



Field Service Kit

Lynx Hot Surface Ignition

Introduction:

This service kit contains the appropriate components to replace all burner igniters in a Lynx Grill with Hot Surface Ignition. There are 4 kits available:

- 90172 Igniter Service Kit—2 Burner for Lynx 27" (K series only) and 30" Models (Serial J & K series only)
- 90173 Igniter Service Kit—2 Burner for Lynx 36" Models (Serial J & K series only)
- 90174 Igniter Service Kit—2 Burner for Lynx 42" Models (Serial J & K series only)
- 90175 Igniter Service Kit—2 Burner for Lynx 54" Models (Serial J & K series only)

IMPORTANT: This service kit contains all of the igniters and wiring needed for the grill igniter retrofit. The kit also contains a new power transformer. The unit must be connected to a 120 VAC power source.



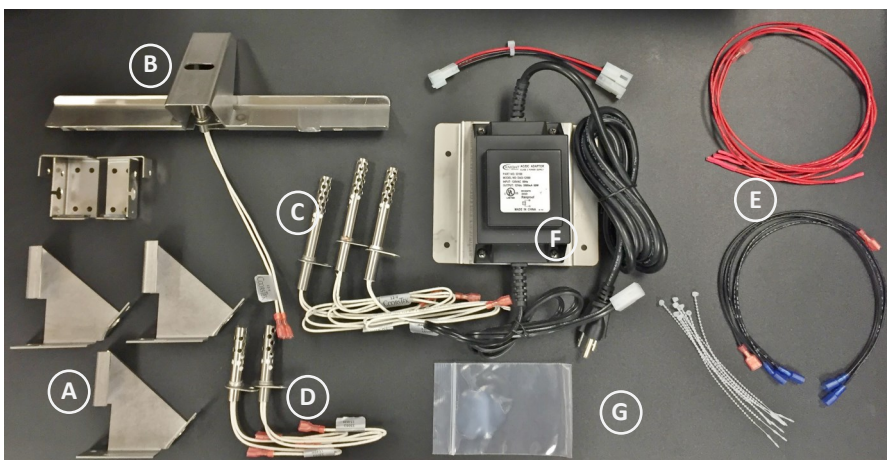
Caution:

Always unplug the unit before beginning any service and shutoff any gas supply until the installation is complete and tested. Make sure you READ and UNDERSTAND these instructions BEFORE installation.

Video overview available: <https://youtu.be/imKcw03gk3M>

Igniter Kit Components

- (A) Main Igniter Shields – there are 2, 3, or 4 depending on the kit you are installing.
- (B) ProSear Burner Shield – One is preassembled and provided in each.
- (C) Long Hot Surface Igniters for each Cast Burner – there are 2, 3, or 4 depending on the kit you are installing.



- (D) Short Hot Surface Igniters for the ProSear and Rotisserie Burners– there are 2, or 3 depending on the kit you are installing. *Note: one of these igniters will have different wire connectors – this igniter is for attachment to item B for use with the sear burner.*

- (E) Wire Assemblies to replace all the connectors to each igniter. There are also several electrical connectors for use in the conversion.
- (F) Transformer with mounting bracket and a Y-Connector.

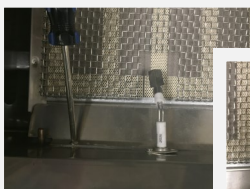
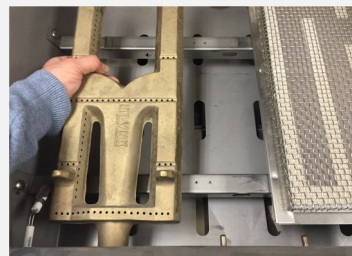
- (G) Di-electric grease for connectors and zip ties to secure the wires.

- (H) Screws and nuts for assembly and to replace any damaged during installation.

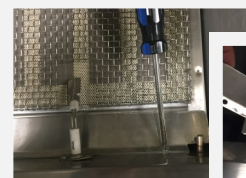


Removing the old igniters:

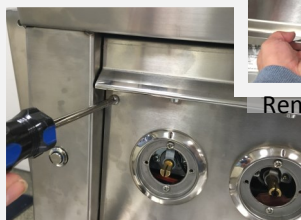
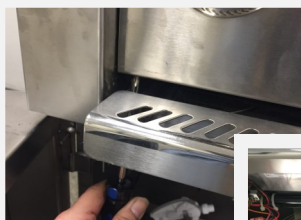
1. Remove all grates, briquette trays, and H-burners from the grill.
2. To remove the ProSear burner, you will need to remove the firebox partition and the gas deflector.



Gas Deflector Removal



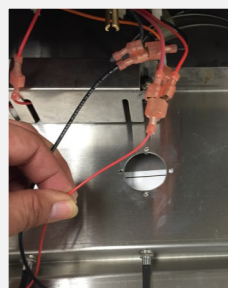
3. Remove the gas control knobs and the front control panel, disconnect the LED light assembly. Disconnect the black igniter module/bracket and place the panel aside.



Removing the Front Panel



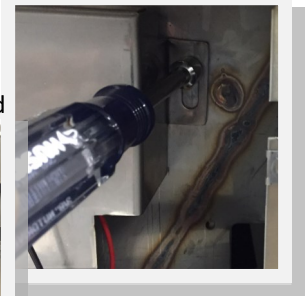
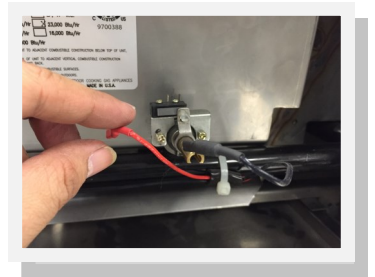
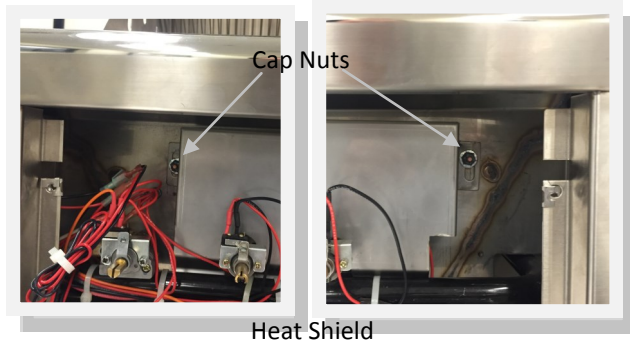
LED Assembly



Black Igniter Module



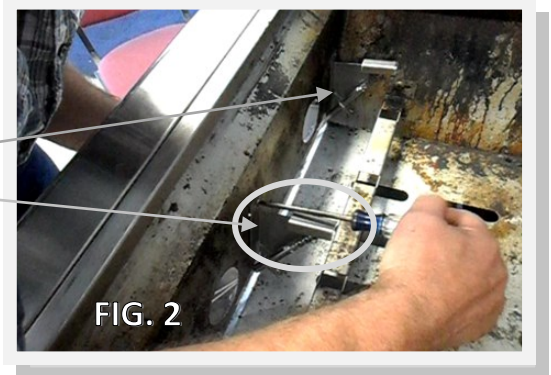
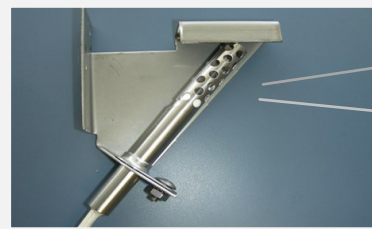
4. Disconnect each wire from the switches on all valves in front of the heat shield
5. Remove the cap-nut on each end of the heat shield. Locate the slide clip under the right most valve and slide it to one side to clear the bottom of the valve. Carefully remove the heat shield from behind the manifold.
6. Cut the wire ties securing all wires to the manifold pipe. Remove the wires from each of the igniters



7. Referencing **FIG.1**, locate each igniter inside the from surface of the grill and identify it's wiring components
8. Remove each igniter by removing the #6 Phillips head screw securing each assembly. The threaded fastener inside the grill may be a welded nut or a locking nut at the front of the grill. Break these loose if necessary, extra fasteners have been provided

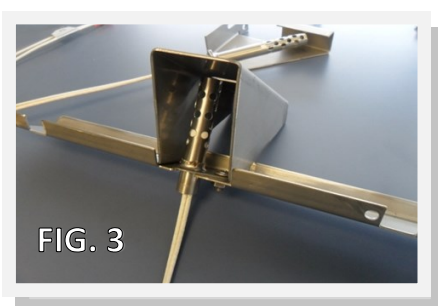
Installing the H-Burner Igniters and Shields:

1. Assemble the long igniters into the igniter brackets with the #8-32 screw and nut provided. There will be one set for each of the brass burners. There may be an additional igniter set. Save this igniter set in the off chance that one is damaged .
2. Assemble the brackets to the inside of the firebox using the same screws and nuts from the previous igniter. Note that the wire fits through the long slot at the bottom of the firebox as in **FIG. 2** – not through the previous hole. Additional fasteners have been provided if required. Please note: *the left most igniter will install at an angle due to the close proximity to the left fire wall.*



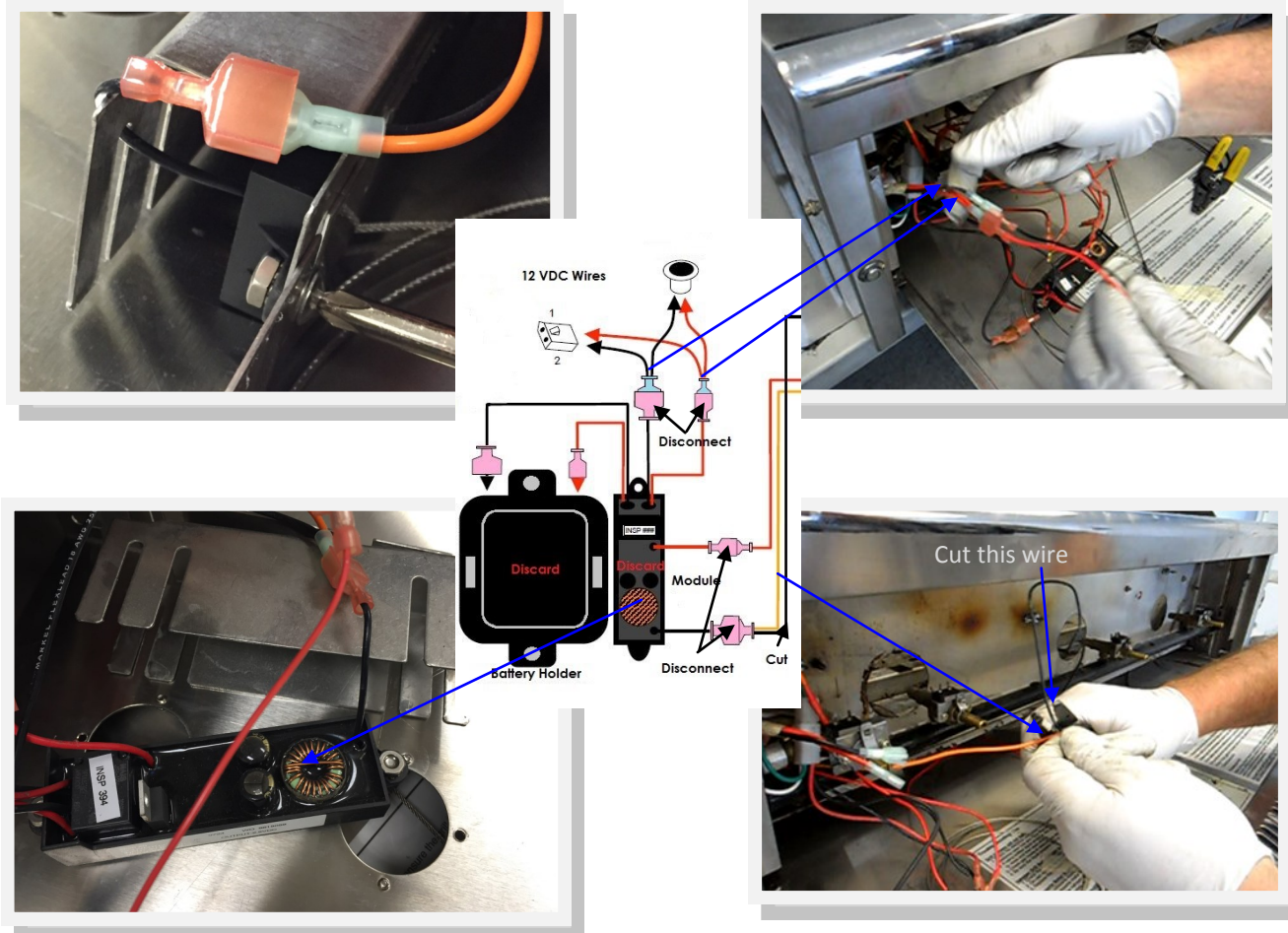
Installing the Sear-Burner Igniters and Shields:

1. The short Pro-Sear igniter comes pre-assembled to the new deflector assembly. **FIG. 3**
2. Remove the old deflector and Install the new deflector assembly using the screws and nuts from the previous deflector. The wire for this assembly goes through the large round hole near the valve.



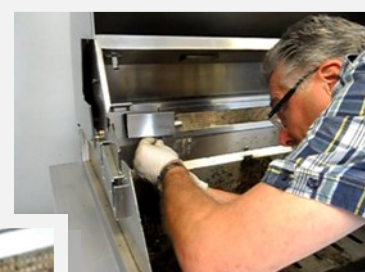
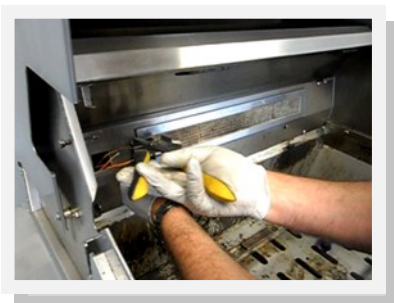
Preparing the Wire Harness Assembly:

1. Identify the black ignition module located on the left side of the front panel.
2. Remove the metal cover to the module. Identify the 12V power leads to the module. Disconnect these leads. These two connectors will provide the 12 Volt DC power for the new igniters.
3. Cut the remaining red and black leads from the module on that side. Disconnect and remove the module. You can then discard the module and the old wires that have been cut.
4. Cut the black lead from the orange wire pair. This black lead runs to each valve switch. Remove it from each valve and discard it. *This may have been done during a previous service call.* If it has, the orange wire will be connected to a black lead by a brass tab connector. Simply disconnect the black wire in this instance. That black wire harness will also be discarded.
5. Remove the red wire leads to the old igniters and discard.



Installing the rear IR igniter:

1. Remove the IR igniter cover and save the cover and screw.
2. With Channel lock pliers, carefully push the thermocouple out of the bracket.
3. Remove the IR igniter bracket and discard.
4. Cut the orange wire connectors from the igniter. Discard the igniter and bracket.
5. Strip the wire leads and crimp the 3/16 male tab connectors (provided) to both orange wire leads.



6. A new Rotisserie igniter bracket is included in the kit (two for the L54 units). Slip the thermocouple into the new mounting bracket with the new clip provided.
7. Mount the bracket onto the rear panel with the provided #6-32 screws.
8. Select the short igniter with the two 3/16 female tab connectors. Note that two types of short igniters are included in the kit.
9. Connect the igniter to the two orange wires and mount the igniter to the bracket with new #6-32 screw.
10. Check the position of the igniter and the length of the thermocouple.
11. Replace the cover with one ¼-20 screw which was included in the kit.
12. Repeat the procedure on the right hand side of the L54 unit if applicable.



Connecting the Wire Harness Assembly

Each kit contains wire assemblies which must be replaced during this kit installation. Ensure all push-on connections are secure. A packet of di-electric grease has been provided. Apply di-electric grease prior to making each electrical connection. This will help seal each connection from the elements.

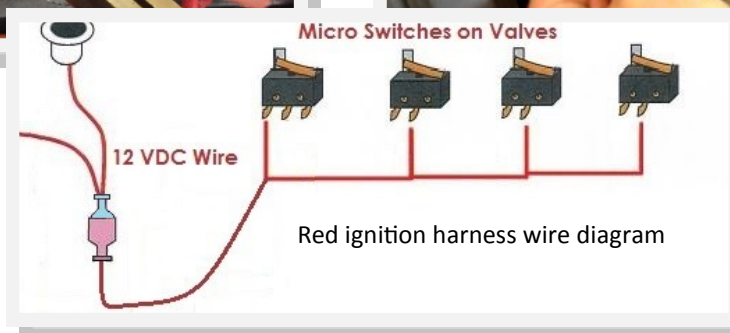
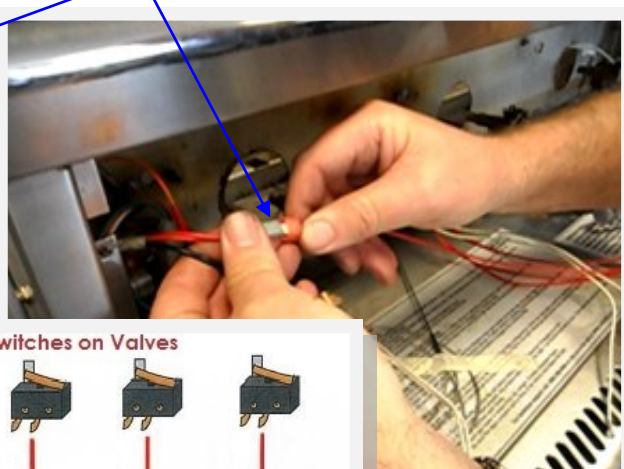
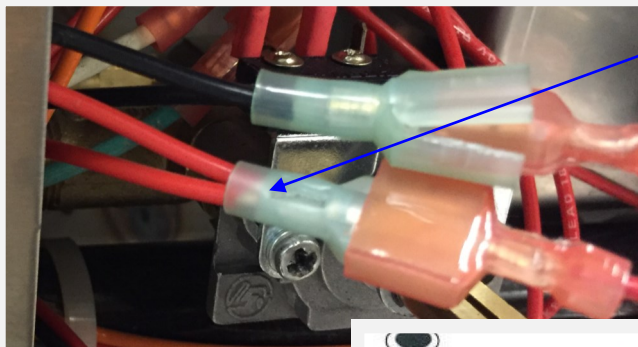
Install the RED wire harness:

1. Select the red ignition wire harness from the kit, beginning with the left side, attach the female spade connectors to the center tab of each micro switch.
2. For non rotisserie models, you will not connect a female spade from the red ignition wire harness to a tab on the micro switch.
3. Follow the red wire connected to the rotisserie jack to the female spade connector located at the end of the 12VDC power double red wire .
4. Attach the male spade connector from the red ignition wire harness to the female spade connector on the 12VDC power double red wire.
5. The 54" grill has two rotisserie burner valves. The orange wire will connect to center tab on the micro switches.

Center Tab

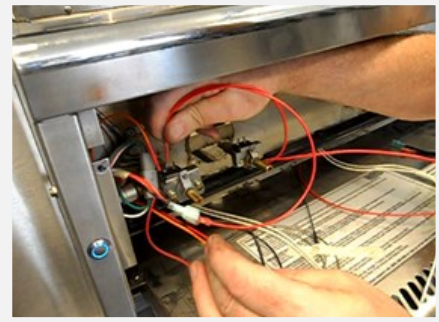


12 VDC Wire



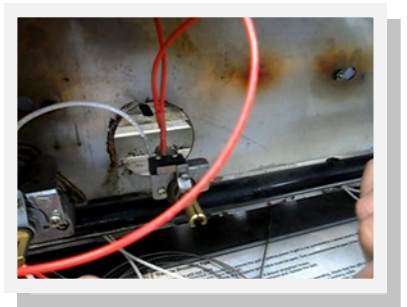
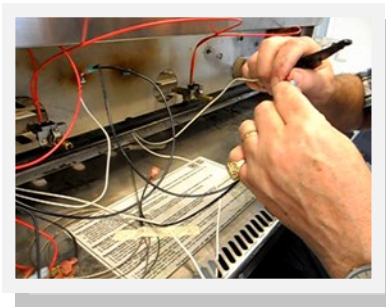
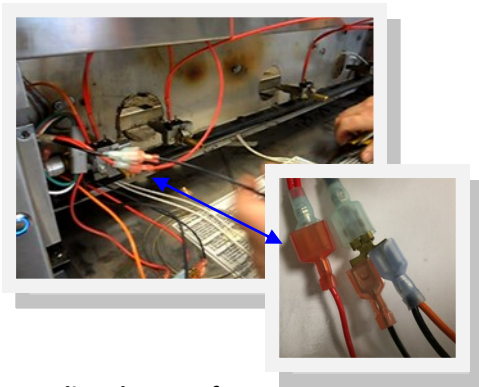
Complete the igniter connections to the switch:

The remaining white lead from each igniter has a mini connector that will attach to the leftmost tab on each micro switch except the rotisserie. Make these connections and leave all wires loose for the next step.



Install the BLACK wire harness:

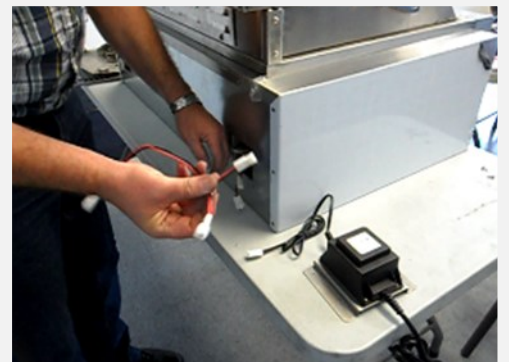
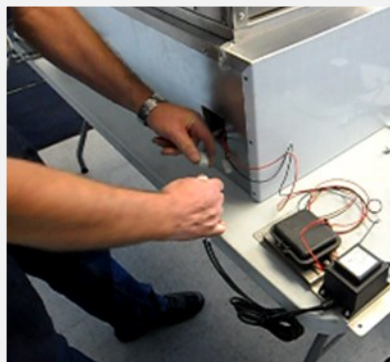
1. Locate the black ignition wire harness from the kit, beginning with the left side, attach the female spade connectors to the white wire lead of each igniter except the rotisserie.
2. Locate the male spade connector from the 12VDC power double black wire connected to the rotisserie jack.
3. Attach the double brass connector, included in the kit, to the black male spade connector of the 12VDC double black wire.
4. Locate the orange wire with the cut black wire and attach it to one of the pins of the double brass connector.
5. Attach the female spade connector from the black ignition wire harness, and attach it to the other pin of the double brass connector.



Upgrading the transformer:

A new transformer has been provided to supply the volts required for the igniter upgrade. The old transformer and battery pack are not sufficient to energize the new 12VDC igniters.

1. Disconnect the transformer from the grill by removing the two connectors at the back of the unit and discard.
2. Locate the two leads from the battery pack and extract the wires. They should slip freely out of the grill. If not, simply clip them off and discard.
3. With adjustments the new transformer can mount in the same location as the old assembly.
4. A Y-Splitter has been provided for the new transformer. insert the two connectors into the matching leads from the grill. Note that the leads all use red and black wires. Your grill contains a third white shielded wire connector that is used only for accessory lighting. DO NOT plug the transformer into this connector. No damage will occur, but the lights will not turn off and the igniters will not function.
5. Plug the square connector into the transformer.

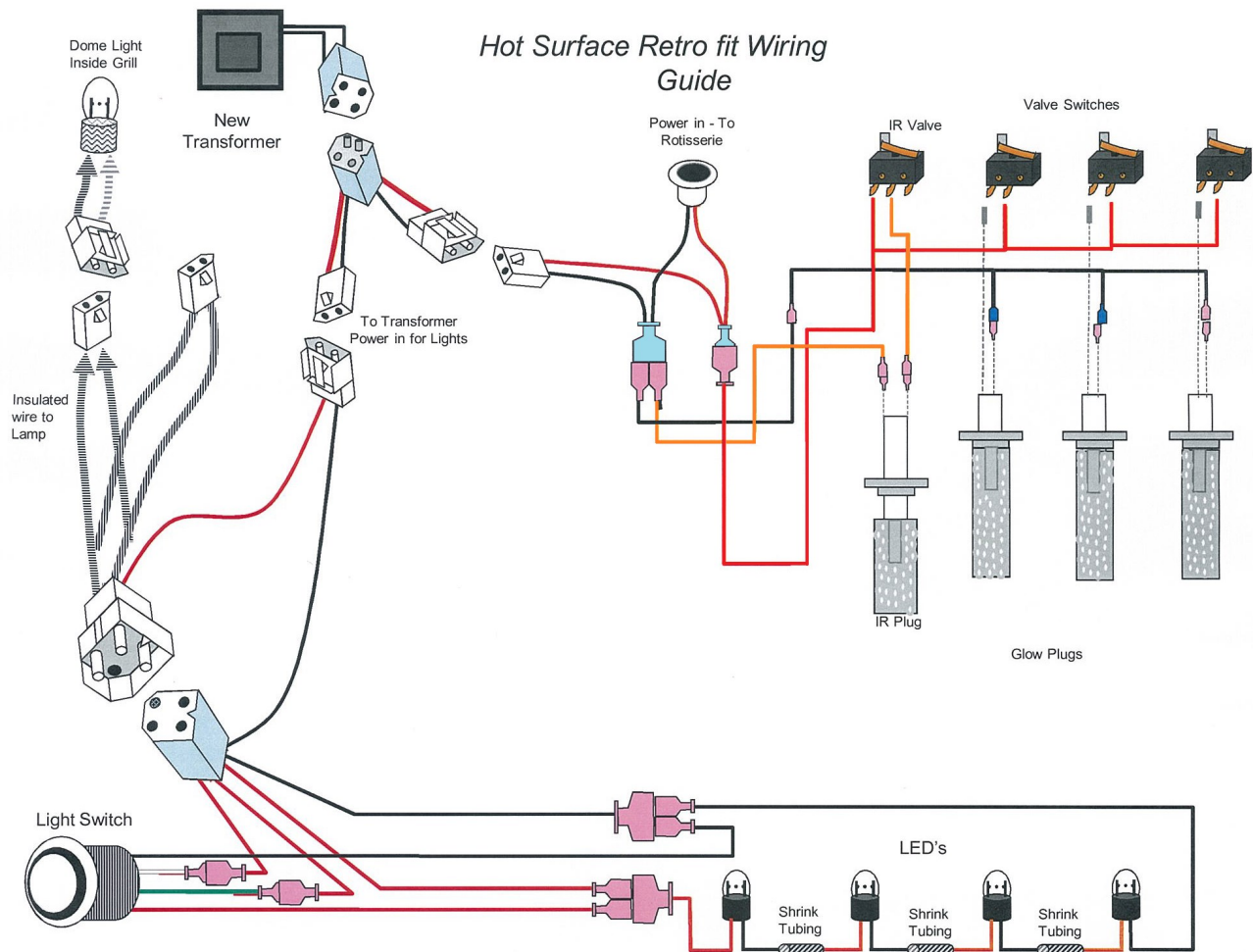


Test the connections:

1. Locate the red and black wire group for the front panel LED lighting and protect it from grounding on the chassis.
2. Plug the transformer into a 120 volt GFI protected outlet.
3. Press the light switch ON/OFF several times. The Halogen lights should be working.
4. Press each of the micro-switches on the valves. The corresponding igniters should operate.
5. Tighten any connections and make any corrections before proceeding.



Make sure you READ and UNDERSTAND these instructions BEFORE installation. If you have any questions or concerns prior to, or during service, please call Customer Care/Technical Support at 888-289-5969, Mon.– Fri. 6AM to 4:30PM, and Saturdays from 8AM to 1PM Pacific Time.



Closing the unit:

1. Using the plastic wire ties provided begin securing all loose wires to the manifold beginning at the left side. Do not tie the wires to the sear burner on the right hand side until the heat shield is secured in the next step.
2. Before replacing the heat shield all wires must be disconnected from the valve switches to avoid damage.
3. Carefully inspect the wiring for the Sear Burner on the right hand side and route it to one side of the valve.
4. Carefully install the heat shield overtop of the manifold and connect with the cap nuts removed during disassembly.
5. Reinstall the cover clip under the valve to close the opening in the heat shield.
6. Reconnect the wires to the valve switches and secure the wires for the sear burner igniter.
7. Using the drip pan as a shelf, place the front panel in front of the unit to connect the LED lighting.
8. Connect the black and red leads to the light panel and test them for proper operation using the light switch.
9. We recommend that the exposed connectors on the black wire bundle be insulated with electrical tape before replacing the panel.
10. Replace the front panel using the 4 sheet metal screws and clips removed during disassembly.
11. Check the light switch to confirm the front panel LEDs and the hood lights one last time.
12. Check the igniters again – pay particular attention to the rear IR Rotisserie Burner valve located on the leftmost side.
13. Replace the drip pan and all knobs.
14. Replace the burners starting with the Sear Burner on the right hand side, then the cast burners. *Note, the sear burner needs to roll in from the left to fit below and against the hood on the new deflector.*
15. Replace the firebox divider, wire mesh on the sear burner and the briquette trays.
16. Replace the grates. Replace the warming rack.

