of shaft.

## **ASSEMBLY OF CYLINDER AND SHAFT**

**IMPORTANT: We recommend installing new "O" rings, "V" seal and flat gasket whenever cylinder and shaft assembly are removed. Lubricate inside of "O" rings before installing. Make sure new "O" rings are not cut or damaged and are in their normal (not inside out) position when in place. Apply a bead of sealant, such as Dow Corning® 732-RTV or equivalent (these are clear silicone sealants), around entire area where gland and flange on the shaft meet.**

- Install new flat gasket.
- Install new "O" rings on shaft. **See Important above.**
- Install gland on shaft.
- Install new "V" seal.
- Place key in slot of shaft, then insert cylinder shaft into cylinder coupler.
- Install lockwasher and locking nut. Tighten locking nut firmly.

**IMPORTANT: After locking nut has been tightened, bend at least two locking tabs on lockwasher into place on nut.**

- Place cylinder shaft and coupler over rib rods protruding through rear of cylinder. Secure coupler to cylinder using washers and nuts. Tighten nuts firmly.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**26. BEARING HOUSING AND SEAL HOUSING**

**a. Bearing Housing and Seal Housing Removal:**

1. Remove cylinder and shaft assembly, paragraph 25.
2. Using a 13mm socket, remove 16 nuts and eight washers holding plate to inside of outer tub.

**IMPORTANT: Before removing nuts and washers, lay a cloth over drain housing (located inside outer tub) so nuts and washers do not fall into drain housing.**

3. Pry plate off inside of outer tub.
4. Remove eight nuts and four washers holding bearing housing to back of chassis.
5. Pull bearing housing off back of chassis.

**▲ WARNING**

**To reduce the risk of serious injury or death, use care when removing bearing housing from rear of washer as bearing housing is very heavy.**

6. Remove seal housing.

**b. Bearing Housing Disassembly:**

1. Insert No. G171397 Punch Bar into No. G171652 Bearing Punch and tighten with No. G144055 Allen Screw. Insert punch bar with bearing punch through center of front bearing and drive rear bearing out of housing.
2. Reverse housing and place a nut on each of the four bearing housing studs to protect the threads.
3. Drop No. G171660 Sleeve into bearing housing cavity, making sure it is seated evenly. Drive front bearing out of housing with punch bar and sleeve.

**c. Seal Housing Disassembly:**

**NOTE: Inspect seal housing for any signs of wear or leakage and replace worn parts.**

1. Pry seal from seal housing.
2. Install new seal in seal housing and seat firmly with No. G171504 Plate Handle and No. G171488 Seal Plate.

**NOTE: When replacing seal, we recommend installing new bearings also.**

**NOTE: When installing new seal, apply a retaining compound (such as Loctite) to outside diameter of seal to assure a water tight seal. Lubricate inside diameter of seal with No. 03637P Lubricant.**

**d. Assembly of Bearing Housing:**

**NOTE: Apply a retaining compound (such as Loctite) to outside diameter of bearings before installing bearings into bearing housing.**

1. Install front bearing first.
2. Thread No. G171504 Plate Handle into No. G171678 Bearing Seal Plate.
3. Install front bearing flat into bearing housing cavity. Place plate handle with bearing seal plate over bearing and seat bearing in housing by pounding on plate handle with a hammer.

## **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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### e. Bearing Housing Installation:

**NOTE: The rear bearing is installed after cylinder and shaft have been pulled through front bearing and housing.**

1. Insert seal housing onto bearing housing assembly.
2. Place bearing assembly onto back of chassis, making sure elbow and seal drain hose come out bottom of assembly.
3. Secure bearing housing to chassis with eight nuts and four washers and tighten the nuts evenly and firmly.
4. Place seal plate over eight bolts inside outer tub and secure seal plate with a washer and two nuts on each bolt. Tighten nuts evenly and firmly.

### f. Cylinder and Shaft Installation:

1. Insert cylinder and shaft assembly into bearing housing from front of washer through outer tub. Run cylinder and shaft in as straight as possible to prevent damage to seals.
2. Mount No. G171520 Hub to bearing housing with three No. G146563 Screws.
3. Insert an allen wrench into No. G171264 Puller Allen Fitting and turn puller allen fitting into No. G171439 Puller Bolt approximately one inch.

**NOTE: Install puller allen fitting into puller bolt with allen hex end extending out from puller bolt.**

4. Screw No. G171447 Puller Nut onto No. G171439 Puller Bolt.
5. Screw puller bolt, with puller allen fitting, into cylinder shaft until puller bolt locks in against cylinder shaft.

**NOTE: Block cylinder at front of washer to prevent cylinder from rotating while pulling cylinder and shaft into bearing housing.**

6. Turn No. G171447 Puller Nut **clockwise** to pull cylinder shaft through bearing housing to properly position cylinder. Turn puller nut until cylinder is properly seated against front bearing.
7. Loosen puller nut and completely remove puller bolt, with puller allen fitting, from cylinder shaft.

### g. Rear Bearing Installation:

**NOTE: Install rear bearing after cylinder and shaft assembly are installed.**

1. Remove No. G171520 Hub from bearing housing. Place rear bearing onto shaft and center bearing over opening in bearing housing.
2. Place No. G171520 Hub back onto bearing housing, over cylinder shaft.
3. Screw No. G171439 Puller Bolt, with puller allen fitting, into cylinder shaft.
4. Using No. G171454 Handle, turn puller nut up tight against hub. Turn puller nut **clockwise** until rear bearing is seated firmly in bearing housing.
5. Remove puller bolt, with puller allen fitting from cylinder shaft.
6. Install lockwasher and locking nut on cylinder shaft and tighten nut firmly.

**IMPORTANT: After locking nut has been tightened, bend at least two locking tabs on lockwasher into place on nut.**

### h. Cylinder Pulley Installation:

1. Insert No. G171264 Puller Allen Fitting into No. G171439 Puller Bolt approximately one inch.

**NOTE: Install pulley allen fitting into puller bolt with allen hex end extending out from puller bolt.**

2. Insert pulley key onto shaft and start pulley onto shaft with a hammer.
3. Screw No. G171439 Puller Bolt with No. G171264 Puller Allen Fitting into cylinder shaft.
4. Insert No. G171454 Handle into No. G171447 Puller Nut and turn nut **clockwise** to push pulley onto shaft.
5. When pulley is seated firmly onto shaft, install large washer, lockwasher and bolt into shaft and tighten firmly.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**27. SIDE PANELS (Right or Left)**

- a. Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- b. Insert a key into lock (located on rear cross channel) and unlock.
- c. Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold-down tabs located on top flange of front panel.
- d. Lift cabinet top off washer.
- e. Remove screws and washers holding rear panel to chassis and remove rear panel.
- f. Remove screws and washers holding side panels to chassis and remove side panels.

**28. OUTER TUB**

- a. Remove cabinet top, paragraph 1, rear panel, paragraph 22 and side panels, paragraph 27.
- b. Remove control panel, paragraph 4.
- c. Remove belts and pulley, paragraphs 23 and 24.
- d. Remove outer tub front panel, paragraph 20, and front panel, paragraph 21.
- e. Remove cylinder and shaft assembly, paragraph 25.
- f. Loosen all clamps and remove all hoses from outer tub.
- g. Remove setscrew, washer and nut holding front of outer tub to each side of chassis.
- h. Remove eight setscrews, washers and nuts holding outer tub to chassis and remove outer tub from chassis.

**29. MOTOR**

**NOTE: Disconnect ground wire before removing motor.**

- a. Remove screws holding rear panel to cabinet and remove panel.
- b. Use a piece of two-by-four or something similar to use for leverage to lift motor while running belts off pulley. Once belts have been removed from pulley, lower motor gradually, DO NOT let it drop or you could damage motor.
- c. Remove nuts, screws and washers holding motor bracket to base of chassis assembly.
- d. Disconnect motor harness plug.

**▲ WARNING**

**To reduce the risk of serious injury or death, use care when removing the motor out the rear of the washer as the motor is very heavy.**

- e. Remove motor by grasping motor bracket shaft and carefully remove motor out rear of washer.

**NOTE: On Single Phase Units Only — Disconnect two wires from centrifugal switch at rear of motor. Make sure you mark terminal connections and corresponding wire number so wires can be reinstalled correctly.**

**IMPORTANT: We recommend that you take motor and motor bracket assembly to a machine shop and have motor bracket shaft pressed out. Have new motor installed on motor bracket and shaft pressed back into motor and bracket, if this is not done, you could end up damaging new motor.**

### **▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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### **30. CAPACITORS**

- a. Remove screws and washers holding rear panel to cabinet and remove rear panel.
- b. Use a piece of two-by-four or something similar to use for leverage to lift motor while running belts off pulley. Once belts have been removed from pulley, lower motor gradually, DO NOT let it drop or you could damage the motor.

### **▲ WARNING**

**Before handling capacitors and to reduce the risk of an electric shock, discharge the capacitors using a resistor rather than shorting.**

- c. Remove two screws holding capacitor bracket to chassis.
- d. Remove capacitor from capacitor bracket by removing nut holding capacitor to bracket and pulling the capacitor out.

**NOTE: Record wiring sequence to capacitors before removing any wires connected to them. Remember to discharge the insulated terminals after they are taken off the capacitors.**

### **31. PRESSURE BULB**

- a. Remove screws holding rear panel to cabinet and remove rear panel.
- b. Loosen hose clamp and remove pressure bulb from large nipple on back of outer tub.
- c. Disconnect pressure hose from pressure bulb by pulling hose out of connector at top of pressure bulb.

### **32. DRAIN VALVE**

- a. Remove screws holding rear panel to cabinet and remove rear panel.
- b. Loosen hose clamps and remove drain elbow, overflow hose and drain hose from drain valve.
- c. Disconnect wires from drain valve motor.
- d. Remove two screws attaching the drain valve to rear chassis brace and remove drain valve.

### **33. FUSE HOLDER AND RESISTOR ASSEMBLY**

- a. Remove two screws holding cabinet top rear corner tabs to rear cross channel of washer.
- b. Insert a key into lock (located on rear cross channel) and unlock.
- c. Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold-down tabs located on top flange of front panel.
- d. Lift cabinet top off washer.
- e. Turn nut off barrel of fuse holder and pull fuse holder out through rear channel.

### **34. TERMINAL BLOCK**

- a. Remove screws and washers holding terminal block access cover to rear cross channel and remove access cover.
- b. Disconnect wires from terminal block.

**IMPORTANT: Before disconnecting wires, label terminals and appropriate wires so wires can be reinstalled correctly.**

- c. Remove terminal block by removing screw and washer holding terminal block to inside of rear channel.

### **35. LOCK ASSEMBLY**

- a. Remove screws holding rear cabinet top rear corner tabs to rear cross channel of washer.
- b. Insert a key into lock (located on rear cross channel) and unlock.
- c. Lift up on back portion of cabinet top and slide top forward to disengage cabinet top from hold-down tabs located on top flange of front panel.
- d. Lift cabinet top off washer.
- e. Remove hex head screw and washers holding locking lever to inside of rear channel and remove locking lever.
- f. Remove lock assembly from rear channel by removing nut holding lock barrel to inside of rear channel and pulling lock out of rear channel.

# SECTION III

## Service Helps

### ▲ WARNING

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**IMPORTANT:** Refer to the Wiring Diagram for aid in testing washer components.

### 36. NO HOT WATER

POSSIBLE CAUSE	TO CORRECT
Water in hot water heater is cold.	Check water heater.
Hot water supply line is closed.	Check for closed valve, kinked hose, or obstruction in line.
Clogged inlet valve screens.	Remove and clean or replace screens.
CYCLE SWITCH improperly set or inoperative.	Set switch or replace switch if inoperative.
Inoperative timer assembly.	Check timer contacts. Replace timer if contacts are inoperative.
Inoperative pressure switch.	Check pressure switch and replace if inoperative.
Broken, loose or incorrect wiring.	Refer to wiring diagram.

### 37. NO COLD WATER

POSSIBLE CAUSE	TO CORRECT
Cold water supply line is closed.	Check for closed valve, kinked hose, or obstruction in line.
Clogged inlet valve screen.	Remove and clean or replace screens.
CYCLE SWITCH improperly set or inoperative.	Set switch or replace switch if inoperative.
Inoperative timer assembly.	Check timer contacts. Replace timer assembly if contacts are inoperative.
Inoperative pressure switch.	Check pressure switch and replace if inoperative.
Broken, loose or incorrect wiring.	Refer to wiring diagram.

### 38. NO WARM WATER

POSSIBLE CAUSE	TO CORRECT
No hot water.	Refer to paragraph 36.
No cold water.	Refer to paragraph 37.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**39. WASHER DOES NOT START AND THE PUSH BUTTON "ON/OFF" IS ON**

POSSIBLE CAUSE	TO CORRECT
Electric power disconnected or tripped breaker or fuse blown. One Amp control fuse(s) blown.	Connect electrical power or replace breaker or fuse(s). Check the washer's one Amp fuse and replace if blown. Fuse is located behind terminal block access cover on rear cross channel. Starting with Serial No. G0550497, washer is equipped with two one Amp fuses which are located behind terminal block access cover on rear cross channel.
3.9 Ohm resistor open.	Replace 3.9 Ohm resistor.
Door lock switch is inoperative or is not closed.	Check door lock assembly and replace if inoperative. Check door latch to ensure proper switch engagement.
Door safety switch is inoperative or is not tripped.	Check door lock assembly and replace if inoperative. Check door latch to ensure proper switch engagement.
Motor overload protector has cycled.	Wait 15 to 30 minutes for overload protector to reset. If protector cycles repeatedly, refer to paragraph 45.
One Phase Models: Reset (located on rear cross channel) has tripped.	Press button to reset.
Inoperative timer.	Test timer start circuit. Replace timer if inoperative.
Inoperative timer motor.	Replace timer assembly.
Broken, loose or incorrect wiring.	Refer to wiring diagram.

**40. CYLINDER DOES NOT FILL**

POSSIBLE CAUSE	TO CORRECT
No hot water.	Refer to paragraph 36.
No cold water.	Refer to paragraph 37.
Inoperative pressure switch.	Check switch and replace if inoperative.
Inoperative timer.	Check timer and replace if inoperative.
Inoperative drain valve.	Check drain valve and replace if inoperative.
Obstruction in drain valve.	Clean drain valve, refer to parts section for assembly sequence of valve.
Clogged inlet valve screens.	Remove inlet hoses from inlet valve and clean or replace screens.
Inoperative inlet valve.	Check inlet valve solenoids for proper operation, replace if inoperative.
Inoperative selector switch.	Check switch and replace if inoperative.
Broken, loose or incorrect wiring.	Refer to wiring diagram.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

**41. WATER DOES NOT SHUT OFF.**

POSSIBLE CAUSE	TO CORRECT
Sediment in inlet valve.	Disassemble and clean sediment from inlet valve or replace and complete inlet valve.
Inoperative pressure switch.	Check switch and replace if inoperative.
Incorrect wiring.	Refer to wiring diagram.

**42. WATER DOES NOT DRAIN FROM CYLINDER**

POSSIBLE CAUSE	TO CORRECT
Obstruction in drain valve.	Disassemble and clean valve, refer to parts section for assembly sequence of valve.
Kinked drain hose.	Straighten drain hose.
Inoperative drain valve motor.	Check motor and replace if inoperative.
Inoperative timer assembly.	Check timer and replace if inoperative.
Incorrect wiring.	Refer to wiring diagram.
Inoperative drain relay.	Check electrical connection "C11" and replace if inoperative.

**43. WASHER CYLINDER DOES NOT TUMBLE**

POSSIBLE CAUSE	TO CORRECT
No electrical power.	Check fuses, switch outlet or power cord.
Inoperative timer assembly.	Check timer and replace if inoperative.
Door lock assembly improperly adjusted.	Adjust door lock assembly.
Motor overload protector has cycled.	Wait 15 to 30 minutes for overload protector to reset. If protector cycles repeatedly, refer to paragraph 45.
Inoperative capacitor(s) (One Phase Model).	Check capacitor(s) and replace if inoperative.
Inoperative drive motor (Wash/Spin).	Check motor and replace if inoperative.
Inoperative pressure switch.	Switch must be in the "normally closed" position. Check pressure hose to see if it is clogged preventing pressure switch from resetting. Check switch and replace if inoperative.
Inoperative motor contactor.	Replace "C5" or "C4" contactor (depending on direction).
Broken, loose or incorrect wiring.	Refer to wiring diagram.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

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**44. WASHER CYLINDER DOES NOT SPIN**

POSSIBLE CAUSE	TO CORRECT
No electrical power.	Check fuses or switch outlet.
Obstruction in drain valve.	Disassemble and clean valve.
Kinked drain hose.	Straighten drain hose.
Inoperative drain valve motor.	Check motor and replace if inoperative.
Incorrect wiring.	Refer to wiring diagram.
Inoperative drain relay.	Check electrical connection "C11" and replace if inoperative.
Motor overload protector has cycled.	Wait 15 to 30 minutes for overload protector to reset. If protector cycles repeatedly, refer to paragraph 45.
Inoperative spin relay.	Check "C8" spin relay and relay coil.
Inoperative "C3" and "C2" contactors.	Check "C3" and "C2" contactors.
Inoperative spin motor.	Replace spin motor.
Inoperative Pressure Switch.	Switch must be in the "normally closed" position. Check pressure hose to see if it is clogged preventing pressure switch from resetting. Check switch and replace if inoperative.
Check water supply.	Has to be in high level fill before it will go into spin.
Broken, loose or incorrect wiring.	Refer to wiring diagram.

**45. MOTOR OVERLOAD PROTECTOR CYCLES REPEATEDLY**

POSSIBLE CAUSE	TO CORRECT
Low voltage.	See <i>Installation Instructions</i> (supplied with washer) for electrical requirements.
Inoperative motor overload protector.	Replace motor.
Water does not drain from cylinder.	Refer to paragraph 42.
Inoperative contactor.	Check contactor and replace if inoperative.
Inoperative centrifugal switch (One Phase only).	Check switch and replace motor if inoperative.

**46. CYLINDER DOES NOT TURN**

POSSIBLE CAUSE	TO CORRECT
Washer cylinder does not tumble.	Refer to paragraph 43.
Loose or broken belts.	Check belt tension or replace belts.

**▲ WARNING**

**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

**47. TIMER DOES NOT ADVANCE**

POSSIBLE CAUSE	TO CORRECT
Inoperative timer motor.	Replace complete timer assembly.
Inoperative pressure switch.	Check switch and replace if inoperative.
Incorrect wiring.	Refer to wiring diagram.

**48. DOOR WILL NOT OPEN**

POSSIBLE CAUSE	TO CORRECT
Inoperative DOOR OPEN switch contacts through Serial No. G0550496.	Check switch and replace if inoperative.
Inoperative timer controls.	Replace timer.
Inoperative door lock solenoid through Serial No. G0550496.	Replace complete door lock assembly.
No electrical power to door switches (control fuse(s) blown).	Check the washer's one Amp fuse and replace if blown. Fuse is located behind terminal block access cover on rear cross channel. Starting with Serial No. G0550497 the washer is equipped with two one Amp fuses which are located behind terminal block access cover on rear cross channel.
Motor overload protector has cycled.	Wait 15 to 30 minutes for motor overload protector to reset. If overload protector cycles repeatedly refer to paragraph 45.
Door interlock not energized.	Check door lock and switch mechanism, and door latch hook for proper alignment and operation.
Inoperative PUSH-TO-OPEN switch through Serial No. G0550496.	Check switch and replace if inoperative.
Inoperative door safety switch.	Check switch and replace if inoperative.
Broken, loose or incorrect wiring.	Refer to wiring diagram.

**49. DOOR LEAKS**

POSSIBLE CAUSE	TO CORRECT
Insufficient pressure on door gasket.	Adjust door.
Damaged gasket.	Replace gasket.

**50. EXCESSIVE VIBRATION**

POSSIBLE CAUSE	TO CORRECT
Unbalanced load in cylinder.	Stop washer, redistribute load, then restart washer.
Loosened mounting bolts.	Tighten bolts.
Loose cabinet screws.	Tighten screws.