



## **SSM 50388 2020-2022 F-Super Duty/Explorer/Aviator, 2021-2022 F-150 - Various Warning Messages And/Or DTCs - IPMA Programming**

Some 2020-2022 F-Super Duty/Explorer/Aviator and 2021-2022 F-150 vehicles may exhibit a Front Camera Fault, Lane Keeping Fault, and/or Collision Warning Not Available message with various diagnostic trouble codes (DTC) stored in the image processing module A (IPMA). If programming fails or Ford Diagnosis and Repair System (FDRS) states a file failed to flash after replacing the IPMA or reprogramming IPMA software, test the battery using any approved Rotunda tool including the GR-190, GRX-3590, and DCA-8000. Fully recharge or replace the battery according to results of the tool. Set the battery charger to maintain battery voltage between 12.6 and 13.6 volts during the entire programming procedure. The IPMA programming procedure may take several hours to complete due to the size of the software files required.