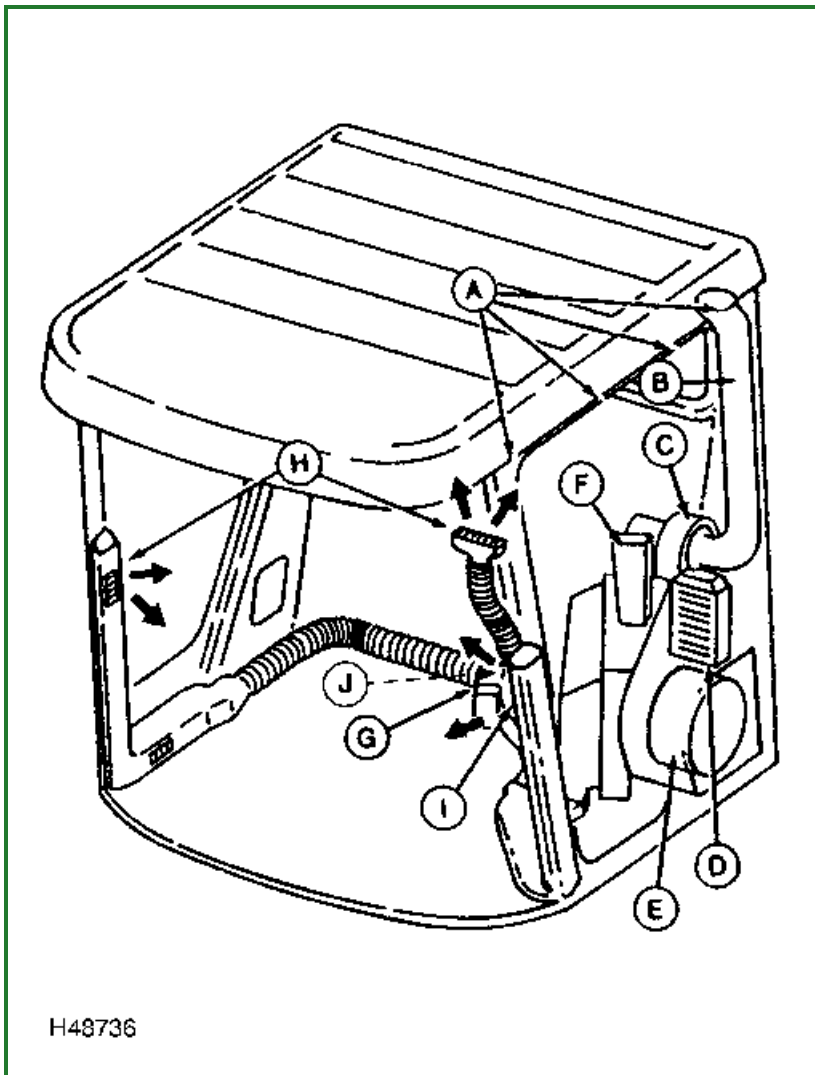


Heating and Air Conditioning-Theory of Operation



H48736

H48736-UN: Cab Air Ducts

LEGEND:

- A - Cab Inlet Air Holes
- B - Inlet Air Duct
- C - Pressurizer Fan
- D - Precleaner
- E - Fresh Air Filter
- F - Recirculating filter
- G - Recirculating Fan
- H - Outlet Air Ducts
- I - Evaporator Thermostat
- J - A/C Clutch Fuse

Outside air is brought into the cab through inlet air holes (A) in the left hand exterior cab roof trim panel. This air is drawn down through an air duct (B) and into the pressurizer fan (C). The air is then pushed through the pre-cleaner (D) where the majority of dirt and a small amount of air is discharged out through the cab floor. This outlet must be open.

The remaining air then passes through a fresh air filter (E) into the evaporator compartment. The air is now mixed with existing air from inside the cab, being drawn into the evaporator compartment through the recirculating filter (F). The mixed air passes through the evaporator and heater core. The temperature control switch determines the extent of the heater valve opening and also turns on the air conditioning system. In some temperature settings the air conditioning and heater are both on.

The thermostat (I) controls evaporator temperature by switching the air conditioning compressor on and off to prevent the evaporator from icing and the cab becoming too cold.

The air conditioning wiring harness is located under the cab seat shrouds. Primary power is provided to this harness by the left-hand main harness from the engine compartment relay panel. A 10-amp fuse is located on the A/C harness under the seat shroud and provides protection for the A/C compressor clutch wiring.

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