



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 12-005  
**Date Opened:** 03/07/2012  
**Investigator:** Steve Mchenry  
**Approver:** Frank Borris  
**Subject:** Stuck throttle

**Date Closed:** 10/22/2012  
**Reviewer:** Jeff Quandt

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Ford Motor Company  
**Products:** MY 2005-06 Ford Taurus & Mercury Sable  
**Population:** 546,082

**Problem Description:** A detached speed control cable may interfere with the throttle closing fully.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	194	70	259**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	177	177

\*Description of Other: Warranty claims

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** This Preliminary Evaluation has been closed.

### Summary:

Preliminary Evaluation (PE)12-005 was opened to investigate allegations of speed control cables detaching from the throttle body and subsequently interfering with the throttle closing fully to the idle position in model year (MY) 2005 and 2006 Ford Taurus vehicles. The speed control cable, throttle body attachment arm ("nail head") for the speed control cable, cable mounting bracket and cable routing for the MY 2005 and 2006 Ford Taurus are common to all MY 2004 through 2006 Ford Taurus and Mercury Sable vehicles equipped with either the 155 HP 3.0L 2-valve Vulcan engine or the 200 HP 3.0L 4-valve Duratec engine (the "subject vehicles"). Figures 1 and 2 show the throttle body cam and speed control cable installed and a cable interference condition caused by contact between a detached cable and the "nail head."

Ford's assessment of the condition in incident vehicles noted that the interference conditions produced tended to be short in duration as the cable end tended to dislodge itself from the throttle body due to vibration, road loads or engine roll in addition to tapping the acceleration pedal. Ford inspected three incident vehicles and measured maximum throttle openings of 5.8% to 14.9%, resulting in engine speeds ranging from 1600 to 2200 rpm with the transmission selector in Drive. A Ford stack-up analysis of the speed control cable length from the attachment bracket to the throttle body indicated a maximum theoretical throttle opening of 16.4% that could result from the alleged defect.

Engineers at the NHTSA Vehicle Research and Test Center (VRTC) inspected an incident vehicle to evaluate throttle positions and engine speeds that could result from the alleged defect and performed brake testing of a vehicle with the throttle stuck at the worst case throttle opening that could result from the condition. The VRTC vehicle inspection noted that, depending on the orientation of the detached cable end, the amount of throttle opening that could result from interference by a detached speed control cable end varied from 4.8% to 11.3%. VRTC brake testing of a MY 2006 Taurus with a Vulcan engine and the throttle held open at 16% found that, even with multiple brake applications, sufficient vacuum was available for the brake booster assist and the brake pedal efforts required to stop

the vehicle did not increase significantly from normal operating conditions.

ODI's analysis of 100 complaints related to the alleged defect found that drivers were generally able to free the interference condition or safely brake to a stop without incident. Approximately one-third (32) reported that the stuck throttle condition was corrected with no action or by tapping the accelerator pedal while the vehicle was still moving, another third (34) reported braking to a stop with the vehicle in Drive prior to correcting the condition, and the remaining third (34) reported that the driver responded to the incident by shifting to Neutral before stopping the vehicle. One complaint alleged that stuck-throttle type symptoms caused the vehicle to pass partially through a traffic light and into an intersection before stopping, however, ODI was unable to contact the owner to verify the cause or relationship to the alleged defect condition. ODI has not identified any crashes related to the alleged defect. Tables 1 and 2 provide a breakdown of complaints and warranty claims related to the alleged defect by engine and model year.

A safety-related defect has not been identified at this time and further use of agency resources does not appear to be warranted. Accordingly, this investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. The agency will monitor this issue and reserves the right to take further action if warranted by the circumstances.

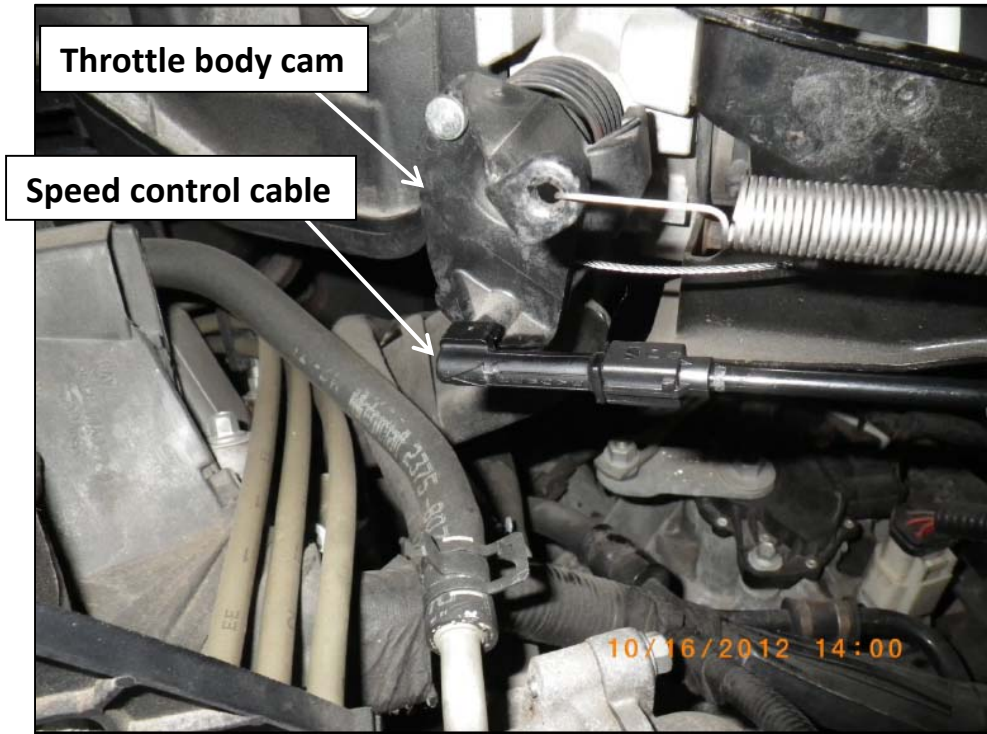


Figure 1 - Exemplar speed control cable and throttle body cam, 2005 Ford Taurus with Vulcan engine.

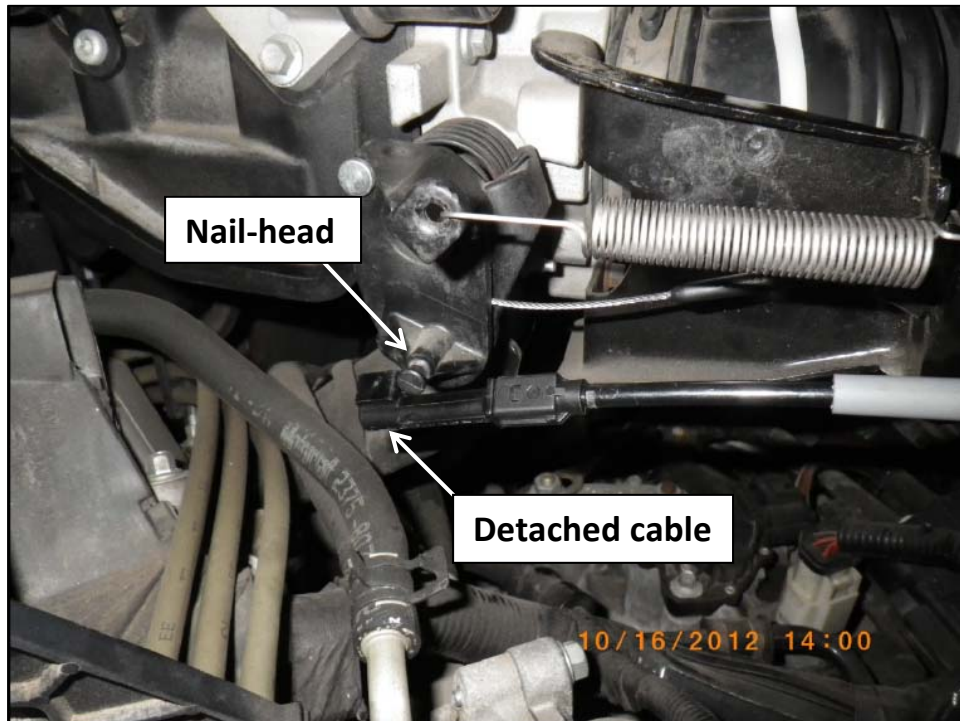


Figure 2 - Detached speed control cable caught on throttle cam nail-head, 2005 Ford Taurus with Vulcan engine.

Engine	MY	Production	ODI complaints		Ford complaints		Total complaints	
			No.	IPTV	No.	IPTV	No.	IPTV
Vulcan 3.0L V6 2-valve 155 HP	2004	161,334	24	0.15	6	0.04	29	0.17
	2005	118,669	121	1.02	48	0.40	166	1.32
	2006	157,001	30	0.19	16	0.10	44	0.31
	Total	437,004	175	0.40	69	0.16	239	0.53
Duratec 3.0L V6 4-valve 200 HP	2004	80,588	1	0.01	1	0.01	2	0.02
	2005	28,490	1	0.04	0	0.00	1	0.04
	2006	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total	109,078	2	0.02	1	0.01	3	0.03
Unknown engine	2004	n/a	0	n/a	0	n/a	0	n/a
	2005	n/a	17	n/a	0	n/a	17	n/a
	2006	n/a	0	n/a	0	n/a	0	n/a
	Total	n/a	17	n/a	0	n/a	17	n/a
Total	2004	241,922	25	0.10	7	0.03	31	0.13
	2005	147,159	139	0.94	48	0.33	184	1.25
	2006	157,001	30	0.19	15	0.10	44	0.28
	Total	546,082	194	0.36	70	0.13	259	0.47

Table 1. Complaints: Speed Control Cable – Detached – Throttle Interference.

Engine	MY	Speed control cable detached, with Interference		Speed control cable detached, no interference		Speed control cable detached, total		
		No.	IPTV	No.	IPTV	No.	IPTV	% with interference
Vulcan 3.0L V6 2-valve	2004	40	0.25	140	0.87	180	1.12	22%
	2005	96	0.81	185	1.56	281	2.37	34%
	2006	37	0.24	152	0.97	189	1.20	20%
	Total	173	0.40	477	1.09	650	1.49	27%
Duratec 3.0L V6 4-valve	2004	2	0.02	50	0.62	52	0.65	4%
	2005	2	0.07	17	0.60	19	0.67	11%
	Total	4	0.04	67	0.61	71	0.65	6%

Table 2. Warranty Claims: Speed Control Cable - Detached.