Takata Non-Azide Driver Inflator (NADI)

Chronology:

March 2009
Takata received a claim of a NADI inflator slow airbag cushion fill deployment and examined the inflator conditions. It was found that the tape seal was damaged after manufacturing, allowing for moisture intrusion to compromise the main generant.

July 2015
A Takata NADI inflator ruptured during an end of vehicle life disposal operation in Japan.

May 6, 2016
Takata was notified, by NHTSA, of a NADI field rupture that had occurred back on 11/21/2012. The driver sustained severe injuries. An investigation was opened and learned that there was a high proportion of leaking tape seals found in field returned inflators from the earliest manufacturing time period. From the suspect date range, 76 out of 109 Takata NADI inflators examined were found to have a leaking tape seal. 1 out 150 NADI inflators outside of the suspect date range was found to have a leaking tape seal, but there was clear evidence that the seal on that inflator had been damaged from an external source. A leaking tape seal by itself is not a performance issue but could allow for moisture intrusion and potential propellant degradation under certain conditions. The identified manufacturing period was Start of Production (SOP) through August 1999. The investigation showed that propellant with a relatively high moisture content could cause decreased inflator performance. The investigation also showed propellant that gets to a relatively high moisture content and then dried to a very low moisture content could cause increased performance. None of the field inflators examined exhibited this characteristic, but some had high propellant moisture.

March 7, 2018
Takata presented the results of its investigation to NHTSA. At that time, the investigation of the NADI issue by Takata failed to conclusively establish root cause for the two known field ruptures. Based on the available evidence, the risk of rupture appeared low.

August 10, 2018
A Takata NADI inflator ruptured during an end of vehicle life disposal operation in Japan.

June 18, 2019
A field rupture occurred in Australia, involving a Takata NADI inflator transplanted from a salvaged vehicle. The driver sustained facial injuries.

September 16, 2019
A second field rupture occurred in Australia, involving a Takata NADI inflator. The driver was fatally injured.

November 14, 2019
A report was received of a previously unreported field rupture of a Takata NADI inflator in Cyprus (the actual incident reportedly occurred in July of 2017). The driver received unspecified injuries.
A report was received of a previously unreported slow deployment of a Takata NADI inflator in Australia (the actual incident reportedly occurred sometime in August 2017).

All the field events noted above occurred with Takata NADI inflators manufactured in the suspect time period. These inflators were manufactured by Takata in Moses Lake, Washington and LaGrange, Georgia.

Per the agreements in the Takata bankruptcy plan, TK Global is submitting this DIR. Since April 10, 2018, the approval date for the Takata bankruptcy plan, the investigation has been continued with the support of Joyson Safety Systems.