

Request 14

Separately, describe in detail the process used to manufacture the intake valves for the subject vehicles including, but not limited to, the following information:

- a) A step-by-step explanation of the manufacturing process;
- b) The type, description, specification, manufacturer, and photographs of the machine and/or tool used in each step of the manufacturing process; and
- c) The purpose of each step of the process.

Answer

As NHTSA is aware, Ford is an OEM customer. The supplier manufactures the subject intake valves, and information within Ford's possession is either not directly its own work product or is the supplier's best available information provided for this request. Ford does not have the type, description, specification, manufacturer, and photographs of each machine and/or tool used in each step of the manufacturing process. Ford is able to provide a picture of the keeper groove grinding machine used by the supplier during production of certain intake valves in the subject vehicles as file "EA23-002 Request 14 – Keeper Groove Grinding Machine Photo."

A process flow diagram detailing the manufacturing process used to manufacture the intake valves in the subject vehicles can be found in the file "EA23-002 Request 14 – Process Flow." This process flow includes all manufacturing steps followed by the supplier, from receiving raw bar stock material to packing final manufactured and inspected intake valves for shipping. The process flow includes a description of the purpose of each step of the intake valve manufacturing process.