



## Ford Mustang (reassessment)

Standard Safety Equipment

2017



### Adult Occupant



72%

### Child Occupant



32%

### Pedestrian Impact Protection



78%

### Safety Assist



61%

## SPECIFICATION

Tested Model	Ford Mustang 5.0 Fastback, LHD
Body Type	- 2 door coupe
Year Of Publication	2017
Kerb Weight	1768kg
VIN From Which Rating Applies	- all 2018 model year Mustang Fastbacks
Class	Roadster sports

### General comments

The Ford Mustang has been reassessed following changes made to the latest version. Cars which can be ordered from July 2017 onwards are equipped as standard with Ford's Pre Collision Assist (with Pedestrian Detection, Forward Collision Warning and Autonomous Emergency Braking) and Lane Keeping Aid. Structurally, the new vehicle is identical to the last, so this assessment uses the crash tests performed previously. The restraint system has been updated to prevent the airbag bottoming out for driver and passenger. In addition, the automatic airbag deactivation now meets Euro NCAP's requirements.

## SAFETY EQUIPMENT

	Driver	Passenger	Rear
<b>FRONTAL CRASH PROTECTION</b>			
Frontal airbag	●	●	—
Belt pretensioner	●	●	✘
Belt loadlimiter	●	●	✘
Knee airbag	●	●	—
<b>SIDE CRASH PROTECTION</b>			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	●	●	✘
<b>CHILD PROTECTION</b>			
Isofix	—	✘	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
<b>SAFETY ASSIST</b>			
Seat Belt Reminder	●	●	✘
<b>OTHER SYSTEMS</b>			
Active Bonnet (Hood)	●		
AEB Pedestrian	●		
AEB City	●		
AEB Inter-Urban	●		
Speed Assistance System	✘		
Lane Assist System	●		

Note: Other equipment may be available on the vehicle but was not considered in the test year.


- Fitted to the vehicle as standard    ○ Fitted to the vehicle as part of the safety pack  
 ○ Not fitted to the test vehicle but available as option or as part of the safety pack    ✘ Not available    — Not applicable

 ADULT OCCUPANT

Total 27.7 Pts / 72%


 GOOD    ADEQUATE    MARGINAL    WEAK    POOR

Frontal Offset Deformable Barrier 6.9 Pts




Passenger Driver

Frontal Full Width 4.7 Pts




Rear Passenger Driver

Whiplash Rear Impact 1.2 Pts




Front seat Rear seat

Lateral Impact 14.9 Pts



Car Pole

AEB City 0

Performance:  Good



ADULT OCCUPANT

Total 27.7 Pts / 72%



GOOD



ADEQUATE



MARGINAL



WEAK



POOR



## ADULT OCCUPANT

Total 27.7 Pts / 72%

## Comments

The passenger compartment of the Mustang remained stable in the frontal offset test. Dummy readings indicated good protection of the knees and femurs of the driver and passenger dummies. Analysis of the dummy data showed that the driver's head had 'bottomed out' the airbag i.e. there was insufficient pressure in the airbag to prevent the head from contacting the steering wheel through the deflated airbag material. The head of the passenger dummy also bottomed out the airbag against the dashboard, owing to insufficient inflation of the airbag and inadequate restraint for larger statures by the front passenger seatbelt load-limiter. Ford have shown improved performance from the airbags fitted to the latest Mustang, with bottoming-out avoided. However, the frontal offset test was not repeated and the scores reflect the performance seen in the original test. In the full-width rigid barrier test, protection of the driver was good apart from the chest, protection of which was adequate. However, the rear seat passenger slipped under the lap portion of the seatbelt (a phenomenon known as 'submarining') and the score for the knee, femur and pelvis body region was penalised and protection was rated as poor. Protection of the chest was also rated as poor as the rear seatbelt (which has neither pre-tensioners nor load-limiters) showed an excessively high tensile force in the test. Dummy readings of head deceleration indicated weak protection of the head for the rear passenger. In the side barrier test, the Mustang scored full points with good protection of all critical body areas. Even in the more severe side pole test, protection of the chest was adequate and that of other body regions was good. Tests on the front seats and head restraints demonstrated a marginal level of protection against whiplash injury in the event of a rear-end collision. A geometric assessment of rear seats indicated poor whiplash protection in these seating positions. The latest Mustang has an autonomous emergency braking system as standard. The system performed well in tests of its functionality at the low speeds typical of city driving at which many whiplash accidents occur. However, the system did not qualify for points as the car's passive whiplash protection was inadequate.

**CHILD OCCUPANT**

Total 15.8 Pts / 32%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

13.6 Pts

Frontal Impact 9.6 Pts 	Lateral Impact 4 Pts 
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Restraint for 6 year old child: *Britax Römer KidFix XP*  
 Restraint for 10 year old child: *0*

Safety Features

0 Pts

	Front Passenger	2nd row outboard
Isofix	✗	●
i-Size	✗	✗
Integrated CRS	✗	✗

● Fitted to test car as standard   
 ○ Not on test car but available as option   
 ✗ Not available


CRS Installation Check

2.2 Pts

● Install without problem   
 ● Install with care   
 ● Safety critical problem   
 ✗ Installation not allowed

**i-Size CRS**

Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize) 	Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize) 	BeSafe iZi Kid X2 i-Size (iSize) 
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 CHILD OCCUPANT

Total 15.8 Pts / 32%

■ ISOFIX CRS

Maxi Cosi Cabriofix & FamilyFix (ISOFIX)



BeSafe iZi Kid X4 ISOfix (ISOFIX)



Britax Römer Duo Plus (ISOFIX)



Britax Römer KidFix XP (ISOFIX)



■ Universal Belted CRS

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyBase2 (Belt)



Britax Römer King II LS (Belt)



Britax Römer KidFix XP (Belt)



CHILD OCCUPANT

Total 15.8 Pts / 32%

	Seat Position		
	Front	2nd row	
	PASSENGER	LEFT	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)	□	□	□
Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)	□	□	□
BeSafe iZi Kid X2 i-Size (iSize)	□	□	□
Maxi Cosi Cabriofix & FamilyFix (ISOFIX)	□	●	●
BeSafe iZi Kid X4 ISOfix (ISOFIX)	□	✘	✘
Britax Römer Duo Plus (ISOFIX)	□	●	●
Britax Römer KidFix XP (ISOFIX)	□	●	●
Maxi Cosi Cabriofix (Belt)	●	●	●
Maxi Cosi Cabriofix & EasyBase2 (Belt)	●	●	●
Britax Römer King II LS (Belt)	●	●	●
Britax Römer KidFix XP (Belt)	●	●	●

● Install without problem  
 ● Install with care  
 ● Safety critical problem  
 ✘ Installation not allowed

Comments

For the impact tests, the 10 year dummy was sat on a booster cushion. Owing to limited rear space the results of the dynamic tests on the 10 year dummy were done in a separate test. In the frontal offset test, protection of the 10 year dummy was rated as at least adequate. However, the shoulder belt slipped between the clavicle and the upper arm and the score for the dummy in this test was penalised. Protection of the 6 year dummy, sat in a high-back booster, was rated as good and adequate for the head and neck respectively but dummy readings of chest deceleration indicated marginal chest protection. In the side barrier test, dummy readings indicated good protection, apart from the head of the 10 year dummy. The head bottomed out the side curtain airbag, making contact, through the deflated airbag material, with the trim on the C pillar. Consequently, all points were lost for the 10 year dummy in this test. The front passenger airbag can be automatically disabled to allow a rearward-facing restraint to be used in that seating position. The information provided to the driver regarding the status of the airbag met Euro NCAP's requirements.




**PEDESTRIAN IMPACT PROTECTION**

Total 32.8 Pts / 78%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

**Pedestrian Impact Protection** 27 Pts



Head Impact	21 Pts
Pelvis Impact	0 Pts
Leg Impact	6 Pts

**AEB Pedestrian** 5.8 Pts

System Name	Pre Collision Assist (PCA)
Type	Auto-Brake with Forward Collision Warning
Operational From	5 km/h
Additional Information	Defaults on for every journey; operates above 40km/h and in low ambient light

**PERFORMANCE |**

	Autobrake Function	
	Avoidance	Mitigation
Running Adult crossing from Farside	Collision avoided up to 45 km/h	Impact mitigated up to 60 km/h
Walking Adult crossing from Nearside -25%	Collision avoided up to 40 km/h	Impact mitigated up to 60 km/h
Walking Adult crossing from Nearside -75%	Collision avoided up to 50 km/h	Impact mitigated up to 60 km/h
Running Child from behind parked vehicles	Collision avoided up to 40 km/h	Impact mitigated up to 50 km/h

**Comments**

The Mustang has an 'active' bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet, creating more space to the hard structures in the engine bay. Ford demonstrated that the system worked robustly for a variety of pedestrian statures and over a range of speeds and, accordingly, the tests were performed in the raised (deployed) position. Test results were good over almost the entire bonnet surface. Protection of the pelvic region was poor in all areas tested but the bumper provided good protection to pedestrians' legs and scored maximum points in Euro NCAP's tests. The autonomous emergency braking system can detect pedestrians as well as other vehicles and performed well in tests of this functionality.

SAFETY ASSIST

Total 7.4 Pts / 61%

GOOD
  ADEQUATE
  MARGINAL
  WEAK
  POOR

Speed Assistance 0 Pts

Seat Belt Reminder 2 Pts

Warning	Front seats		
	Driver Seat	front passenger(s)	rear passenger(s)
Visual	●	●	—
Audible	●	●	—

● Pass
 ● Fail
 — Not available

Lane Support 2.7 Pts

System Name	Lane Keeping Aid
Type	Lane Keep Assist and Lane Departure Warning
Operational From	65 km/h
Warning	Audible
<b>PERFORMANCE</b>	
LKA Confirmation Test	Pass (4/5)
LDW Confirmation Test	Pass

SAFETY ASSIST

Total 7.4 Pts / 61%

AEB Interurban

2.7 Pts

System Name	Pre Collision Assist (PCA)	
Type	Forward Collision Warning with Auto-Brake	
Operational From	5 km/h	
Additional Information	Default On	
PERFORMANCE		
	Autobrake Function Only	Driver reacts to warning
Operational Speed	5-300 km/h	5-300 km/h
Approaching a stationary car	See AEB City	Crash avoided up to 75km/h. Crash speed reduced up to 80km/h.
Approaching a slower moving car	Crash avoided up to 70km/h.	Crash avoided up to 80km/h.
FOLLOWING A CAR AT SHORT DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Mitigation	Mitigation
FOLLOWING A CAR AT LONG DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Avoidance	Avoidance

Comments

The Mustang has a seatbelt reminder system for the front seats only. The latest Mustang has an autonomous emergency braking system that operates at highways speeds. In tests, the system performed well, with collisions avoided or mitigated in almost every test speed and scenario. Also standard is a lane keeping assistance system which gently steers the car away from a lane marking if it is drifting out of lane.

## RATING VALIDITY

### Variants of Model Range

Body Type	Engine & Transmission	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
* 2 door coupe	5.0 V8 Manual and Automatic	Mustang Fastback 5.0 V8	4 x 2	✓	✓
2 door coupe	2.3 EcoBoost Manual and Automatic	Mustang Fastback 2.3 EcoBoost	4 x 2	✓	✓
2 door convertible	5.0 V8 Manual and Automatic	Mustang Convertible 5.0 V8	4 x 2	✗	✗
2 door convertible	2.3 EcoBoost Manual and Automatic	Mustang Convertible 2.3 EcoBoost	4 x 2	✗	✗

\* Tested variant

### Annual Reviews and Facelifts

Euro NCAP © Ford Mustang (reassessment) July 2017 12/12

Date	Event	Outcome
July 2017	Rating Published	2017 ★★☆☆☆ ✓