

## **LASER WELDED PLASTIC INTERCOOLER**

### **ABSTRACT OF THE DISCLOSURE**

An intercooler assembly includes a housing that defines an internal space containing a plurality of tubes. A joint between a tube and a tube plate is created by a laser welding process. A form presses the walls of the tube outwardly to form the flange. The downward force of the form not only creates the desired flange, but also exerts a pressure that holds the flange against the tube plate. The form provides for the transmission of laser energy to that the creation of the flange can be performed concurrently with the welding process.