

Chronology for MY15/16 Polaris Slingshot Back-up Camera

Nov. 2014 — Slingshot vehicles began production with original backup camera (part number 4015018).

Q3 2015 — Due to warranty claim experience for part number 4015018 caused by voltage regulator failures, Polaris transitions to new back-up camera supplier (Protech).

Sept 2015 — Due to the failure mode of the voltage regulator housing melting, Polaris Engineering requested a third-party, Microtek Laboratories, to conduct an analysis of the backup camera's voltage regulator failures. Polaris contracted with Microtek to conduct the IEC 60695-11-5 Needle Flame test on voltage regulator housings for both the original camera (part number 4015018) and the replacement camera (part number 4016539). Both passed the test for flammability requirements.

Q4 2015 — Polaris conducted validation testing for the replacement camera (4016539) from different supplier.

Q4 2015 — Polaris conducted a safety review of the original camera (4015018). Warranty data reviewed indicated that voltage regulator failures resulted in smoke and a burning smell, but not a fire. The burning smell was believed to be caused by the plastic housing on the voltage regulator melting during the internal failure. Based on this field data and the results of the third-party testing, Polaris concluded that a defect related to motor vehicle safety did not exist.

Feb. 2nd 2016 — The replacement back-up camera (4016539) is introduced into production on all camera-equipped Slingshot vehicles.

5/18/2017 — Polaris Engineering renews investigation due to continued warranty claims related to purported melting and smoke on MY15/16 vehicles equipped with camera PN 4015018. No fires were identified during this investigation.

6/5/2017 — Polaris conducted a second safety review of the original camera (4015018).

9/27/2017 — Polaris again concluded no defect related to motor vehicle safety exists based on the absence of any field reports or testing evidence to indicate fire or melt propagation.

August 2018 – New cases reported.

VIN . Polaris received email inquiry claiming electrical shortage/fire in backup camera on 8/21/2018. Dealer creates Polaris case 8/28/2018. Warranty claim approved for replacement of Display - Radio, Mount- Backup Camera, and Camera - Rear Lines.

VIN . Fire incident on vehicle manufactured on 2/5/2015 reported to Polaris on 8/21/2018. Incident occurred 8/21/2018. Polaris on-site investigation 9/4/2018. Preliminary review completed 9/14/2018. Polaris determined to buy back Slingshot for further engineering investigation on 9/14/18. Due to slow consumer response, buy back unit arrives in Wyoming, MN 11/6/2018.

10/2/2018 — NHTSA ODI contacts Polaris with request for information regarding thermal incidents related to the backup camera and/or wiring. **VIN** was referenced in ODI request

for information. Investigation on back-up camera (PN 4015018) failures initiated again noting for the first time the loss of tail/stop lights in the ODI VOQ.

11/6/2018 — Buy back unit (VIN #) arrives in Wyoming, MN. Invasive investigation takes place 11/6-11/7. Partial burn of rear portion of vehicle. Fuel system intact. It is determined that the initiation point of the fire is in the CMHSL/back-up camera location on the vehicle. Back-up camera voltage regulator PCB recovered from the melted plastic. It shows signs of failure similar to those failure modes seen the past. Cross-functional ENG team deems the voltage regulator to have failed.

11/8/2018 — Polaris determines the existence of an obligation to report under Part 573 due to thermal hazard (based on new evidence provided by VIN) and the potential for tail light failure as a secondary consequence from camera failure (VIN).