2017-2018MY Niro Hybrid Power Relay Assembly Basis of Safety Defect Determination 573.6(c)(6)

September 25, 2018	Kia Motors America, Inc. (KMA) files recall of 2017-2018MY Niro Hybrid vehicles to address inadequate connection between the Main Relay contacts that can increase electrical resistance and generate heat. If sufficient heat is generated, thermal damage may occur to the rear seat, including the potential for a fire. (18V666). Kia dealers instructed to inspect the Power Relay Assembly (PRA) for any signs of thermal damage. If any thermal damage was present, the PRA was to be replaced with a new one. If no thermal damage was present, the Main Relay was to be replaced with a new one.
June 13, 2022	Kia North America (Kia NA) receives Techline case from dealer that identifies customer complaint of burning smell involving a 2017MY Niro (Vehicle #1). Dealer identifies melting of the PRA. Kia's record shows Recall 18V666 repair previously completed May 20, 2019.
June 14, 2022	Kia NA receives Techline case involving a 2017MY Niro that identifies customer complaint of vehicle no-start (Vehicle #2). Dealer identifies melting of the PRA. Kia's record shows Recall 18V666 repair previously completed on August 5, 2019.
June 28, 2022	Kia NA Safety Office engineer inspects Vehicle #2 and collects parts for further evaluation.
July 7, 2022	Kia NA Safety Office engineer inspects Vehicle #1 and finds soot deposits in area of PRA and localized fire damage. Parts are subsequently collected for Vehicle #1 and sent to Kia NA Safety Office for further evaluation.
July 29, 2022	Kia NA Safety Office receives Vehicle # 1 parts from dealer.
August 12, 2022	Kia NA Safety Office evaluates collected parts from Vehicle #1 and Vehicle #2 and identifies parts from both vehicles are the originally installed Main Relays (LS IS CO., Ltd) and not the recall remedy relays (Panasonic).
August 17—September 22, 2022	Kia NA Safety Office conducts preliminary field data analysis and identifies two (2) additional warranty claims with associated Techline cases with thermal damage on original installed Main Relays (dates of receipt 4/20/21 & 1/14/22). Kia's records show Recall 18V666 previously completed on both vehicles.

September 23, 2022	Kia NA Safety Office escalates the issue to SEL.
October 5—November 3, 2022	Kia NA Safety Office conducts audit of four (4) randomly selected non-incident vehicles that previously had Recall 18V666 repair completed and confirms recall remedy relays (Panasonic) had been installed and no thermal issue found.
October 19—November 3, 2022	Kia NA Safety Office updates field data analysis and identifies one (1) additional warranty claim with thermal damage on originally installed Main Relay (date of receipt 9/30/22) even though Recall 18V666 repair had previously been completed. To date, a total of five (5) fires (localized melting/damage only) identified.
November 4, 2022	Kia NA decides to recall the 2017-2018MY Niro vehicles previously recalled under 18V666. No fatalities, injuries or crashes.