11/4/20—Grand Design RV informs THOR Ind. of three incidents involving Winntec Model 6020 regulators, where the regulators were suspected as the cause of fires. The Thor companies reviewed the issue internally and found no issues with these regulators at that time.

12/4/20–KZ RV informs THOR Ind. of two issues under investigation with the same suspect regulators.

12/22/20—Grand Design performs lab analysis on two failed regulators and finds they contain an oily substance inside.

There is a belief that the oily substance is machining oil from a manufacturing process.

2/24/21—Grand Design informs THOR Ind. they are investigating several more fires, and will be sending regulators from those incidents for lab inspection.

3/16/21—Lab analysis performed on six regulators from Grand Design, including one exemplar and one from KZ RV. In the lab setting, the KZ RV regulator operated within allowable parameters, although it contained the same oily residue seen on the field samples.

4/19/21–THOR Ind. engages Exponent Engineering to conduct analysis of regulators to determine source of oily substance.

5/10/21—Safety Committee Meetings conducted at KZ RV, Keystone RV and Jayco RV, to update them on regulator investigation. All committees request further investigation of specific claims and confirmation of Exponent findings.

5/12/21–Exponent provides written report/presentation on regulator analysis.

5/14/21–Meeting held with Grand Design, Dehco, Winnspec International, and Chen Fong to discuss regulator issue.

Winnspec given until May 18, to return information regarding issues with their regulators.

5/19/21–Safety Committee Meetings conducted at KZ RV, Keystone RV and Jayco RV to update them on the regulator investigation.

5/21/21—THOR Ind. Discussed regulator issue with the Medium Heavy Duty ODI office.

5/24/21 & 5/25/21 - Meeting with Grand Design, Dehco, Winnspec International, and Chen Fong at Livonia, MI testing facility, to discuss regulator investigation. Chen Fong agrees the regulator is allowing higher pressure than expected with a compromised second stage seal.

5/27/21–Safety Committee Meetings conducted at KZ RV, Keystone RV and Jayco RV. All safety committees decide to move forward with a recall for safety for units built with a defective Winntec Model 6020 regulator.

6/16/21 – Video Meeting was held with Thor Industries and NHTSA ODI and Recalls Management Divisions to update them on the progress of gathering the required populations of all regulator recalls submitted by the Thor Companies.

NHTSA was informed that more confirmation testing was required to definitively establish a population.

- 7/7/21 Exponent provided Thor Industries draft testing results of the interaction of the second stage seal with various plasticizers found in hoses used on the regulators from the last five years of manufacturing. Only one sample per year was available to test. This testing confirmed similarities in several years.
- 7/8/21 Exponent's draft testing results reviewed with Thor Industries companies. Due to small sample size, it was requested to see if more samples could be secured for confirmation testing.
- 7/16/21 Thor Industries conducts meeting with Dehco, UFP and Winnspec to discuss the regulator recalls. Winnspec agrees to provide further second stage seal discs to confirm earlier testing.
- 8/2/21 Testing samples from Winnspec received from China at Exponent.
- 8/18/21 Exponent provides draft testing results to Thor Industries on confirmation Samples.
- 8/20/21 Thor Industries conducts meeting with affected companies to discuss testing results. Companies are instructed to review the results with their Safety Committees and adjust recall populations accordingly.
- 9/2/21 Keystone Safety Committee reviewed the information and concluded that the data reviewed indicated a unanimous vote for a voluntary recall. Investigation called for to determine affected unit range.
- 9/13/2021 Investigation concluded and scope completed.