INSTRUCTIONS FOR LINING #142 SPECIAL LENGTH FURNACE

1. PLACE LEFT SIDE BRICK (10½" LONG) IN POSITION.

2. PUT SMALL AMOUNT OF CEMENT ALONG BACK EDGE OF LEFT SIDE BRICK (16" LONG) AND SET IN PLACE.

3. CEMENT LEFT SIDE OF BACK BRICK AND SET IN PLACE WITH HOLE TOWARD TOP.

4. PUT SMALL AMOUNT OF CEMENT ON LEFT SIDE AND BACK OF BOTTOM BRICK (8" LONG) AND POSITION AGAINST LEFT SIDE AND BACK BRICK.

5. PUT CEMENT ON LEFT SIDE AND BACK OF BOTTOM BRICK (16" LONG) AND SET IN PLACE.

6. PUT CEMENT ON RIGHT SIDE OF BACK AND BOTTOM BRICKS AND POSITION RIGHT SIDE BRICK (18½" LONG).

7. CEMENT BACK SIDE OF RIGHT SIDE BRICK (8" LONG) AND SET IN PLACE.

8. CEMENT TOP OF THE SIDE BRICKS AND BACK BRICK AND SLIDE TOP BRICK (16¼" LONG) INTO PLACE.

9. CEMENT BACK EDGE OF TOP BRICK (10¼" LONG) AND SLIDE INTO POSITION.

10. CHECK ALL CEMENTED JOINTS MAKING SURE ENOUGH CEMENT HAS BEEN USED.

11. CEMENT ALL FRONT SURFACES AND POSITION FRONT FRAME BRICK. REPLACE FRONT CASTING.

12. PLACE SHORT TAPERED END OF BURNER PORT NEXT TO PORT CUP; PUT GASKET AROUND PORT AND PACK GASKET INTO CUP. COVER WITH CEMENT, USING ENOUGH SO THAT IT WILL OOZE OUT AROUND THE EDGE OF THE BURNER CUP WHEN BURNER PORT IS INSERTED IN THE FURNACE.

13. PLACE CEMENT ON SIDE AND BOTTOM OF HEARTH RESTS. PLACE IN POSITION AT FRONT AND BACK OF FURNACE. CEMENT BOTTOM OF CENTER HEARTH SUPPORT AND CENTER ON BOTTOM OF FURNACE. BE SURE THE TOP OF THE CENTER HEARTH SUPPORT IS EVEN WITH THE TOP OF THE HEARTH RESTS ON EACH END.

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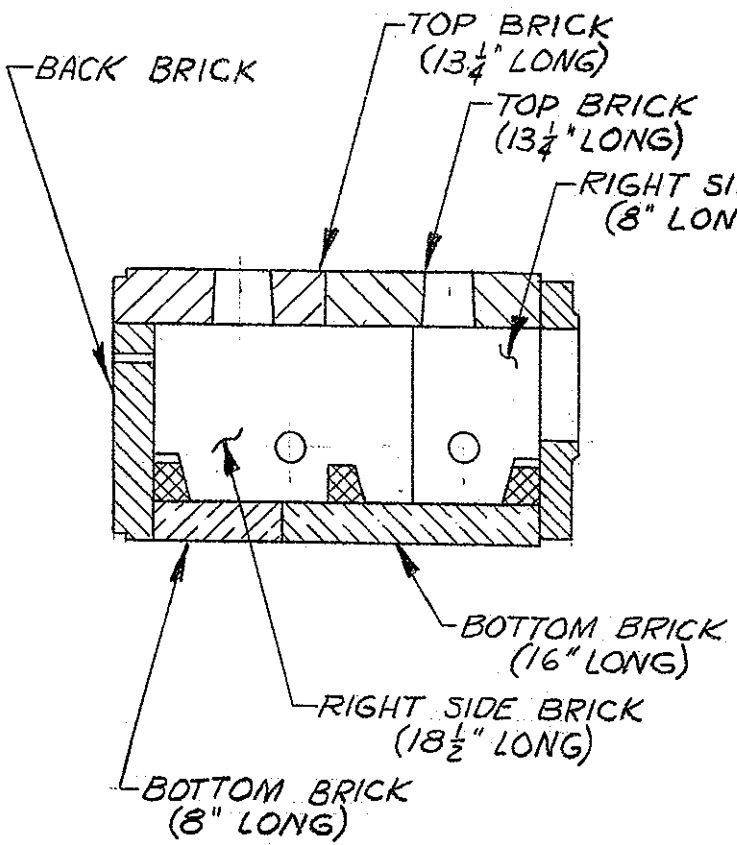
1. TO POUR DOOR LINING, LAY 1/2" INSULATING BLOCK IN BOTTOM OF DOOR CASTING.

2. MIX 25# OF HI-TEMP CASTABLE MATERIAL TO AN EVEN CONSISTENCY.

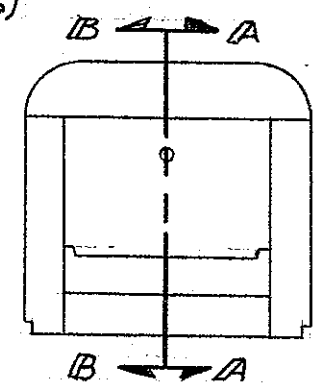
3. ADD BETWEEN 2½ AND 3 QUARTS OF CLEAR, COOL WATER TO THE CASTABLE. MIX THOROUGHLY AND POUR INTO THE DOOR CASTING.

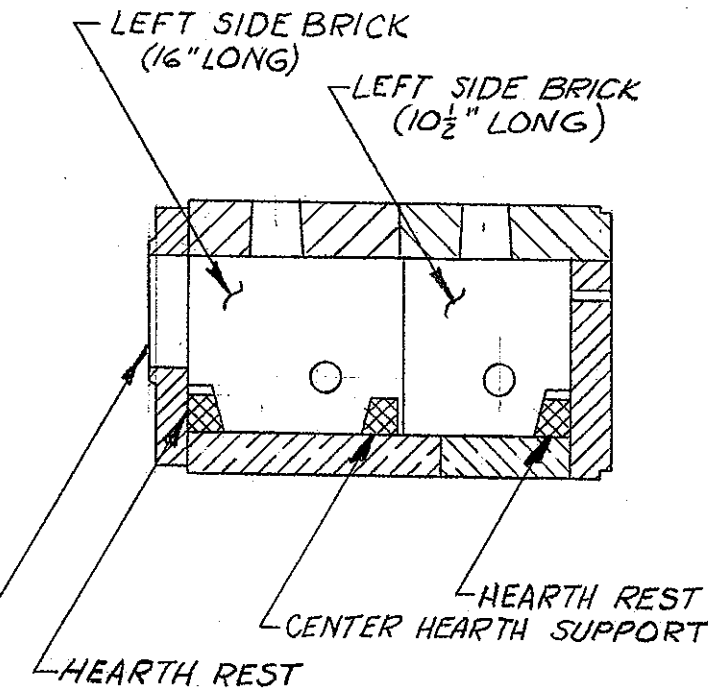
4. USE A STIFF, STRAIGHT EDGE TO LEVEL OFF THE TOP SURFACE. MAKE SURE THE CASTABLE IS LEVEL WITH THE SIDES OF THE DOOR CASTING.

LINING DIAGRAM FOR NO. 142 SPECIAL LENGTH FURNACE



SECTION A-A
(SHOWING RIGHT SIDE OF FURACE)

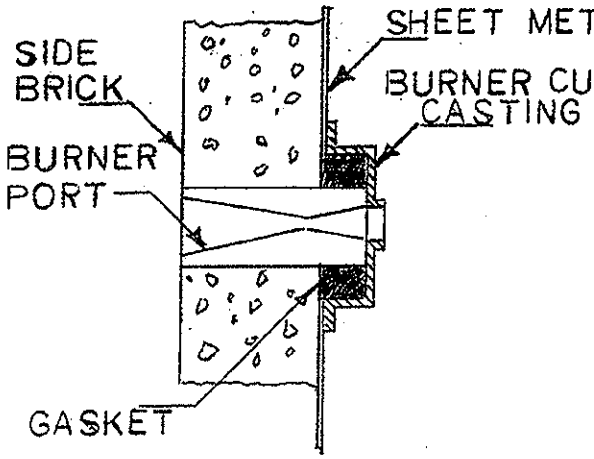




SECTION B-B
(SHOWING LEFT SIDE OF FURNACE)

JOHNSON GAS APPLIANCE CO.
CEDAR RAPIDS, IOWA

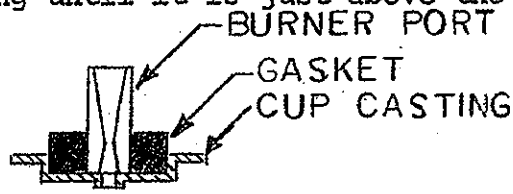
REPLACING PORT & GASKET IN OVEN FURNACES



Break the union in the piping. Loosen the screws and remove the cup casting. Remove the old gasket and any cement from the cup casting.

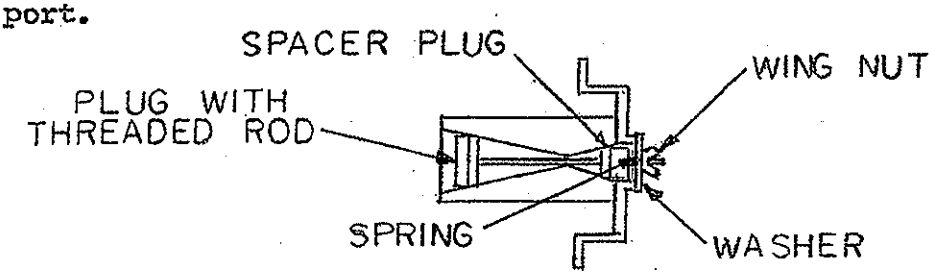
If the burner port is cracked or deteriorated remove it by tapping the sides lightly to break it loose or crack it. Remove any chunks of cement that remain on the side brick.

If the burner port is okay and doesn't have to be removed. Place the new burner port (provided) in the center of the burner cup casting, with the small port hole against the casting. Fasten the port in position using the holding fixture provided. (See sketch at bottom of page.) Place the gasket strip inside the cup casting and around the burner port. Using your thumbs or a block of wood, press the gasket material down, inside the cup casting until it is just above the top of the cup casting.



Disassemble the holding fixture and remove the burner port by rotating it gently. Put a thin layer of cement around the outside of the burner port that is in the side brick. Put a thin layer of cement on the side brick next to the burner port.

Slide the gasket and cup casting over the burner port by rotating the cup casting. Line up the holes in the sheet metal side and cup casting. Tighten the screws and pull the cup casting against the sheet metal side. Make sure the end of the burner port is against the cup casting and the holes through the center are lined up and clear of cement. If the old burner port is to be replaced, repeat the same procedure as above except do not remove the burner port from the cup casting. Put a 1/8" layer of cement around the outside of the burner port. Insert the port through the hole in the side brick. Line up the holes in the sheet metal and cup casting. Use the screws and draw the burner port and cup casting in place. Make sure the end of the burner port is against the cup casting and the holes through the center are lined up and clear of cement. If the hole in the side brick was too large, fill in the space with cement. Allow the cement to set for about one hour, then gently, remove the holding fixture and proceed to another port.



FORM NO. 1023

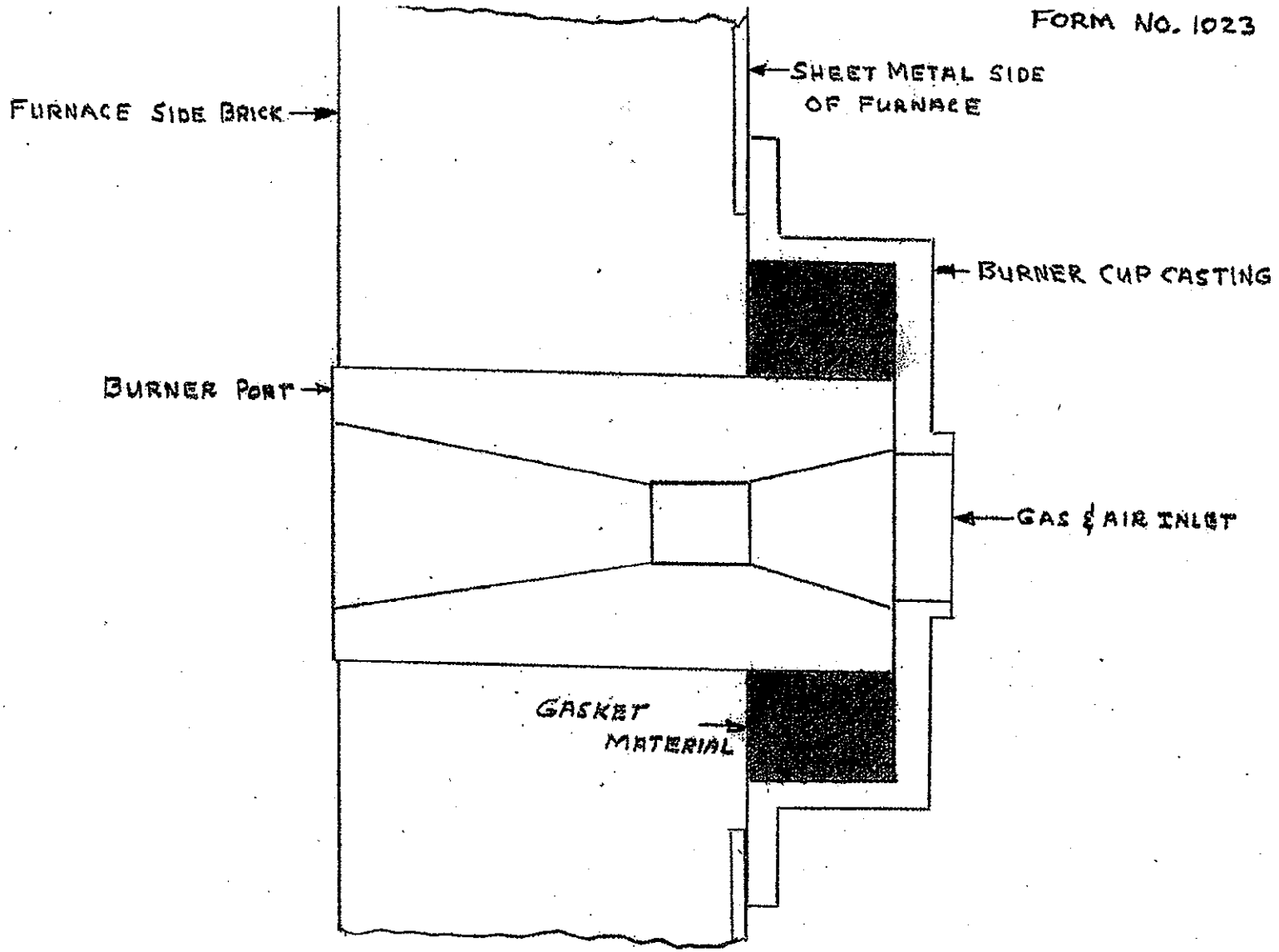
ENGINEERING NO.

PART NO. FORM NO. 1023

BY

DATE

SUBJECT



SECTION SHOWING BURNER PORT IN FURNACE

DATE _____ BY _____ ENGINEERING NO. _____

SUBJECT REPLACING REFRACTORY BURNER PORT PART NO. _____

SEE FORM NO 1023

IF YOUR OLD REFRACTORY BURNER PORT WAS BROKEN OR CRACKED; REMOVE THE OLD PORT BY TAPPING THE SIDES GENTLY AND TURNING THE PORT WITH A PIPE WRENCH.

TAKE THE NEW BURNER PORT, GASKET AND PORT CUP AND PUT CEMENT AROUND THE OUTSIDE OF THE BURNER PORT. SLIDE THE NEW PORT INTO PLACE WITH THE SCREW HOLES LINED UP. PUT THE SCREWS BACK IN PLACE AND TIGHTEN. REMOVE ANY EXCESS CEMENT FROM AROUND THE PORT CUP. IF ANY OF THE LINING HAS CHIPPED OFF, FILL IN WITH CEMENT. ALLOW CEMENT TO SET UP FOR AT LEAST 8 HOURS, REPLACE PIPING.