



NOTE: The alignment completion is indicated on the diagnostic scan tool. If the alignment is unsuccessful, check the interior mirror for proper installation.



NOTE: The FRONT CAMERA MALFUNCTION - SERVICE REQUIRED message in the IPC disappears when the system is aligned.

The IPMA camera alignment procedure should be performed when any of the following occur:

- Windshield replacement
- Change in tire size
- Suspension repair or alignment
- Front air bag deployment
- Interior mirror replacement

DESCRIPTION AND OPERATION > LANE KEEPING SYSTEM - SYSTEM OPERATION AND COMPONENT DESCRIPTION > COMPONENT DESCRIPTION

IPMA

The IPMA is integral to the interior rear view mirror. The IPMA contains a forward-looking camera that is used to detect the position of the vehicle within the lane.

The IPMA requires PMI and camera alignment when replaced.

Camera Windshield Defrost Heater

The camera windshield defrost heater is a resistive-type heater grid that is adhered to the inside of the windshield directly in front of the IPMA camera.

The camera windshield defrost heater uses a jumper harness between the component and the vehicle harness. Before replacing the camera windshield defrost heater or IPMA for a camera windshield defrost heater concern, verify the integrity of the wiring, connectors and terminals on the jumper harness.

Lane Keeping System Switch

The lane keeping system switch is a normally open, momentary contact switch that, when pressed, grounds the lane keeping system switch input circuit from the IPMA.

DIAGNOSIS AND TESTING > LANE KEEPING SYSTEM > DTC CHART(S)

Diagnostics in this article assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: Diagnostic Methods .

IPMA DTC Chart