



HYUNDAI

Technical Service Bulletin

GROUP

BODY ELECTRICAL

NUMBER

19-BE-005H

DATE

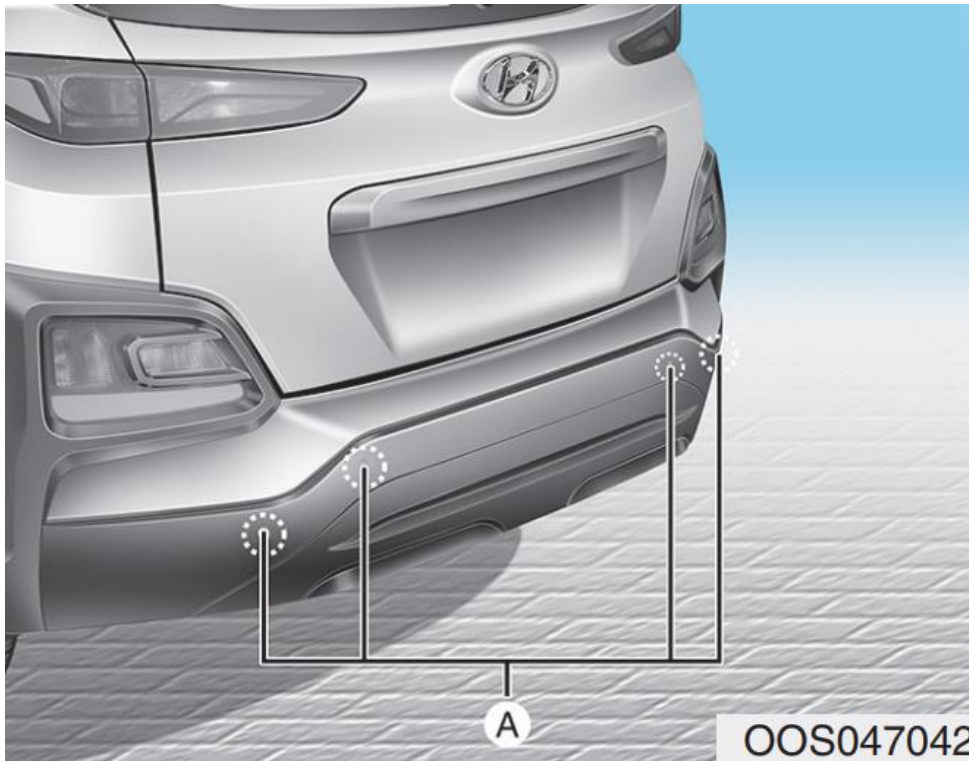
MARCH, 2019

MODEL(S)

ALL

SUBJECT: PARKING ASSIST SYSTEM (PAS) DIAGNOSTIC GUIDE

Description: This service bulletin provides information on how to properly diagnose the Parking Assist System (PAS) sensors.



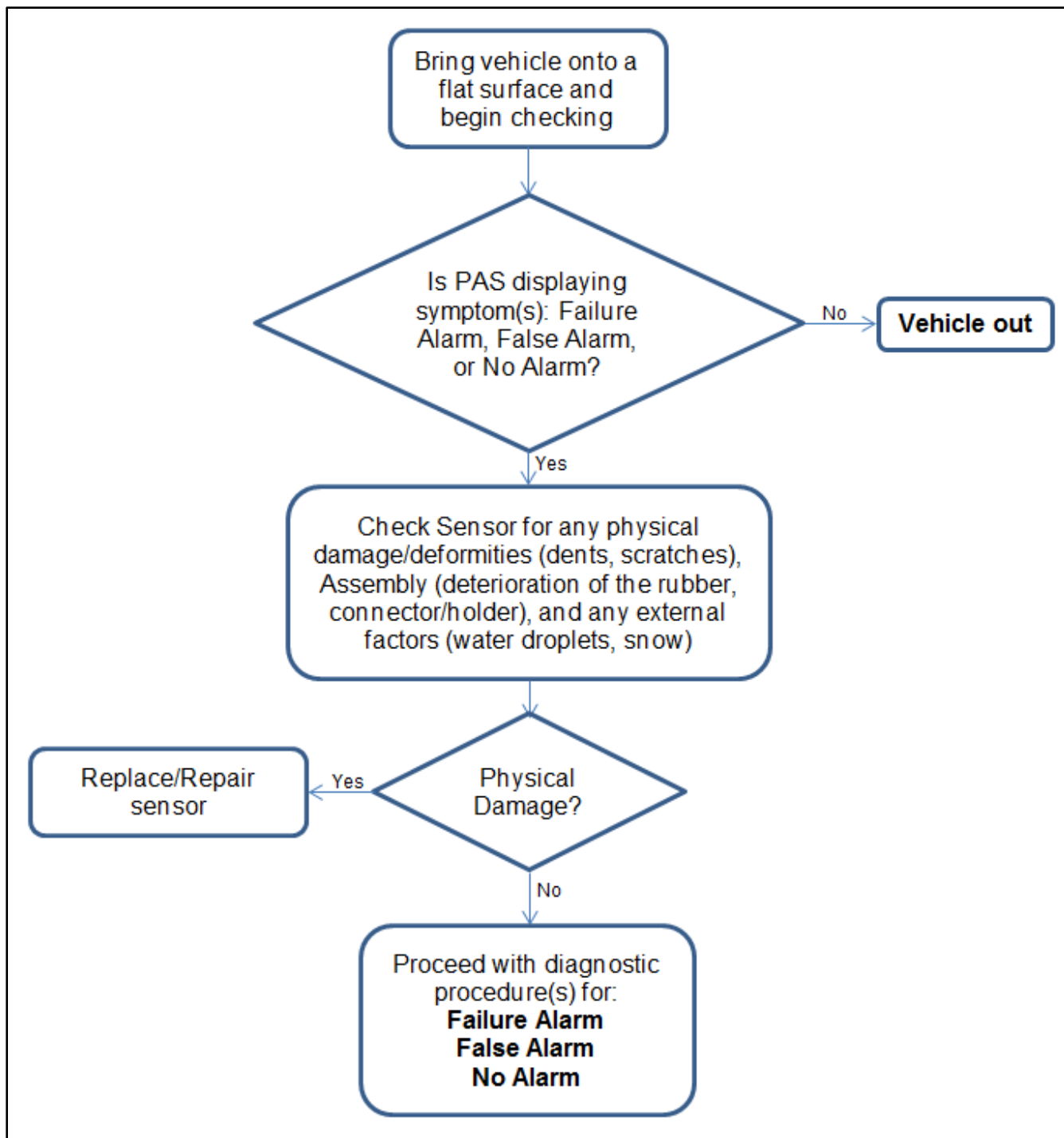
[A] : Sensor

Applicable Vehicles: All vehicles equipped with a Parking Assist System (PAS)

WARRANTY INFORMATION: Normal warranty applies where applicable.

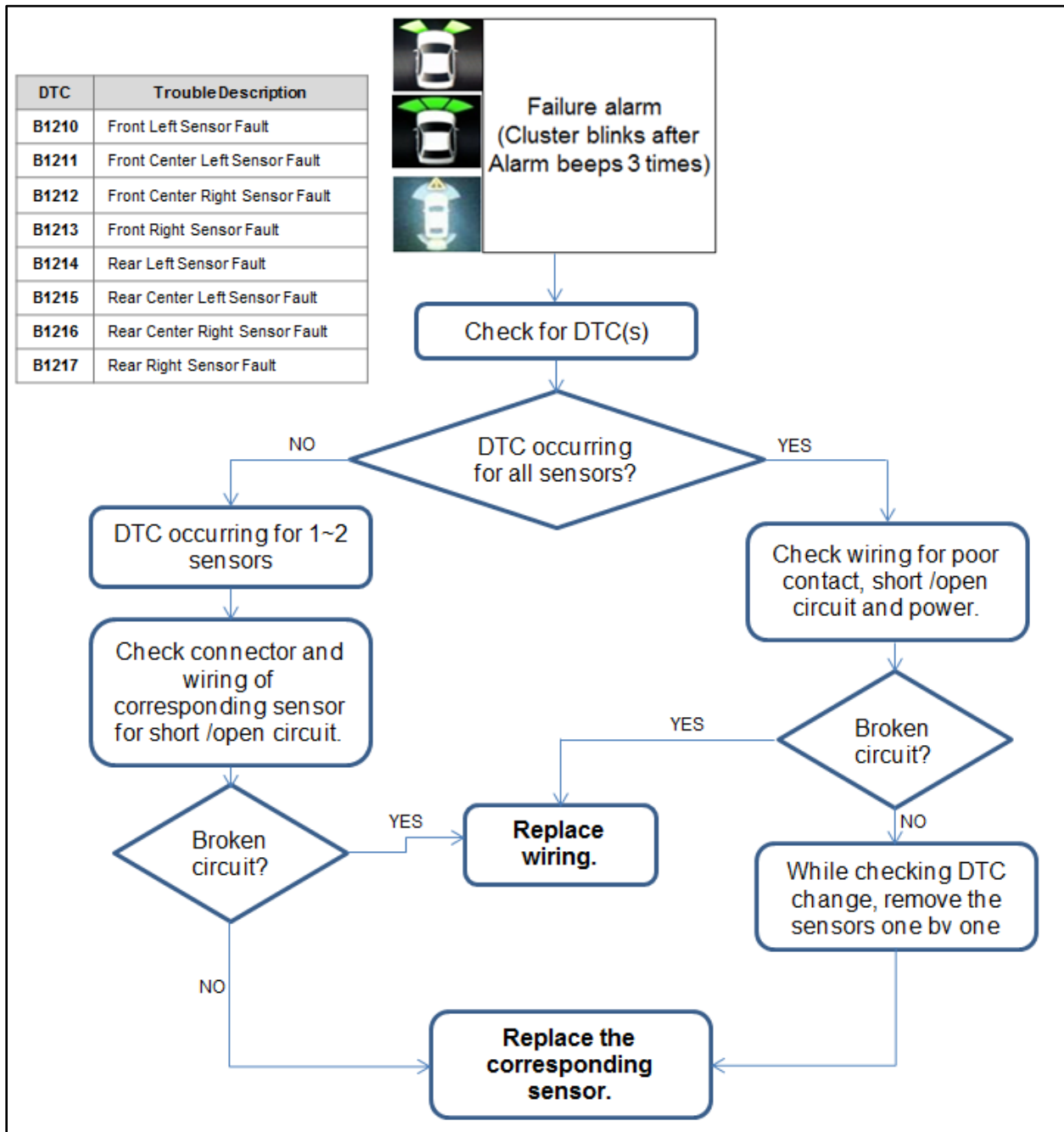
Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Service Procedure:



1. Determine if the vehicle's Parking Assist System is displaying any of the following symptoms: Failure Alarm, False Alarm, or No Alarm.
 - If the vehicle is displaying symptoms, proceed to check the sensor for any signs of physical damage or any external factors that could be preventing the sensor from operating normally and repair/replace the sensors as needed.
2. If the vehicle is experiencing any of the symptoms and there are no signs of any physical damage to the sensors, proceed with the diagnostic procedure(s). For Failure Alarm (Page 3), False Alarm (Page 4), and No Alarm (Page 5).

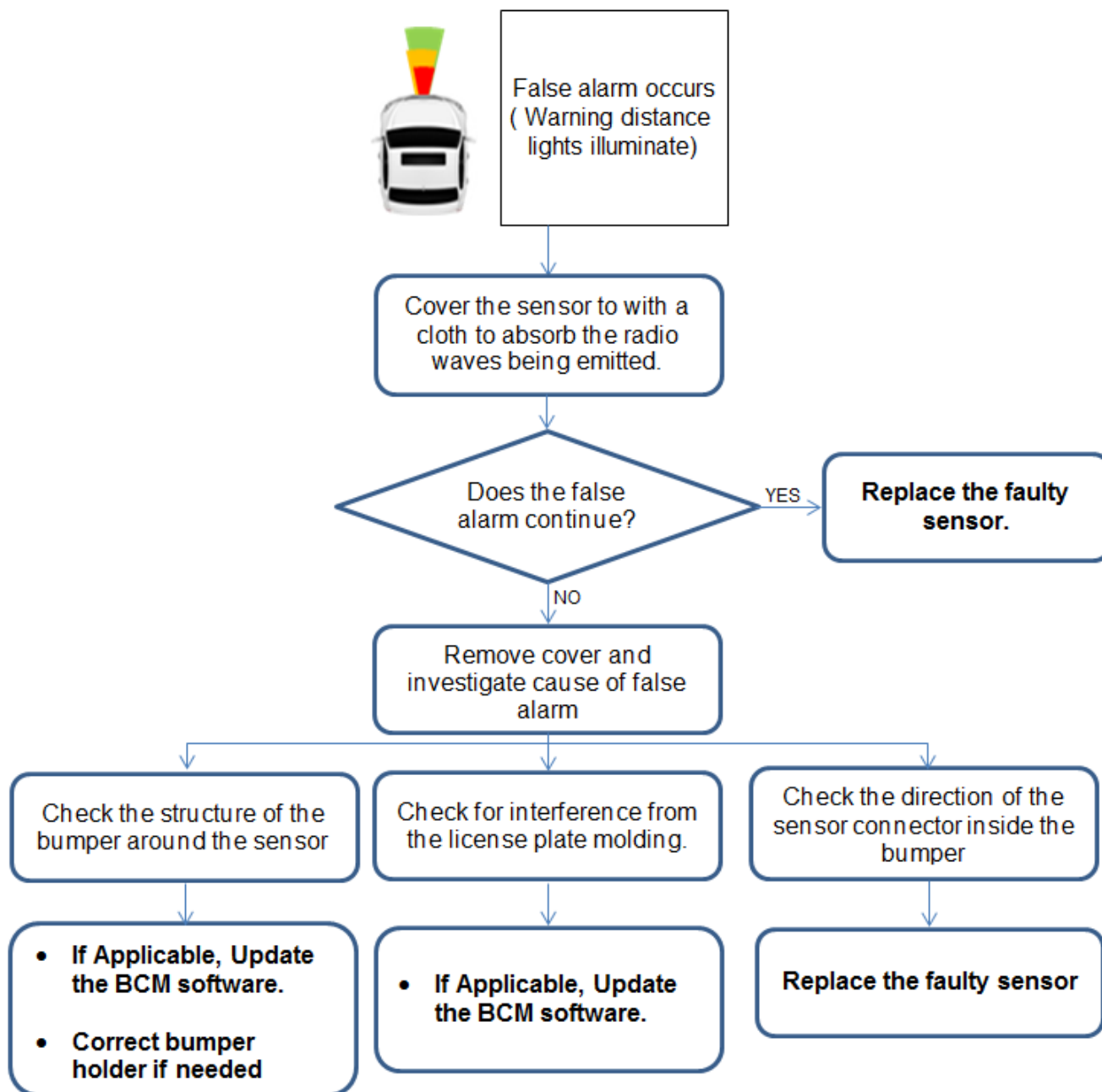
Failure Alarm Diagnostic Procedure:



1. Check the vehicle for any active DTCs listed above.
 - If DTCs are active for all sensors, check the wiring/connectors for all sensors. Replace wiring if needed.
 - If DTCs are active for 1~2 sensors check the wiring/connectors for the listed sensors. Replace wiring/connectors if needed.
2. If no issue with the wiring/connectors is discovered, replace the sensor(s).
 - In the case that all sensors were displaying DTC(s), check DTC change while removing the sensors one by one.

Note: If more than 2 sensors are failing on the front, then all are considered to be failing (same applies to the rear).

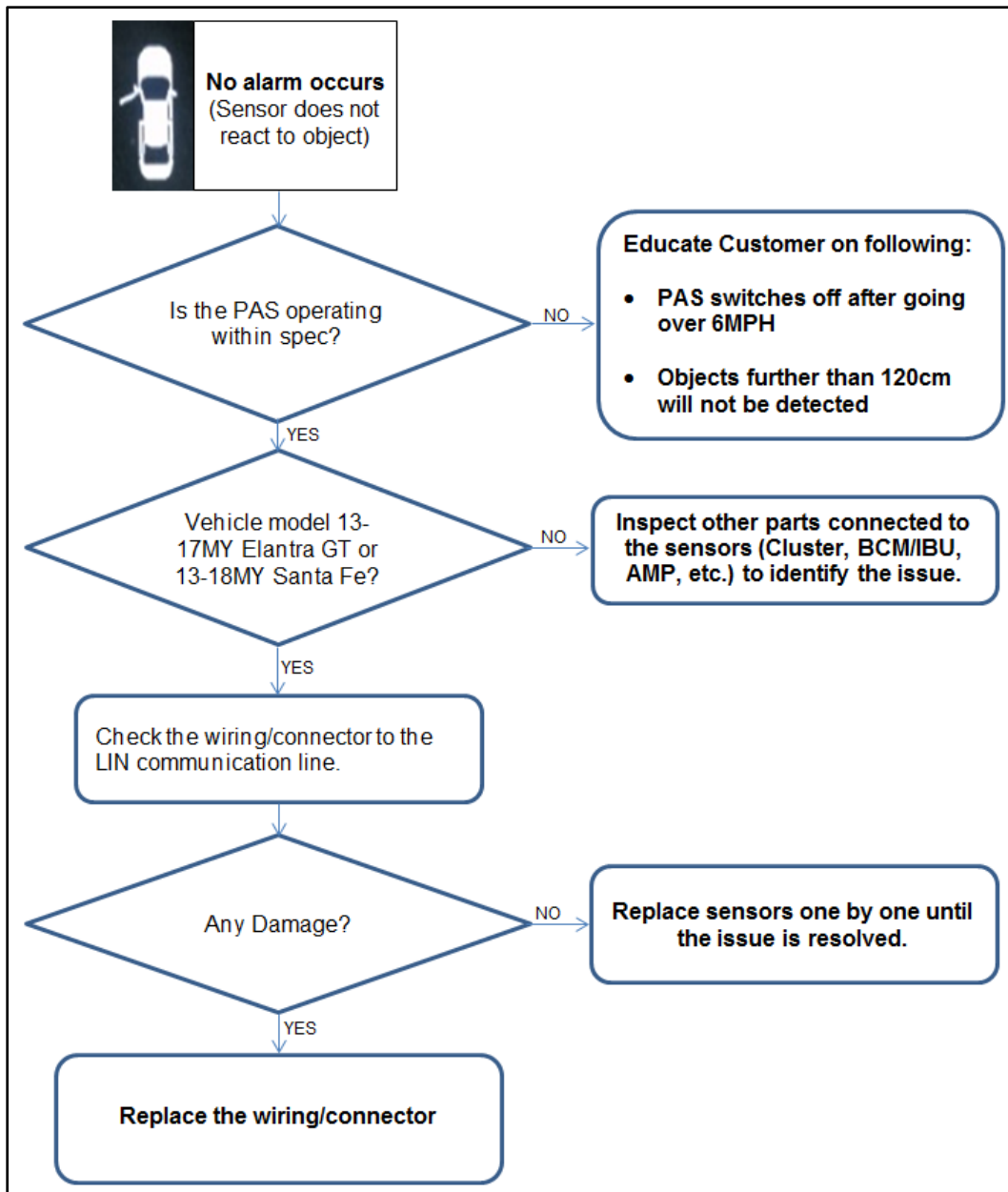
False Alarm Diagnostic Procedure:



1. Cover the sensor displaying the false alarm with a cloth to absorb the generated radio waves.
 - If the false alarm continues after the sensor has been covered, replace the faulty sensor.
2. If the false alarm is resolved by covering the sensor, then proceed to further investigate the cause of the false alarm by doing the following:
 - Check the structure of the bumper around the sensor. Fix any deformities and update the BCM software of the vehicle.
 - Check if there is any interference from the license plate molding. If the molding is at fault, attach sound absorbing material to the molding and update the BCM software.
 - Check the direction of the sensor connector inside the bumper. If there are any issues with the connector, replace the faulty sensor.

NOTE: External factors such as weather and other vehicles may cause false alarms.

No Alarm Diagnostic Procedure



1. Verify the Parking Assist System is operating within spec:
 - If the vehicle is showing no alarm, check the vehicle is not being operated over 6Mph and that the objects are not further than 120cm.
2. Verify the model of the vehicle:
 - Is the vehicle a 13-17MY Elantra GT (GD) or 13-18MY Santa Fe (NC)? If the vehicle is **NOT** one of the listed models, inspect the other parts connected to the sensor. (Cluster, BCM/IBU, AMP, etc.)
 - If the vehicle is a 13-17MY Elantra GT (GD) or 13-18MY Santa Fe (NC), proceed to check the wiring/connector on the LIN communication line.
3. Verify that there is no damage to the wiring/connector on the LIN communication line:
 - If there is damage to the wiring/connector, then replace the wiring/connector(s) as needed.
 - If there is no damage present to the wiring/connector, then replace the sensors one by one until the issue is resolved.