

## FORD AND LINCOLN ADAS JOB AID — GLASS VERSION

**IMPORTANT:** The information in this document is for reference only.

- References to component locations on vehicle are approximate and may vary by vehicle and/or vehicle trim level.
- Refer to Ford Workshop Manual (WSM) for further information including: description and operation, component location, diagnosis and testing, repair and calibration.

### INTRODUCTION

Many Ford vehicles are equipped with Advanced Driver-Assistance Systems (ADAS) to help warn drivers and mitigate hazards. These ADAS components may require additional calibration steps or vehicle programming after the component or related components have been removed, replaced, or serviced. This job aid covers the component description, component location, and the required calibration steps of each advanced driving support system. When servicing or calibrating any ADAS component, the Ford Workshop Manual procedures should always be followed.

### ADAS Descriptions

System		Abbreviation	Description
Lane Keeping System	Lane Keeping Alert	LKS	- Detects when a vehicle is close to leaving the lane without turn signal input. The lane keeping system activates an actuator in the Electronic Power Assist Steering (EPAS) to vibrate the steering wheel, warning the driver they are close to leaving the lane.
	Lane Keeping Aid		- Provides steering input toward the center of the lane when an unintended lane departure is detected.

### ADAS Component Location

Component	ADAS Component Location
Head Up Display Module (HUD)	On top of the instrument panel on the driver's side at the base of the windshield
Image Processing Module A (IPMA)	On the windshield, below the interior rear view mirror
Lane Keeping Camera	On the top edge of the windshield



## ADAS Component Calibration

**NOTE:** It is important to note that the driver assist systems are intended to work on the vehicle as it is designed. Any aftermarket alteration could cause a system to malfunction or not accept a correct calibration.

Component	When is Calibration Required	Notes
Head Up Display Module	- A new HUD is installed	- Programmable Module Installation
	- The HUD is removed and reinstalled or replaced - The instrument panel is removed and installed or replaced - A new windshield is installed	- HUD Calibration • If the system is not calibrated, the images may be distorted or display improperly.
Image Processing Module A	- New IPMA is installed	- Programmable Module Installation - IPMA Camera Alignment
Lane Keeping Camera	- When a windshield, camera or IPMA is replaced - If the windshield is removed for structural repairs that affect windshield position - Change in tire size - Suspension repair or alignment - Front air bag deployment	- IPMA Camera Alignment - Lane keeping systems are developed and calibrated based on the manufacturer's specified ride height and wheel/tire combinations. If the ride height or wheels have been altered this will affect system accuracy.

