

Speed Queen

A **Raytheon** Company

Service Manual for Stacked Drying Tumbler

(30 Pound Capacity)

**(For Models After to Serial No.
DTCK9401011756)**

KEEP THIS MANUAL FOR FUTURE REFERENCE

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IMPORTANT: Warranty is void unless drying tumbler is installed according to the installation manual. Compliance with minimum specifications and requirements detailed therein, and with applicable local codes is a **MUST**. Because of varied requirements, applicable local codes should be thoroughly understood and all pre-installation work arranged for accordingly.

Installation must also conform with American National Standard Z223.1-1984 "National Fuel Gas Code" and Standard ANSI/NFPA 70-1984 "National Electrical Code" in the U.S.A., Standards CAN1-B149.1 OR CAN1-B149.2 installation codes for gas burning appliances and equipment in Canada and/or local codes.

▲ WARNING

FAILURE TO INSTALL, MAINTAIN, AND/OR OPERATE THIS MACHINE ACCORDING TO MANUFACTURER'S INSTRUCTIONS MAY RESULT IN CONDITIONS WHICH CAN PRODUCE SERIOUS INJURY, DEATH AND/OR PROPERTY DAMAGE.

NOTE: The **WARNING** and **IMPORTANT** instructions 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 this tumbler. 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 on any problems or conditions you do not understand.

FOR YOUR SAFETY

IF YOU SMELL GAS

1. Open windows
2. Don't touch electrical switches
3. Extinguish any open flame
4. Immediately call your gas supplier

CONSIGNES DE SÈCURITÈ

Si vous sentez une odeur de gaz:

1. Ouvrez les fenêtres
2. Ne touchez pas aux interrupteurs électriques
3. Eteignez toute flamme nue
4. Contactez immédiatement votre compagnie de gaz

FOR YOUR SAFETY

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

CONSIGNES DE SÈCURITÈ

Il est interdit d'entreposer ou d'utiliser des liquides inflammables ou dégageant des vapeurs inflammables, à proximité de tout appareil fonctionnant au gaz.

IMPORTANT: Purchaser must consult the local gas supplier for suggested instructions to be followed if the tumbler user smells gas. The gas utility instructions plus the warning note directly above must be posted in a prominent location near the tumbler for customer use.

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REPLACEMENT PARTS INFORMATION

If replacement parts are required, contact the source from whom you purchased your tumbler or, contact RSPC, Shepard Street, P.O. Box 990, Ripon, Wisconsin 54971-0990, for the name and address of the nearest authorized parts distributor.

IMPORTANT Rules For Personal Safety

(Save these instructions)

▲ WARNING

To reduce the risk of fire, electric shock, serious injury or death to persons when using your tumbler, follow these basic precautions:

DO NOT ALLOW CHILDREN TO PLAY IN, WITH OR AROUND THIS TUMBLER. SERIOUS INJURY MAY RESULT IF A CHILD SHOULD CRAWL INSIDE AND THE TUMBLER IS STARTED. THIS IS A SAFETY RULE FOR ALL APPLIANCES.

- Read all instructions before using the tumbler.
- Install this tumbler according to the installation instructions. All connections for gas supply, electrical power and grounding must comply with local codes and be made by licensed personnel when required.
- To minimize the possibility of electrical shock, make sure the tumbler has been properly grounded in accordance with the installation instructions.
- Because of hazards under certain conditions **DO NOT USE** an extension cord.
- **ALWAYS** disconnect the electrical power to the tumbler before servicing.
- To prevent damage which may result in fire or shock hazard, **DO NOT** expose this tumbler to rain or excessive moisture.
- Should your tumbler require service, **DO NOT** attempt to repair or replace any part or parts of your tumbler. All servicing should be referred to a qualified serviceman.
- **DO NOT** reach into the tumbler if the cylinder is moving.
- Before this tumbler is removed from service or discarded, remove the door to the drying compartment.
- Store laundry aids, dry cleaning solvents and disinfectants out of the reach of children (preferably in a locked cabinet) to help prevent poisoning or chemical burns.
- **DO NOT TUMBLE** fiber glass curtains and draperies unless the label says it can be done. If they are dried, wipe out the cylinder with a damp cloth to remove particles of fiber glass.

- **TO AVOID CREATING A FIRE, SPONTANEOUS COMBUSTION OR EXPLOSION HAZARD:**
 - **KEEP APPLIANCE AREA CLEAN AND FREE FROM COMBUSTIBLE MATERIALS.**
 - **Towels or garments heavily soiled with a cooking residue, machine oils or grease, must be thoroughly washed in hot water using an extra amount of strong heavy duty detergent and a long wash cycle before drying.**
 - **Remove laundry immediately after tumbler stops.**
 - **DO NOT place anything on top of the tumbler or drape items over the front of the tumbler.**
 - **DO NOT use flammable dry cleaning solvents, gasoline, kerosene or other flammable cleaners in or near the tumbler.**
 - **DO NOT put fabrics treated with flammable cleaners into the tumbler until they have been thoroughly air dried and then hand washed.**
 - **DO NOT put plastics, anything containing wax or chemicals such as in mops and cleaning cloths, or anything dry cleaned at home with a dry cleaning solvent in the tumbler.**
 - **DO NOT USE HEAT for drying articles containing foam rubber or similarly textured rubberlike materials.**
- **ALWAYS clean the lint filter daily. A layer of lint in the filter reduces drying efficiency and prolongs drying time.**
- **ALWAYS read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings or precautions.**

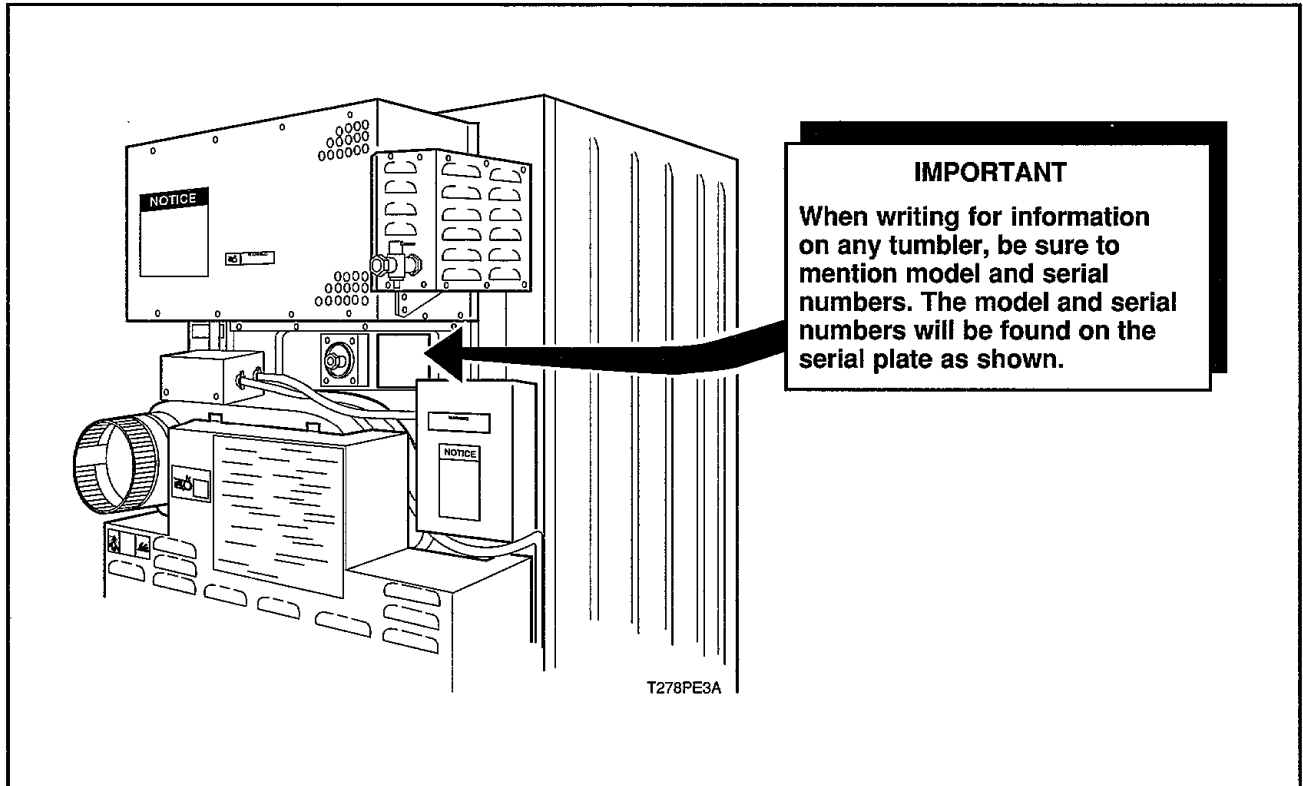
ALWAYS FOLLOW THE FABRIC CARE INSTRUCTIONS SUPPLIED BY THE GARMENT MANUFACTURER.

▲ WARNING

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

- **Install lockable door(s) to prevent public access to rear of tumblers.**
- **Never operate the tumbler with access panels open.**
- **Do not operate the tumbler with guards or parts missing, or with broken parts.**
- **Do not bypass any safety devices.**

Serial Plate Location



SECTION I

Service Procedures

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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1. INTRODUCTION

IMPORTANT: References made to the left or right hand direction are taken from the operator's position facing the front of the tumbler.

SAFETY WARNINGS AND DECALS

Safety Warnings and Decals have been provided in key locations to remind you of important precautions for the safe operation and maintenance of your tumbler. Please take the time to review these warnings before proceeding with service work.

All decals have been designed and applied to withstand washing and cleaning. Decals should be checked periodically to be sure they have not been damaged, removed, or painted. Refer to the Parts Manual for ordering replacement decals.

2. LOADING DOOR ASSEMBLY (Figure 1)

- Open loading door.
- While supporting door, remove upper hinge bolt holding door to hinge bracket.

NOTE: Nylon washer must be in place on lower pin when reinstalling loading door.

- Remove door from bracket.

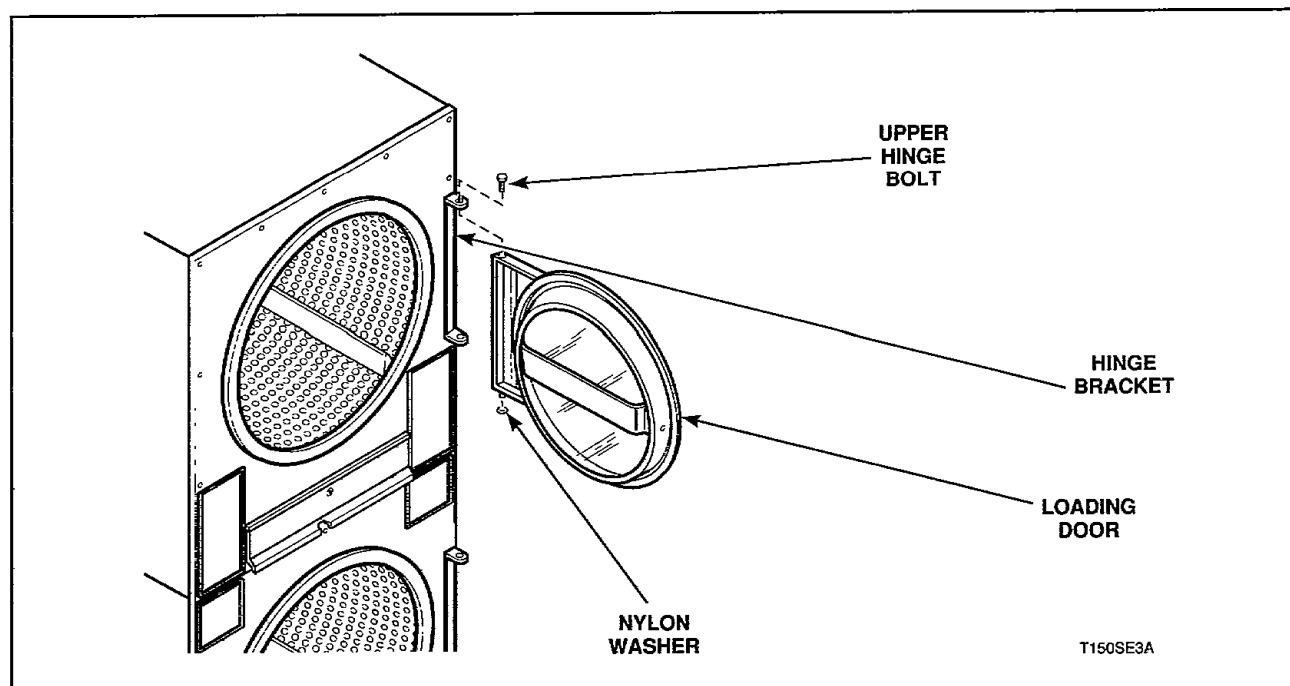


Figure 1

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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3. DOOR HINGE (Figure 2)

- Remove loading door assembly, paragraph 2.
- Remove nuts and screws holding hinge to door frame, Figure 2.

4. DOOR BAR/HANDLE (Figure 3)

- Open loading door.
- Remove screws holding door bar/handle to loading door.

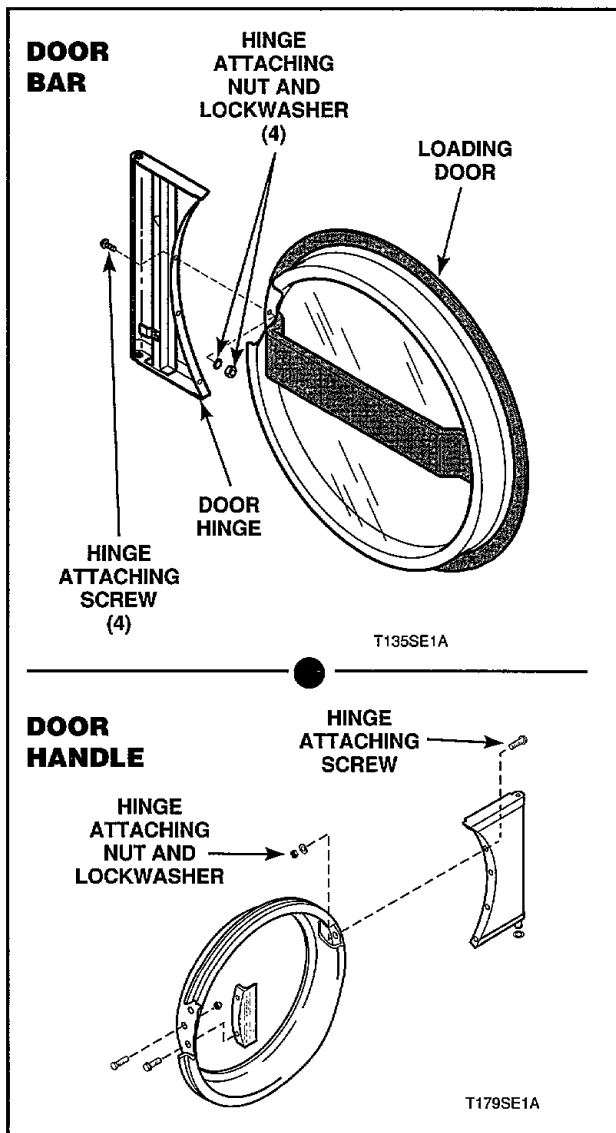


Figure 2

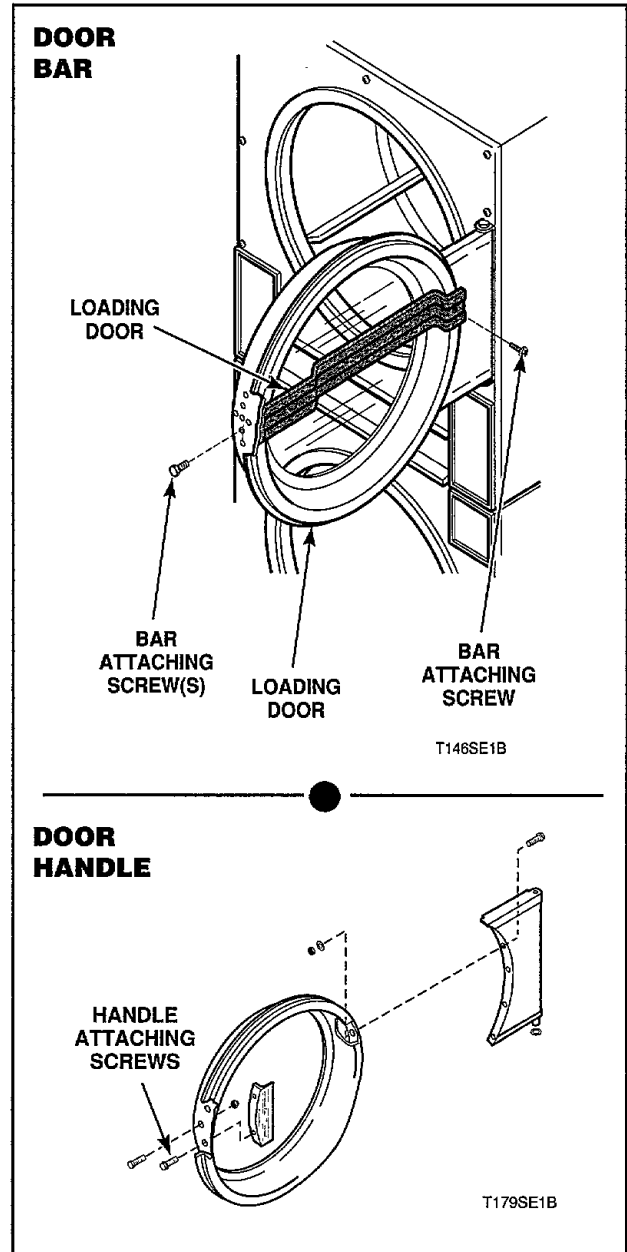


Figure 3

(continued)

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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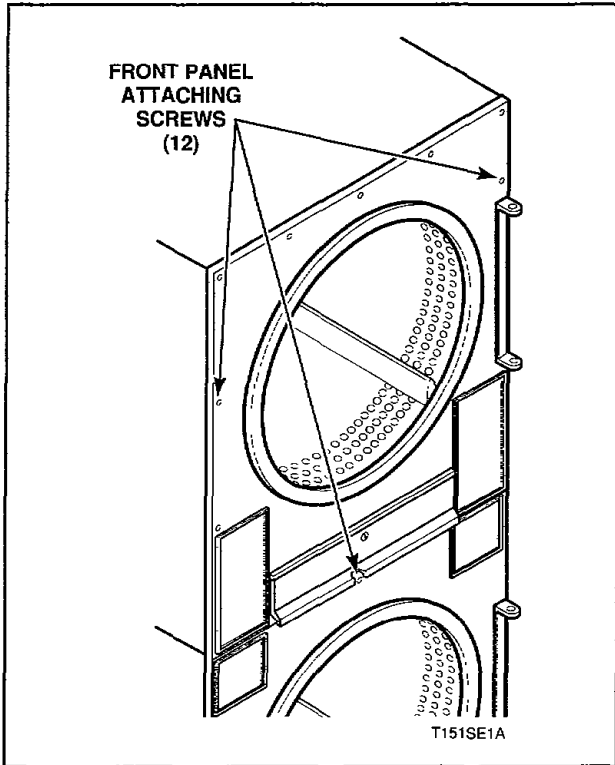


Figure 4

5. FRONT PANEL (Figure 4)

- Disconnect electrical service and shut off supply line gas valve.
- Remove loading door, paragraph 2.
- Unlock and remove lint drawer.
- Remove screws holding front panel to cabinet.
- While supporting front panel, tip the top forward slightly and lift up and out far enough to disconnect electronic control (upper tumbler only), Figure 5.
- Remove front panel.

NOTE: Refer to wiring diagram when rewiring electronic control.

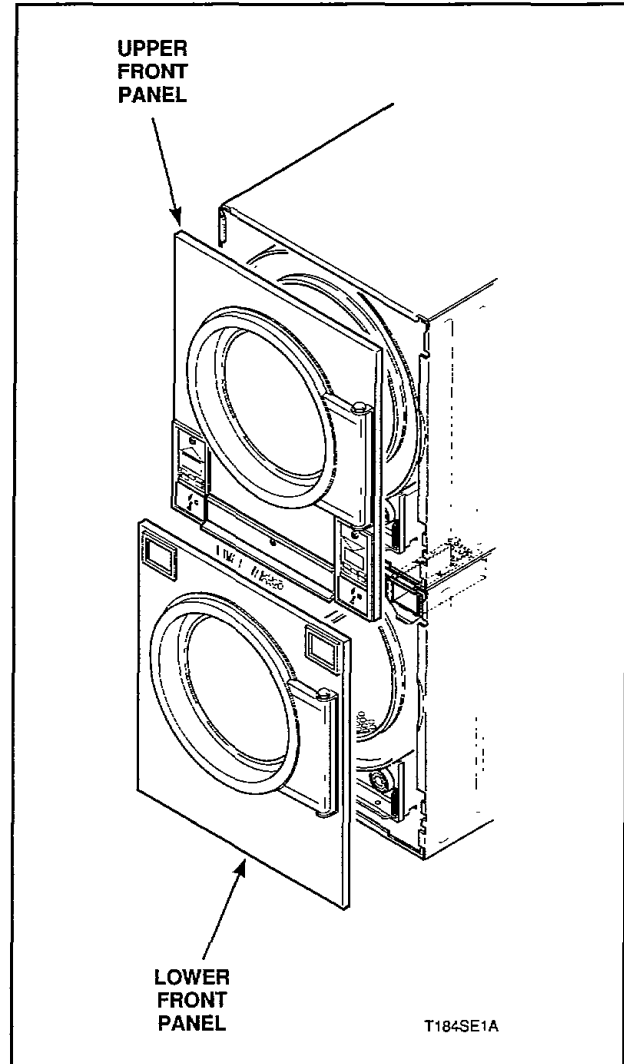


Figure 5

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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6. DOOR SWITCH (Figure 6)

- Disconnect electrical service to tumbler.
- Remove front panel, paragraph 5.
- Door switch is mounted on a bracket screwed to the inside of the side panel. Disconnect wires to door switch and remove by depressing tabs on switch and pushing out through mounting bracket.

NOTE: Refer to wiring diagram when rewiring door switch.

▲ WARNING

To reduce the risk of serious injury the door switch MUST be reinstalled after service is complete.

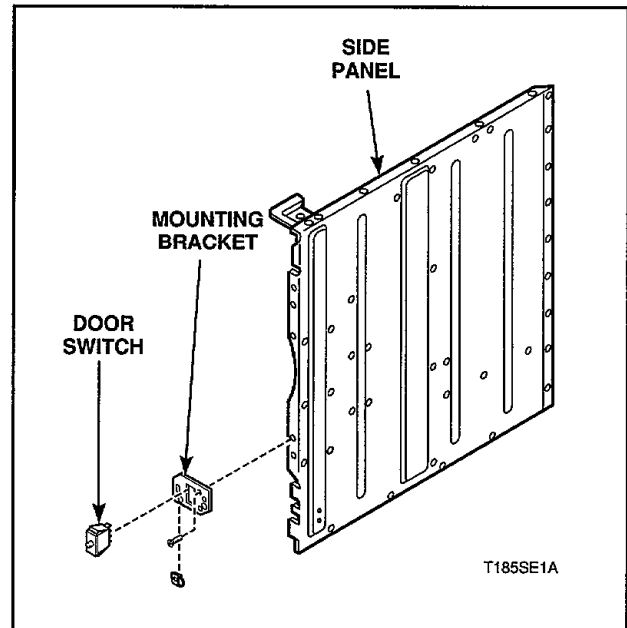


Figure 6

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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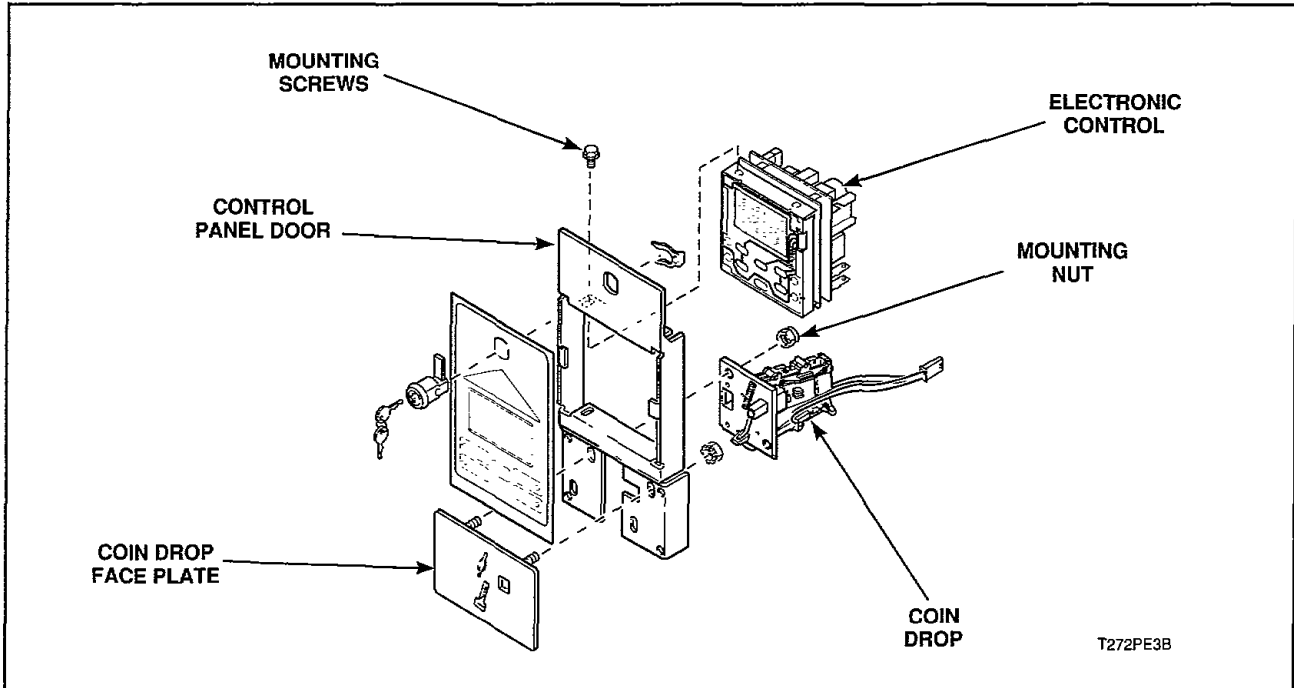


Figure 7

7. ELECTRONIC CONTROL

- Disconnect electrical service to tumbler.
- Unlock and remove electronic control door, *Figure 7*.
- Remove screws attaching electronic control to control panel door.
- Pull electronic control out of control panel door and disconnect electronic control quick disconnect blocks, *Figure 7*.
- Place electronic control in a clean, dry location where it cannot be damaged.

IMPORTANT: Electronic control door MUST be reinstalled after servicing is completed.

IMPORTANT: When removing electronic control grasp *only* the top metal tab of the unit. DO NOT remove electronic control by grasping sides. Do not touch circuit boards on the front or back side of electronic control.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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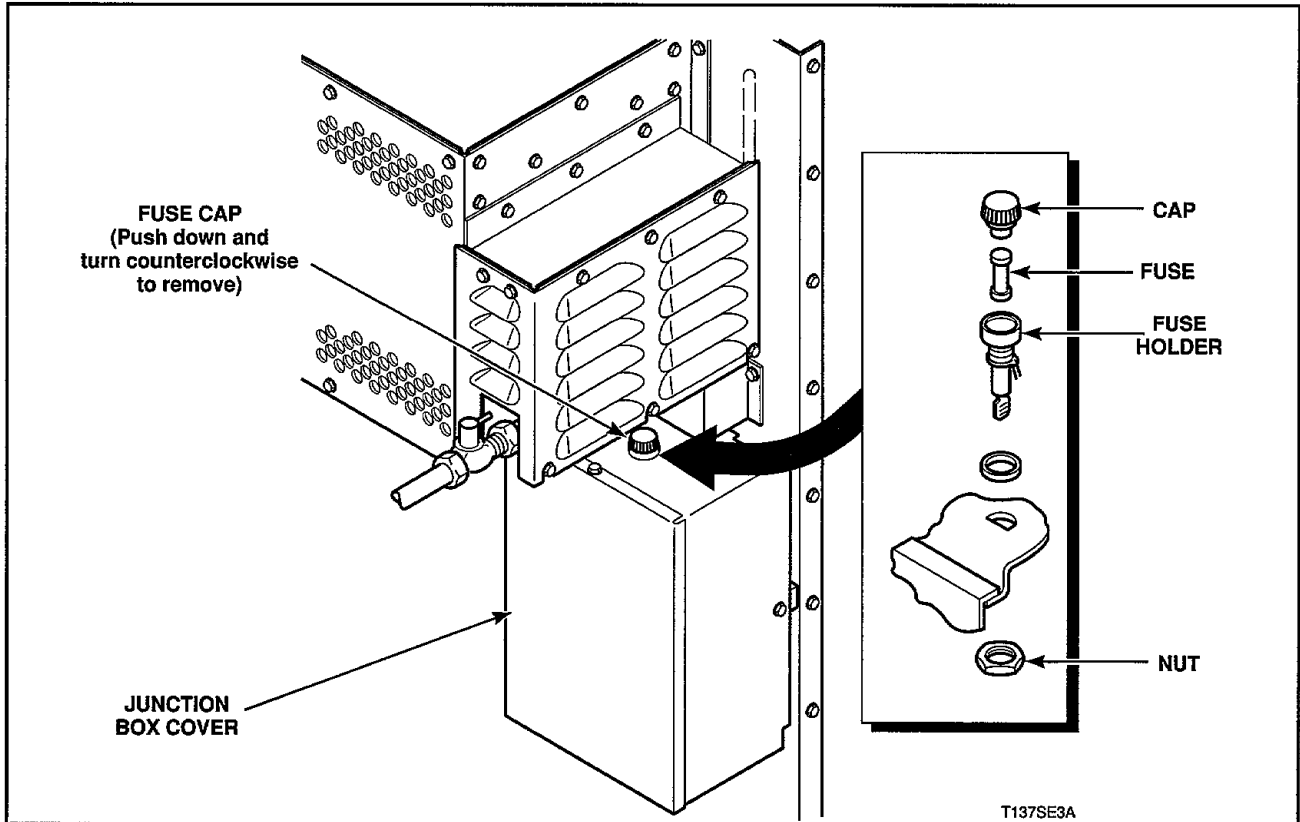


Figure 8

8. FUSE AND FUSE HOLDER ASSEMBLY

- Disconnect electrical service and shut off supply line gas valve.
- Fuse holder is located on the top of each junction box at the rear of the machine.
- Turn fuse cap counterclockwise to remove fuse, *Figure 8*
- Remove fuse from fuse cap.

NOTE: Refer to wiring diagram when rewiring fuse.

- Remove junction box cover, *Figure 8*.
- Disconnect wires from fuse holder.
- Remove plastic retaining nut. Remove assembly.

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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9. COIN DROP ASSEMBLY (Figure 7)

- Disconnect electrical service to tumbler.
- Unlock electronic control door and tip forward.
- Disconnect wires to coin drop.
- Disconnect wires to electronic control.
- Remove two mounting nuts and remove coin drop.

10. LINT SCREEN (Figure 9)

- Disconnect electrical service to tumbler.
- Unlock and remove lint drawer.
- Remove lint screen bracket screws and lint screen brackets.
- Remove lint screen.

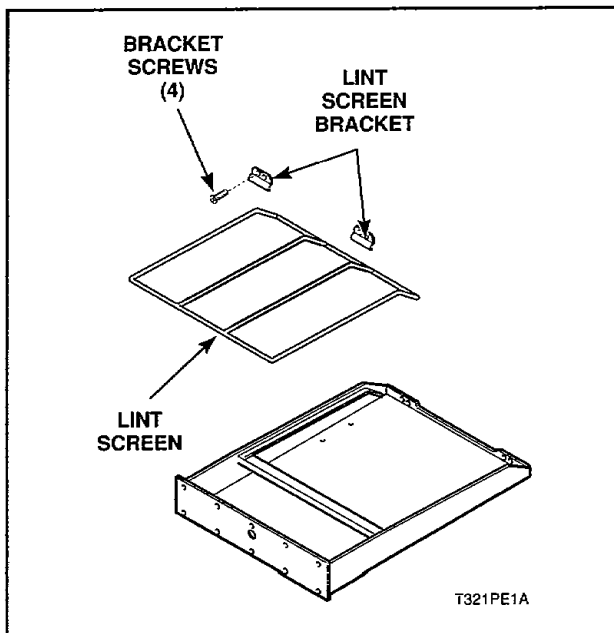


Figure 9

11. LINT DRAWER SEAL

- Disconnect electrical service to tumbler.
- Unlock and remove lint drawer.
- Remove damaged or worn seal from front panel.
- Degrease area where new seal is to be placed.

▲ WARNING

For personal safety use degreaser/solvent only in a well ventilated area away from any open flames or sources of ignition.

- When installing new seal, make sure it is placed in depressed front panel area and does not extend into lint drawer opening cavity.

12. LINT DRAWER SWITCH (Figure 10)

- Disconnect electrical service to the tumbler.
- Unlock and remove lint drawer.
- Pull lint drawer switch out.
- Disconnect wires to rocker switch.

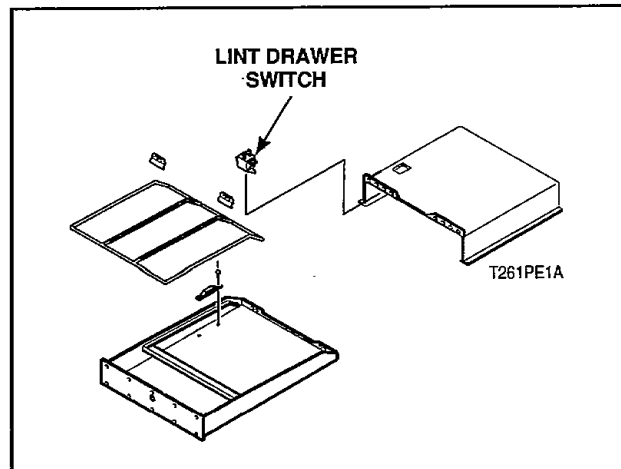


Figure 10

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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13. CYLINDER ROLLERS (Figure 11)

- a. Disconnect electrical service to tumbler.
- b. Unlock and remove lint drawer.
- c. Remove front panel, paragraph 5.
- d. Remove nuts from end of roller shafts.
- e. Lift cylinder up slightly and remove rollers from shafts.

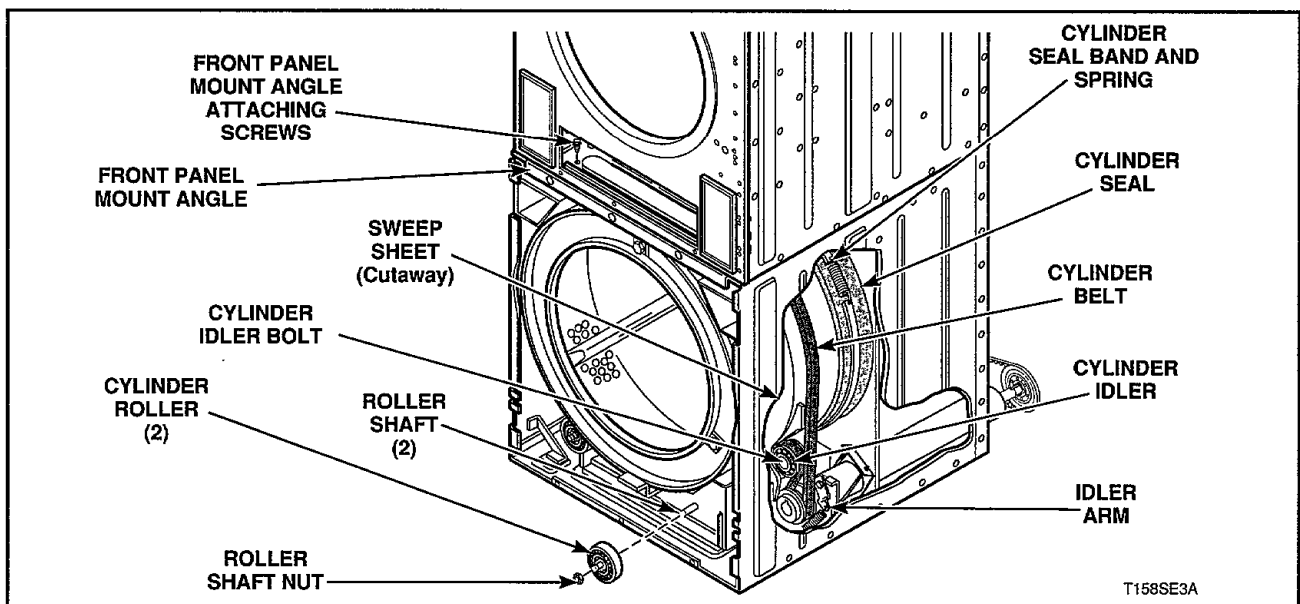
14. CYLINDER BELT (Figure 11)

- a. Disconnect electrical service to tumbler.
- b. Unlock and remove lint drawer.
- c. Remove front panel, paragraph 5.
- d. Remove front panel mounting angle.
- e. Remove sweep sheet by disconnecting springs from the left side of the air duct roller support bracket, removing the two mounting screws from the right side of the air duct roller support bracket, and lifting the cylinder to pull the sweep sheet out.
- f. Disengage belt from idler system by rotating idler arm down.
- g. Remove cylinder belt being careful not to pinch it. Lift up cylinder to create a gap between rollers and cylinder to allow belt to pass through.

15. CYLINDER IDLER (Figure 11)

- a. Disconnect electrical service to tumbler.
- b. Unlock and remove lint drawer.
- c. Remove front panel, paragraph 5.
- d. Disengage belt from idler system by rotating idler arm down.
- e. Remove bolt holding cylinder idler to idler arm. Remove cylinder idler.

NOTE: When installing cylinder belt, be sure belt is properly positioned around cylinder and on sheave and idler. Rotate cylinder clockwise by hand a few turns to align belt around belt path.



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Figure 11
13

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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16. CYLINDER AND TRUNNION ASSEMBLY

- Disconnect electrical service to tumbler.
- Unlock and remove lint drawer.
- Remove front panel, paragraph 5.
- Remove front panel mounting angle.
- Remove sweep sheet by disconnecting springs from the left side of the air duct roller support bracket, removing the two mounting screws from the right side of the air duct roller support bracket, and lifting the cylinder to pull the sweep sheet out.
- Run the cylinder belt off idler.
- Remove upper portion of belt, leaving belt in place on lint shroud.
- Remove nuts from end of roller shafts.
- Lift cylinder up slightly and remove rollers from shafts.
- Remove palnut, jamnut and washer from end of trunnion shaft located at rear of unit, *Figure 12*.

LOWER STACKED MODEL ONLY

Unlock and remove top lint drawer. Remove screws attaching front panel mount angle to top unit base and remove front panel mount angle from bottom unit, *Figure 11*.

- Screw cylinder guide service tool, Part No. 263P4, on trunnion shaft threads to be used as a guide.
- Remove cylinder and trunnion assembly from unit.
- Rotate and pull the cylinder so that the cylinder seal can be worked over the lip on the air duct roller support.

NOTE: Care must be taken not to damage or remove the seals on the sweep sheet.

NOTE: When removing cylinder through front of cabinet, spread cabinet slightly so cylinder will clear cabinet sides. Be careful not to pull off cylinder seal when removing cylinder.

IMPORTANT: After reinstalling cylinder and trunnion assembly, make sure band is in place on seal and seal is over seal partition along entire circumference. Test that cylinder turns freely and seal does not bind.

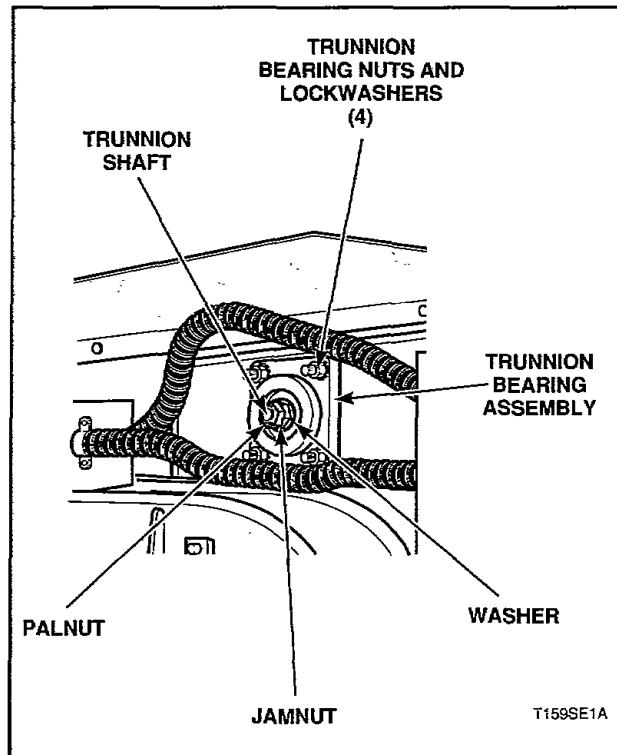


Figure 12

17. TRUNNION BEARING ASSEMBLY (*Figure 12*)

- Disconnect electrical service to tumbler.
- Remove palnut, jamnut and washer from end of trunnion shaft.
- Screw cylinder guide service tool, Part No. 263P4, on trunnion shaft threads to be used as a guide.
- Remove nuts and lockwashers holding bearing assembly on cabinet back.
- Remove trunnion bearing assembly.

IMPORTANT: Trunnion bearing assembly is a nonrepairable unit. If worn or damaged replace entire assembly.

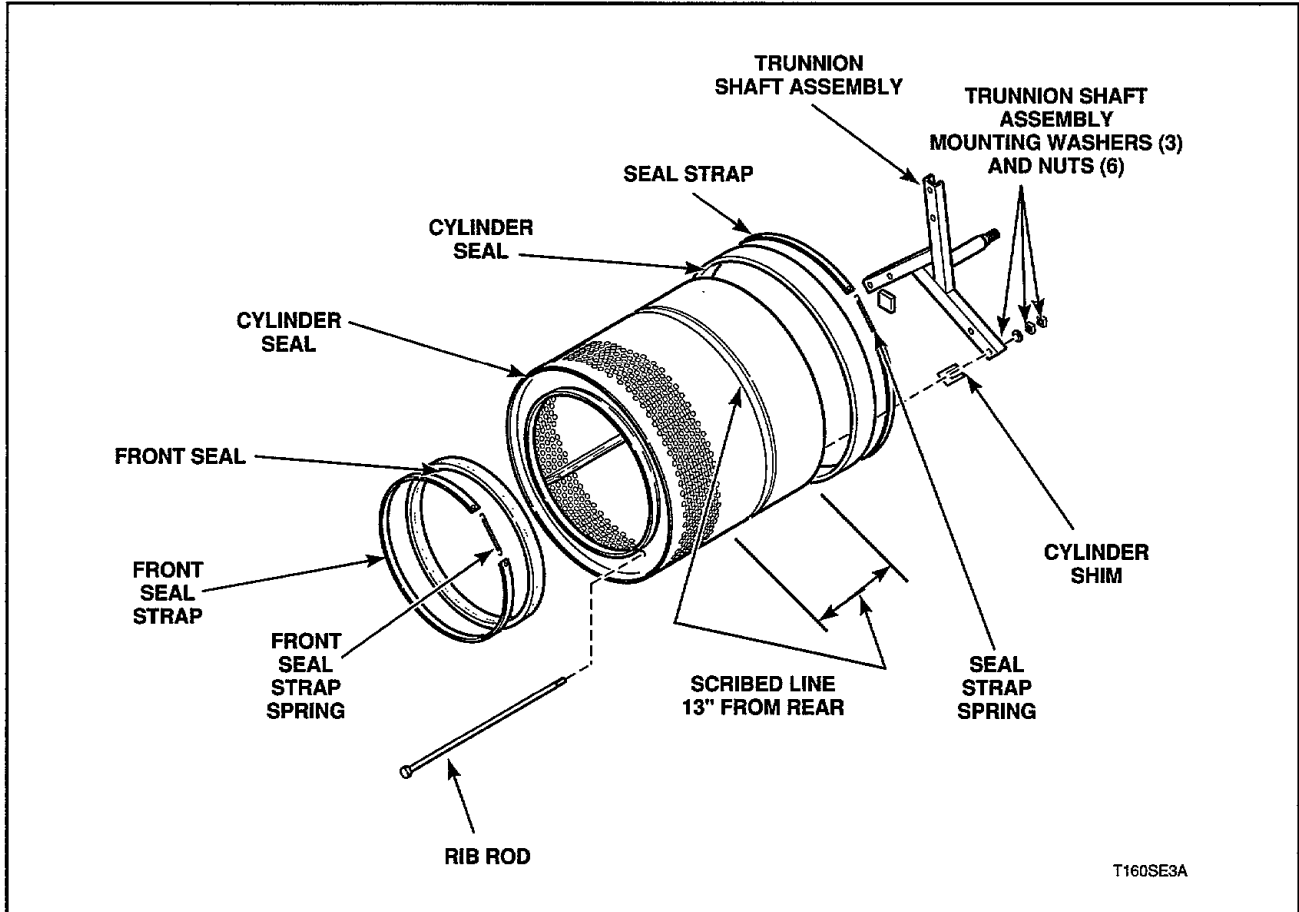
NOTE: Upon reassembly, use cylinder guide service tool to position trunnion shaft through bearing bore.

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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Figure 13

18. TRUNNION SHAFT ASSEMBLY (Figure 13)

- a. Disconnect electrical service to tumbler.
- b. Remove cylinder and trunnion assembly, paragraph 16.
- c. Remove the three washers and six nuts holding trunnion shaft assembly to rear of cylinder, Figure 13.

IMPORTANT: When installing trunnion assembly on cylinder, the cylinder and shaft must be leveled. Refer to Figure 14 for an example of how to check for proper alignment of the shaft and cylinder. Measure the distance between the center of the trunnion shaft and the outer rim of the cylinder as shown. If any measurement is lower than the highest point, place shim or shims (M401402) between trunnion channel and cylinder back until the measurement is equal to the highest point.

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
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- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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19. CYLINDER SEAL AND FRONT CYLINDER SEAL (Figure 13)

a. Cylinder Seal

1. Remove cylinder and trunnion assembly, paragraph 16.
2. Disconnect seal strap spring and remove seal strap.
3. Break seal loose from cylinder. Concentrated heat to metal below seal will loosen adhesive.

NOTE: Scribe a line around the perimeter of the cylinder indicating where leading edge of seal is to be positioned. Line should be 13" from rear edge of cylinder.

4. Scrape any remaining adhesive from cylinder with a single edge razor blade while applying heat with a hair dryer or hot air gun.
5. With degreaser/solvent, thoroughly clean area to be reglued.

▲ WARNING

For personal safety use degreaser/solvent only in a well ventilated area away from any open flames.

6. Position new seal on cylinder with leading edge at scribed line.
7. Obtain a glue gun and load gun with hot melt adhesive sticks provided with cylinder seal.

▲ WARNING

For personal safety DO NOT let hot glue contact skin. Hot glue may cause burns.

Read and follow glue gun manufacturer's operating instructions before using any glue gun.

IMPORTANT: Use ONLY hot melt adhesive sticks provided with seal. Other adhesives or hot melts will not adhere to cylinder surface or will break down with heat.

8. With nozzle of glue gun slightly under seal leading edge, apply a liberal amount of hot melt around cylinder perimeter following with hand pressure mating seal to cylinder. Hot melt should extend to seal edge or slightly beyond.

NOTE: DO NOT get adhesive on the face of the seal that comes in contact with moving parts.

b. Front Cylinder Seal

1. Remove cylinder and trunnion assembly, paragraph 16.
2. Disconnect seal strap spring and remove seal strap.
3. Break seal loose from cylinder. Concentrated heat to metal below seal will loosen adhesive.
4. Scrape any remaining adhesive from cylinder with a single edge razor blade while applying heat with a hair dryer or hot air gun.
5. With degreaser/solvent, thoroughly clean area to be reglued.

▲ WARNING

For personal safety use degreaser/solvent only in a well ventilated area away from any open flames.

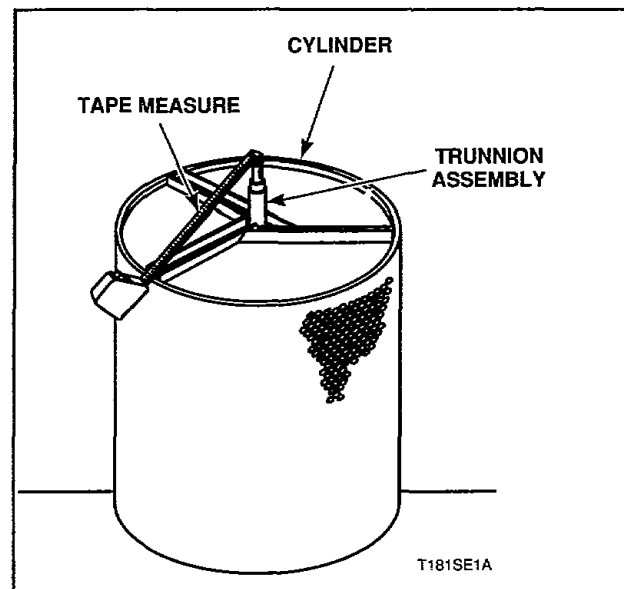


Figure 14

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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6. The front cylinder seal will be installed on the cylinder with the colored thread stripe on the inside at the front rolled edge of the cylinder. The narrower section of the width will be to the front of the machine. The seal may have to be stretched slightly to ease assembly.
7. Starting at the top, set the seal around the outside of the front cylinder lip. Working from both left and right, proceed by stretching and positioning the seal downward until the seal is in place. Align colored thread stripe to the front rolled edge of the cylinder.
8. Obtain a glue gun and load gun with hot melt adhesive sticks provided with cylinder seal.
9. The seal is now ready to be glued. The field installation of this seal requires the seal to be glued every 2" to 3" around its circumference. Insert the glue gun nozzle between the seal and cylinder lip.
10. The front cylinder strap should now be placed in position. The raised edges of the strap should be placed against the seal. The spring must be stretched between one hole of the strap and the opposite hole using a pair of needle-nose pliers or vise-grips.
11. Flare the seal outward by running hand around the seal, slightly bending the seal outward. The seal is slightly elastic and will now fit better against the front panel during reassembly.

▲ WARNING

For personal safety DO NOT let hot glue contact skin. Hot glue may cause burns.

Read and follow glue gun manufacturer's operating instructions before using any glue gun.

IMPORTANT: Use ONLY hot melt adhesive sticks provided with seal. Other adhesives or hot melts will not adhere to cylinder surface or will break down with heat.

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

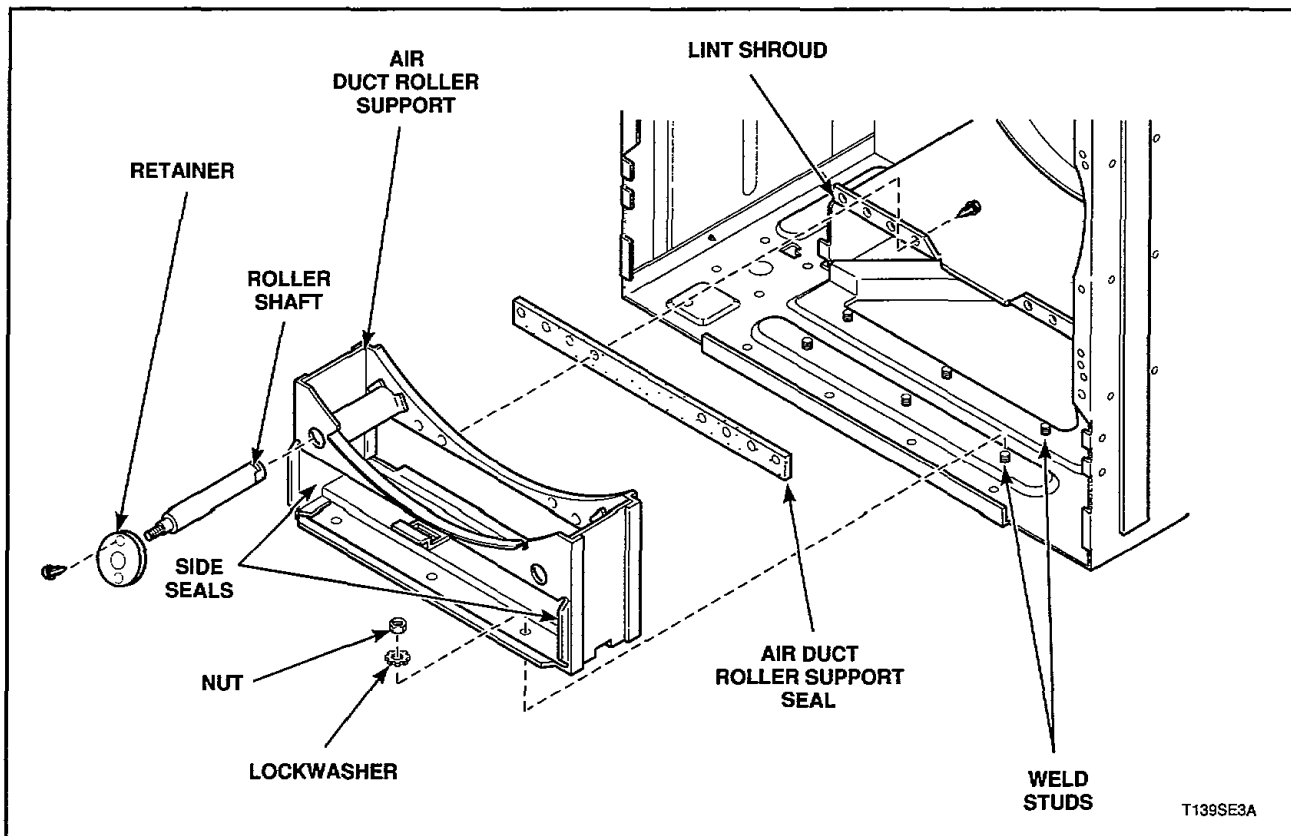
20. ROLLER SHAFT (Figure 15)

- Remove cylinder and trunnion assembly, paragraph 16.
- Remove cylinder roller, paragraph 13.
- Remove screws from retainer and remove retainer, Figure 15.
- Slide shaft forward out of air duct roller support assembly.

21. AIR DUCT ROLLER SUPPORT ASSEMBLY (Figure 15)

- Remove cylinder and trunnion assembly, paragraph 16.
- Remove screws holding lint shroud to back of air duct roller support assembly.
- Remove nuts and lockwashers holding air duct roller support to base.
- Lifting up over the weld studs and pulling forward, remove air duct roller support assembly.
- Remove roller shaft, paragraph 20.

IMPORTANT: When reinstalling air duct roller support assembly on upper unit, be careful not to pinch main wire harness routed below assembly.



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Figure 15

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

W002

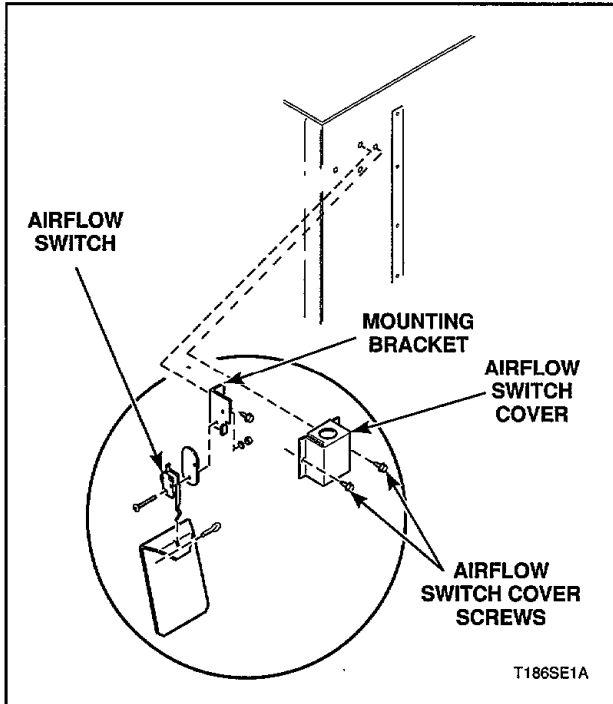


Figure 16

22. AIR DUCT ROLLER SUPPORT SEALS (Figure 15)

- Remove air duct roller support assembly, paragraph 21.
- Detach air duct roller support seal from back of roller support assembly.
- Side seals can be replaced without removing air duct roller support.

IMPORTANT: When reinstalling air duct roller support assembly on upper unit, be careful not to pinch main wire harness routed below assembly.

23. AIRFLOW SWITCH (Figure 16)

- Disconnect electrical service to tumbler.
- Remove airflow switch cover screws. Remove cover.
- Disconnect wires from switch.

NOTE: Refer to wiring diagram when rewiring switch.

- Remove screws and nuts holding switch to mounting bracket.

24. STOVE HIGH LIMIT THERMOSTAT (Figure 17)

- Disconnect electrical service to tumbler.
- Remove screws attaching thermostat cover to stove. Remove cover.
- Disconnect wires from high limit thermostat.

NOTE: Refer to wiring diagram when rewiring thermostat.

- Remove screws attaching thermostat to stove.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

W002

25. BURNER SYSTEM COMPONENTS

**COMPLETE GAS VALVE ASSEMBLY
(Figure 18)**

- Disconnect electrical service and shut off supply line gas valve.
- Remove top screws holding gas valve cover to cabinet and stove and loosen bottom screws.
- Remove gas valve cover.
- Remove junction box cover screw.
- Remove junction box cover.
- Disconnect gas valve wire connections.

NOTE: Refer to wiring diagram when rewiring gas valve.

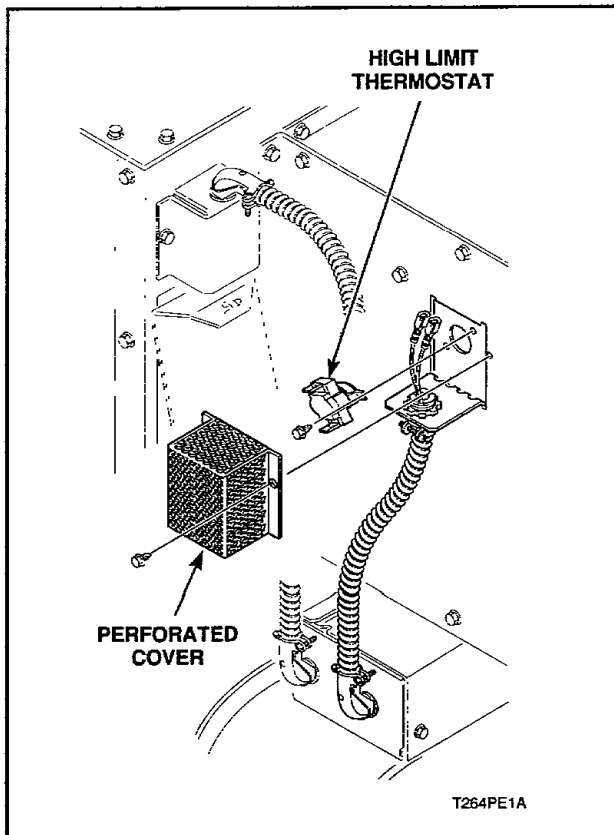


Figure 17

- Disconnect gas valve pipe union nut attaching gas shut-off valve to gas valve nipple.
- Remove screws mounting gas valve to mounting plate.

IMPORTANT: When reinstalling gas valve, purge air and sediment from the gas service line before connecting it loosely to the tumbler. Purge remaining air until odor of gas is detected, then tighten connection. Use pipe compound resistant to action of L.P. gas on all pipe threads.

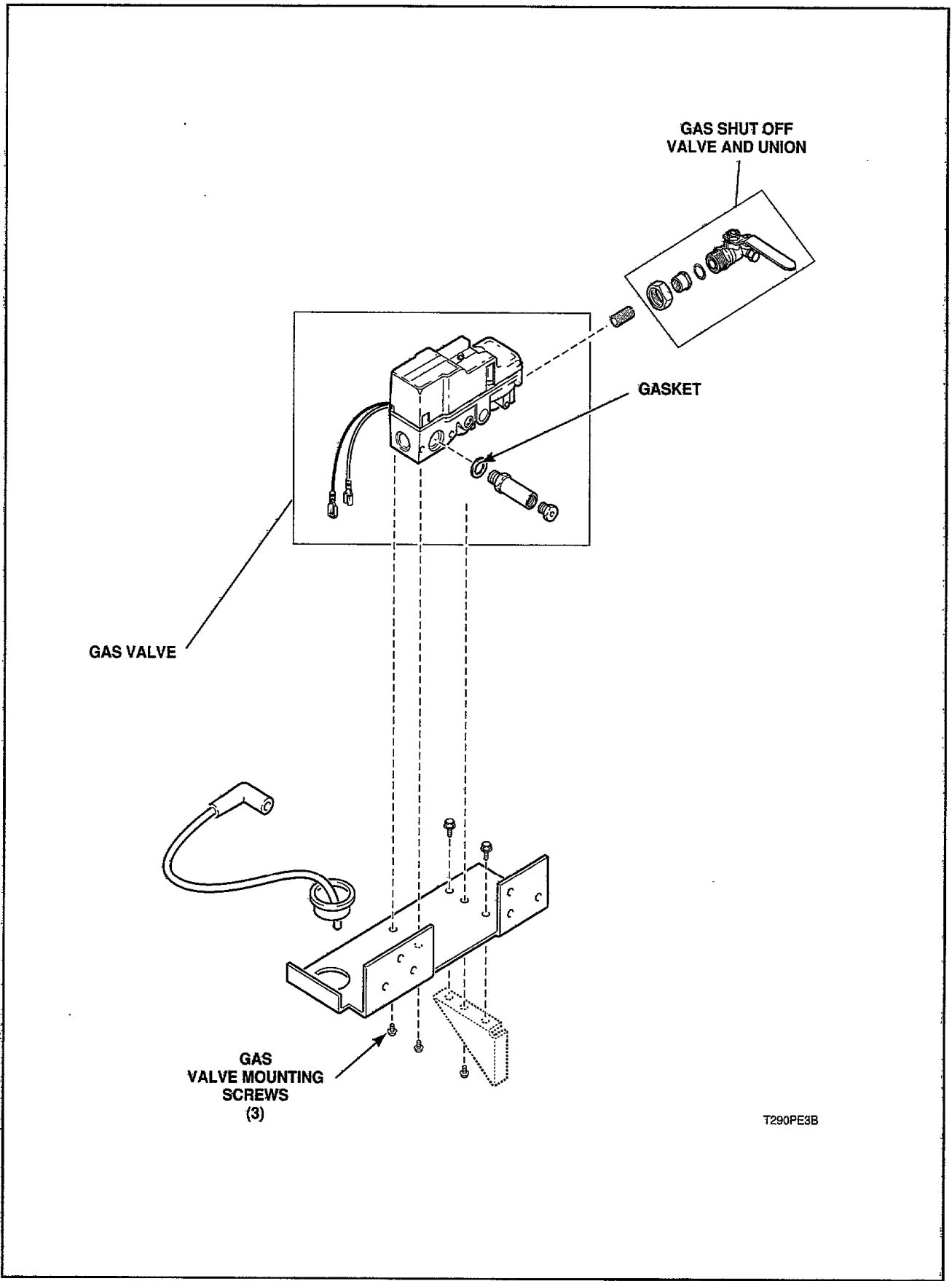
▲ WARNING

**To reduce the risk of fire or explosion:
Check all pipe connections for gas leaks
with a soapy solution. DO NOT USE AN
OPEN FLAME TO CHECK FOR GAS
LEAKS!**

**IGNITER AND BURNER TUBE ASSEMBLY
(Figure 19)**

- Disconnect electrical service and shut off supply line gas valve.
- Remove complete gas valve assembly. Refer to gas valve procedure, paragraph 25.
- Remove screws attaching stove guard to bottom of stove. Remove guard.
- Disconnect high voltage lead from igniter.
- Remove screws mounting burner to stove.
- Remove screws holding plate to side of stove.
- Remove burner by lifting igniter end up towards top of stove and pulling burner towards gas valve end of stove. Remove burner from bottom of stove.
- Remove screws mounting igniter to burner.
- Remove igniter.

(continued)



T290PE3B

Figure 18

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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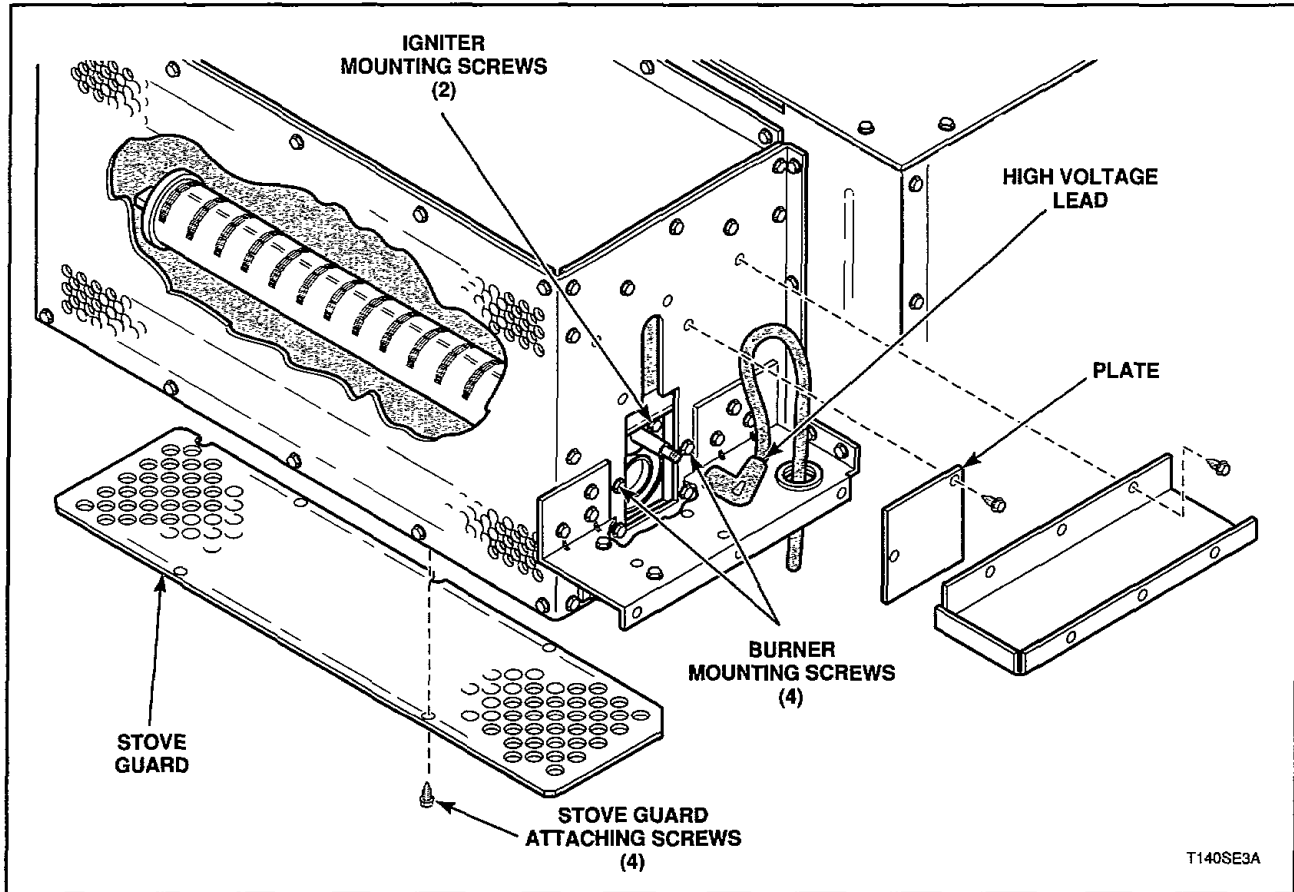


Figure 19

IMPORTANT: When reinstalling igniter on burner, gap between igniter and burner tab should be $.125'' - .1875''$ ($1/8'' - 3/16''$) ($.3 - .5$ cm), *Figure 20*.

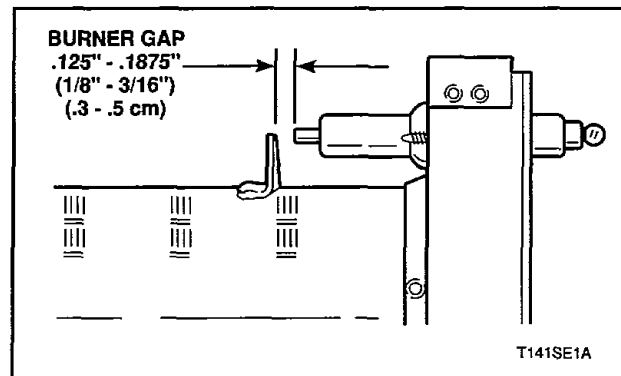


Figure 20

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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INSTANT ELECTRONIC IGNITION (Figure 21)

- Disconnect electrical service and shut off supply line gas valve.
- Remove screw attaching junction box cover to junction box. Remove cover.
- Disconnect wire harness.
- Remove high voltage lead.
- Remove screws attaching ignition control unit to junction box.
- Remove ignition control unit.

IMPORTANT: Remove circuit board and plastic back as a unit. Handle ignition control unit by sides of board only. DO NOT contact circuit boards with hands or metal objects. Place unit in clean, dry area away from work area to avoid damage.

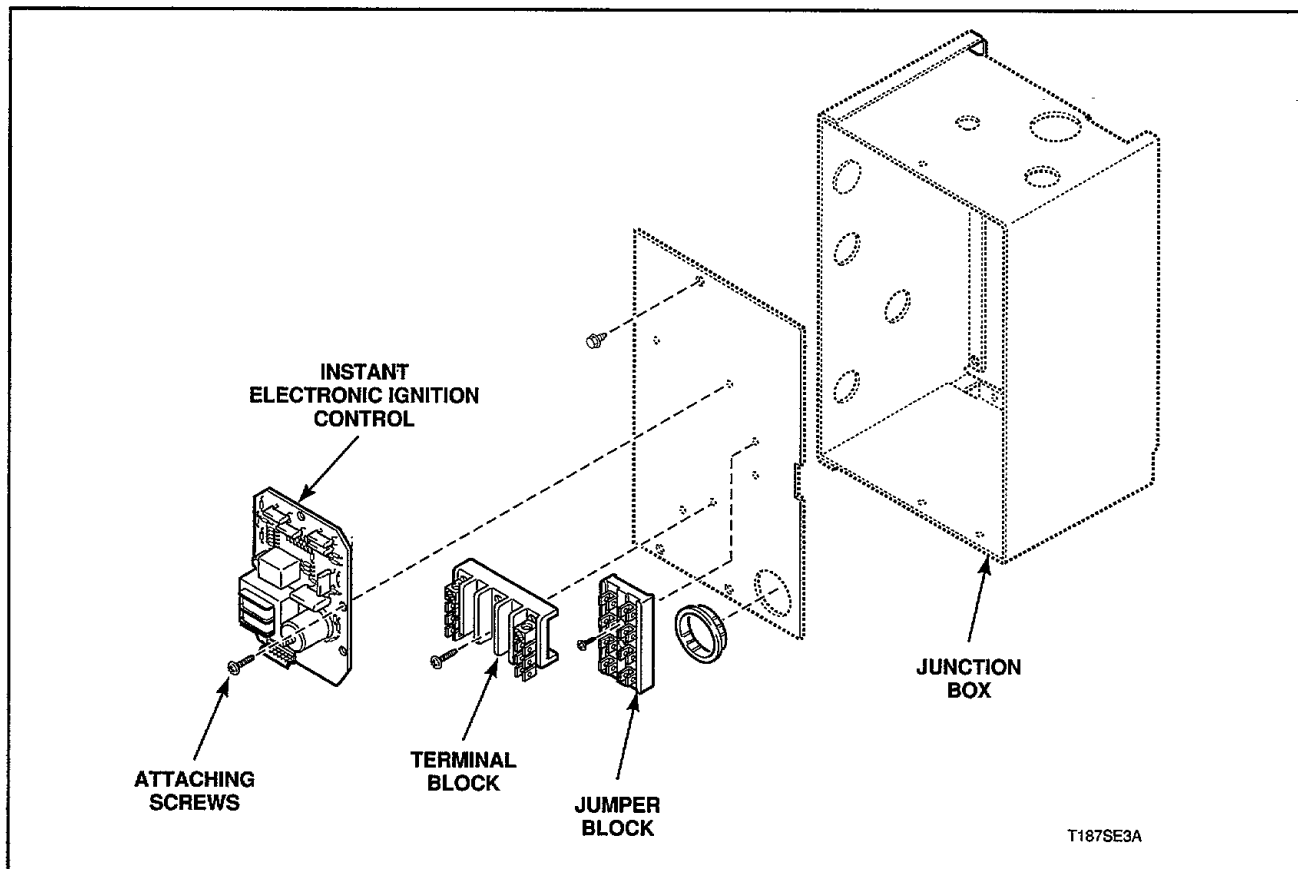


Figure 21

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

W002

**26. TEMPERATURE SENSOR THERMISTOR
(Figure 22)**

- Disconnect electrical service and shut off supply line gas valve.
- Remove screws attaching fan housing junction box cover.
- Remove cover from fan housing junction box.
- Disconnect two wires from temperature sensor terminals.
- Remove temperature sensor by turning counterclockwise.

NOTE: Refer to wiring diagram when rewiring temperature sensor.

**27. CABINET HIGH LIMIT THERMOSTAT
(Figure 22)**

- Disconnect electrical service and shut off supply line gas valve.
- Remove two screws attaching fan housing junction box cover.
- Remove cover from fan housing junction box.
- Disconnect two wires from thermostat.

NOTE: Refer to wiring diagram when rewiring thermostat.

- Remove screws holding cabinet high limit thermostat to fan housing. Remove thermostat.

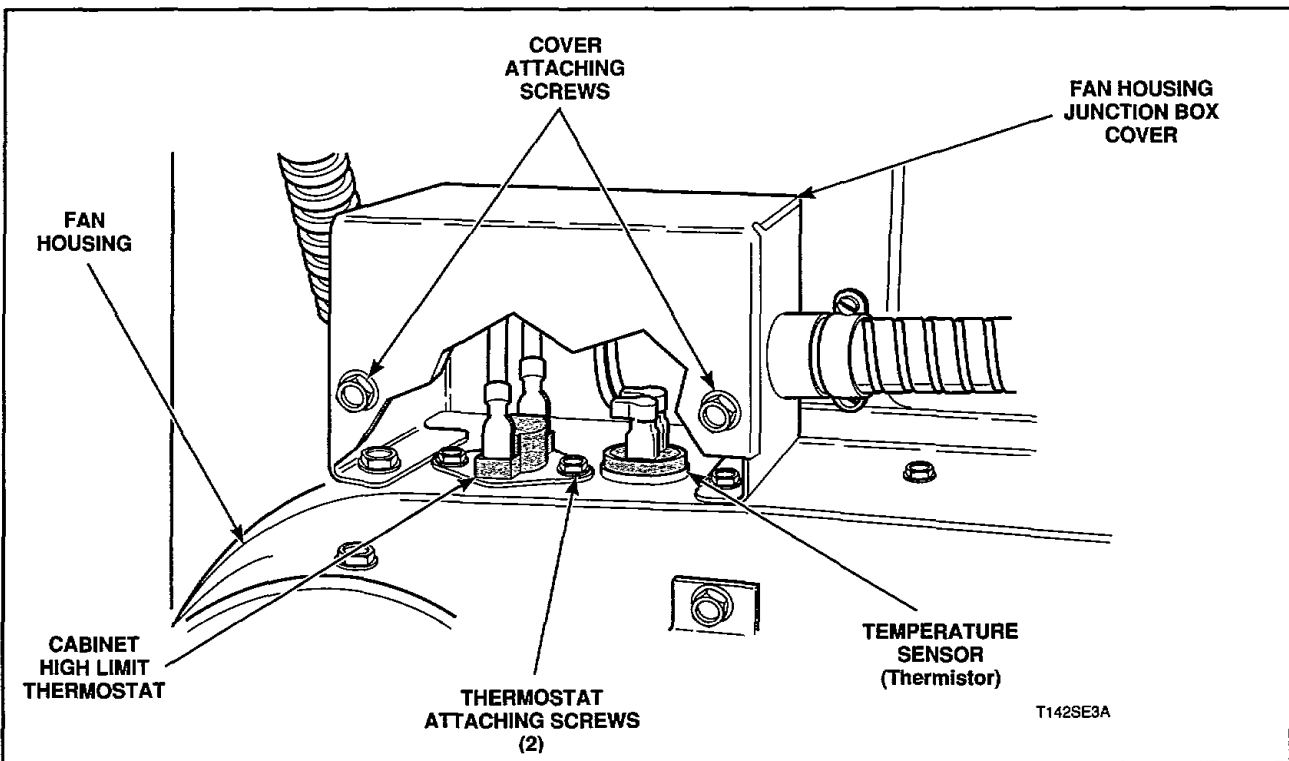


Figure 22

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

28. BELT GUARD AND BELT GUARD SWITCH
(Figure 23)

- Disconnect electrical service to tumbler.
- Remove screws attaching belt guard front to belt guard.

▲ WARNING

To reduce the risk of serious injury, belt guard front and belt guard switch **MUST** be reinstalled after servicing has been completed.

- Disconnect wires from belt guard switch.

NOTE: Refer to wiring diagram when rewiring belt guard switch.

- Depress tabs on sides of switch and push switch out through belt guard.
- Support belt guard and remove attaching screws. Remove belt guard.

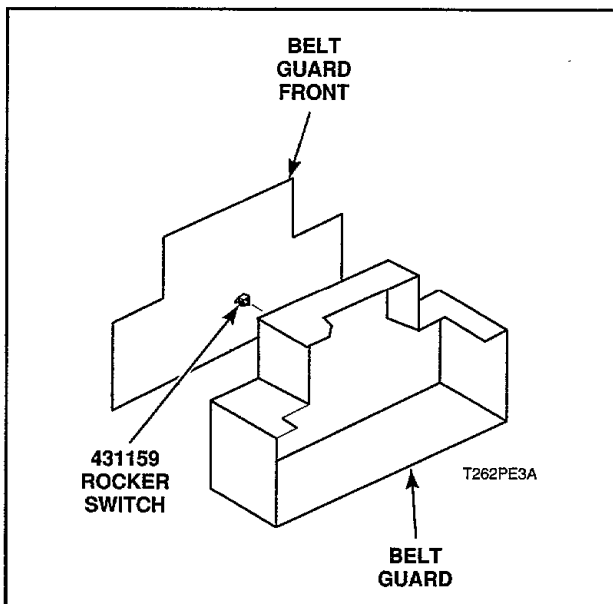


Figure 23

29. DRIVE BELT

- Disconnect electrical service to tumbler.
- Remove screws holding belt guard front to belt guard, Figure 23.

▲ WARNING

To reduce the risk of serious injury, belt guard front **MUST** be reinstalled after servicing has been completed.

- Pull drive belt idler to the right to relieve belt tension.
- Run belt off sheaves and idler, Figure 24.

IMPORTANT: Drive belt **MUST** be replaced with Belt No. 430054 for proper tumbler operation.

NOTE: The drive belt tension is automatically set by a spring loaded idler system. There is no adjustment. Refer to Figure 24 for proper belt routing.

- Reinstall belt guard front.

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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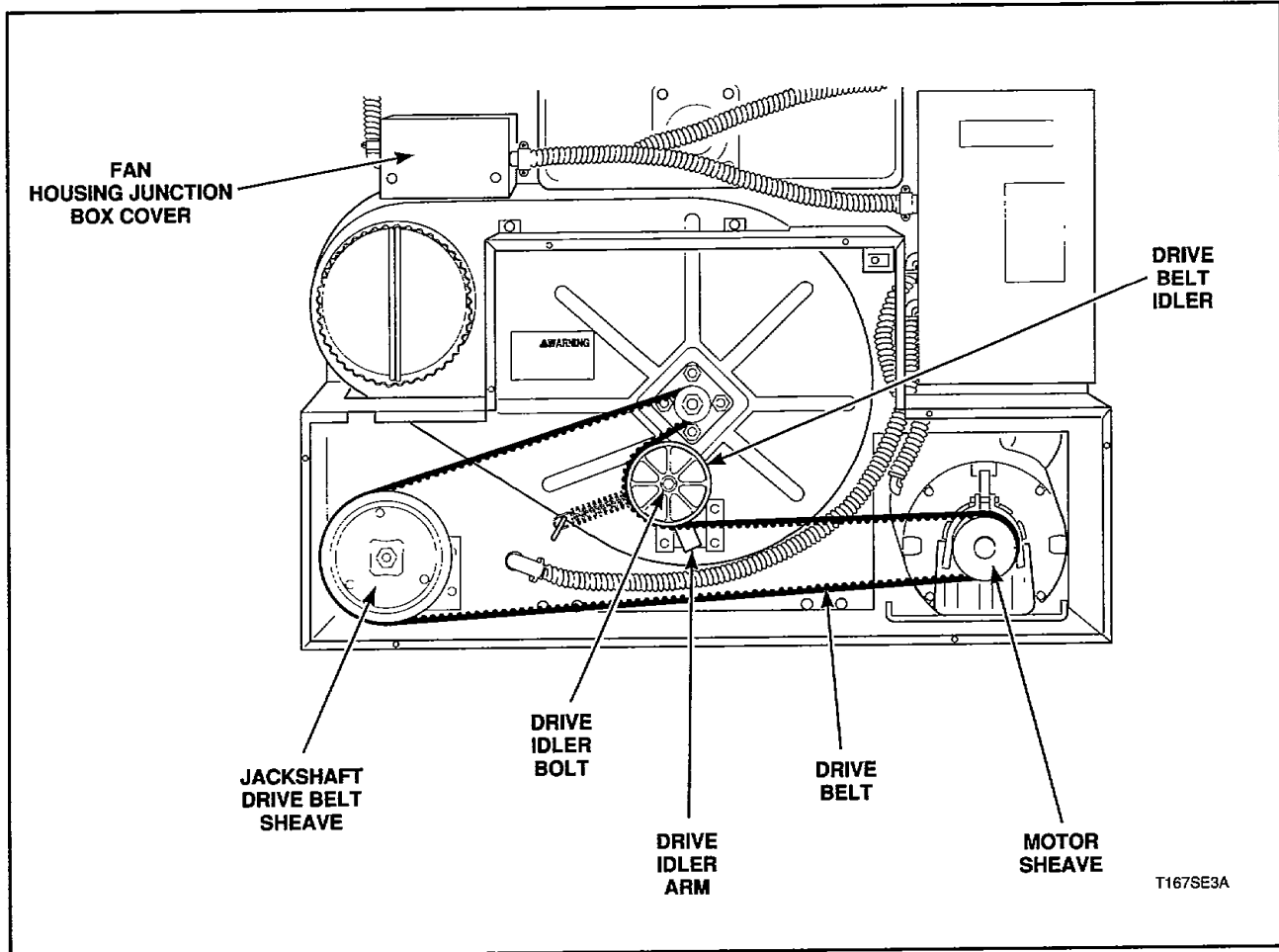


Figure 24

30. DRIVE IDLER (Figure 24)

- Disconnect electrical service to tumbler.
- Remove screws holding belt guard front to belt guard.

▲ WARNING

To reduce the risk of serious injury, belt guard front **MUST** be reinstalled after servicing has been completed.

- Remove drive belt, paragraph 29.
- Remove bolt holding drive idler to idler arm.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

W002

31. FAN

- a. Disconnect electrical service to tumbler.
- b. Remove belt guard, paragraph 28.
- c. Remove drive belt, paragraph 29.
- d. Remove screws from fan housing junction box cover and remove cover, *Figure 25*.
- e. Disconnect cabinet high limit thermostat and temperature sensor wires.
- f. Remove screws holding fan housing junction box to fan housing. Remove fan housing junction box.
- g. Remove 17 screws holding fan housing to cabinet back, *Figure 25*.
- h. With fan housing assembly off cabinet, hold fan while loosening palnut and jamnut, *Figure 26*.
- i. Remove palnut and jamnut from fan shaft. Remove fan.

NOTE: Refer to wiring diagram when rewiring cabinet high limit thermostat and temperature sensor.

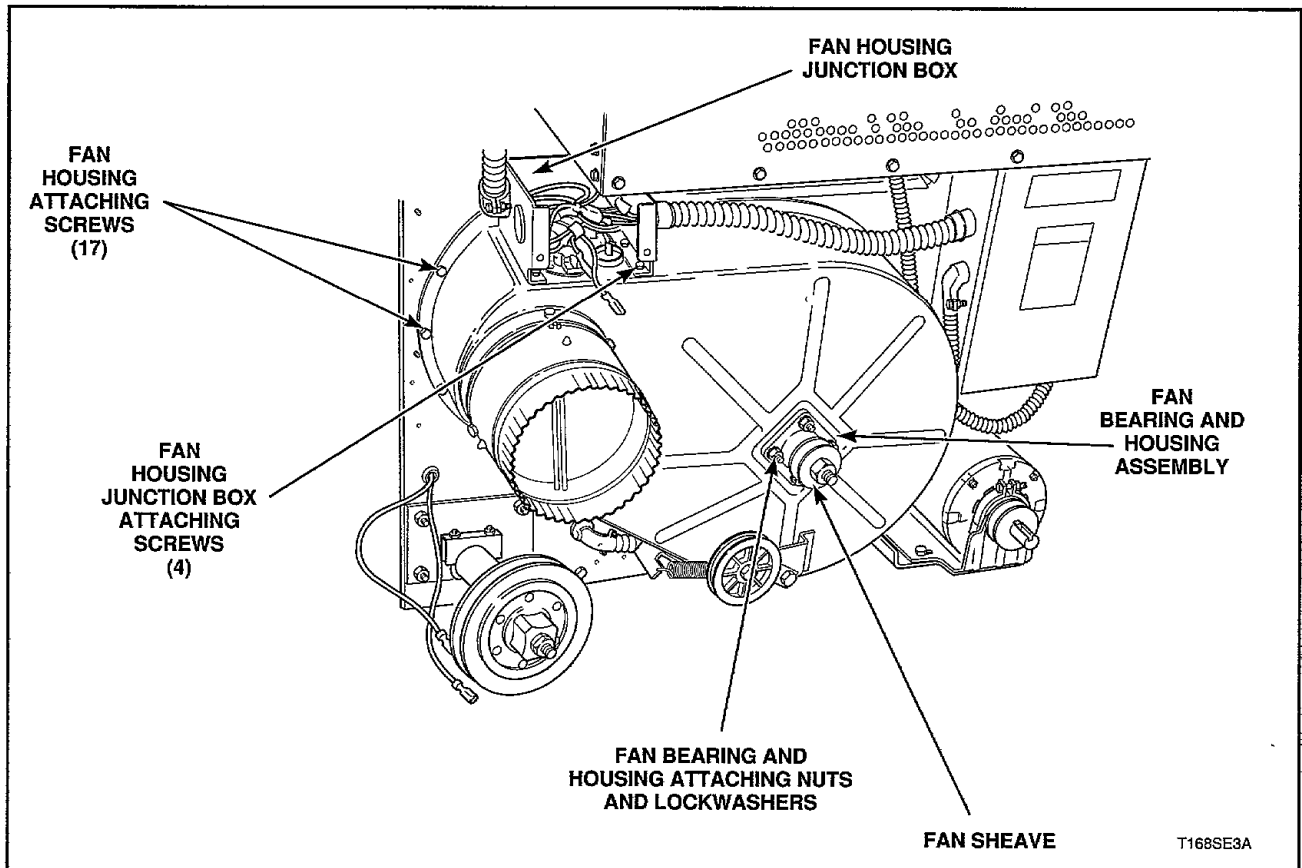


Figure 25

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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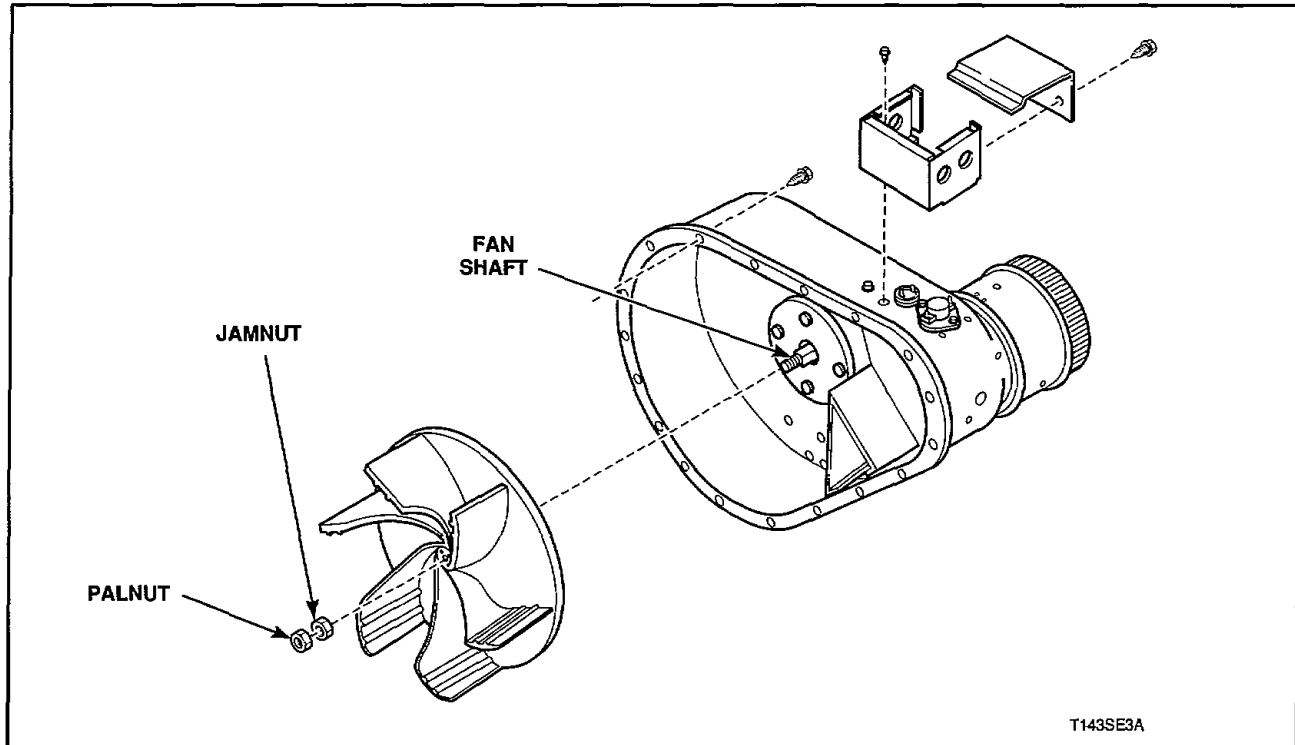


Figure 26

32. FAN BEARING, SHAFT AND HOUSING ASSEMBLY (Figure 26)

- Remove fan, paragraph 31.
- Loosen fan sheave setscrew. Remove fan sheave, *Figure 25*.
- Remove nuts, lockwashers and fan bearing, shaft and housing assembly from blower housing.

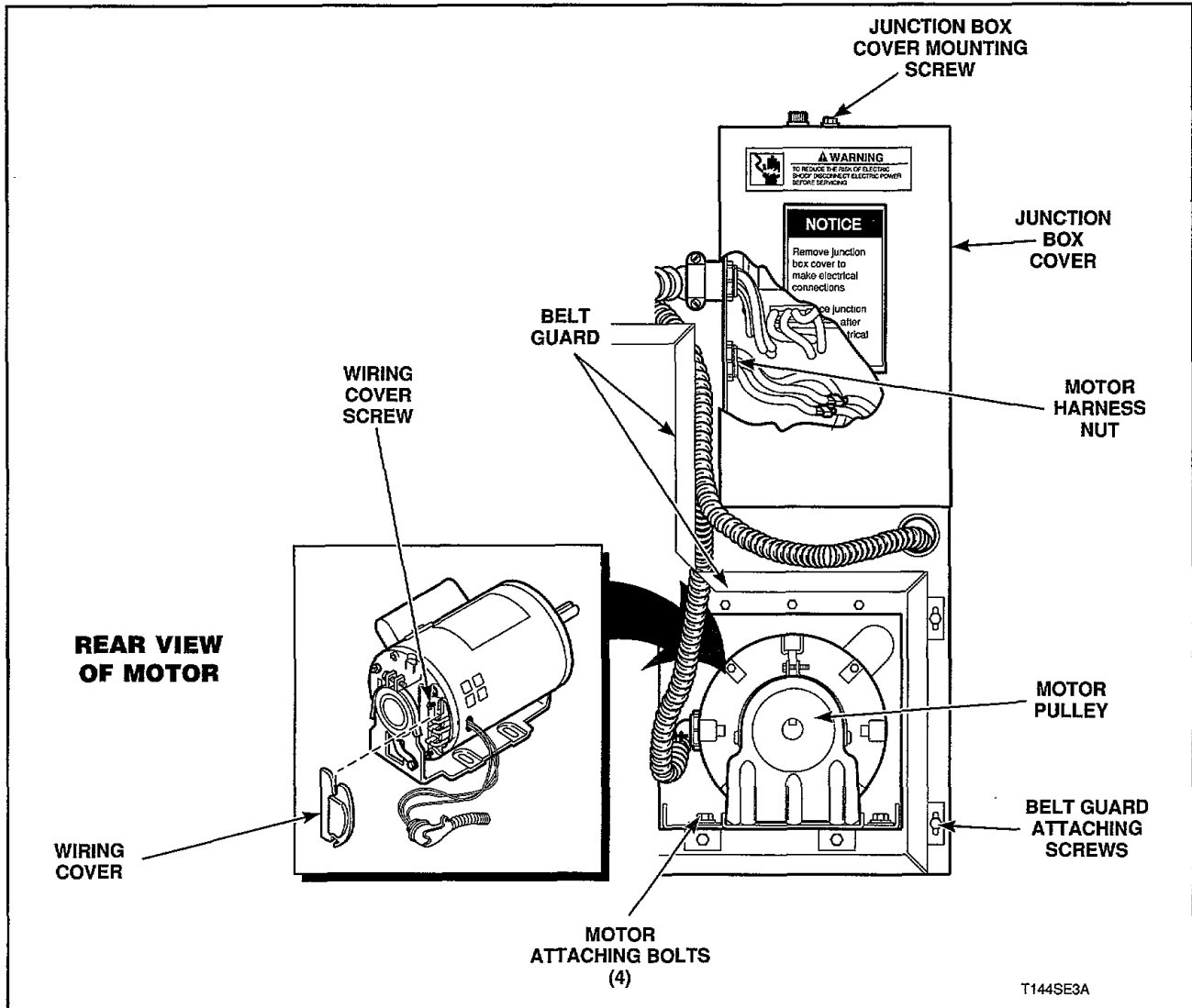
IMPORTANT: Fan bearing, shaft and housing assembly is a nonrepairable unit. If worn or damaged replace entire assembly.

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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Figure 27

33. MOTOR (Figure 27)

- Disconnect electrical service to tumbler.
- Remove belt guard, paragraph 28.
- Remove drive belt, paragraph 29.
- Remove junction box cover mounting screw. Remove junction box cover.
- Disconnect motor wires in junction box.
- Loosen and remove harness nut attaching motor harness to junction box.
- Loosen and remove bolts attaching motor to motor mounting bracket.
- Remove motor from unit with harness attached.
- Loosen screw on motor wiring cover and slide cover to the side.
- Disconnect motor harness wires from motor.

NOTE: Refer to wiring diagram when rewiring motor wires.

NOTE: When installing motor, refer to wiring diagram when rewiring motor.

SECTION II

Adjustments

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

W002

34. LEVELING LEGS

NOTE: Keep the tumbler as close to the floor as possible. All four legs must rest firmly on the floor so weight of tumbler is evenly distributed. Tumbler must not rock.

- a. Check the front to rear level by rotating the clothes cylinder until one of the cylinder ribs is at the bottom. Place a level on the rib. Adjust legs as necessary.

NOTE: The front of the tumbler should be slightly higher than the rear (approximately 1/8 inch, 3.18 mm). This will prevent the clothes, while tumbling, from wearing on the door glass gasket.

- b. Check the side to side level by placing a level on the front and rear of top panel. Adjust legs as necessary.

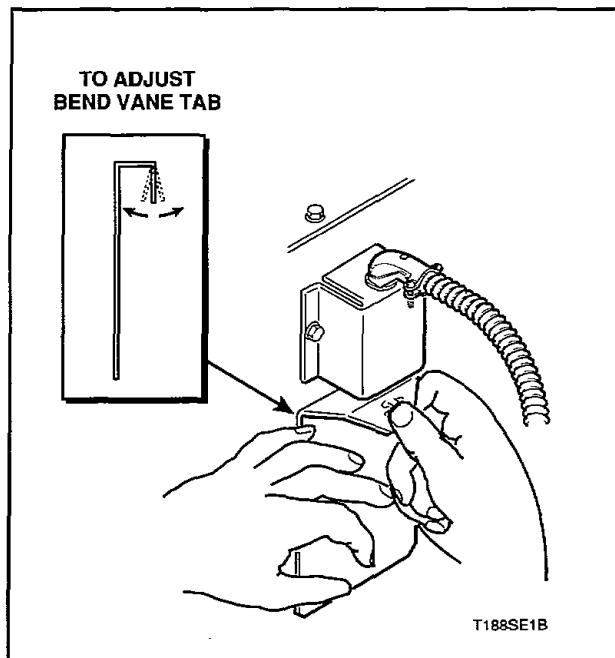


Figure 28

35. MAIN GAS BURNER AIR SHUTTER

IMPORTANT: The burner requires no adjustment for primary air.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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36. AIRFLOW SWITCH (Figure 28)

The airflow switch is set at the factory for proper operation. However, at installation, airflow must be checked on each switch. If there is a problem, adjust as follows:

IMPORTANT: Lint drawers, loading doors, coin vaults and microprocessor doors must be in place before attempting to adjust airflow switch.

IMPORTANT: Airflow switch vane must remain closed during operation. If it opens during the drying cycle, this indicates insufficient airflow through the tumbler. If switch remains open, or pops open and closed during the cycle, the heating system will shut off. The cylinder and fan will continue to operate even though the airflow switch is malfunctioning.

IMPORTANT: Airflow switch operation may be affected by a clogged lint screen, lack of make-up air, or in the customer installed main or collector ducts. These conditions must be checked and necessary corrections made before adjusting airflow switch. Always check airflow at installation.

The airflow switch operation is controlled by bending the vane. Bending the vane either increases or decreases airflow switch sensitivity. The vane should be adjusted so the airflow will force the vane away from the cabinet when the machine door is opened 1-1/2 inches (3.81 cm). Loading door switch must be taped shut during this adjustment. Adjust the airflow switch as follows:

- a. Load the tumbler with a dry cotton load.

NOTE: Airflow adjustment is faster with one person opening loading door in front and another adjusting the vane in the rear of the tumbler.

- b. Start the tumbler. Open loading door 1-1/2 inches (3.81 cm). The airflow vane should move away from the cabinet, opening the switch contacts and shutting off the heat system. This indicates proper operation and proper adjustment.
- c. If switch is not opening as described in step "b", it should be adjusted so it is MORE sensitive. Grasp the vane and spread the vane and switch connection apart, *Figure 28*. Retest by opening loading door and continue spreading the vane until switch operates as described in step "b".
- d. If switch opens BEFORE loading door is opened the proper distance, step "b", it should be adjusted so it is LESS sensitive. Squeeze the vane and switch connection together. Retest by opening the loading door and continue squeezing vane connection together until switch operates as described in step "b".
- e. Remove tape from the loading door switch.

37. CYLINDER DOOR SWITCH (Figure 29)

The door switch should be adjusted so the cylinder stops when door is opened two inches (5.08 cm), plus or minus 1/4 inch (6.35 mm). This switch is a normally open switch and is closed when the door is closed.

- a. Close door and start tumbler. Slowly open loading door. Cylinder and heat system should shut off when door is open two inches (5.08 cm) plus or minus 1/4 inch (6.35 mm).
- b. Slowly close loading door. When door is two inches (5.08 cm) from being fully closed, the tab on the door should contact the switch plunger and depress it enough to close the switch with an audible "click".
- c. If tab does not depress the switch plunger enough to operate the switch, bend tab on loading door OUTWARD and repeat steps "a" and "b".

▲ WARNING

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

- Disconnect electric power to the tumbler before servicing.
- Close gas shut-off valve to gas tumbler before servicing.
- Close steam gate valve to steam tumbler before servicing.
- Never start the tumbler with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.

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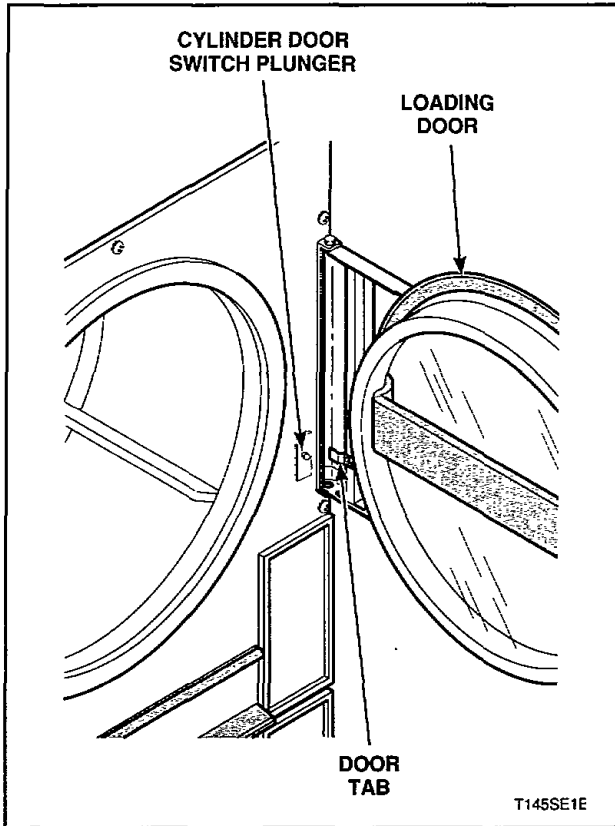


Figure 29

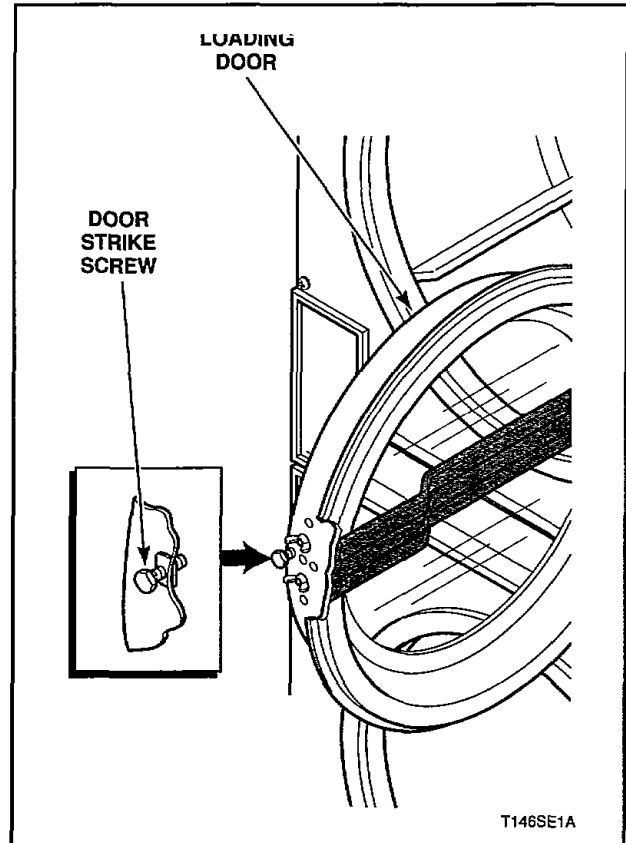


Figure 30

39. CYLINDER DOOR STRIKE (Figure 30)

The door strike must be adjusted so that sufficient tension holds loading door closed against the force of a load tumbling against it. The door is properly adjusted when 8-15 lbs. (35.6-66.7 kg) of pull is required to open door.

To adjust, open door and turn door strike screw in or out as required.

40. BELT GUARD SWITCH

The belt guard switch is a normally open switch and closed when the guard front is in place. No adjustment is necessary.

41. DRIVE BELT TENSION

Correct tension is maintained by a spring loaded idler. No adjustment is necessary.

42. CYLINDER BELT TENSION

Correct tension is maintained by a spring loaded idler. No adjustment is necessary.

SECTION III

Service Helps

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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IMPORTANT: Refer to appropriate wiring diagram for aid in testing tumbler components.

42. MOTOR DOES NOT START

POSSIBLE CAUSE	TO CORRECT
Electrical power off or circuit breaker or fuse blown.	Check power supply, or replace fuses.
Loading door switch, lint drawer switch or belt guard switch not closed or inoperative switch.	Close door, drawer or replace guard or test switch and replace if inoperative.
Door switch improperly adjusted.	Refer to ADJUSTMENTS section in this manual for door switch adjustment.
Start circuit not complete.	Press start button.
Inoperative motor.	Have motor tested and replace if inoperative.
Improper coins inserted in coin drop.	Check that proper coins are inserted.
Inoperative coin drop.	Test coin drop and replace if inoperative.
Broken, loose, or incorrect wiring.	Refer to wiring diagram located on back of tumbler.
Jackshaft binding in bearings.	Replace bearings.
Fan shaft binding in bearings.	Replace fan shaft and bearing assembly.
Cylinder shaft binding in bearings.	Replace cylinder bearing and housing assembly.
Idler bearings binding.	Replace idler(s).
Stove high limit thermostat is open or inoperative.	Allow unit to cool down and clean lint screen or replace thermostat.
Electronic control inoperative.	Replace electronic control.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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43. MOTOR OVERLOAD PROTECTOR CYCLES REPEATEDLY

POSSIBLE CAUSE	TO CORRECT
Incorrect voltage.	Refer to INSTALLATION INSTRUCTIONS supplied with tumbler) for electrical requirements.
Clothes load too large.	Remove part of load.
Clothes cylinder is binding.	Check cylinder for binding.
Inadequate wiring.	Check with local power company to ensure that wiring is adequate.
Inadequate make-up air.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for make-up requirements.
Poor housekeeping.	Clean lint accumulation on and around the motor.
Broken, loose, or incorrect wiring.	Refer to wiring diagram located on back of tumbler.

44. MOTOR RUNS BUT CYLINDER DOES NOT TURN

POSSIBLE CAUSE	TO CORRECT
Motor drive pulley loose and key fallen out.	Replace key and tighten setscrews.
Drive belt sheave loose and key fallen out.	Replace key and tighten setscrews.
Broken drive belt.	Replace drive belt.
Broken cylinder belt.	Replace cylinder belt.
Cylinder is binding.	Check cylinder for binding.

45. MOTOR DOES NOT STOP

POSSIBLE CAUSE	TO CORRECT
Inoperative door switch, belt guard switch, or lint drawer switch.	Test switches and replace if inoperative.
Inoperative coin drop.	Test coin drop and replace if inoperative.
Incorrect wiring.	Refer to wiring diagram located on back of tumbler.
Electronic Control inoperative.	Replace electronic control.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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46. BURNER DOES NOT IGNITE

POSSIBLE CAUSE	TO CORRECT
Improper or inadequate exhaust system.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for exhaust system requirements.
Blown fuses or tripped circuit breaker in external electric supply line.	Check fuses or circuit breaker.
Drying selector set in the "cool down" portion of cycle.	Reset switch on microprocessor.
Inoperative cabinet high limit thermostat.	Test thermostat and replace if inoperative.
Insufficient gas supply.	Open partially closed gas shut-off valve, or correct low gas pressure. Check manifold pressure and adjust to pressure specified on rating plate. If pressure cannot be obtained, have gas supplier check main pressure.
Incorrect orifices.	Tumbler is equipped for type of gas specified on rating plate. If orifices are different from that specified on rating plate, obtain proper orifices.
Lint buildup.	Clean lint compartment after every 8 hour shift. Check damper for lint accumulation. Check ductwork for lint build-up.
Inadequate duct work and make-up air.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) to ensure that ductwork and make-up air openings are sized adequately.
Inoperative airflow switch.	Test switch and replace if inoperative.
Airflow switch out of adjustment.	Refer to ADJUSTMENTS section in this manual for airflow switch adjustment.
Lint drawer not closed properly.	Unlock and open lint drawer, close lint drawer on tumbler (ensuring a tight fit) then lock.
Broken, loose, or incorrect wiring.	Refer to wiring diagram located on back of tumbler.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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46. BURNER DOES NOT IGNITE (continued)

POSSIBLE CAUSE	TO CORRECT
Improper igniter to burner tab clearances.	Set gap as described in SERVICE PROCEDURES section, paragraph 25.
Valve coils inoperative.	Check valve coils and replace if necessary.
Blown fuse on tumbler.	Check fuse and replace if necessary.
Gas shut-off valve closed.	Open shut-off valve.
Green wire from IEI board not connected to ground terminal.	Connect green wire to terminal.
Inoperative IEI control.	Replace IEI control.
Inoperative motor switch.	Replace motor.
IEI control in safety lockout.	Reset IEI control by opening and closing tumbler door.

47. BURNER IGNITES AND GOES OUT REPEATEDLY

POSSIBLE CAUSE	TO CORRECT
Insufficient gas pressure.	Check gas supply and pressure.
Inoperative cabinet high limit thermostat.	Test thermostat and replace if inoperative.
Improper or inadequate exhaust system.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for exhaust requirements.
Improper orifices.	Tumbler is equipped for type of gas specified on rating plate. If orifices are different from that specified on rating plate, obtain and install proper orifices.
Broken, loose, or incorrect wiring.	Refer to wiring diagram located on back of tumbler.
Excessive igniter to burner clearance.	Set gap as described in SERVICE PROCEDURES section, paragraph 25.
Inadequate make-up air.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for make-up air requirements.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
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48. BURNER DOES NOT SHUT OFF

POSSIBLE CAUSE	TO CORRECT
Motor does not stop.	Refer to paragraph 45.
Impurities on gas valve seat, preventing valve from closing.	Replace gas valve.
Incorrect wiring.	Refer to wiring diagram located on back of tumbler.
Inoperative thermistor.	Replace thermistor.

49. CLOTHES DO NOT DRY

POSSIBLE CAUSE	TO CORRECT
Burner does not ignite.	Refer to paragraph 46.
Too much water in articles being dried.	Remove excess water.
Clothes load too large.	Remove part of load. Thirty pounds dry weight (cotton load) is maximum load.
Improper or inadequate exhaust system.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for exhaust recommendations.
Burner shuts off prematurely.	Refer to paragraph 47.
Drying selector improperly set.	Set selector for higher setting.
Incorrect voltage.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for electrical requirements.
Inadequate make-up air.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for make-up air requirements.
Clogged lint screen.	Clean lint screen.
Exhaust thimble binding.	Adjust thimble vanes so they turn freely.

▲ WARNING

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

- **Disconnect electric power to the tumbler before servicing.**
- **Close gas shut-off valve to gas tumbler before servicing.**
- **Close steam gate valve to steam tumbler before servicing.**
- **Never start the tumbler with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.**

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50. TUMBLER OVERHEATING

POSSIBLE CAUSE	TO CORRECT
Incorrect main burner orifices.	Replace orifices.
Gas pressure too high.	Adjust gas pressure as specified on rating plate.
Inadequate make-up air.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for make-up air requirements.
Lint accumulation.	Remove lint.
Restricted or inadequate exhaust system.	Remove obstruction or lint build up from exhaust ductwork. Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for exhaust system requirements.
Inoperative temperature sensor.	Check wiring to ensure temperature sensor is connected. Replace temperature sensor if necessary.
Exhaust thimble binding.	Adjust vanes so they turn freely.

51. BURNERS NOT BURNING PROPERLY

POSSIBLE CAUSE	TO CORRECT
Dirt in burners.	Disassemble burners and blow out the dirt.
Gas pressure too high.	Check rating plate on back of tumbler for correct gas pressure.
Incorrect orifices.	Tumbler is equipped for type of gas specified on rating plate. If orifices are different from that specified on rating plate, obtain and install proper orifices.
Restricted or blocked exhaust duct.	Disassemble and clean exhaust system.
Airflow switch not functioning properly.	Replace airflow switch.
Inadequate make-up air.	Refer to INSTALLATION INSTRUCTIONS (supplied with tumbler) for make-up air requirements.

52. CYLINDER DOOR OPENS DURING OPERATION

POSSIBLE CAUSE	TO CORRECT
Door strike improperly adjusted.	Refer to ADJUSTMENTS section in this manual for door strike adjustment.
Tumbler improperly leveled.	Refer to ADJUSTMENTS section in this manual for level leg adjustment.

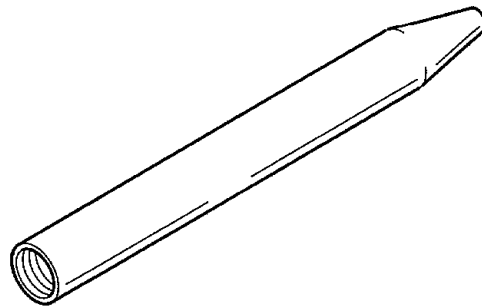
SECTION IV

Electronic Control Troubleshooting

Refer to Troubleshooting Guide supplied with the tumbler.

SECTION VII

Special Tools



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CYLINDER GUIDE TOOL