Two blow-molded automotive heater duct parts are quickly and efficiently assembled with an HA infrared welding machine. Parts are held vertically in opposing nests that are indexed toward the center of the machine where the heater platen is positioned. The areas to be welded are heated, then the heater platen retracts (90° to the nests) and the parts are pressed together for a predetermined time period to achieve the correct bond.

How Infrared Welding Works
A controlled infrared light emitter welds injection molded or blow-molded assemblies, with accurately regulated parameters including time, temperature and tool positioning. Single or multiple-station machine are available.

Applications
Automotive functional and decorative components, appliance parts, medical devices and other plastic products.

HA: The Resource
HA Industries has the machine-building expertise for both large programs and individual machines. Our manufacturing capacity and rapid turnaround time lets us produce machines for virtually any size program. Many projects are designed and built in less than twelve weeks.

Our extensive in-house mechanical and electrical expertise supports you from machine concept to completion. Throughout the program we work hand-in-hand with you, and this commitment continues with service and follow-up after your machine is put into production. HA has supplied and supported hundreds of installations worldwide.

Call us. We'll recommend the most cost efficient means for your plastic assembly applications.

- Replaces hot-plate and vibration welding
- Faster changeover
- No part or tooling contamination
- Lower initial and operating costs
- Single or multiple station machines
Higher Productivity Per Machine

Weld Multiple Surfaces in One Setup

Infrared emitters can be placed in various positions within and around the part.

Faster Changeover

Simpler process and setup as compared to hot-plate or vibration welding. Changeover is faster because there is no need to wait for hot-plate tooling to cool down. Quick-change fixtures minimize part-to-part changeover time.

Less Downtime

Elimination of downtime required to clean or remove contaminants from the hot plate heater platen.

Reduce Costs

- Capital investment is substantially reduced.
- Tooling costs are also reduced since backup tools are not needed.
- Injection molding tooling can be simplified because tongue-and-groove part designs are not required for surface joining.
- Electric consumption can be reduced compared to other processes.
- Less floor space is needed for the infrared welding machine.

Higher Part Quality

No Contamination of Part

- No flaking that can be caused by vibration welding
- No plastic strings that break off and contaminate the part (as occurs in some hot-plate applications)

Cleaner Process

Plastic does not stick to the heat sources as in hot-plate process.