

ACPE-03

Pedal Misapplication Cases in vehicle category N1

Korea Automobile Testing & Research Institute(KATRI)

Special Accident Investigation Office

Giok, Park



Pedal Misapplication Accident Data

Statistics Data

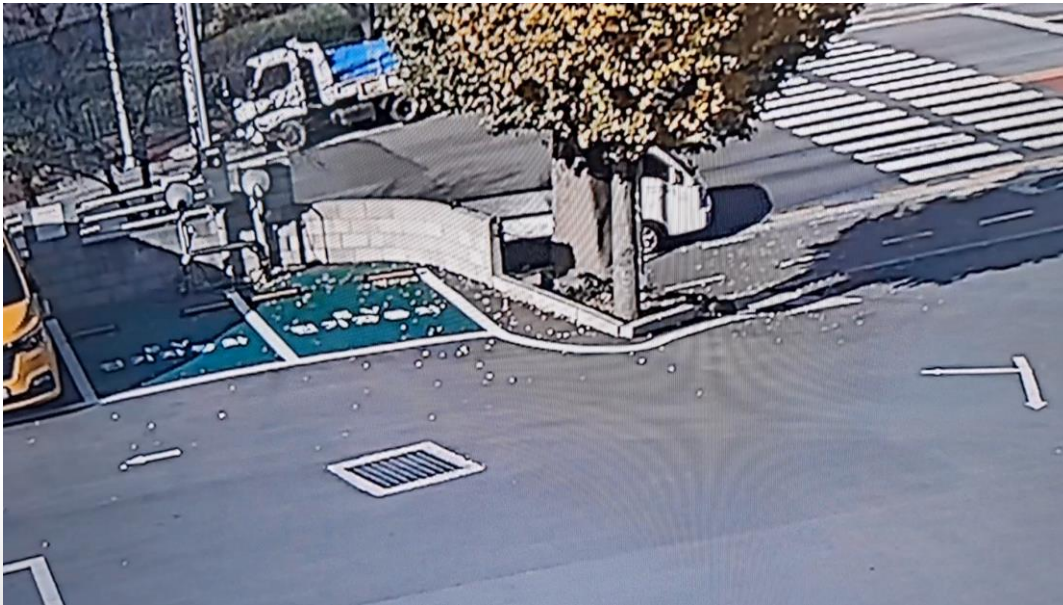
- ✓ Time Period: Jan. 2022 ~ Sep. 2023 (21 months)
- ✓ Pedal Misapplication suspected accident : 726 cases(Reported by the Manufacturers)
 - M1: 652 cases (89.8 %)
 - N1: 74 cases (10.2 %)



Pedal Misapplication Accident Data

Case 2 (N1 category)

- ☑ The accident occurred due to a pedal misapplication while parking to charge.
- ☑ The accident with an electric vehicle 4 months after purchase(65-year-old man).
- ☑ The driver pressed the gas pedal instead of the brake pedal for stopping.



Time (s)	Speed (km/h)	Motor (rpm)	APS (%)	Brake switch (on/off)	Steering Angle (deg)
-5.0	5	500	0	Off	-250
-4.5	5	400	0	Off	-250
-4.0	5	400	0	Off	-250
-3.5	5	500	0	Off	-250
-3.0	5	400	0	Off	-250
-2.5	5	400	0	Off	-250
-2.0	5	500	32	Off	-250
-1.5	7	700	99	Off	-250
-1.0	18	2100	99	Off	-250
-0.5	27	3200	99	Off	-250
0.0	11	2100	99	Off	-250

Pedal Misapplication Accident case

Case 1 (N1 category)

- ☑ A rear-end and a front-end collision occurred in an accident while moving a parked vehicle.
- ☑ The accident with an electric vehicle 2 months after purchase(Driver information is unknown).
- ☑ (Multi-Event) Event 1 and Event 2 overlap for 2 seconds.

CCTV



Dashcam



Time (s)	E.#1 Time (s)	E.#2 Time (s)	Speed (km/h)	Motor (rpm)	APS (%)	Brake switch (on/off)	Steering Angle (deg)	Gear position
-8.5	-5.0		5	500	10	Off	-90	R
-8.0	-4.5		7	700	7	Off	15	R
-7.5	-4.0		8	800	5	Off	45	R
-7.0	-3.5		8	800	0	Off	-20	R
-6.5	-3.0		8	800	0	On	-10	R
-6.0	-2.5		7	700	0	On	-20	R
-5.5	-2.0		1	0	0	Off	-75	R
-5.0	-1.5	-5.0	1	100	16	Off	-35	R
-4.5	-1.0	-4.5	1	0	2	Off	-30	R
-4.0	-0.5	-4.0	0	100	28	Off	-30	R
-3.5	0.0	-3.5	4	400	99	Off	-30	R
-3.0		-3.0	4	400	99	Off	-30	R
-2.5		-2.5	1	0	0	Off	-60	D
-2.0		-2.0	2	200	97	Off	-65	D
-1.5		-1.5	8	800	74	Off	-90	D
-1.0		-1.0	16	1700	99	Off	-100	D
-0.5		-0.5	34	4500	99	Off	-200	D
0.0		0.0	29	3300	99	Off	-195	D

THANK YOU

e-mail parkgiok@kotsa.or.kr
giok.park@gmail.com