

INTRODUCTION

The material presented in this module is intended to provide you with an understanding of the fundamentals of range servicing.

Major appliances have become more sophisticated, taking them out of the screwdriver and pliers category. Their electrical circuits include several different types of automatic controls, switches, heaters, valves, etc.. Semiconductors, solid-state controls, and other components usually associated with radio and television electronic circuits, are being engineered into automatic washers, dryers, dishwashers and refrigerators.

The appliance technician is emerging into a professional status of his own. He must prepare himself now to be able to perform his duties today as well as to retain his professionalism in the future.

No longer is on-the-job training sufficient to prepare technicians for the complicated procedures required for todays sophisticated appliances. This training can best be obtained through organized classroom study and application. However, much of the knowledge necessary to service todays appliances can be obtained through study courses. Completion of this and other courses will provide you with sufficient understanding of appliances and their operation to enable you to do minor service. It will also serve as a valuable stepping stone to more advanced study and on-the-job training to improve your servicing skills.

Information contained in this module is used on WHIRLPOOL® appliances.

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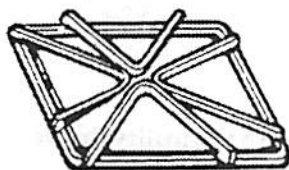
***TEST** See Test Book LIT4314428

***NOTE:** *We recommend taking the TEST for MODULE 3, right after studying it.*

CHAPTER 1

MECHANICAL COMPONENTS

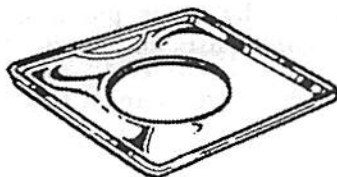
BURNER GRATES



These burner grates are located on top of the gas burners. They are used to set pots on for cooking. To remove them just lift off the cook top.

Wash them in warm soapy water, rinse and dry well.

REFLECTOR PANS

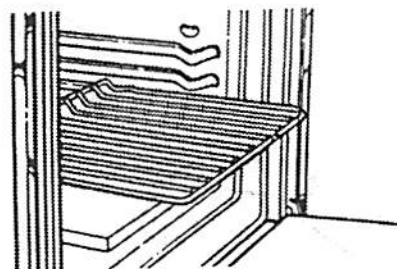


These reflector pans are located under the burner grates (gas) or surface units (electric) and are used not only to reflect the heat, but to catch foods that might spill over when cooking.

To remove the reflector pans, lift the burner grates or pull the surface units out, then lift the reflector pans out of the cook top.

Wash them in warm soapy water, rinse and dry well.

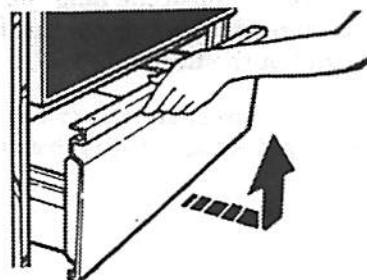
OVEN RACKS



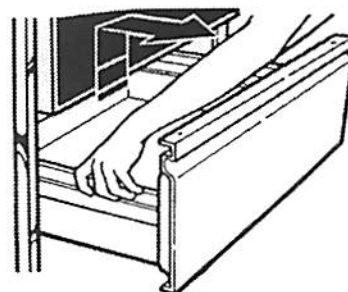
These parts are located inside the oven and are used to set your food on when baking or broiling. To remove them, pull out then lift up and pull.

STORAGE DRAWER

The storage drawer, located at the bottom of the range, is for storing pots and pans. Never keep anything in the drawer that could burn or melt.



STEP 1 Pull the drawer out to the first stop, then lift the front.

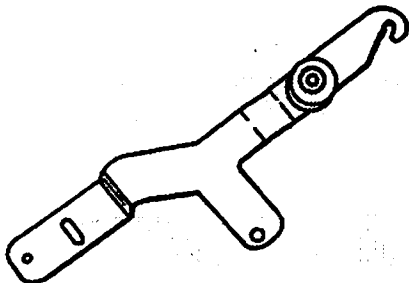


STEP 2 Pull to the last stop, then lift the back to clear the glide.

STEP 3 Pull the rest of the way out.

HINGE

This part is located on both sides inside the front frame. The channel arm rides on this hinge for opening and closing the oven door.



STEP 1 Remove the utility drawer, oven door, oven door spring and anchor and the channel arm.

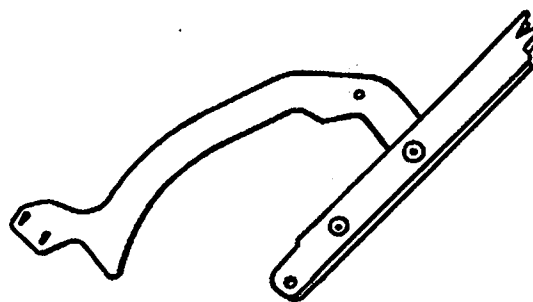
STEP 2 Remove the screws holding the hinge to the side of the frame.

STEP 3 Lift to remove the top of the hinge from the bushing and back to remove the tab from the slot in the frame.

REPLACEMENT

STEP 4 Place the top of the hinge on the bushing and slide forward so the tab on the hinge comes through the slot in the frame.

STEP 5 Replace the channel arm, oven door spring and anchor, oven door and utility drawer.



STEP 1 Remove the utility drawer, oven door and oven door spring and anchor.

STEP 2 Pry the "C" clip off the hinge pin.

STEP 3 Remove the hinge pin.

STEP 4 Roll the channel arm out the front of the frame.

REPLACEMENT

STEP 5 Roll the channel arm back into the front frame. Be sure the curved edge of the channel arm is riding on the pulley on the hinge.

STEP 6 Place the bottom edge of the channel arm over the edge of the hinge, lining up the screw holes.

STEP 7 Place the hinge pin from the outside, through the channel arm and hinge.

STEP 8 Push the "C" clip in the groove on the hinge pin.

STEP 9 Replace the oven door spring and anchor, oven door and utility drawer.

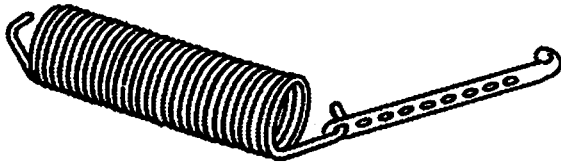
OVEN DOOR SPRING and ANCHOR

These parts are located on the inside of the cabinet (each side). One end of the anchor hooks to the range base and the other end hooks to the end of the spring. The other end of the spring then hooks into the channel arm. Adjustment gives tension to the oven door.

Don't forget to mark which holes the spring and anchor are in, in the channel arm and frame. Both sides must be in the same holes so the oven door tension is the same. This makes the oven door open and close easier.

CHANNEL ARM

This part is located on both sides, going into the bottom of the oven door. It is used with the hinge for opening and closing the oven door.



- STEP 1** Tape the oven door shut.
- STEP 2** Remove the utility drawer.
- STEP 3** Reach-in and remove the spring and anchor from the holes in the base and channel arm.

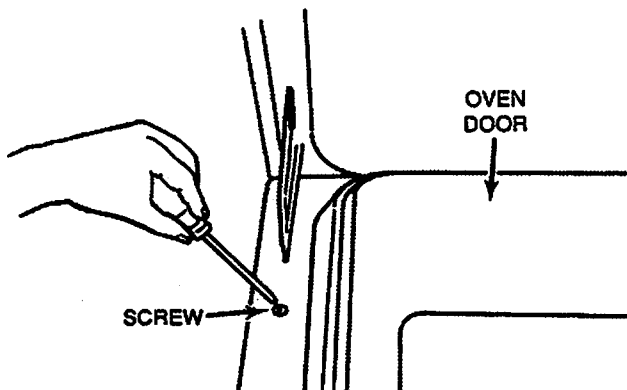
REPLACEMENT

- STEP 4** Place one end of the spring in the channel arm.
- STEP 5** Place the other end of the spring in one of the holes in the anchor.
- STEP 6** Place the curved end on the anchor in the hole on the frame.
- STEP 7** Replace the utility drawer.
- STEP 8** Remove the tape.

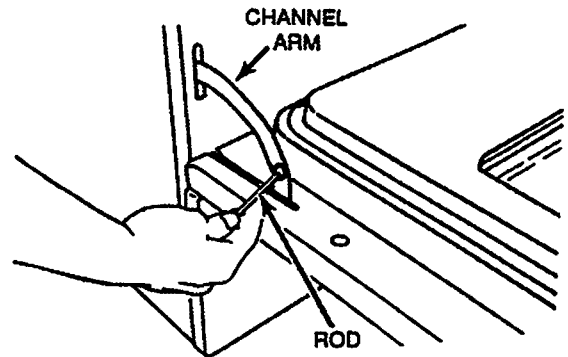
OVEN DOOR REMOVAL

The oven door of course is located on the front of the range. Most models have a glass window for looking into the range while things are baking. The door can be opened somewhat while you are broiling (most newer models).

- STEP 1** Open the oven door all the way.

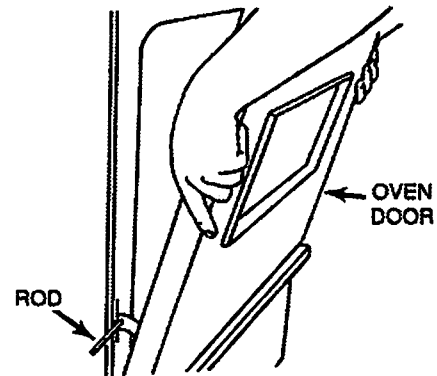


- STEP 2** Some models use a screw to hold the door to the channel arm. Remember to unscrew both sides.



- STEP 3** Place a straight piece of dowel rod (3 inches long by 1/8 inch diameter) in the hole in each channel arm.

If this is not done, when the door is pulled off the channel arms, they could snap back and chip the finish.



- STEP 4** Close the door to the broil stop.
- STEP 5** Grasp the oven door on the sides and pull off the channel arms.

REPLACEMENT

- STEP 6** Place the oven door with the slots over the channel arms, then push down.
- STEP 7** Open the oven door all the way.
- STEP 8** Replace both screws (if used).
- STEP 9** Remove the dowel rod from each channel arm.
- STEP 10** Close the oven door.