

REPORT NUMBER 114-GTL-09-002

SAFETY COMPLIANCE TESTING FOR FMVSS NO. 114 THEFT PROTECTION

HONDA MOTOR CO., LTD OF JAPAN
2009 HONDA FIT, PASSENGER CAR
NHTSA NO. C95302

GENERAL TESTING LABORATORIES, INC.
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MAY 1, 2009

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF TEST

A model year 2009 Honda Fit passenger car was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 114 testing to determine if the vehicle was in compliance with the requirements of the standard. FMVSS 114 specifies requirements to decrease the likelihood that a vehicle is stolen, or accidentally set in motion.

1.1 The test vehicle was a 2009 Honda Fit Passenger Car. The vehicle was identified as follows:

A. Vehicle Identification Number: JHMGE87229S021972

B. NHTSA No.: C95302

C. Manufacturer: HONDA MOTOR CO., LTD OF JAPAN

D. Manufacture Date: 10/08

E. Color: Storm Silver Metallic

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 114 testing on April 7, 2009.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure TP-114-03-Draft and General Testing Laboratories, Inc. (GTL) Test Procedure, TP-114-03-Draft, "Theft Protection and Rollaway Prevention".

2.1 SUMMARY OF RESULTS

Test data indicate the FMVSS 114 requirements appear to have been satisfied. All test data resulting from the tests were recorded on test data sheets in Section 3.

SECTION 3

TEST DATA

3.0 TEST RESULTS

The following data sheets document the results of FMVSS 114 testing on the 2009 Honda Fit.

FMVSS 114, THEFT PROTECTION
DATA SHEET 1 – VEHICLE IDENTIFICATION

TEST DATE: 04/07/09 LAB.: General Testing Laboratories
 CONTRACT: DTNH22-06-C-00032 VEH. NHTSA NO.: C95302
 VIN: JHMGE87229S021972 BUILD DATE: 10/08

MY/MAKE/MODEL/BODY STYLE: 2009 Honda Fit

TRANSMISSION TYPE:

Automatic ; Manual ; Other (describe: _____)

DRIVE TRAIN TYPE:

Front Wheel ; Rear Wheel ; 4-Wheel

FUEL TANK LEVEL: 100 (% OF max.) MILEAGE: 335

VEHICLE STARTING SYSTEM:

Location of the starting system:

On Right Side of Steering Column

Selectable settings:

Lock/Off, Accessory, On/Run, Start

Explain how the system is activated:

Push key in hole and turn clockwise

KEY

Description of the key:

Normal traditional metal key

STARTING SYSTEM ACTIVATION

Describe how the key is inserted into the starting system:

Align key with slot and push in

Describe how the key is used to activate the starting system:

Turn clockwise

Describe how the key is removed from the starting system:

Pull key out of slot

FMVSS 114, THEFT PROTECTION
DATA SHEET 1 continued

GEAR SELECTION CONTROL

Describe the gear selection control:

5 speed manual stick shift

Describe how the gear selection control is activated:

Push in clutch and move shift stick in an "H" pattern

Describe all of the selectable settings:

1st, 2nd, 3rd, 4th, 5th, Neutral, Reverse

IMMOBILIZER

Is the vehicle equipped with an immobilizer YES NO

Describe the immobilizer device and how it prevents vehicle theft (if equipped):

Electrical circuit built into key which activates the immobilizer system which turns off the engine fuel system.

OPTIONAL RELEASE DEVICES

Describe if the vehicle is equipped with optional release devices:

N/A

OPTIONAL RELEASE DEVICES:

Key Removal Gear Selection Control None Other

VEHICLE FLUIDS

Check all vehicle fluids and adjust to the proper levels for operation: Full

VEHICLE TIRE PLACARD INFORMATION

Vehicle Mfg. Recommended Tire Inflation Pressure

(kPa): Front 220 Rear 220

TIRE INFLATION PRESSURES:

Measured (kPa): LF 220 LR 220 RF 220 RR 220

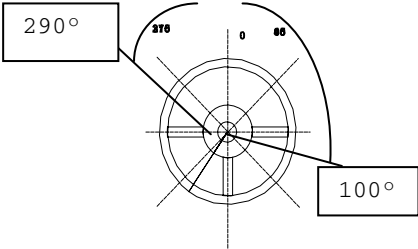
WEIGHT

Vehicle Curb Weight(kg): 1122 Weight of Driver (kg): 91 (target = 91kg)

FMVSS 114, THEFT PROTECTION
DATA SHEET 2

VEH. NHTSA NO.: C95302

TEST DATE: 04/07/09

| REQUIREMENT S5.1.1 | PASS | FAIL |
|--|------|------|
| Engine cannot be started without using the key <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | X | |
| <p>With key removed, steering wheel locks: Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/></p> <p>Identify locking position(s) on wheel using arrow(s)</p> <p>Clockwise: <u>100</u> (degrees) Counterclockwise: <u>290</u> (degrees)</p>  | | |
| <p>Key removal prevents forward self-mobility: Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/></p> <p>If yes describe: Engine must be off to remove key, shift lever locks in park position.</p> | | |
| When key is removed from the starting system, starting of the engine or motor and either steering or self mobility is prevented. YES | X | |

REMARKS:

FMVSS 114, THEFT PROTECTION
DATA SHEET 2 continued

| REQUIREMENT S5.1.3 | PASS | FAIL |
|---|------|------|
| <p>An audible warning is activated whenever the key is in any starting system position with the exception of "on" and "start" and the door closest to the driver's designated seating position is opened.</p> <p style="text-align: right;">Yes <u> X </u> No _____</p> <p>Identify ALL key/starting system position setting: <u>Lock/Off, Accessory, On/Run, Start</u></p> | X | |

| REQUIREMENT S5.1.4 | PASS | FAIL |
|--|------|------|
| <p>With the vehicle engine or motor shut down and the transmission gear selection control in any position other than "park";</p> <p>The steering wheel can rotate without locking? Yes <u> X </u> No _____</p> | X | |
| <p>The vehicle is free to roll forward? Yes <u> X </u> No _____</p> | X | |

REMARKS:

RECORDED BY: G. Farrand

DATE: 04/07/09

APPROVED BY: D. Messick

FMVSS 114, ROLLAWAY PREVENTION
DATA SHEET 3
(for vehicles equipped with transmission with a "park" position)

VEH. NHTSA NO.: C95302

TEST DATE: 04/07/09

| REQUIREMENT S4.2.1(a)(2) | PASS | FAIL |
|---|------|------|
| <p>The starting system prevents key removal in ALL gear selection control positions except "park". Yes_____ No_____</p> <p>Can the gear selection control be placed between each gear selection position and will it remain there without assistance? Yes_____ No_____</p> <p>If yes, can the key be removed from the starting system? Yes_____ No_____</p> <p>If the key can be removed from the vehicle starting system when the gear selection control is not locked in "park", a mechanism shall exist which, upon key removal, the vehicle transmission or gear selection control shall become locked in "park" as the direct result of removing the key. If such a mechanism exists, describe the mechanism and its function:</p> | N/A* | |

| REQUIREMENT S5.2.2 | PASS | FAIL |
|---|------|------|
| <p>The gear selection control is locked in the "park" position when the key is removed from the starting system. Yes_____ No_____</p> | N/A* | |

REMARKS: *MANUAL TRANSMISSION

DATA SHEET 3 continued

| REQUIREMENT S5.2.3 | PASS | FAIL |
|---|------|------|
| <p><u>ELECTRICAL FAILURE (Battery Discharge)</u></p> <p>In the event of an electrical failure, key removal from the starting system when the transmission or gear selection control is not locked in "park" is permitted". Yes_____ No_____</p> <p>The vehicle is equipped with an override device that permits key removal from the starting system when the transmission or gear selection control is not locked in "park". Yes_____ No_____</p> <p>If yes, select the type of override device equipped: Opaque Cover_____ No Cover_____</p> <p>Describe the override device design and mode of activation (if equipped):</p> | N/A* | |
| | N/A* | |
| | N/A* | |
| <p>FILL IN THE SECTION BELOW THAT APPLIES:</p> <p><u>OVERRIDE WITH AN OPAQUE COVER:</u></p> <p>The opaque surface cover prevents sight of and use of override device. Yes_____ No_____</p> <p>The opaque surface cover can only be removed by using a screwdriver or other tool. Yes_____ No_____</p> <p>As a direct result of removing the key from starting system, the following is prevented: Steering_____ or Self-Mobility_____</p> <p><u>OVERRIDE WITH NO COVER</u></p> <p>The override device requires the use of a tool to activate. Yes_____ No_____</p> <p>Simultaneous activation of the override device and removal of key from starting system is required. Yes_____ No_____</p> <p>As a direct result of removing the key from the starting system, the following is prevented: Steering_____ or Self-Mobility_____</p> | N/A* | |

REMARKS: *MANUAL TRANSMISSION

DATA SHEET 3 continued

| REQUIREMENT S5.2.4 | PASS | FAIL |
|---|---|------|
| <p><u>GEAR SELECTION CONTROL OVERRIDE DEVICE</u></p> <p>The vehicle is equipped with an override device that allows the user to move the gear selection control from “park” after the key has been removed from the starting system. Yes_____ No <u>X</u></p> <p>If yes, select the type of override device that is equipped: Override operated with a: Key_____ Opaque Cover_____ No Cover_____</p> <p>Describe the override device design and mode of activation (if equipped):</p> <p>FILL IN THE SECTION BELOW THAT APPLIES:</p> <p><u>OVERRIDE OPERATED WITH KEY:</u></p> <p>The key is required to operate the override device that allows the user to move the gear selection control from “park” after the key has been removed from the starting system. Yes_____ No_____</p> <p><u>OVERRIDE WITH AN OPAQUE COVER</u></p> <p>The opaque surface cover prevents sight of and use of override device. Yes_____ No_____</p> <p>The opaque surface cover can only be removed by using a screwdriver or other tool. Yes_____ No_____</p> <p>As a direct result of removing the key from the starting system, the following is prevented: Steering_____ or Self-Mobility_____</p> <p><u>OVERRIDE WITH NO COVER</u></p> <p>The override device requires the use of a tool to operate. Yes_____ No_____</p> <p>Simultaneous activation of the override device and removal of key from starting system is required. Yes_____ No_____</p> <p>As a direct result of removing the key from the starting system, the following is prevented: Steering_____ or Self-Mobility_____</p> | <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> | |

REMARKS:

DATA SHEET 3 continued

| REQUIREMENTS S5.2.5 | PASS | FAIL |
|---|-------------------------|------------------------|
| <p><u>VEHICLE FACING UPHILL ON 10% GRADE</u></p> <p>With the gear selection control in “park” measure movement of the vehicle down the slope upon releasing the service brake.</p> <p>Test grade: <u> 11 </u> % (9% to 15%) Measured movement: <u> 58 </u> mm (150mm maximum)</p> <p>NOTE: Repeat procedure if vehicle fails on grade in excess of 10%.</p> <p>Test grade: <u> </u> % (9% to 10%) Measured movement: <u> </u> mm (150 mm maximum)</p> <p><u>VEHICLE FACING DOWNHILL ON 10% GRADE</u></p> <p>With the gear selection control in “park” measure movement of the vehicle down the slope upon releasing the service brake.</p> <p>Test grade: <u> 11 </u> % (9% to 15%) Measured movement: <u> 64 </u> mm (150mm maximum)</p> <p>NOTE: Repeat procedure if vehicle fails on grade in excess of 10%.</p> <p>Test grade: <u> </u> % (9% to 10%) Measured movement: <u> </u> mm (150 mm maximum)</p> | <p>N/A*</p> <p>N/A*</p> | <p><u>see note</u></p> |

REMARKS: *MANUAL TRANSMISSION

DATA SHEET 3 continued

| REQUIREMENTS S5.3 | PASS | FAIL |
|---|------------------------------|------|
| <u>VEHICLE FACING UPHILL ON 10% GRADE</u> | | |
| With the key in the "off" position, the transmission will shift out of "park" without the service brake being applied. Yes_____ No_____ | <u>N/A*</u> | |
| With the key in the "acc" position, the transmission will shift out of "park" without the service brake being applied. Yes_____ No_____ | <u>N/A*</u> | |
| With the key in the "on" position (engine off), the transmission will shift out of "park" without the service brake being applied. Yes_____ No_____ | <u>N/A*</u> | |
| With the key in the "start" position, the transmission will shift out of "park" without the service brake being applied. Yes_____ No_____ | <u>N/A*</u> | |
| With the key in the "other" position (please specify), the transmission will shift out of "park" without the service brake being applied. Yes_____ No_____ | <u>N/A*</u> | |
| Does the key stay between starting system positions without being held by operator? Yes_____ No_____ | <u>N/A*</u> | |
| If so, please describe. | | |
| Brake force readings (force required to allow the transmission to shift out of "park"): | | |
| The vehicle is equipped with adjustable pedals: Yes_____ No_____ | | |
| Fore Position: | Aft Position (if applicable) | |
| Reading 1 _____ | Reading 1 _____ | |
| Reading 2 _____ | Reading 2 _____ | |
| Reading 3 _____ | Reading 3 _____ | |
| Reading 4 _____ | Reading 4 _____ | |
| Reading 5 _____ | Reading 5 _____ | |
| Avg. _____ | Avg. _____ | |
| | <u>N/A*</u> | |

REMARKS: *MANUAL TRANSMISSION

RECORDED BY: G. Farrand
 APPROVED BY: D. Messick

DATE: 04/07/09

SECTION 4
TEST EQUIPMENT LIST

| ITEM | MFR | MODEL | S/N | CAL. PERIOD | DATE OF NEXT CALIB. | REMARKS |
|---------------------|-----------|-----------|---------|-------------|---------------------|---------|
| SLR DIGITAL CAMERA | NIKON | D50 | N/A | N/A | N/A | |
| TIRE PRESSURE GAUGE | WESKLER | 45-0/100 | 107 | 12 MO. | 03/10 | |
| INCLINOMETER | MITUTOYO | PRO 360 | 950-315 | N/A | BEFORE USE | |
| STEEL TAPE | STANLEY | FAT MAX | 33-890 | 12 MO. | 03/10 | |
| WHEEL SCALES | INTERCOMP | SERIES 94 | 199744 | 12 MO. | 04/10 | |
| WHEEL SCALES | INTERCOMP | SERIES 94 | 199744 | 12 MO. | 04/10 | |
| WHEEL SCALES | INTERCOMP | SERIES 94 | 199744 | 12 MO. | 04/10 | |
| WHEEL SCALES | INTERCOMP | SERIES 94 | 199744 | 12 MO. | 04/10 | |
| SPRING SCALE | CHATILLON | DPP-10 | 4729 | 12 MO. | 04/10 | |

SECTION 5
PHOTOGRAPHS



2009 HONDA FIT
NHTSA NO. C95302
FMVSS NO. 114

FIGURE 5.1
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE

MFD. IN JAPAN BY HONDA MOTOR CO., LTD; 10/'08
GVWR 3512LBS GAWR F 1921LBS R 1619LBS
GVWR 1594KG GAWR F 872 KG R 735 KG
THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY , BUMPER,
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE.
V.I.N.: JHMGE87229S021972 TYPE: PASSENGER CAR



TK6 9 AA0 - NH642M - B - S



TIRE AND LOADING INFORMATION

SEATING CAPACITY : TOTAL 5 : FRONT 2 : REAR 3

The combined weight of occupants and cargo should never exceed 385kg or 850lbs.

| TIRE | SIZE | COLD TIRE PRESSURE | SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION |
|-------|----------------|--------------------|--|
| FRONT | 175/65R15 84S | 220KPA, 32PSI | |
| REAR | | 220KPA, 32PSI | |
| SPARE | T125/70D15 95M | 420KPA, 60PSI | |

HA

2009 HONDA FIT
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FMVSS NO. 114

FIGURE 5.3
VEHICLE TIRE INFORMATION LABEL



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FIGURE 5.4
CLOSE-UP VIEW OF IGNITION KEY



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FMVSS NO. 114

FIGURE 5.5
STARTING SYSTEM CONTROL



2009 HONDA FIT
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FIGURE 5.6
TRANSMISSION GEAR SELECTION CONTROL