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# BMW of North America

# Special Product PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552(B)(6)

Name: Philip Fekete Customer Name:

Region: Eastern Address:

Date of Report: 11/26/2002 City, State: Whitestone, NY

Inspection Date: 11/26/2002 BMW Model: 745LiA

Inspection Location: Wide World of Cars, Inc. Chassis No.: WBAGNG3402 D

Location City/State: Spring Valley, NY 10977 Mileage: 3,329

Nature of Complaint:

Customer states he was driving vehicle near his work on the highway when a message appeared on the dashboard stating transmission failure and do not go over 40mph. He states he pulled into the parking lot at his work, put vehicle in park, left engine running and went to step out of the vehicle. He states the vehicle suddenly started rolling backwards and the driver side door was damaged after hitting a pole. Customer states he jumped back in the vehicle and was able to stop it. He states he turned off the engine and contacted Roadside Assistance but he did not have vehicle towed. He states approx. 4-5 hours later he got back in the vehicle and the transmission failure message light went off. Customer states he continued driving vehicle as he contacted Wide World of Cars but could not get an appointment. right away. He states about 10 days later, he was involved in an accident and had two flat tires. He states the vehicle was then towed through Roadside to BMW of Bayside, as it was the closest dealer at the time. Customer states Bayside could not obtain the tires he needed so he then had the vehicle towed through Roadside up to Wide World of Cars so he would not miss his service appointment. Customer states Wide World provided him with a loaner. Note to FSE: Please inspect vehicle for alleged transmission failure and customer complaint of vehicle rolling out of Park.

Observation:

The incident vehicle was examined and photographed on November 26, 2002, at the Wide World of Cars facility located in Spring Valley, New York. The vehicle was a BMW, Model 745LiA passenger car as shown in Photos 01 through 04. The New York license tag was The odometer reading was 3,329. The Chassis Number was and a manufacture date of 7/02 was found on the federal sticker attached to the driver's door opening.

A short test using a BMW GTI diagnostic tester was performed and an EGS fault error 5142 No CAN message from instrument cluster was found. A diagnostic printout, the shop order and history file are included with this report.

The examination reveled that the driver's door had been forced past the normal opening position, which created an exterior sheet metal interference to the drivers door and front fender as shown in Photo 07. The lower, center portion of the interior door panel had contact damage as shown in Photo 08. The pressurized door opening spring had been dislodged from the hinge pillar mount as shown in Photo 09.

Careful examination of the engine compartment including hose connections, electrical connections and foreign debris was performed and no problems were found.

After completing my visual examination, I evaluated the customer's vehicle in the parking lot at the Wide World repair facility for approximately 1/2 hour. I evaluated the braking ability to hold the vehicle in place with the transmission gear selector in drive or reverse with no incident. Depressing the parking brake prevented the vehicle from rolling. Depressing the parking brake while the vehicle was in motion stopped the vehicle from rolling. During my evaluation the engine idled well with no incident.

In order to engage starting mode, it was necessary to apply the brake pedal with gear selections in park or neutral only. The engine would not start in reverse or drive gear selections. It was also necessary to apply the brake pedal in order to engage the gear selector from park. Switching the engine off in gear selections reverse or drive automatically engaged the gear selection to park, (P) which appeared in the instrument cluster and stopped the vehicle from rolling.

With the brake pedal applied and engine running, the transmission gear selector was positioned in reverse, (R) which appeared in the instrument cluster. Upon opening the driver's door and exiting the vehicle while in gear (at speeds approximately 3 mph or less) the transmission automatically engaged from reverse mode to park, (P) which appeared in the instrument cluster and stopped the vehicle from rolling.

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# BMW of North America Special Product Investigation Report

With the brake pedal applied and engine running, the transmission gear selector was positioned in drive, (D) which appeared in the instrument cluster. Upon opening the driver's door and exiting the vehicle while in gear (at speeds approximately 3 mph or less) the transmission automatically engaged from drive to park, (P) which appeared in the instrument cluster and stopped the vehicle from rolling.

With the brake pedal applied and engine running, the transmission gear selector was positioned in neutral, (N) which appeared in the instrument cluster. The transmission remained in neutral upon exiting the vehicle with the engine running (on/off) with no incident. Removing the ignition key from the dash panel automatically engaged the transmission from neutral to park, (P) which appeared in the instrument cluster holding the vehicle in place.

Engaging the park button located at the end of the transmission gear selector would engage the transmission from RND to park with no incident. During every transition from reverse, neutral or drive to park manually or automatically, I could feel and hear the transmission engagement holding the vehicle in place.

Note, upon leaving the vehicle on level ground with the engine running in reverse or in drive, the vehicle would intermittently exceed the 3 mph threshold and continue to roll in either direction.

FSE Name	Ray C Sommers	
Market/Region	Southern	
Center Name	South Motors	
Inspection Date	August 30, 2007	
Inspection Location	South Motors	
City, State	Miami, FL	

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	750Li 21016
Production Date	11/06

The customer alleges transmission park disengagement while exiting the vehicle.

#### **Root Cause:**

Not yet determined.

# **Diagnostic Path:**

I arrived at South Motors on August 30, 2007 at 4:30 pm. Ti was 97 degrees and sunny. The purpose for my visit was to inspect VIN Degrees for alleged transmission park disengagement while exiting the vehicle.

When I arrived at the vehicle it was noted that the body shop repairs were complete on the body exterior. An airbag warning indicator was illuminated in the instrument cluster due to body shop repairs on the driver door. No other warning indicators were present.

The vehicle was connected to BMW INPA Diagnostic Software for electronic diagnosis of the GS19B control module. The results are as follows.

- GS19B
- Printouts of all diagnosis are attached to this report documenting all reported findings.

Dynamic testing was conducted. The transmission park button was pressed multiple times while the transmission was engaged in reverse, drive and neutral. During this testing the transmission park engagement was monitored electronically. Each and every time the park pawl engaged firmly into the gear wheel on the output shaft and held the vehicle in a stationary position. The driver seat recognition sensor also detected the absence of the driver and placed the vehicle into park as long as the vehicle was at a dead stop. The EMF and Auto P functions were also tested. These systems performed as designed when activated. The transmission electro/mechanical park system was tested repeatedly for a one-hour period. During this time I did not observe any malfunction of the transmission electro/mechanical park function, Auto P function or EMF function, nor did I witness any rolling of the vehicle while any of the above systems were engaged.

- Photos IMG\_0196, 97, 98 and 99 are views of the instrument cluster showing actual mileage and different modes of park engaged without and illuminated warning indicators.
- Photos 0200, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10 and 11 are views of the repaired body exterior.
- Photo 12 is a view of the identifying VIN sticker located inside the driver's doorjamb.

# **BMW** of North America, LLC

# **Internal Field Report**

Repair:	
Not yet deter	mined.
Attachments	::
•	Photos and diagnostic printouts.

FSE Name	Philip Fekete	
Market/Region	Eastern	
Center Name	BMW of Bayside	
Inspection Date	9/17/2003	
Inspection Location	BMW of Bayside	
City State	Douglaston, NY	
City, State	11363	

Customer Name Customer Address City, State		
VIN/Chassis	D	
Model & Mileage	745Li	13,999
Production Date	4/02	

A request was made to inspect the vehicle to determine the cause of rolling.

#### Root Cause:

Not yet determined.

# Diagnostic Path:

The examination revealed body damage to the left front fender as shown in Photo 07. Other body damage was found on the front and rear bumper covers as shown in Photos 03 and 06. The drivers floor cover was not properly anchored and riding up the accelerator pedal as shown in Photo 08 and 09. Note the anchors were secured to the floorboard but not utilized as shown in Photo 10.

A short test using a BMW tester was performed and CAS, DME, ARS, CIM, PBR, AMP, ASK, CD-GW, CDC, DWA, TEL, KOM, NAVI, PM and SIM fault errors were found including a DME 27A0-Fan, electronics box, a ARS D1DD-Message (lateral acceleration) from DSC, a ARS D1DE-Message (yaw velocity) from DSC, a CIM 5D36-Hall sensor, inclination, a EMF D3BD PT-CAN implausible message received from the control module, a EMF D3BE-No message from the control module, and a EMF 6040-Automatic hold function.

Examination of the automatic transmission gearshift selector was performed. The gearshift selector operated smoothly and I was not able to place the gearshift selector from Park to Drive without first depressing the brake pedal. The indicator of the gearshift lever positions corresponded to the actual transmission gear and instrument panel display positions. The transmission gear selector was placed in Drive position. Upon exiting the vehicle, the transmission would automatically shift to Park, holding the vehicle in place. The vehicle was held in place with the engine running, the gearshift selector placed in Drive with the Park Brake applied. The vehicle was evaluated with the gearshift selector placed in Park, the engine was left running and the Parking Brake was NOT applied for approximately 6 hours throughout the remainder of the week without incident. Both axle shafts were inspected and both appeared to be positioned properly within the axle carrier.

#### Repair:

Not yet determined.

#### Attachments:

Photos and a diagnostic data file.

FSE Name	Ray C Sommers	
Market/Region	Southern Region	
Center Name	Orr BMW	
Increation Date	December 11,	
Inspection Date	2008	
Inspection Location	Orr BMW	
City, State	Shreveport, LA	

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	7 <del>45Li</del> 36991
Production Date	12/04

The customer alleges the vehicle rolled in park / transmission did not switch to park.

#### Root Cause:

Not yet determined.

# **Diagnostic Path:**

I arrived at Orr BMW on December 11, 2008 at 11:00 am. It was 32 degrees and sunny. The purpose for my visit was to inspect VIN Description for the alleged customer complaint of the vehicle rolled in park / transmission did not switch to park.

When I arrived at the vehicle dynamic testing was performed using all scenarios of park engagement with comfort access followed by electronic diagnosis.

An overview of park engagement / disengagement is as follows. To remove the transmission from park the engine must be running. Hydraulic oil pressure from the main oil pump inside the transmission is required to disengage the park pawl from the park gear mounted on the output shaft. To engage park hydraulic pressure is released and a mechanical spring forces the park pawl into the output shaft park gear. Further, when park is engaged a steel ball is forced between the backside of the park pawl and a hardened plate attached to the outer surface of the transmission case. This ball will not allow the park pawl to disengage from the output shaft gear. Disengagement of park at this point can only take place with a running engine or by utilizing the mechanical release cable and handle located above the service brake pedal. The vehicle's key must be removed from the remote and used to access this mechanism. Park function will not engage whenever the vehicle is in motion.

With the vehicle at a stand still position and comfort access is being utilized (key not in CAS) whenever the start / stop button is pressed once the engine turns off and the transmission engages park. It does not matter what range the transmission was in prior to turning off the engine. This function was tested multiple times and found to function as designed. The seat sensor mat was also tested with the engine running and the vehicle at a stand still state. Whenever the driver's weight was removed from the driver seat the transmission promptly engaged park.

With the vehicle in a standstill position, engine running and comfort access not being utilized (key in CAS). The system functions identically to the way it operates when comfort access is in use with the exception of one scenario. There is a mode programmed into the vehicle called Car Wash mode. This mode is accessed with a running engine, the transmission is placed in neutral and the start / stop button is pressed once. The engine turns off and the transmission is held in the neutral position for a period of approximately 16 minuets. The vehicle may be exited during this time. This use is intended for car washes that pull the vehicle through the wash chamber. At any time during this mode the park mode can be engaged by removing the key from the CAS or pressing the park button.

During dynamic testing all scenarios was exhausted trying to exit the vehicle without the engagement of park. The only way I was able to exit the vehicle without park engagement was through the Car Wash Mode.

Diagnostics show that no are errors stored in the EGS system.

Printouts are attached to this report documenting all reported findings.

- Photos IMG\_6107. 08, 09, 10 and 11 are views of the impact damage on the front bumper cover and license plate bracket.
- Photos 12, 13, 14, 15, 16, 17, 18 and 19 are views of the body exterior and body damage prior to the incident.
- Photos 20, 21 and 22 show park engagement and displayed mileage.
- Photos 23 and 24 are views of the instrument cluster in the CAR WASH MODE.
- Photo 25 is a view of the identifying VIN sticker located inside the driver's doorjamb.

# Repair:

Not yet determined.

#### **Attachments:**

Photos and diagnostic printouts.

FSE Name	Ryan Cram	
Market/Region	Western	
Center Name	Center BMW	
Inspection Date	3/05/08	
Inspection Location	Center BMW	
City State	Sherman Oaks,	
City, State	Ca	

Customer Name Customer Address City, State	
VIN/Chassis	
Model & Mileage	745Li / 79978
Production Date	6/03

The service technician alleges vehicle movement in Park

#### **Root Cause:**

Not yet determined.

# **Diagnostic Path:**

I inspected the subject vehicle at Center BMW on March 5th 2008. A shop hoist was used to assist in the inspection. I identified the vehicle by the dashboard and B-pillar VIN placard, see photos 0001-0002.

Photos 0003-0007 show the undercarriage of the vehicle.

Photos 0008-0012 show the brake calipers and shock assemblies; they appear to have been spray painted with Orange-Red color paint.

Photos 0013-0014 show the undercarriage with the engine and transmission splash pan removed. Photos 0015-0016 show the emergency park pawl release lever. I found the lever to be positioned properly and it did not appear damaged. The cable appears routed correctly. The electric connection to the transmission appears correctly engaged. The transmission does appear to be leaking from the oil pan gasket.

With the vehicle on the shop hoist and Park displayed on the instrument cluster I attempted to move the rear wheels by hand. The wheels could be moved slightly (driveline play) and the park lock could be felt engaged when I attempted to move the wheels forward on rearward.

Photos 0017-0020 show the engine compartment and the airbox to HFM connection. I found that both airbox clips to the HFM were not secured.

Photo 0021 shows the instrument cluster in a Key-on / Engine-running condition. Photo 0022 shows the cluster as I tried to engage a drive gear with the engine running without depressing the brake pedal. Photo 0023 shows the park brake engaged. Photo 0024 shows the park brake engaged and a drive gear engaged. The check control message appeared as I provided throttle request. With the throttle depressed the vehicle did not creep forward and an audible gong was heard in addition to the check control message.

Photos 0025-0031 show the service requirements and the check control

messages for the subject vehicle.

While inspecting the park lock function I moved the vehicle to an inclined area and checked the function by selecting park with the brake pedal depressed when releasing the brake pedal the vehicle would either lock immediately or roll slightly ,less than one foot, and could be felt to engage park. This function check was repeated while allowing the vehicle to roll slightly down the incline so that the park lock cog could be checked over its entire circumference. This test was repeated over twenty times with positive engagement of the park lock at all times.

Photos 0032-0041 show the exterior of the subject vehicle. Photos 0042-0046 show damage to the vehicle exterior.

Photo 0047 shows the driver's side interior. Photo 0048-0049 show the driver's side floor mat. The mat does not appear properly positioned and the Velcro hold downs do no appear effective. Photo 0050 shows the accelerator and brake pedal. Photo 0051 shows the brake pedal. Both pedals appear in good condition. The driver's floor mat is partially covering the accelerator pedal. The brake pedal pad is missing.

I interrogated the vehicle fault memory with a GT1 and Inpa Laptop tools, see attached scans/snapshots, description below.

Control unit	Fault Code	Description	Currently	Warning
			present?	Lamp/CC
				Message
TMFAH	9BE6	Driver's side rear window	YES	
		position invalid		
SSFA	9763	Open Circuit, Driver's seat	NO	YES
		occupancy detector		
PM	A158	Battery	NO	
		Disconnection(closed		
		circuit current) at or above		
		threshold		
LM	931E	Right license plate light	YES	YES
		open circuit		
DME	28D7	No communication with	YES	
		Alternator		
DME	27A0	E-Box Fan short to ground	YES	

#### Repair:

Not yet determined.

Attachments: Photos, Repair Order, Inpa screenshots, GT1 Scans

# **BMW of North America, LLC**

# **Internal Field Report**

FSE Name	Philip Fekete	Customer Name	, D
Market/Region	14 Eastern	<b>Customer Address</b>	
Center Name	Park Avenue	City, State	
Center Name	BMW	VIN/Chassis	D
Inspection Date	12/17/07	Model & Mileage	BMW 745i
Inspection Location	Park Avenue	<b>Production Date</b>	
mapeonon Location	BMW		
City, State	Maywood, NJ		
Oity, State	07607	_	

# Nature of Complaint:

Customer complains for transmission slipped out of Park.

#### Root Cause:

Not yet determined.

# **Diagnostic Path:**

The vehicle was dynamically evaluated again on December 18, 2007, at the Park Avenue BMW service facility located in Maywood, New Jersey.

The evaluation was performed on the premises of the center's parking lot for approximately 40 minutes. The engine continued to idle with the gear shifter placed in the Park mode and no problems were observed. While in the Park, the gear shift stalk was manipulated up and down and the vehicle remained stationary. The transmission could only be placed in Reverse or Drive by first applying the brake pedal, pulling the gear shift stalk towards the steering wheel and pushing the lever up for Reverse and or pushing the lever down for Drive. The vehicle performed well without incident.

No body repairs have been made at this time.

#### Repair:

Not yet determined.

Attachments: None

FSE Name	Philip Fekete	Custome
Market/Region	14 Eastern	Custome
Center Name	Park Avenue BMW	City, Sta
Inspection Date	11/15/07	VIN/Cha
Inspection Location	Park Avenue BMW	Model &
City, State	Maywood, NJ 07607	Producti

Customer Name Customer Address City, State	Ridgewood, NJ
VIN/Chassis	D
Model & Mileage	BMW 750i 33,839 miles
Production Date	5/05

Customer complains for transmission slipped out of Park.

#### Root Cause:

Not yet determined.

# Diagnostic Path:

The vehicle was examined on November 15, 2007, at the Park Avenue service facility located in Maywood, New Jersey. The photographs were taken with a digital camera equipped with an internal speed light. The vehicle was a 2006 BMW, Model 750i Passenger Car. The chassis number was WBAHL83506 December 1. A manufacture date of 5/05 was printed on the placard attached to the driver's door opening.

The vehicle examination revealed that the back of the driver's door was struck from the rear while it was partially left open. The greatest amount of impact damage surrounded the door lock mechanism and the interior door panel was damaged as well. The door was forcefully opened past the maximum length of the door strut. The door strut popped off of the ball joint upon impact and the back of the door swung around towards the front of the car. The front of the driver's door was pushed behind the front fender and into the hinge post (A pillar) that caused the outer door skin to buckle inward. The front fender displayed minimal damage and the A pillar alignment visually appeared okay. Currently the vehicle is wrapped with plastic to protect the interior from the elements because the door will not fully close.

An interrogation of the vehicle electrical system was performed and EGS transmission fault errors were found. The fault errors included a 507D-Parking gear incorrectly disengaged, a 507C-Parking gear incorrectly engaged and a 4F81-Ratio monitoring, clutch A. A copy of the diagnostic data is shown in photographs 207 through 211.

A dynamic evaluation was performed inside of the service facility. The engine continued to idle with the gear shifter placed in the Park mode and no problems were observed. While in the Park, the gear shift stalk was manipulated up and down and the vehicle remained stationary. The transmission could only be placed in Neutral, Reverse or Drive by first applying the brake pedal, pulling the gear shift stalk towards the steering wheel which placed the transmission in Neutral and pushing the lever up for Reverse and or pushing the lever down for Drive. The vehicle performed well without incident.

# Repair:

Not yet determined.

Attachments: Digital photographs.

FSE Name	Ray C Sommers	
Market/Region	Southern	
Center Name	United BMW	
Inspection Date	November 18,	
	2005	
Inspection Location	United BMW	
City, State	Roswell, GA	

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	745Li 33736
Production Date	02/03

The customer complains for alleged parking brake/interlock failure.

#### **Root Cause:**

Not yet determined.

#### Diagnostic Path:

I arrived at United BMW on November 18, 2005 at 12: 00 am; it was 62 degrees and sunny. The purpose for my visit was to inspect VIN Description for the alleged complaint of parking brake and interlock failure.

When I arrived at the vehicle it was noted that all external body repairs were complete.

Dynamic testing was performed on the EMF and the EGS systems. EMF was applied with the engine running. The transmission was placed in the drive gear position. The accelerator pedal was pressed until torque converter stall speed was achieved. The vehicle remained stationary during this test without the service brake pedal being applied. The vehicle was then placed on a downward decline with the front of the vehicle facing the downward incline. The engine was turned off and the transmission was placed in the carwash/service mode, (neutral). EMF was again applied. The vehicle remained stationary during this test. This test was duplicated a second time with the rear of the vehicle facing the downward decline. The results of this test were the same; the vehicle remained stationary.

The EGS electro- hydraulic-mechanical park functions were tested. With the engine running and the vehicle on a decline the transmission was switched from drive to park and reverse to park several times. The mechanical park was engaged on each occasion and the vehicle remained stationary. This test was conducted with the front and rear of the vehicle facing the downward decline with the same results. With the engine running the start/stop button was pressed and the key was removed from the CAS. The engine was shut off and the transmission automatically engaged the mechanical park pawl on each test, holding the vehicle stationary. With the vehicle still on the same downward decline, the engine was again started and the transmission was placed into the drive position. The start/stop button was pressed, shutting down the engine. The ignition key remained in the CAS. This process activates the carwash/service mode. An audible and visual warning was displayed immediately in the instrument cluster warning the driver that the transmission has been placed in neutral. When the service brake pedal was released the vehicle rolled freely down the decline. While the vehicle was rolling EMF was applied. The vehicle was brought to a halt and held stationary.

During dynamic testing the EMF and EGS systems performed as designed and no malfunction was observed.

The vehicle was connected to BMW INPA Diagnostic Software for a complete system analysis. Several errors were recoded, however none of the recorded errors pertained to the customers alleged complaint. The stored errors are attached to this report and are available for viewing in the technical folder.

- Photos IMG\_3010, 15 and 16 are views of the instrument cluster showing the vehicle in the carwash/service mode and the warnings displayed below the tachometer.
- Photo 11 shows the transmission park engaged without the engine running.
- Photo 12 shows the transmission park engaged along with EMF engagement.
   Please note the engine is not running.
- Photo 13 shows drive gear engaged along with EMF engagement. Please note the tachometer shows stall speed achieved and the vehicle speed is 0.
- Photo 14 shows transmission park engagement with a running engine.
- Photo 17 is a view of the identifying VIN sticker located inside the driver's doorjamb.
- Photos 18, 19, 20, 21, 22, 23, 24 and 25 are views of the body exterior showing the completed repairs.

# Repair:

Not yet determined.

#### Attachments:

 Photos and diagnostic printouts. A copy of the repair estimate is available upon request.

FSE Name	Cram
Market/Region	Western
Center Name	Bob Smith BMW
Inspection Date	2/06/08
Inspection Location	Bob Smith BMW
City, State	Calabasas, Ca

Customer Name Customer Address City, State	
VIN/Chassis	DT30
Model & Mileage	750Li 40058
Production Date	8/05

Customer alleges that the vehicle moved while the transmission was in Park

#### **Root Cause:**

Not yet determined.

# Diagnostic Path:

I inspected the subject vehicle at Bob Smith BMW in Calabasas, Ca on February 6<sup>th</sup> 2008, The vehicle was in inspected inside their service facility and in the parking lot. A shop hoist was used to assist with the inspection. I identified the subject vehicle by the dashboard and B-pillar VIN placard, see photos 0001-0003. Photos 0004-0012 show the exterior of the vehicle.

Photos 0013-0023 show damage to the undercarriage of the vehicle. With the vehicle in Park I could and the parking brake released I was unable to move the rear wheels other than normal play in the driveline.

Photos 0024-0025 show the right front tire. The tires are an aftermarket Yokohama Brand.

Photos 0026-0027 show the rear area of the vehicle and the attachment area of the EMF. I inspected this area and found no foreign items. The E-Brake cables appear to be routed correctly. When the park brake was applied with the engine off the rear wheels are not able to be moved by hand while the vehicle was on the shop hoist.

The vehicle was then moved outside to check the function of the park lock, park brake and CAS system. The vehicle was placed on a hill in the dealer's parking lot. When engaging Park and releasing the brakes with the parking brake released the vehicle did not move. I tried this repeatedly allowing the vehicle to roll slightly and then stopping the vehicle with the brakes and then engaging Park. With Park engaged I released the brakes. The vehicle would settle downhill until the parking pawl was fully loaded. After this the vehicle would not move.

Photos 0028-0032 show the status of the park brake, off, button pushed, and engaged. I parked the vehicle with the park brake applied and the engine running. When I tried to accelerate in a driving gear the vehicle was held by the service brakes, and the Check control message appeared informing me that the park brake was applied. I turned the engine off park brake applied and could feel the EMF apply and then the service brakes release. The vehicle did not move. I then started the vehicle and could feel the EMF release and the service brakes held the vehicle.

I checked the function of the EGS / CAS interface. I was able to check this function with both the valet and master keys. With the vehicle running and the transmission in neutral I pushed the start/stop button. The engine shut off and Park was engaged, photos 0033-0034. The CAS also recognized when a comfort access key was removed from the vehicle by posting a check control message that the remote key was not recognized, photo 0047.

Photos 0035-0046 show the exterior of the vehicle and the damaged areas.

#### Repair:

Not yet determined.

Attachments: Photos, Inpa screen shots and Diagnostic scans

FSE Name	Sho Tagawa
Market/Region	35 / Western
Center Name	BMW of Mountain
	View
Inspection Date	10/30/07
Inspection Location	150 East El
	Camino Real
City State	Mountain View,
City, State	CA 94040

Customer Name Customer Address	
City, State	San Jose, CA
VIN/Chassis	DT71
Model & Mileage	750Li / 8370
Production Date	2/2007

Customer questions why the transmission didn't stay in Park mode.

#### **Root Cause:**

Not yet determined.

## Diagnostic Path:

I inspected the vehicle at BMW of Mountain View (150 East El Camino Real, Mountain View, CA 94040) on October 30, 2007 at approximately 9: 30 am. Weather: Cloudy, 60 degrees.

Photos P1000001 – 14 show the VIN and the exterior of the vehicle.

- Photo P1000009 shows a small dent on the rear right bumper area.
- Photo P1000011 shows a small scratch on the center of the rear bumper.

Photo P1000015 shows the instrument cluster with a key-on / engine off / no seat belt.

Photo P1000016 shows the instrument cluster with the engine running / the seat belt on.

Photo P1000017 shows the mileage at the inspection. The mileage was 8370 miles.

Photos P1000018 – 23 shows the undercarriage of the vehicle.

I observed no damage in this area.

Photos P1000025 – 31 shows the screen shots of GT1.

I observed no faults stored in EGS (Transmission control unit) or EMF (Electronic parking brake.)

- Photos P1000031 shows that the parking brake system is working as designed.

Photos P1000033 – 37 shows the EMF button and the gear shift lever.

Then I tested the following 4 situations in the following 2 key modes.

- 1. Key was inserted to the CAS
- 2. Key was placed on the center console. This was the test in the Comfort Mode.

	Engine	Parking	Parking	Transmission	Car moved?
		brake button	brake		
1	Running in D, then turned	Not pressed	Not applied	Shifted from	No
	off by pressing Start/Stop			D to P	
	once				
2	Running in D, then	Not pressed	Not applied	Shifted from	No
	pressed P on shift lever.	-		D to P	
	Engine still running.				
3	Running in P	Pressed	Applied	Р	No
4	Off	Pressed	Applied	Р	No
	Ignition on				

I tried each situation 5 to 10 times and the transmission shifted to P every time as designed. Every time I pressed the Parking button on the dashboard, the system worked as designed.

The tires were Pirelli P Zero with OEM star logo for all tires.

The tire size was 245/45R19 98Y for the fronts and 275/40R19 101Y for the rears.

	Left Front	Right Front	Left Rear	Right Rear
Tire production DOT	0507	0507	4906	4906
Tire pressure (bar)	2.2	2.1	2.3	2.2
Tire tread depth (mm)	7.0	6.6	5.1	5.6

Repair:

Not yet determined.

Attachments: RO

FSE Name	Ryan Cram
Market/Region	Western
Conton None	Century West
Center Name	BMW
Inspection Date	6/10/09
Increation Location	Century West
Inspection Location	BMW
City State	North Hollywood,
City, State	CA

Customer Name Customer Address City, State	
VIN/Chassis	DT30
Model & Mileage	750Li / 39175
Production Date	7/05

The customer alleges movement in Park

#### **Root Cause:**

Not yet determined.

#### Diagnostic Path:

I inspected the subject vehicle at Century West BMW in North Hollywood, CA on June 10<sup>th</sup>, 2009 at approximately 10am. A shop hoist was used to assist in the inspection.

I identified the subject vehicle from the B-pillar and Dashboard VIN placards, photos 0138-0139.

The vehicle was placed on the shop hoist. Neutral was selected; both rear wheels could be turned by hand. Park was then selected; the parking pawl could be heard to engage in the park cog; both rear wheels could not be turned by hand.

Photos 0140-0144 show the undercarriage of the subject vehicle; no damage was noted in this area.

Photos 0145-0146 show the exterior of the vehicle and damage to the left rear area.

Photos 0147-0148 show the transmission and the emergency release cable. The cable appears routed correctly. The electrical connection to the transmission appears correctly routed and installed. I found no leaks in this area.

Photos 0149-0150 show damage to the left rear bumper cover.

Photo 0151 shows the instrument cluster in a Key-on / engine-off condition; the driver's seatbelt is not fastened. Photo 0152 shows the instrument cluster in a Key-on / engine-running condition; the driver's seatbelt is fastened.

I then tested the automatic park engagement feature. The feature was then tested with the remote in the key slot. Photo 0153 shows the engine running in Drive with the remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0154. Photo 0155 shows the engine running in Reverse with the remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0156.

Car wash mode was then tested. The vehicle was started with the remote in the key slot and then placed into Neutral, photo 0157. The start-stop button was then pressed once and the vehicle remained in Neutral, photo 0158.

The vehicle was started with comfort access; photo 0159 shows the engine running in Drive with no remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0160. The vehicle was started with comfort access; photo 0161 shows the engine running in Reverse with no remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0162.

The vehicle was then started with comfort access and placed in Neutral, photo 0163. The startstop button was pressed once and the transmission was shifted automatically into Park, photo 0164.

Photos 0165-0167 show the check control messages and service requirements displayed in the control display.

I attached my laptop and performed a check-in function, see attached.

The vehicle was driven outside for better photos of the exterior. Photos 0168-0175 show the exterior of the subject vehicle. Photos 0176-0177 show damage to the rear of the vehicle.

The vehicle was parked on a slight incline. When applying Park the vehicle could be felt to roll slightly and the park pawl would engage and hold the vehicle. This was done repeatedly with similar results, both forwards and backwards. The vehicle would roll a maximum of only a few inches before locking into park.

The vehicle was placed on the ramp to the second story of the parking structure and then turned off. The vehicle shifted to Park. The brake was released and the vehicle moved slightly against the parking pawl. After the initial movement the vehicle did not move or roll. This exercise was performed with the vehicle in an uphill and downhill attitude. Photo 0179 shows the vehicle parked on the parking ramp; the incline is approximately 10 degrees.

#### Repair:

Not yet determined.

Attachments: Photos, Check-in data

Inspector Name	Robert Luciano		
Market/Region	42 CR		
Center Name	Grand Blanc		
	BMW		
Inspection Date	10/5/11		
Inspection Location	Grand Blanc		
	BMW		
City, State	Grand Blanc MI		

Customer Name	
Customer Address	
City, State	Grand Blanc MI
VIN/Chassis	D
Model & Mileage	750Li 55,267
Production Date	9/05

The customer alleges rolling in park.

#### **Root Cause:**

Not yet determined.

## Diagnostic Path:

The vehicle was inspected inside and outside of the workshop. Before moving the vehicle, I observed the instrument cluster and information display for warning lights when starting vehicle. I observed the CEL illuminate briefly and then go out at start up. I observed the seat belt warning light illuminate and go out once I fastened the seat belt. I observed "All systems OK" when checking for check control messages in the control display. I observed "Engine oil level OK" in the control display. I observed the B-pillar VIN label and VIN plate on dashboard. I observed impact damage on windshield just left of the rear view mirror.

I drove vehicle to the side lot to continue inspecting. I observed the exterior of the vehicle. I observed a scuff mark on the rear bumper at the left center PDC sensor. I observed a small impact mark in the shape of the head of a tag screw on the mid center of the rear bumper.

I observed the engine compartment. I did not observe any aftermarket components. I observed the brake fluid level above max.

I observed the gear selector stalk, the "P" button on the gear selector stalk and verified its operation and movement. With the key in my pocket "Comfort Access" I started the vehicle and performed the following operations listed with the results.

Foot on brake in D > Pressed P on stalk > switched to Park

- > Pressed start/stop 1 time > switched to Park
- > Pressed start/stop 2 times > switched to Park
- > Pressed start/stop 2 times fast > switched to Park

>Stepped out of vehicle guickly > vehicle rolled 1-2ft > switched to Park

Foot on brake in N > Pressed P on stalk > switched to Park

- >Pressed start/stop 1 time > switched to Park
- >Pressed start/stop 2 times > switched to Park
- >Pressed start/stop 2 times fast > switched to Park

I then inserted the remote control in the ignition lock, performed the following operations listed with results.

Foot on brake in D > Pressed P on stalk > switched to Park

- > Pressed start/stop 1 time > switched to Park
- > Pressed start/stop 2 times > switched to Park
- > Pressed start/stop 2 times fast > switched to Park

Engine on switched to N > Pressed start/stop 1 time, then a second time > stays in N; then pressed remote transmitter to remove from ignition > switched to Park

Road tested vehicle for 16 miles. Verified operation of the parking brake. Verified operation of AUTO P.

I brought the vehicle into the workshop for further inspection.

Tires - Pirelli P Zero Rosso

Front – 245/45 R19 98Y Right – XT W2 E866 (1810) – 5mm Left – XT W2 E866 (2110) – 5mm

Rear – 275/40 R19 101Y Right – XT Y2 E867 (1110) – 5mm Left – XT Y2 E867 (1110) – 5mm

Front Pads – 6mm Rear Pads – 10mm

Front Rotors Left – 28.2mm Right – 28.1mm

Rear Rotors Left – 23.1mm Right – 23.2mm

Under the lighting in the workshop I observed sanding marks from a body shop repair on the left side of the trunk lid.

I observed no fluid leaks under the vehicle. I observed damage to the "splash" covers under the front bumper on the right and left side.

I used INPA laptop tools to read vehicle data and fault memory.

I connected vehicle to ISID using ISTA. I read fault memory. I performed status checks on P button on stalk. I performed status check of parking gear. I performed a status check of brake pressure (176 bar engine on, 129bar engine off)

# Repair:

Not yet determined.

Attachments: Photos, DT31465.PDF, DT31465.docx

FSE Name	Richard Brown
Market/Region	35 / Western
	Stevens Creek
Center Name	BMW
Inspection Date	02/07/2005
-	Stevens Creek
Inspection Location	BMW
City, State	Santa Clara, CA

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	745Li / 22596 mls
Production Date	10/18/2002

Customer complains for alleged roll away.

#### **Root Cause:**

Not yet determined.

#### Diagnostic Path:

The VIN on the B pillar compliance label identified the vehicle. See attached photo 0001. The vehicle mileage at the time of inspection was note as 22,596 miles. See attached photo 0002.

The vehicle exterior was inspected. See attached photos 0021 - 0024. There is some damage to the lower right portion of the front bumper cover. See attached photos 0025 - 0027. There is no other visible damage to the body of the vehicle. The vehicle was raised on a lift. It was noted that the engine compartment and transmission screening are missing. See attached photos 0004 and 0005. The right rear corner of the lower reinforcement plate is also damaged. See attached photos 0009 - 0011. Many of the plastic underbody panels are scratched. See attached photos 0012 and 0013.

The transmission fluid level was checked in accordance with the test plan in the diagnosis program in the DIS plus. Transmission fluid ran out of the filler hole when the fluid temperature reached  $36^{\circ}$  C. The transmission is adequately filled with fluid. There is no evidence of fluid leakage around the transmission. See attached photos 0006-0008.

The positioning of the transmission emergency park release lever and cable were checked. The cable and lever are properly positioned. See attached photo 0007. The movement of the lever was checked. The lever moved smoothly without any binding. When moved rearward and then released, the lever moved consistently back to its initial (correct) position.

The vehicle was identified using a DIS plus. A short test indicated faults stored in the following modules: DME, EGS, DSC, AMP, PM, SZL, TEL, MOST system, and CAN/byteflight. See attached printouts DIS01 – DIS03.

The CAS was identified and the fault memory read out. There are no faults stored in the CAS. See attached printout DIS04. The CAS was also identified and its fault memory read out using INPA. Again, there were no faults in the error memory. There are four entries in the info memory: 1) 9909 No transponder ID recognized. 2) 9906 Error transponder communication. 3) 9C48 Unknown error location. 4) 9908 Transponder no respective. See attached printouts INPA09 – INPA13.

The DME was identified and the fault memory read out. There is one fault stored: 2727 Oxygen sensor aging after cat., bank 2. See attached printouts DIS05 – DIS08. The EGS was identified and the fault memory read out. There is one fault stored: 51AC No message (identification sensor connected) from Car Access System. See attached printouts DIS09 – DIS11. The EGS was also identified and its fault memory read out using INPA. See attached printouts INPA05 – INPA08.

The DSC module was identified and the fault memory read out. There are two faults stored: 1) 5EF4 Steering angle sensor, fault, internal. 2) 5F2B Rotation rate sensor, voltage supply. See attached printouts DIS12 – DIS16.

The PM was identified and the fault memory read out. There is one fault stored: A158 Battery disconnection (closed-circuit-current). See attached printouts DIS17 – DIS18.

The SSFA (driver's seat satellite module) was identified and the fault memory read out. There are no faults stored in the SSFA. See attached printout DIS19. The operation of the driver's seat occupancy detection was checked. The system registered correctly when the seat was not occupied and when it was occupied. See attached printouts DIS20 and DIS21.

The SZL was identified and the fault memory read out. There are two faults stored: 1) 94E6 Control-module fault. 2) 94E7 Control-module fault. Neither fault is currently present. See attached printouts DIS22 – DIS26. The SZL was identified and its fault memory read out using INPA. Fault code 94E7 is identified by INPA as: Steering angle sensor – Relative wiper angle faulty. Fault code 94E6 is identified by INPA as: Steering angle sensor – Wiper 2 out of range. See attached printouts INPA01 - INPA04.

The SIM was identified and the fault memory read out. There are no faults stored in the SIM. See attached printout DIS27.

The ZGM was identified and the fault memory read out. There are no faults stored in the ZGM. See attached printout DIS28.

The CAN/byteflight (virtual) module was identified and the fault memory read out. There is one fault stored: 51AC CAN identification sensor connected. See attached printouts DIS29 – DIS32.

The AMP, TEL, and MOST system were not identified and interrogated, as they are not relative to the nature of the complaint.

The operation of the transmission gear engagement and park mechanism were checked in the parking lot of Stevens Creek BMW. The following observations were made:

- -There no check control messages in the Control Display. See attached photo 0003.
- -The transmission could not be shifted into Drive (D), Reverse (R), or Neutral (N) when the engine was not running. When attempted, a message confirming this was displayed in the instrument cluster. See attached photo 0018.
- -With the engine running, D, R, or N could not be engaged without stepping on the brake pedal. When attempted, a message stating the above was displayed in the instrument cluster. See attached photo 0020.
- -When the engine was running and the transmission was in D, R, or N, and the engine was shut off, and the key was removed from the CAS, the transmission shifted into Park (P). Every time.
- -With the engine running and the transmission in D or R, if the driver's door was opened an audible gong was heard and a warning was displayed in the instrument cluster. See attached photos 0015 and 0016. If the driver's weight was then removed from the seat, and there was no vehicle movement, the transmission would shift into (P) after a delay of approximately 2½ to 3 seconds. If there were any vehicle movement, either forward or rearward, when the driver's door was opened and the driver's weight was removed from the seat, the transmission would not shift into P. The vehicle would continue to travel in whatever direction it had already started until the brakes were applied. When the vehicle was moving, in either direction, the key

could not be removed from the CAS.

- -When the engine was running and the transmission had been shifted into N by the driver, if the driver's door was opened an audible gong was heard and a warning message was displayed in the instrument cluster. See attached photo 0017. If the driver's weight was then removed from the seat, the vehicle would roll. The direction and speed of the vehicle movement was dependant on the slope it was located on. -When the engine was running with the transmission in either D or R and the engine was shut off, the transmission would shift into N. If the driver exited the vehicle the same warnings were issued as if the driver had deliberately shifted the vehicle into N. -Prior to this writer's inspection, the vehicle had been programmed (via the iDrive) so that the star button on the steering wheel (MFL) would activate the Auto P function. See attached photo 0014.
- -When Auto P was active and the engine was running and the transmission was in D or R, if the driver's door was opened and the driver's weight was removed from the seat, the transmission would shift into P, every time. The parking brake (EMF) would also activate the parking brake. There was no vehicle movement.
- -When Auto P was active and the engine was running and the transmission was in D or R, if the engine was shut off, the transmission would shift into N and the parking brake (EMF) would activate the parking brake. See attached photos 0029-0031. There was no vehicle movement.
- -When Auto P was active and the transmission was in N, engine running or not running, if the driver exited the vehicle the EMF would activate the parking brake. The transmission remained in N. See attached photos 0031. There was no vehicle movement.

The Vehicle History Report was reviewed. There have been no previous transmission repairs on this vehicle. See attached copy of the report Doc1 and Doc2.

#### Repair:

Not yet determined.

**Attachments** Photographs: DSCN0001 – DSCN0032

Printouts: DIS01 – DIS31 Printouts: INPA01 – INPA13

Copies of Vehicle History Report: Doc1 and Doc2

FSE Name	Ryan Cram
Market/Region	Western
Center Name	Chapman BMW
Center Name	Camelback
Inspection Date	4/20/09
Inspection Location	Chapman BMW
	Camelback
City, State	Phoenix, CA

Customer Name Customer Address City, State	
VIN/Chassis	DT67
Model & Mileage	750LiA / 21175
Production Date	10/06

The customer alleges rolling in park.

#### Root Cause:

Not yet determined.

# Diagnostic Path:

I inspected the subject vehicle at Chapman BMW Camelback on April 20th 2009, in Phoenix Arizona. A shop hoist was used to assist in the inspection. I identified the vehicle by the dashboard and B-pillar VIN placard, see photos 0133-0134.

Photo 0135 shows the instrument cluster in a Key-on / Engine-off condition. Photo 0136 shows the instrument cluster in a Key-on / Engine-running condition. Photos 137-0138 show the service requirements and check control messaged displayed in the CID. Photo 0139 show the check control message displayed in the instrument cluster when the vehicle when the vehicle was started or turned off.

Photos 0140--0143 show the undercarriage of the vehicle; no damage was observed. Photos 0144-0146 show the transmission with the splash pan removed. Photo0144 shows the emergency park pawl release lever. I found the lever to be positioned properly and it did not appear damaged. The cable appears routed correctly. The electric connection to the transmission appears correctly engaged.

With the vehicle on the shop hoist and Park displayed on the instrument cluster I attempted to move the rear wheels by hand. The wheels could be moved slightly (driveline play) and the park lock could be felt engaged when I attempted to move the wheels forward on rearward.

Photos 0147-0150 show damage to the front of the vehicle.

Photos 0151-0158 show the exterior of the vehicle.

Photos 0159-0160 show the left front wheel. The tire pressure monitor has been replaced with a regular tire valve; this was done at all four wheels.

The vehicle was then driven to a location with an incline in order to check the park lock function. During the test drive the transmission appeared to respond normally; no harsh or unexpected shifting was observed.

While inspecting the park lock function I moved the vehicle to an inclined area and checked the function by selecting park with the brake pedal depressed when releasing the brake pedal the vehicle would either lock immediately or roll slightly ,less than one foot, and could be felt to engage park. This function check was repeated while allowing the vehicle to roll slightly down the incline so that the park lock cog could be checked over its entire circumference. This test was repeated over twenty times with positive engagement of the park lock at all times. Photo 0161 shows the instrument cluster in a key-on engine running condition; the vehicle had been driven approximately nine miles and was at operating temperature. Photo 0162 shows the

vehicle on the incline in Park.

The vehicle was placed in drive while applying the brake, photo 0163. The vehicle was turned off by pressing the start-stop button; the transmission was then automatically shifted to Park, photo 0164. This same test was performed in reverse with the same outcome. These tests were performed with the remote key engaged in the key slot and using comfort access, the outcome was the same; the vehicle shifted to park after the start-stop button was pressed. The vehicle was then placed in neutral with my foot on the brake the start-stop button was then pressed; the vehicle remained in neutral (car-wash mode). The brake was released slightly and the vehicle began to roll forward.

The function of the auto park feature was tested. Auto-Park was selected, photo 0165. The vehicle did not move until the accelerator pedal was depressed. The vehicle was then turned of by pressing the start-stop button. The park brake was applied and the vehicle shifted to Park, photo 0166.

Photo 0167 shows the mileage after the road test at 21190.

I interrogated the vehicle fault memory with Inpa Laptop tools, see attached.

#### Repair:

Not yet determined.

Attachments: Inpa check-in data, RO

FSE Name	Ryan Cram
Market/Region	Western
Center Name	Chapman BMW
	Camelback
Inspection Date	5/6/09
Inspection Location	Chapman BMW
City, State	Phoenix, AZ

Customer Name Customer Address City, State	
VIN/Chassis	DT67
Model & Mileage	750LiA / 21708
Production Date	10/06

Customer alleges the vehicle rolled in Park

#### **Root Cause:**

Not yet determined.

# **Diagnostic Path:**

I inspected the subject vehicle at Chapman BMW Camelback in Phoenix, AZ on May 6<sup>th</sup>, 2009 at approximately 12 noon. The customer was to arrive at 1pm for a meeting to explain what he believed had occurred.

I identified the subject vehicle from the B-pillar and Dashboard VIN placards, photos 0136-0138.

Photos 0139-0143 show the exterior of the vehicle and damage to the left rear area.

The vehicle was parked on a slight incline. When applying Park the vehicle could be felt to roll slightly and the park pawl would engage and hold the vehicle. This was done repeatedly with similar results. The vehicle would roll a maximum of only a few inches before locking into park.

I then test the automatic park engagement feature. The vehicle was started with comfort access; photo 0144 shows the engine running in drive with no remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0145. The vehicle was started with comfort access; photo 0146 shows the engine running in reverse with no remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0147.

The feature was then tested with the remote in the key slot. Photo 0148 shows the engine running in drive with the remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0149. Photo 0150 shows the engine running in drive with the remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0151.

Car wash mode was then tested. The vehicle was started with the remote in the key slot and then placed into neutral, photo 0152. The start-stop button was then pressed once and the vehicle remained in neutral, photo 0153.

I then tested the Auto park feature. Auto Park was applied with the engine running. The feature held the vehicle until the accelerator pedal was depressed. The vehicle was then turned off by pressing the start-stop button; the park brake was then applied. The vehicle did not roll photos 0154-0155.

The customer arrived and during the discussion the customer felt that the vehicle had been in park and was able to roll while park was engaged. The vehicle was then driven by the service manager, Doug Strobot, to a parking structure at a nearby facility with the customer and me accompanying. The vehicle was placed on the ramp to the second story of the parking structure and then turned off. The vehicle shifted to park. The brake was released and the vehicle moved slightly against the parking pawl. After the initial movement the vehicle did not move or roll. This exercise was performed with the vehicle in an uphill and downhill attitude.

The vehicle was then returned to the BMW center for further inspection. Photos 0156-0158 show damage to the undercarriage of the vehicle. The transmission pan was removed to insect the Parking pawl and gear. I found no metal debris in the pan that would indicate a failed component. The spring for the park pawl appeared properly mounted and in good condition. I then actuated the emergency release by had while the rear wheels were moved with the help of a technician. I inspected the park pawl and gear as the wheels were rotated. I found no damage to the pawl or gear.

I attached my laptop and performed a Check-in function, see attached

Repair:

Not yet determined.

Attachments: Inpa check-in data

4.763

FSE Name	Philip Fekete	<b>Customer Name</b>		
Market/Region	14 Eastern	Customer Address	Star Mo	obile
Center Name	First Class	Customer Address		
Center Name	Leasing	City, State	Orange	e, NJ
Inspection Date	6/27/06	City, State		
Inspection Location	Paul Miller BMW	VIN/Chassis	D	
City State	Wayne, NJ	Model & Mileage	750Li	4,76
City, State	07470	<b>Production Date</b>	11/05	

#### Nature of Complaint:

Customer complains for alleged UES and vehicle shifting on its own.

#### **Root Cause:**

Not yet determined.

# Diagnostic Path:

The vehicle was examined on June 27, 2006 at the Paul Miller BMW service facility located in Wayne, New Jersey. The vehicle was a 2006 BMW, Model 750li Passenger Car. The chassis number was WBAHN83526D

Shop Foreman Brian stated that the vehicle was tested for approximately 30 minutes during the last service inspection for the alleged complaint and the gear shifter performed well as designed. The customer spoke with Brain during the day of the recent inspection performed on 6/27 prior to arrival and the customer was not aware that the vehicle had been tested during the last visit for the alleged complaint and that the vehicle would not shift into Reverse with the drivers seat unoccupied and or without first depressing the brake pedal. The customer stated, well, then, maybe the vehicle was left in reverse resting in a pot hole. The customer stated that he would like his vehicle replaced with an M5.

An interrogation of the vehicle's electrical system was performed and no EGS transmission control fault errors were found as shown in photographs 423 through 425.

The rear bumper displayed minor impact damage however the bumper cover alignment appeared good as shown in photographs 409 through 413.

An intensive evaluation was performed for approximately 20 minutes within the premises of the centers parking lot. The gear shift lever moved freely and performed well without incident. The gear selector was placed in the Reverse position from outside of the vehicle with the drivers seat unoccupied and the vehicle remained in the Park mode and a message in the instrument cluster read "To engage gear, brake" as shown in photographs 010 and 419. The transmission shifted from Reverse to Park when I opened the door and quickly exited the vehicle.

The stationary glass including the windshield and side windows were covered with aftermarket tinting as shown in photograph 012.

# Repair:

Not yet determined.

Attachments: Digital photographs and a vehicle history file.

FSE Name	Ryan Cram
Market/Region	34 Western
Center Name	Bob Smith BMW
Inspection Date	11/22/06
Inspection Location	Bob Smith BMW
City, State	Calabasas Ca

Customer Name Customer Address City, State		
VIN/Chassis	DT05	
Model & Mileage	750i 3990	
Production Date	3/06	

Customer alleges of vehicle not engaging park after shutting off with comfort access.

#### **Root Cause:**

Not yet determined.

# Diagnostic Path:

I performed the inspection of the subject vehicle at Bob Smith BMW on November 22<sup>nd</sup> at approximately 10:30 am. I identified the subject vehicle by the dashboard and B-Pillar VIN plate, see photos 0001-0003. Photos 0004-0013 show the exterior of the vehicle.

Photos 0014-0016 show the damage to the rear of the vehicle.

Photo 0017 shows the instrument cluster with a key-on / engine-off condition; the driver's seatbelt is not fastened. Photo 0018 shows the instrument cluster with a key-on / engine-running condition; the driver's seatbelt is fastened. Photos 0019-0020 show the service requirements and check control messages of the subject vehicle. The CID indicated that all service was up to date and no check control messages were present.

The vehicle was the moved out to the service parking lot for dynamic testing of the comfort access and parking pawl engagement. I parked the vehicle on an icline to check the engagement of the parking pawl. The parking pawl engaged and the vehicle did not roll. This test was performed repeatedly with the same results.

Photo 0021 shows the vehicle in drive with the engine running with the transmission in Drive. Photo 0022 shows the vehicle when switching off the engine by means of the CAS push button the vehicle assumes park position. Photo 0023 shows the vehicle running with the transmission in Neutral. Photo 0024 shows the vehicle when switching off the engine by means of the CAS push button the vehicle assumes park position.

I then removed the mechanical portion of the key and accessed the transmission park release cable at the driver's foot well. I released the park lock and with the engine running the Kombi displays Neutral and the Check control message appears "Transmission range P fault", see photo 0025.

Photo 0026 shows the engine running with the Transmission in a Nuetral position, park brake applied. I then exited the vehicle and the Check control message appears "remote control no response", see photo 0027. Photos 0028-0029 show the check control messages displayed in the CID. Photo 0030 shows the check control displayed with the transmission in Park.

I attached a GT1 and interrogated the fault memory of the subject vehicle, see attached printouts. I found no relevant faults in any control unit. I performed status checks on the comfort access and EMF parking brake system and found them to be operating as designed.

# Repair:

Not yet determined.

Attachments: Photos, Repair order, Diagnostic pages

FSE Name	Mike Donahoe
Market/Region	42 Central
Center Name	Erhard BMW
Inspection Date	5/29/2009
Inspection Location	38700 Grand Rvr
City, State	Farmington Hills
	MI

Customer Name Customer Address City, State	
VIN/Chassis	DT
Model & Mileage	750LiA 9,955
Production Date	10/ 2007

Customer complains for alleged transmission park failure.

#### **Root Cause:**

Not yet determined.

# **Diagnostic Path:**

This vehicle was inspected the morning of May 29, 2009, inside and outside the workshop of Erhard BMW of Farmington Hills, 38700 Grand River Avenue, Farmington Hills, Michigan, 48335, on a sunny day with the ambient temperature of 74°F.

I observed the vehicle identification plate at top of dashboard. (1) I observed the B-pillar VIN plate. (2) I observed vehicle tire data plate on left B-pillar. (3) I observed the vehicle odometer. (4)

I performed a walk around vehicle and observed no damage to exterior of vehicle. (5,6,7,8) I observed no add on accessories installed inside engine compartment. (9,10,11)

I verified battery voltage with the key off and with engine running. The battery voltage measured 12.40 with key off and 14.68 with engine running.

I verified that transmission would engage park. (12) I pressed the button numerous times. The transmission engaged park with an audible click on each application. I verified transmission gear indicator on instrument cluster. (13,14,15,16,17) I verified that brake lights are operational. I attempted to shift transmission without applying brake. I was unable to shift without brake application and warning in cluster indicated that brake must be applied to shift transmission. I placed the vehicle on a slight incline and engaged park. The incline angle is approx. 25-30°. The transmission engaged park each time I attempted park function. I parked the vehicle nose up the incline and nose down the incline. The park functioned properly on each attempt.

I verified that left front seat occupancy sensor operation. The left front seat indicated not occupied and assigned when entering and exiting the vehicle.

I verified transmission function and operation optically from under vehicle. I observed no oil leaks under transmission assembly. (18,19) I found no defects in transmission position or function. (20) The emergency park release mechanism is positioned properly and not disengaged. (21) I verified differential operation. (23) The rear axle flanges on differential are positioned correctly. (24,25) I observed no defects in differential operation. (26,27)

This vehicle is equipped with Comfort Access. I verified transmission park function with the key in the CAS and with key out of CAS. I verified that transmission engaged park when the key was removed and when engine stop button was actuated. I also verified that transmission engaged park when the key was not in CAS and when engine stop button was actuated.

I verified parking brake function. I observed no faults in EMF module or operation.

I interrogated vehicle fault systems with BMW GT1 Tester. I observed no faults in EGS. I am including the BMW GT1 Tester diagnostic printout with this report. (DT78728.pdf)

This vehicle was presented to Erhard BMW of Farmington Hills on April 27, 2009 with 7,484 miles. The owner stated that transmission would not engage park when depressing start/ stop button at times. The owner also indicated that Comfort Access was inoperative on driver's door. The Center ordered 2 Comfort Access door handles. The right front and left rear handles were disconnected before vehicle was returned to owner. The parts were ordered and service

advisor told owner that they were unable to duplicate park complaint but that fault may be caused by low voltage due to door handles. (RO72265) The owner's automotive expert insisted that vehicle be returned to the same condition at the time of the alleged incident. The right front and left rear door handles were reconnected and vehicle faults were erased. I test drove vehicle and found no defects in transmission operation. (28)

#### Pictures used in this report.

- DSC\_0001 View of vehicle identification plate at top of dashboard.
- DSC\_0002 View of vehicle identification plate on B-pillar.
- DSC 0003 View of vehicle tire information plate on left B-pillar.
- DSC\_0004 View of vehicle odometer.
- DSC 0005 View of front of vehicle.
- DSC 0006 View of left side of vehicle.
- DSC\_0007 View of rear of vehicle.
- DSC\_0008 View of right side of vehicle.
- DSC\_0009 View of engine compartment.
- DSC\_0010 View of left side of engine compartment.
- DSC 0011 View of right side of engine compartment.
- DSC\_0012 View of transmission gear shifter.
- DSC\_0013 View of transmission gear indication in instrument cluster.
- DSC 0014 View of transmission gear indication in instrument cluster.
- DSC\_0015 View of transmission gear indication in instrument cluster.
- DSC\_0016 View of transmission gear indication in instrument cluster.
- DSC 0017 View of transmission gear indication in instrument cluster.
- DSC\_0018 View of transmission splash pan under vehicle.
- DSC\_0019 View of transmission splash pan under vehicle.
- DSC 0020 View of transmission.
- DSC\_0021 View of emergency park release on left side of transmission.
- DSC\_0022 View of transmission oil fill sticker on transmission oil pan.
- DSC 0023 View of differential.
- DSC\_0024 View of right side differential axle flange.
- DSC 0025 View of left side differential axle flange.
- DSC\_0026 View of differential.
- DSC 0027 View of differential.
- DSC 0028 View of vehicle odometer after test drive.

#### Repair:

Not yet determined.

Attachments: Photos, DT78728.pdf, RO72265.pdf

FSE Name	Mike Donahoe
Market/Region	48 Central
Center Name	Motorwerks BMW
Inspection Date	3/5/2010
Inspection Location	1300 American W
City, State	Bloomington MN

Customer Name Customer Address City, State	Maple Grove MN
VIN/Chassis	D
Model & Mileage	745LiA 76,338
Production Date	06/ 2002

The customer alleges rolling in park.

#### **Root Cause:**

Not yet determined.

# **Diagnostic Path:**

This vehicle was inspected the morning of March 5, 2010, inside and outside the workshop of Motorwerks BMW, 1300 American Blvd. West, Bloomington, Minnesota, 55420, on a sunny day with the ambient temperature of 43°F.

I observed the vehicle identification plate at top of dashboard. (1) I observed the B-pillar VIN plate. (2) I observed vehicle tire data plate on left B-pillar. (3) I observed the vehicle odometer. (4)

I performed a walk around vehicle and observed no damage to exterior of vehicle. (5,6,7,8) I observed no add on accessories installed inside engine compartment. (9,10,11)

I verified battery voltage with the key off and with engine running. The battery voltage measured 12.47 with key off and 14.88 with engine running.

I verified that transmission would engage park. (12) I moved the shifter from drive to park and reverse to park numerous times. The transmission engaged park with an audible click on each application. I verified transmission gear indicator on instrument cluster. (13,14,15,16) I verified that brake lights are operational. I attempted to shift transmission without applying brake. I was unable to shift without brake application and warning in cluster indicated that brake must be applied to shift transmission. I placed the vehicle on a slight incline and engaged park. The incline angle is approx. 30°- 40°. The transmission engaged park each time I attempted park function. I parked the vehicle nose up the incline and nose down the incline. The park functioned properly on each attempt.

The vehicle tires are Dunlop Winter Sport M3. (17,18,19,20) The vehicle tire size is 245/50R18. The tire pressures measured LF 31PSI, LR 35psi, RR 27psi, and RF 31psi. The tires tread depth measured, LF 3mm, LR 3mm, RR 3mm, and RF 3mm.

I verified that left front seat occupancy sensor operation. The left front seat indicated not occupied and assigned when entering and exiting the vehicle.

I verified transmission function and operation optically from under vehicle. I observed slight oil seepage under front transmission area. (21) I found no defects in transmission position, mounting, or function. (21)

I observed that the transmission serial number is 0071735. (23,24)

I observed no significant impact damage to underside of vehicle. (25,26,27,28,29,30)

I verified differential operation. (31) The rear axle flanges on differential are tight and positioned correctly. (32,33) I observed no defects in differential operation. The emergency park release mechanism is positioned properly and not disengaged. (34)

I verified parking brake function with GT1. I observed no faults in EMF module or operation. I interrogated vehicle fault systems with BMW GT1 Tester. I observed no faults in EGS. I am including the BMW GT1 Tester diagnostic printout with this report. (DR04478.pdf)

Pictures used in this report.

Attachments: Photos, DR04478.pdf

DSC\_0001 View of vehicle identification plate at top of dashboard. DSC\_0002 View of vehicle identification plate on B-pillar. DSC 0003 View of vehicle tire information plate on left B-pillar. DSC 0004 View of vehicle odometer. DSC 0005 View of front of vehicle. DSC 0006 View of left side of vehicle. DSC 0007 View of rear of vehicle. DSC 0008 View of right side of vehicle. DSC\_0009 View of engine compartment. DSC\_0010 View of left side of engine compartment. DSC\_0011 View of right side of engine compartment. DSC\_0012 View of transmission gear shifter. DSC 0013 View of transmission gear indication in instrument cluster. DSC\_0014 View of transmission gear indication in instrument cluster. DSC 0015 View of transmission gear indication in instrument cluster. DSC\_0016 View of transmission gear indication in instrument cluster. DSC\_0017 View of left front wheel and tire. DSC 0018 View of left rear wheel and tire. DSC 0019 View of right rear wheel and tire. DSC\_0020 View of right front wheel and tire. DSC 0021 View of transmission. DSC 0022 View of transmission oil fill sticker on transmission oil pan. DSC\_0023 View of transmission serial numbers. DSC 0024 View of transmission serial numbers. DSC\_0025 View of front underside of vehicle. DSC\_0026 View of front center underside of vehicle. DSC 0027 View of center underside of vehicle. DSC\_0028 View of center underside of vehicle. DSC 0029 View of rear center underside of vehicle. DSC 0030 View of rear underside of vehicle. DSC 0031 View of differential. DSC 0032 View of right side differential axle flange. DSC 0033 View of left side differential axle flange. DSC\_0034 View of emergency park release on left side of transmission. Repair: Not yet determined.

Paul Labrie
11 Eastern
Herb Chambers
1/9/2004
Herb Chambers
Boston MA

<b>Customer Name</b>	
<b>Customer Address</b>	
City, State	Boston MA
VIN/Chassis	D
Model & Mileage	745i 16423
<b>Production Date</b>	1/12/03

Please inspect to address complaint of vehicle rolling in Park

#### Root Cause:

Not yet determined.

# Diagnostic Path:

I inspected the vehicle on Friday morning January 9 2004 at Herb Chambers BMW. The vehicle was driven into the shop by the shop foreman. Mileage of vehicle verified in photo 13. A battery charger was installed on the vehicle and a GT1 was connected and diagnosis was performed using DIS CD V36. Refer to the DIS Printouts attachment for all diagnostic information.

The exterior of the vehicle was inspected for damage. The front of the vehicle as see in photo 8 has not damage visible at time of inspection. The rear of the vehicle is seen in photo's 1,2,and 3. The right rear corner of the vehicle is seen in photo 4. There is damage to the right rear bumper area. Photo 5 and 7 show the right rear corer of the bumper with scratches and damage to the bumper cover and trim. Photo 6 shows some scratches to the center of the bumper cover below the license plate area.

A short test was performed on the vehicle. No faults were stored relating to transmission. MOST communication faults were stored and a Most system analysis test plan was performed. The navigation computer showed as being the most probable cause of the NAV resets with 62 resets total. Recommend NAV computer replacement and program with NAV CD V22.1

I checked the operation of the transmission when shifting into Park (see photo 20) and the Park function operating correctly. I checked the operation of shifting from Park to Drive (see photo 15) and Drive to Park the vehicle operated correctly. I checked operation of shifting from Park to reverse (see photo 14) and Reverse to park, the vehicle operated correctly. Also status of all gear positions was properly displayed on instrument cluster and in DIS diagnosis (see DIS Printouts).

Shifter stalk on column was checked for proper operation and positioning (see photo 19), not trouble found.

The vehicle was then in the following way, Reverse gear selected with foot on brake. Door was then opened, the gong set off along with a cluster warning as seen in photo 16. As soon as you take your weight off of the seat and foot off the brake the vehicle takes off in reverse. I then monitored the seat occupancy sensor via DIS (see DIS printouts) via the drivers seat module satellite sensor SSFA and the occupancy sensor always showed the seat as being occupied with or without anyone occupying the seat. I then verified this using INPA (see PDF file Drivers seat occupation) that the seat mat always showed as being occupied. Another E65 was compared and the feature and readings worked as follows. When reverse gear selected and door opened and driver leaves seat and takes foot off of brake, when the vehicle just starts to move it automatically shifts to Park. The brake pedal operation (see photo 10) was checked with no trouble found.

The technician is going to remove seat and check mat for the cause of the false reading which is causing vehicle to stay in reverse when seat becomes unoccupied and foot off brake.

Tech is going diagnose NAV complaints further.

Tech is going to replace amplifier for remotes with new and improved parts.

Parts on backorder

# Repair:

Spoke with technician who stated he had to replace Drivers seat sensor mat for faulty occupied reading.

### **Attachments**

FSE Name	Philip Fekete
Market/Region	14 Eastern
Center Name	Paul Miller BMW
Inspection Date	8/27/08
Inspection Location	Paul Miller BMW
City State	Wayne, NJ
City, State	07470

Customer Name	
Customer Address	
City, State	North Beregn, NJ
VIN/Chassis	D
	08' BMW 750Li
Model & Mileage	11,280 mi
	18,154 km
Production Date	12/07

The customer alleges the vehicle rolled in Park.

### Root Cause:

Not yet determined.

## **Diagnostic Path:**

The vehicle displayed recent frontal and rear impact damage. The damaged components that surrounded the front of the car included the front bumper cover, the lower splash covers and the engine oil cooler which was leaking oil. The damaged components that surrounded the rear of the car included the lower bumper cover and the exhaust system.

The customer was questioned about the front end damage. Allegedly, the customer stated that the front tow hook was ripped out of the front bumper when the car was being removed from the front of his neighbor's house. He claimed the tow truck operator damaged the front end when the vehicle was pulled away. I'm guessing that the tow truck driver had to refer to alternative measures in order to pull the vehicle away due to the failed tow hook. However, the outer threads to the tow hook and the receiving inner threads located within the front bumper carrier were in good condition. In addition, the tow hook was slightly bent and the front inner diameter to the hook displayed a hammered finish. This evidence suggests that the tow hook was utilized and it did not fail when it was used. Also, there were visible markings on the belt contact area of the driver's sliding latch plate. An SSFA fault error was set at 18,152 km which may have been set after the incident however no airbag deployment was observed.

There was partially repaired impact damage to the lower right rear passenger door, the door opening, the rocker panel and to the front of the rear wheel opening. The impact damage appeared oblique from the front. The deformed area was covered with an excessive amount of body filler and black primer that displayed deep sanding marks. Someone tacked welding rods to the bottom corner to the right rear door opening in order to reshape the inward deformity with the use of a slide hammer or a pair of pliers. In addition, there were small holes were too much heat was applied. The welding rods used for pulling were cut off and portions of each rod including the small holes were left exposed.

The front headlamps, the driving lights and the rear back up lights were covered with black spray paint making them ineffective. All of the brake calipers were heavily covered with bright red spray paint as well. Allegedly the vehicle was fitted with 22" wheels and tires that had been removed by the service department after the alleged incident and the original wheels and tires were reinstalled. The front wheel wells were

tire scuffed.

The transmission gear selector was ripped from its socket and was not available for observation. In addition, the screws that secured the trim cover to the top of the steering wheel column were removed and the trim cover was found resting on the passenger floorboard. The BMW emblem in the center of the steering wheel was dimpled inward.

An interrogation of the vehicles electrical system was performed and CAS, EGS, CIM2, EMF, RDC, IHKA, INSTR, LM2, PM, SSFA, TMBFT, TMBFH, TMFAT, TMFAH, SGM, and CAN fault errors were found.

The vehicle had 18,154 km during the interrogation after the incident. The vehicle may have been fitted with aftermarket equipment as a result of the many erroneous fault errors found. However, there were groups of fault errors that occurred at the same odometer reading. For example:

At 15,816 km: RDC and SGM-SIM faults were set. The RDC faults may have occurred during a wheel and tire swap before the incident. The SGM fault may have been related to a dead battery.

At 18,144 km: EGS fault errors were set. The EGS fault errors may have been related to the missing gear shift stalk. Not sure.

At 18,152 km: Almost all of the remaining fault errors were set because of low battery voltage which include PM, SSFA, NVE, CAS, TMFAH, TMFA, TMBFH, and TMBF.

At 18,154 km: Performed vehicle inspection.

The vehicle was pushed to the service stall immediately after it was towed to the center. That may account for the 2 km difference between 18,152 km and 18,154 km. However, the 10 km difference between 18,144 km when the EGS fault errors were set and 18,152 km when the under voltage fault errors were set can not be accounted for.

Due to the damaged gear selector the vehicle could not be dynamically tested.

## Repair:

Not yet determined.

## Attachments:

Digital photographs that include the diagnostic data.

FSE Name	Richard Brown
Market/Region	34 / Western
Center Name	Bob Smith BMW
Inspection Date	03/08/2004
Inspection Location	Bob Smith BMW
City, State	Calabasas, CA

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	745Li / 21182 mls
Production Date	08/01/2002

Customer complains for alleged rolling in Park.

#### Root Cause:

Not yet determined.

# Diagnostic Path:

The VIN, Decree , on the B pillar compliance label identified the vehicle. See attached photo 0001. The vehicle mileage at the time of inspection was noted as 21182 miles. See attached photo 0002.

The exterior of the vehicle was inspected. There were some scratches on the rear bumper cover and on the left mirror. See attached photos 0010 and 0012. Otherwise, there was no visible damage to the body of the vehicle. See attached photos 0007, 0008, 0009, and 0011.

The control modules involved in the application of the transmission parking mechanism were identified and interrogated using a DIS plus.

The Car Access System (CAS) was identified. There were no faults stored in the CAS. See attached DIS printout 01.

The Steering Column Switch Center (SZL) was identified. There were no faults stored in the SZL. See attached DIS printout 02.

The Central Gateway Module (ZGM) was identified. There were no faults stored in the ZGM. See attached DIS printout 03.

The Transmission Control Module was identified. There were no faults stored in the transmission control module. See attached DIS printout 04.

The Parking Brake module (EMF) was identified. There was one fault stored in the EMF: 6040 Automatic hold function, Signal or value above threshold, Fault not currently present. See attached DIS printout 07.

The vehicle was raised on a lift and inspected from below. The engine and transmission mounts were in good condition and were not cracked. The operating lever and cable for the manual release of the transmission park mechanism were both properly mounted and positioned. See attached photos 0003 and 0004. The transmission park release lever was operated by hand. The lever moved smoothly without any binding. The internal spring returned the lever to its forward most position every time.

The engine was started and the transmission was placed in Drive. The Park button on the end of the range selector stalk was pressed. The transmission shifted from drive back to park and the vehicle could not be moved. This operation was repeated a half a dozen times. Each time the transmission park mechanism engaged properly.

The above test was also repeated several times using Reverse instead of Drive.

The transmission park mechanism engaged every time.

The engine was started and the transmission was placed in Drive. While leaving the transmission in drive, the engine was switched off. The transmission switched itself to Neutral. When the key was removed from the CAS, the transmission switched to Park and the parking mechanism engaged. This test was repeated several times. The transmission park mechanism engaged every time the key was removed from the

## CAS.

The engine was started and the transmission placed in drive. The driver's door was opened. A warning chime sounded and the warning "Transmission in driving position!" was displayed in the instrument cluster. See attached photo 0006. When weight was removed from the driver's seat, the transmission shifted to park and the parking mechanism engaged. This test was repeated several times with the same result each time.

The manual park release lever under the driver's dash was operated. When the ignition was switched on, the following warning was displayed in the Control Display: "Transmission range P may be unavailable. Engage parking brake when vehicle is stationary. Please Contact the nearest BMW center."

See attached photo 0005.

After starting engine with the park mechanism released manually, the following fault was stored in the transmission control module: 507D Parking gear incorrectly disengaged, implausible signal or value, Fault currently not present, Fault would not cause a warning lamp to light up.

See attached DIS printouts 05 and 06.

## Repair:

Not yet determined.

**Attachments** Photographs: DSCN0001 – DSCN0012

DIS Printouts: 01 - 07

FSE Name	Richard Brown
Market/Region	34 / Western
Center Name	Valencia BMW
Inspection Date	02/03/2005
Inspection Location	Valencia BMW
City, State	Valencia, CA

Customer Name Customer Address	
City, State	
VIN/Chassis	D
Model & Mileage	745Li / 27541 mls
Production Date	12/19/2002

Customer complains for alleged roll away.

### **Root Cause:**

Not yet determined.

# Diagnostic Path:

The VIN on the B pillar compliance label identified the vehicle. See attached photo 0001. The vehicle mileage at the time of inspection was note as 27,541 miles. See attached photo 0002.

The exterior of the vehicle was inspected. There is some slight denting in the trunk lid. There is some scraping on the rear bumper cover. There are "door dings" in the area around the driver's door handle. There is no other visible damage to the body of the vehicle. See attached photos 0015 - 0025.

The vehicle was raised on a lift and the transmission was inspected. There is some visible seepage of transmission fluid. See attached photos 0003-0005. The transmission fluid level was checked in accordance with the test plan in the diagnosis program in the GT1. The transmission fluid temperature was at  $49^{\circ}$  C when the procedure was started. Fluid immediately ran out of the level check/fill hole. The transmission is adequately filled with fluid.

The positioning of the transmission emergency park release lever and cable were checked. The cable and lever are properly positioned. See attached photo 0004. The movement of the lever was checked. The lever moved smoothly without any binding. When moved rearward and then released, the lever moved consistently back to its initial (correct) position.

The vehicle was identified using a GT1. A short test indicated faults stored in the following modules: DME, EGS, DSC, EMF, AMP, PM, SMBF, SZL, MOST system, and CAN/byteflight. See attached printouts DIS01 – DIS03.

The CAN/byteflight (virtual) module was identified and the fault memory read out. There are two faults stored: 1) 51AC EGS GS1902: CAN identification sensor connected – Fault not currently present. 2) Communication fault. See attached printouts DIS04 – DIS06.

The DSC module was identified and the fault memory read out. There are three faults stored: 1) 5EF8 Brake fluid warning switch – Fault currently not present. 2) 5EF4 Steering angle sensor, fault internal – Fault currently not present. 3) 5F27 Brake pad thickness, front axle – Fault currently not present. See attached printouts DIS07 – DIS14.

The EGS was identified and the fault memory read out. There are two faults stored: 1) 51AC No message (identification sensor connected) from Car Access System implausible signal or value – Fault currently not present – Fault would not cause warning lamp to light up. 2) 4F53 Converter lockup clutch faulty/opened – General (P0741) – Fault currently not present – Fault would not cause warning lamp to light up. See attached printouts DIS15 – DIS18.

The EMF was identified and the fault memory read out. There is one entry: Signal or value above threshold – Fault currently not present. See attached printouts DIS19 –

## DIS21.

The DME was identified and the fault memory read out. There is one fault stored: 276D Function, tank venting system – Tank-venting system – Fault currently not present – Fault would cause warning lamp (MIL) to light up. See attached printouts DIS22 – DIS25.

The PM was identified and the fault memory read out. There is one fault stored: A158 Battery disconnection (closed-circuit current) – Signal or value above threshold – Fault currently not present, but already stored. See attached printouts DIS26 and DIS27. The SZL was identified and the fault memory read out. There are two faults stored: 1) 94E6 Control-module fault – Fault currently not present. 2) 94E7 Control-module fault – Fault currently not present. 30 PAE7 Control-module fault – Fault currently not present. See attached printouts DIS31 – DIS35. The SZL fault memory was read out using INPA for clarification of the above faults. Fault code 94E7 is identified by INPA as: Steering angle sensor – Relative wiper angle faulty. Fault code 94E6 is identified by INPA as: Steering angle sensor – Wiper 2 out of range. See attached printouts INPA05 and INPA06. The info memory of the SZL was read out. There is one entry: 950C Power-on-Reset uP. See attached printout INPA07.

The SSFA (Driver's seat module) was identified and the fault memory read out. There are no faults stored. See attached printout DIS28. The status of the driver's seat occupation detection system was checked. The system correctly identified when the seat was not occupied and when the seat was occupied. See attached printouts DIS29 and DIS30.

The SIM and the ZGM were identified and their fault memories read out. There are no faults stored in either module. See attached printouts DIS36 and DIS37.

A review of the printouts revealed that the CAS had not been individually identified using the GT1. The CAS was identified using INPA. See attached printout INPA01. Its error memory was read out. There are no faults stored in the CAS error memory. See attached printout INPA02. The CAS info memory was read out. There are three entries in the info memory: 1) 9909 No transponder ID recognized. 2) 9906 Error transponder communication. 3) 9908 Transponder no respective. See attached printouts INPA03 and INPA04.

The AMP, SMBF, and MOST system were not identified and interrogated, as they are not relative to the nature of the complaint.

The operation of the transmission gear engagement and park mechanism were checked in the parking lot of Valencia BMW. The following observations were made:

- -There were no transmission related check control messages in the Control Display. See attached photo 0006.
- -The transmission could not be shifted into Drive (D), Reverse (R), or Neutral (N) when the engine was not running. When attempted, a message confirming this was displayed in the instrument cluster. See attached photo 0007.
- -With the engine running, D, R, or N could not be engaged without stepping on the brake pedal. When attempted, a message stating the above was displayed in the instrument cluster. See attached photo 0008.
- -When the engine was running and the transmission was in D, R, or N, and the engine was shut off, and then the key was removed from the CAS, the transmission shifted into Park (P). Every time.
- -With the engine running and the transmission in D or R, if the driver's door was opened an audible gong was heard and a warning was displayed in the instrument cluster. See attached photos 0009 and 0010. If the driver's weight was then removed

from the seat, and there was no vehicle movement, the transmission would shift into (P) after a delay of approximately 2½ to 3 seconds. If there were any vehicle movement, either forward or rearward, when the driver's door was opened and the driver's weight was removed from the seat, the transmission would not shift into P. The vehicle would continue to travel in whatever direction it had already started until the brakes were applied. When the vehicle was moving, in either direction, the key could not be removed from the CAS.

- -When the engine was running and the transmission had been shifted into N by the driver, if the driver's door was opened an audible gong was heard and a warning message was displayed in the instrument and in the check control area of the Control Display. See attached photos 0011 and 0013. If the driver's weight was then removed from the seat, the vehicle would roll. The direction and speed of the vehicle movement was dependant on the slope it was located on.
- -When the engine was running with the transmission either D or R and the engine was shut off, the transmission would shift into N. If the driver exited the vehicle the same warnings were issued as if the driver had deliberately shifted the vehicle into N.
- -Prior to this writer's inspection, the vehicle had been programmed (via the I drive) so that the star button on the steering wheel (MFL) would activate the Auto P function. See attached photo 0014.
- -When Auto P was active and the engine was running and the transmission was in D or R, if the driver's door was opened and the driver's weight was removed from the seat, the transmission would shift into P, every time. The parking brake (EMF) would also activate the parking brake. There was no vehicle movement.
- -When Auto P was active and the transmission was in N, engine running or not running, if the driver exited the vehicle the EMF would activate the parking brake. The transmission remained in N. See attached photo 0012. There was no vehicle movement.
- -When left in N the transmission automatically shifted into P after approximately 30 minutes.

### Repair:

Not yet determined.

**Attachments** Photographs: DSCN0001 – DSCN0025

Printouts: DIS01 – DIS37 Printouts: INPA01 – INPA07

FSE Name	Ryan Cram
Market/Region	Western
Center Name	BMW of North
	Scottsdale
Inspection Date	9/21/09
Inspection Location	BMW of North
	Scottsdale
City, State	North Scottsdale,
	A7

Customer Name Customer Address City, State	
VIN/Chassis	DT84
Model & Mileage	750LiA / 5642
Production Date	3/08

The customer alleges rolling in park.

### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

I inspected the subject vehicle at BMW of North Scottsdale in North Scottsdale, AZ on September 21, 2009 at approximately 12 noon.

I identified the subject vehicle from the B-pillar and Dashboard VIN placards, photos 0001-0003.

Photo 0004 shows the instrument cluster in a Key-on/Engine-off condition; the driver's seatbelt is not fastened. Photo 0005 shows the instrument cluster in a Key-on/Engine-running condition; the driver's seatbelt is fastened.

I then test the automatic park engagement feature. The vehicle was started with comfort access; photo 0006 shows the engine running in drive with no remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0007. The vehicle was started with comfort access; photo 0008 shows the engine running in reverse with no remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0009. The vehicle was then placed in Neutral, photo 0010, then the start-stop button was pressed; the vehicle shifted into Park, photo 0011.

The feature was then tested with the remote in the key slot. Photo 0012 shows the engine running in drive with the remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0013. Photo 0014 shows the engine running in Reverse with the remote in the key slot. The start-stop button was pressed once and the transmission was shifted automatically into Park, photo 0015.

Car wash mode was then tested. The vehicle was started with the remote in the key slot and then placed into neutral, photo 0016. The start-stop button was then pressed once and the vehicle remained in neutral, photo 0017. The park button was then pressed with the engine off and the vehicle shifted into Park.

The vehicle was lifted on a shop hoist; photos 0019-0024 show the undercarriage. I removed the transmission splash pan. I found no damage or leaks in this area. Photos 0025-0029 show the emergency release cable and transmission electrical connector. The cable appears correctly attached and routed. The electrical connector appears properly connected.

While the vehicle was on the hoist the rear wheels were spun by hand. The park pawl engagement could be felt.

Photos 0030-0032 show the engine compartment; I found no aftermarket components or damage in this area.

Photos 0033-0034 show damage to the upper portion of the left front door.

The vehicle was placed on the ramp to the second story of the parking structure and then turned off. The vehicle shifted to Park. The brake was released and the vehicle moved slightly against the parking pawl. After the initial movement the vehicle did not move or roll. This exercise was performed with the vehicle in an uphill and downhill attitude, photo 0035. Photos 0036-0044 show the exterior of the vehicle and damage to the left rear area. The vehicle shifted to Park when the P button was pressed.

Photo 0044 shows the repair order.

I attached my laptop and read out the vehicle diagnostics, see attached.

## Repair:

Not yet determined.

Attachments: Photos, Inpa Check-in data.

FSE Name	Ray C Sommers
Market/Region	Southern
Center Name	South Motors
	Body Shop
Inspection Date	February 11,
	2004
Inspection Location	South Motors
	Body Shop
City, State	Miami, FL

Customer Name	
Customer Address	
City, State	
VIN/Chassis	D
Model & Mileage	745i 20112
<b>Production Date</b>	12/01

Customer alleges vehicle disengaged park while attempting fueling and rolled into a ditch.

### Root Cause:

Not yet determined.

## Diagnostic Path:

I arrived at South Motors Body Shop on February 11, 2004 at 12: 10 pm; it was 87 degrees and sunny. The purpose for my visit was to inspect VIN Degree for alleged defect causing park disengagement.

When I arrived at the vehicle a visual inspection was performed. The damage was located on the passenger's side of the vehicle. The severity of this damage could not be photographed, as the repairs were complete and ready for painting. The right front corner of the front bumper cover had minor repairable damage. The rear bumper cover was being replaced. The passenger's front fender, front door, rear door and rear quarter panel displayed areas of repair.

The engine was started and drive gear was engaged. Transmission park was requested numerous times. Each time the request was made the internal hydraulics of the transmission placed the transmission into park and responded that the action was carried out by illuminating the P indicator in the instrument cluster. The park engaged signal is sent from internal hall sensors, (inside the transmission) which must be satisfied by a mechanical movement of the park engagement linkage. The illumination of the P indicator would only be possible if the transmission was engaged in park.

The engine was again started and drive gear was engaged. Pressing the start/stop button once and leaving the ignition key inserted in the CAS the engine was shut off. This sequence activated the CARWASH mode, (explained in the owners manual) which places the transmission in neutral for approximately 30 minutes. When the ignition key was removed from the CAS in the carwash mode the transmission engaged park on every attempt. Several attempts were made to exit the driver's seat without transmission park engaged. The carwash mode was the only way the vehicle would remain in neutral.

The vehicle was connected to BMW INPA Diagnostic software for ME9E65 and GS19 control unit diagnosis. There were no errors stored relevant to the customer complaint. Errors stored are related to SI B 61 13 02 software update.

- Photos DSCN 7379 and 80 show park and drive engagement with the engine running.
- Photo 81 shows neutral engagement and a warning, Transmission in position N! This warns the driver that the carwash mode has been activated. Please note the engine is not running.
- Photo 82 shows the ignition key position when photo 81 was taken.
- Photos 83, 84, and 85 show park engagement and ignition key position.
- Photos 86, 87, 88, 89 and 90 are views of the exterior body damage.
- Photo 91 is a view of the identifying VIN sticker located inside the driver's doorjamb.

## Repair:

Not yet determined.

Attachments Photos and diagnostic prints.

FSE Name	Philip Fekete
Market/Region	14 Eastern
Center Name	
Inspection Date	3/27/08
Inspection Location	JMK Auto Sales
City, State	Springfield, NJ
	07081

Customer Name	
Customer Address	
City, State	Staten Island, NY
VIN/Chassis	WBAHL83506
Model & Mileage	06' BMW 750i 29,665 miles
Production Date	12/05

Customer complains alleges malfunction of transmission Park function.

#### **Root Cause:**

Not yet determined.

# Diagnostic Path:

The vehicle was examined on March 27, 2008 at the JMK Auto Sales service facility located in Springfield, New Jersey. The photographs were taken with a digital camera equipped with an internal speed light. The vehicle was a 2006 BMW Model, 750i Passenger Car. The chassis number was WBAHL83506D. A manufacture date of 12/05 was printed on the placard attached to the driver's door opening.

An interrogation of the vehicle electrical system was performed and no EGS transmission fault errors were found. A copy of the diagnostic data is shown in photographs 722 through 726.

A dynamic evaluation was performed on the premises of the center's parking lot for approximately 15 minutes. The engine continued to idle with the gear shifter placed in the Park mode and no problems were observed. While in the Park, the gear shift stalk was manipulated up and down and the vehicle remained stationary. The transmission could only be placed in Reverse or Drive by first applying the brake pedal, pulling the gear shift stalk towards the steering wheel and pushing the lever up for Reverse and or pushing the lever down for Drive. The vehicle performed well without incident.

The driver's carpeted floor cover was securely attached and properly positioned however the BMW rubber floor cover that was placed over the carpeted floor cover as shown in photograph 412. The carpeted area on the transmission tunnel displayed imprints that were transferred by the bottom side to the rubber floor cover as shown in photograph 415. The rubber floor cover was adjusted to the carpet imprints for observation as shown in photograph 417, 418 and 419.

The entire left side of the exterior body had been recently refinished. A trim strip that surrounded the rear park distance sensors had been resurfaced and the right rear fender and door area may have been resurfaced as well evidenced by the fresh appearance, tape lines and various levels of orange peeled texture. The driver's door handle would stick in the upward (opened) position and the painted surface that covered the door handle appeared original in comparison the exterior door finish. In addition the screws that secured the front inner fender to the apron had been recently removed and there was orange peeled texture and rubbing compound that surrounded the front grills.

# **BMW of North America, LLC**

# **Internal Field Report**

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Not yet determined.

# Attachments:

Digital photographs that includes the diagnostic data.

FSE Name	Philip Fekete
Market/Region	14 Eastern
Center Name	JMK Auto Sales
Inspection Date	10/8/07
Inspection Location	JMK Auto Sales
City, State	Springfield, NJ

<b>Customer Name</b>	
Customer Address	
City, State	Nutley, NJ
VIN/Chassis	D
Model & Mileage	BMW 745Li 41,941 miles
Production Date	7/03

Customer complains for transmission slipped out of Park.

### Root Cause:

Not yet determined.

## Diagnostic Path:

The vehicle was examined on October 8, 2007, at the JMK service facility located in Springfield, New Jersey. The photographs were taken with a digital camera equipped with an internal speed light. The vehicle was a 2003 BMW, Model 745Li Passenger Car. The chassis number was WBAGN63443D . A manufacture date of 7/03 was printed on the placard attached to the driver's door opening.

An interrogation of the vehicle electrical system was performed and no EGS transmission fault errors were found. A copy of the diagnostic data is shown in photographs 329 and 330.

An observation of the transmission shift cable is shown in photograph 750.

A dynamic evaluation was performed on the premises of the center's parking lot for approximately 45 minutes. The engine continued to idle with the gear shifter placed in the Park mode and no problems were observed. While in the Park, the gear shift stalk was manipulated up and down and the vehicle remained stationary. During this time a message in the instrument cluster read (to engage gear, brake). The transmission could only be placed in Reverse or Drive by first applying the brake pedal, pulling the gear shift stalk towards the steering wheel and pushing the lever up for Reverse and or pushing the lever down for Drive. The vehicle performed well without incident.

## Repair:

Not yet determined.

Attachments: Digital photographs.

FSE Name	Ray C Sommers
Market/Region	Southern
Center Name	Nalley BMW
	Collision
Inspection Date	January 30,
	2006
Inspection Location	Nalley BMW
	Collision
City, State	Doraville, GA

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	750Li 9023
Production Date	08/05

The customer alleges that the vehicle inadvertently rolled away after parking, resulting in impact.

### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

I arrived at Nalley BMW Collision Center on January 30, 2005 at12: 30 pm; it was 65 degrees and overcast. The purpose for my visit was to inspect VIN D for inadvertent roll away.

When I arrived at the vehicle a visual inspection was performed. The body repairs were in progress. The main area of impact appeared to be locates at the driver's side front corner. There was minor scraping along the driver's side and damage on the rear quarter panel at the taillight area. The front bumper cover and support were removed along with the hood, front fender and upper core support. The inner apron displayed damage back to the shock/strut tower. The rear bumper cover was also removed and visible damage was present on the driver's side end of the bumper support. These removed parts were not available for viewing.

The vehicle was connected to BMW INPA Diagnostic Software for vehicle diagnosis. Errors were stored in the following control units. ZGM, DME, EGS, DSC, EMF, CAS and KOMBI. Some of the stored errors were caused from the disassembly of the vehicle. A complete report of all diagnosis is available in the technical folder.

Using the comfort access system, the vehicle was started. The transmission was placed in D (drive) with the service brake pedal depressed. The start stop button was depressed one time. The engine was turned off and the transmission automatically returned to park. This test was carried out many times with the same result. The same test was performed again using reverse gear as the input. The outcome of this testing was the same. The engine was again started and the transmission was placed in D (drive) with the service brake pedal applied. The driver's door was opened and the vehicle was exited. The transmission immediately went to the park position when it recognized the absence of the driver.

With the vehicles transmission in the park position the vehicle was rocked forward and rearward. An auditable clicking could be heard from under the vehicle indicating the engagement of the mechanical park pawl into the gear wheel of the output shaft. The vehicle remained stationary during this testing.

At no time during this inspection did I witness any malfunction of park engagement.

Carl Barbara, ZF Technical Engineer is planning an inspection of this vehicle on Wednesday February the 8<sup>th</sup>. The findings may be requested through ZF or Mr. Barbara.

An inspection of this vehicle is planed after all repairs are complete. This inspection is to take place at Nalley BMW. During this inspection dynamic testing will be carried out along with electronic testing to further confirm park engagement along with EMF operation. The expected completion date of body repairs is expected to be sometime within the third week of February.

- Photos IMG\_3524, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 and 36 are views
  of the body exterior showing impact damage sustained.
- Photos 37, 38 and 39 are instrument cluster views showing confirmed park engagement and actual mileage accrued.
- Photos 40 and 41 are views of the identifying VIN sticker located inside the driver's doorjamb.

### Repair:

Not yet determined.

## Attachments:

Photos and diagnostic printouts.

FSE Name	Ryan Cram
Market/Region	Western
Center Name	BMW of Encinitas
Inspection Date	8/19/10
Inspection Location	BMW of Encinitas
City, State	Encinitas, CA

Customer Name Customer Address City, ☐ State	
VIN/Chassis	DT12
Model & Mileage	750iA / 24109
Production Date	2/08

The customer alleges rolling in park.

#### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

I inspected the subject vehicle at BMW of Encinitas in Encinitas, CA on August 19, 2010 at approximately 11AM. The inspection was performed in the service facility with a shop hoist used to assist in the inspection. The weather conditions were sunny and approximately 75 degrees F.

I identified the subject vehicle by the B-pillar VIN placard, photos 0001-0002.

Photos 0003-0008 show the undercarriage; no damage, leaks or foreign items were found in this area.

Photos 0009-0012 show the transmission. The electrical connector appears properly connected. No leaks were observed at the transmission. While the vehicle was on the hoist the rear wheels were moved back and forth by hand. The wheels would move slightly and the parking pawl could be felt stopping the wheels. The emergency release lever on the side of the transmission was activated with the help of a technician. The wheels would then unlock, the lever was released and the parking pawl could be felt to positively engage in the park cog. This was repeated multiple timed with the same results.

Photo 0013 shows the engine compartment; no foreign items were observed in this area.

Photos 0014-0021 show the exterior of the subject vehicle.

The vehicle was then driven outside on a slight incline. The incline would allow the vehicle to roll while in neutral with the brakes not applied. Photo 0022 shows the vehicle running, in Drive, with the key in the CAS. I depressed the Park button on the selector lever, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0023.

Photo 0024 shows the vehicle running, in Drive, with the key in the CAS. I depressed the Start/Stop Button on the ZAS, the engine turned off, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0025.

Photo 0026 shows the vehicle running, in Neutral, with the key in the CAS. I depressed the Park button on the selector lever, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0027.

Photo 0028 shows the vehicle running, in Neutral, with the key in the CAS. I depressed the Start/Stop Button on the ZAS, the engine turned off, the vehicle remained in Neutral and the brakes were released, the vehicle could be felt to roll, photo 0029. This appears to be normal function of the car wash mode.

Photo 0030 shows the vehicle running, in Drive, with the key not inserted in the CAS, Comfort Access mode. I depressed the Park button on the selector lever, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0031.

Photo 0032 shows the vehicle running, in Drive, with the key not inserted in the CAS, Comfort Access mode. I depressed the Start/Stop Button on the ZAS, the engine turned off, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0033.

Photo 0034 shows the vehicle running, in Neutral, with the key not inserted in the CAS, Comfort Access mode. I depressed the Park button on the selector lever, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0035.

Photo 0036 shows the vehicle running, in Neutral, with the key not inserted in the CAS, Comfort Access mode. I depressed the Start/Stop Button on the ZAS, the engine turned off, Park was engaged and the brakes were released, the vehicle could be felt to roll slightly, approximately 2-3cm and the Parking pawl engaged, photo 0037.

During the above tests the Park function appeared to operate normally in both Comfort Access mode and with the Key inserted into the CAS. The above tests were repeated multiple times with the same results.

Photos 0038-0047 show the vehicle parked at an angle of approximately 10 degrees. The vehicle was left with Park engaged and the Park brake not applied; the vehicle did not roll.

Photo 0048 shows the instrument cluster in a Key-on / Engine running condition. Photo 0049 shows the mileage at the time of inspection as 24109.

Photos 0050 shows the "Auto P" function set to activate with the Star button on the steering wheel. The Auto P function appears to function normally. Photos 0051-0053 show the check control messages and service requirements displayed in the CID.

I attached my laptop and performed a check-in function using Inpa, see attached.

#### Repair:

Not yet determined.

Attachments: Photos, Inpa check-in data

FSE Name	Philip Fekete
Market/Region	14 Eastern
Center Name	Vista Motor Co.
Inspection Date	9/17/10
Inspection Location	Hunterdon BMW
City, State	Lebanon, NJ
	08833-4208

Customer Name Customer Address	
City, State	Bridgewater, NJ
VIN/Chassis	D
Model & Mileage	2006 750Li 39,302
Production Date	3/06

Customer alleges brake failure and complains vehicle rolled.

#### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

The vehicle examination revealed minor body damage to the left, rear corner and across the back to the bumper cover. The corner was scuffed and the back to the bumper cover displayed minor deformation.

The rear bumper cover is shown in photographs 176 through 178.

An interrogation of the vehicle's electrical system was performed and no DSC or EGS fault errors were found. The INPA diagnostic information is attached to this report.

A visual inspection for fluid loss of the braking system was performed and no problems were identified. The fluid lines that led to each corner of the vehicle were checked for leaks and no problems were identified as well.

The undercarriage including the brake lines and hoses that didn't display fluid loss is shown in photographs 182 through 187 and 390. Both front and rear brake pads displayed minimal wear. The amount of remaining brake pad thickness for both front and rear brakes shown in photographs 782 through 788, measured approximately 8 - 9 millimeters.

The customer's vehicle was equipped with carpeted floor covers and two additional aftermarket floor covers that were miss-positioned over the accelerator pedal. The driver's carpeted floor cover was partially anchored and properly positioned over the floorboard. Note the left anchor was pulled from its socket and was stuck to the bottom of the floor cover.

The aftermarket floor covers that were placed over of the production floor cover and over the accelerator pedal as well are shown in photographs 188 through 193, 196 and 197. The dislodged anchor is shown in photographs 194 and 195. The properly positioned primary floor cover is shown in photograph 193.

The customer's vehicle was evaluated for approximately 1 hour accumulating 11.7 miles subjected to numerous parking, aggressive and normal type stopping scenarios. During the evaluation, engine speed was normal with engine temperatures cold and warm. Over braking resulted in proper activation of the ABS/DSC systems. The brake pedal felt firm when depressed. The brake fluid pressure with the engine running and the brakes fully applied was recorded at 105 bar. The braking system held the vehicle in place with the engine running, the gear selector placed in Drive and with the accelerator pushed fully towards the floor.

The transmission shifted well from Park to Reverse and to Drive positions without incident. The PRNDL indicator located in the middle of the instrument cluster responded appropriately to each gear selection. In addition, the transmission held the vehicle in position while parked on graded surfaces without incident as well. The brake pedal had to be depressed in order to shift from Park to other gear selections.

# **BMW of North America, LLC**

# **Internal Field Report**

The additional floor covers were placed in the trunk after the evaluation.

# Repair:

Not yet determined.

# Attachments:

Digital photographs and an INPA diagnostic report.

FSE Name	Matthew Gabel
Market/Region	Western
Center Name	BMW of North
	Scottsdale
Inspection Date	4-16-03
Inspection Location	BMW of North
	Scottsdale
City, State	Scottsdale, AZ

<b>Customer Name</b>	
<b>Customer Address</b>	
City, State	Cave Creek, AZ
VIN/Chassis	D
Model & Mileage	745Li, 2088
Production Date	12-03

Customer alleges that the vehicle rolled backward while in park.

### Root Cause:

Not yet determined.

## Diagnostic Path:

As you can see in picture 83 thru 88 there was no visible external damage to the vehicle. But in picture 90 you can see that the driver's front door break has been popped off of its mounting point on the A-pillar and then bent upward. Also in picture's 94, 95, and 97 you can see a small scratch on the wood trim of the driver's side front door. I also accessed the EGS control unit using the INPA program and found no faults or other problems with the car.

I performed a functional check of the vehicle and found that the park feature worked normally. I also checked the auto park function and found it working normally. Then I checked the driver's front sensor mat and found it normal as well. With the car stopped and in drive I would raise up out of the seat and the car would automatically go into park just as it should. I parked the vehicle on a hill and found that it held normally.

### Repair:

Not yet determined.

**Attachments:** EGS fault and info pages, and complete vehicle fault pages, EGS status pages, Vehicle pictures.

FSE Name	Ryan Cram
Market/Region	32 Western
Center Name	Irvine BMW
Inspection Date	5/17/07
Inspection Location	Irvine BMW
City, State	Irvine Ca

Customer Name Customer Address City, State	
VIN/Chassis	DP64
Model & Mileage	745i / 43980
Production Date	2/03

Customer alleges of vehicle not engaging park.

#### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

I inspected the subject vehicle at Irvine BMW on May 17<sup>th</sup>. The inspection was performed in the service facility with the use of a shop hoist to assist. Photos 0001-0008 show the exterior of the vehicle.

Photos 0009-0010 show the damage to the xterior of the left front door and left front fender.

Photos 0011-0012 show the VIN of the subject vehicle at the B-pillar and dashboard/

Photo 0013 shows the instrument cluster with a key-on / engine-off condition. Photo 0014 shows the instrument cluster with a key-on / engine-running condition; the driver's seatbelt is not fastened. Photo 0015 shows the mileage, 43980, at the time of inspection. Photo 0016-0020 show the service requirements and check control messages displayed in the CID. Photo 0021shows the instrument cluster with the engine running and the driver's seatbelt fastened. The check control message displayed "to engage gear, brake" was displayed while attempting to engage a driving range with no brake application.

Photo 0022 shows the instrument cluster check control message displayed while reverse gear is engaged with the driver's door open. Photo 0023 shows the instrument cluster check control message displayed while neutral is engaged with the driver's door open. Photo 0024 shows the instrument cluster check control message displayed while a driving gear is engaged with the driver's door open. Photo 0025 shows the instrument cluster check control message displayed while park is engaged with the driver's door open. Photo 0026 shows the CID display with a driving gear engaged and the driver's door open.

Photo 0027 shows the instrument cluster display with the park brake applied. The park brake function appears to be working as designed.

Photos 0028-0030 show the undercarriage of the vehicle. The rear of the transmission appears moist with transmission fluid. The seepage appears to be at the rear of the transmission oil sump.

Photo 0031-0032 shows the emergency release lever and cable of the transmission. The release lever appears in a rearward position; the rear wheels are not locked and gear indicator display in the instrument cluster appears as Neutral. Photos 0034-0035 show the emergency release in a forward position; the rear wheels appear locked when rotated slightly by hand and the gear indicator display in the instrument cluster appears as Park.

Photo 0036 shows the driver's side interior area. Photo 0037 shows the drivers side floor mat. The mat appears to be OEM and the outer Velcro attachment is not fully secure to the floor mat. The inner attachment appears to be out of position. Photo 0039-0041 shows the damage to the interior of the driver's door panel.

I attached a GT1 to the vehicle and performed a short test as well as interrogating control module statuses. I found no relevant faults in the control modules. I checked the status of the selector lever inputs to the EGS control unit. The statuses appear to correlate with the desired request. The status of the brake pedal being depressed also appears to function normally. I checked the status of the EMF park brake and the statuses appear to correlate with the desired request.

I then drove the vehicle at the dealer's parking lot. While engaging park the vehicle locked and did not roll when park was indicated on the cluster. The selector lever request to engage park was performed numerous times; the park engagement functioned correctly at all times. This function check was performed multiple times at various inclines.

## Repair:

Not yet determined.

Attachments: Photos, diagnostic scans

FSE Name	Phil Fekete
Market/Region	12 Eastern
Center Name	Rallye
	BMW
Inspection Date	3/24/10
Inspection Location	BMW of Tenafly
City, State	Tenafly, NJ

Customer Name Customer Address	
City, State	Fort Lee, NJ
VIN/Chassis	D
Model & Mileage	03' 745Ll 81,497 miles
Production Date	10/02

Customer complains of vehicle rolling out of park.

#### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

The vehicle examination revealed minor impact damage across the rear bumper that cracked the bumper cover. Otherwise there was no other damage found. The vehicle had been poorly refinished on both sides and on both bumper covers. There were paint sags, inconsistent orange peeled textures and valley type sanding marks where the transition from the metal surface to the previous exterior finish was visible to the eye.

An interrogation of the vehicle's electrical system was performed and there were no EGS or EMF fault errors found. Reference FASTA and the attached INPA report.

The transmission was placed in Park while parked on steep grades for more than 20 minutes and the vehicle never rolled downhill. Note the vehicle had been parked at the center a couple of weeks prior to the inspection with incident.

The parking brake was evaluated as well on the premises of the center's parking lot and on local streets with steep grades. The parking brake was applied why the vehicle was in motion possibly up to 3.0 miles per hour and the parking brake was capable of the stopping the vehicle with minimal effort.

The parking brake was applied while the transmission remained in Neutral on steep grades for longer periods and the vehicle never rolled down hill. In addition the transmission was shifted to Drive and to Reverse with the parking brake applied and with the accelerator lightly depressed and yet the vehicle remained in place.

The vehicle remained in position independently with the transmission placed in Park and or with only the parking brake applied with the transmission placed in Neutral and the customer's complaint of rolling out of Park was never duplicated.

## Repair:

Not yet determined.

#### **Attachments:**

Digital photographs that include INPA diagnostic information.

FSE Name	Mark Brownlee
Market/Region	Southern
Center Name	BMW of Austin
Inspection Date	12/28/04
Inspection Location	BMW of Austin
City, State	Austin, Texas

Customer Name	
<b>Customer Address</b>	
City, State	Austin, TX
VIN/Chassis	D
Model & Mileage	745Li - 5502
<b>Production Date</b>	09/04

Customer alleges rolling/transmission park failure.

#### Root Cause:

Not yet determined.

### Diagnostic Path:

I arrived at BMW of Austin on December 28, 2004 at 10:30 A.M. The outside temperature was 56 degrees and the sky was clear. The purpose for my visit was to inspect VIN December 28, 2004 at 10:30 A.M. The outside temperature was 56 degrees and the sky was clear. The purpose for my visit was to inspect VIN December 28, 2004 at 10:30 A.M. The outside

When I arrived a visual inspection was performed. The main area of damage was to the rear bumper cover. I also noted damage to both side rocker panels along the bottom edge. The front splashguard behind the spoiler could be seen hanging low on the driver's side.

I checked tire brand and pressures. Brand was Dunlop SP Sport 01A, 245/45 ZR 19 front and 275/40 ZR 19 in the rear. Pressures were as follows – 29.5 PSI L/F, 29.0 PSI R/F, 33.5 PSI L/R, and 33.5 PSI R/R.

I raised the vehicle using the shop lift to inspect the under side for any additional damage. In the front I found the supporting bracket for the ARS bar broken and the bar was hanging low on that side. The front splashguard was pulled back and hanging low on the driver's side. There were some scrapes on the front axle carrier along the bottom. There were two points of impact to both side rocker panels. In the rear the exhaust outlets were bent forward, the spare tire well was pushed up, and there was damage to the rear bumper cover. I saw no tire or wheel damage.

In the interior I checked the functions of the gear selector. All gears were correctly indicated and engaged when selected. The mechanism did not fail to engage park when selected. The transmission would shift into park if you opened the driver's door and lifted off the seat while transmission was in drive or reverse at a stop. The only way the car would stay in neutral when exiting the vehicle was if you left the engine running with the remote not installed in the CAS and left transmission in neutral and got out of the car, taking remote with you; or if you left the remote in the CAS with the engine off, left transmission in neutral, turned the engine off and got out of the car, leaving remote in the CAS. At no time during inspection did I find any faults or misapplications of the gear selector. I parked the car on a slope and verified park would engage and hold vehicle.

I connected the car to a shop GT1 for fault interrogation. There were no faults stored in any relevant modules pertaining to transmission operation. The faults found were from the rear control display or a result of impact damage due to car hitting hard objects.

The following faults were stored after performing short test:

CAN/byteflight - Communication fault
D587 SG-FD-GW Control module, rear-comp. Display (gateway): K-CAN

Communication fault, not currently present
CIM Chassis Integration Modules - 5D36 Hall sensor, inclination, without signal, not
Currently present, frequency 2 times

DSC Dynamic Stability Control - 5F2B Rotation rate sensor, voltage supply, not Currently present.

FCON Rear compartment controller - E307 K-CAN Communication fault.

SG-FD Control module, rear compartment - A5E8 Fault, memory test, control display Computer, rear compartment, currently present, frequency 60 times

PDC Park Distance Control - 9E33, 9E34, 9E35, and 9E36 wire, ultrasonic sensor, rear Left, center and right, short to negative, not currently present, Frequency 1 time for all sensors

CA Comfort Access - A06B Antenna, bumper

I checked gear selector status in EGS and DME and all inputs were correctly indicated.

- Photos DSCN 1234, 35, 36, 37, 38, 39, 40, and 41 are views of exterior of the vehicle.
- Photos 42, 43, 44, and 45 show gear selections in the instrument cluster with the engine running and driver's door shut.
- Photos 46, 47, and 48 show gear selections in the instrument cluster with the engine running and the driver's door opened, all normal indications and functions.
- Photo 49 is view of the identifying VIN sticker located in the driver's doorjamb.
- Photo 50 is view of the tire label located in the driver's dooriamb.
- Photos 51, 52, 53, 59, and 60 show damage to the driver's side rocker panel.
- Photos 54, 55, and 56 show damage to the rear bumper area.
- Photos 57, 58, and 65 show damage to the passenger's side rocker panel.
- Photos 61, 62, 63, and 64 show view of damage to underside of rear bumper area.
- Photos 66, 67, 68, and 69 show damage to front ARS mounting at front subframe.
- Photos 70, 71, 72, 73, 74, 85, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, and 96 are of diagnostic screen printouts verifying entered faults and status requests.

### Repair:

Not yet determined.

## Attachments

Photos of vehicle and diagnostic printouts.

FSE Name	Richard Brown
Market/Region	38 / Western
Center Name	
Inspection Date	02/14/2006
Increation Leastion	Weisco Motor Car
Inspection Location	Co.
City, State	Denver, CO

Customer Name	
Customer Address City, State	_
VIN/Chassis	D
Model & Mileage	7451 / 48608
Production Date	01/2002

Customer complains of alleged rolling in Park.

### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

The VIN at the left front of the dash and on the B pillar compliance label identified the vehicle. See attached photos 0001 and 0002. The vehicle mileage was noted as 48,608 miles. See attached photos 0017 and DSCN0001.

The vehicle was inspected inside at Weisco Motor Car Company. There is some damage to a spoiler mounted on the trunk lid. There is some scratching visible on the rear bumper cover. The driver's door will not close. The forward edge of the door contacts the left front fender. The driver's door brake is not connected. There is some damage at the lower rear corner of the driver's door. See attached photos 0003 - 0013, and 0018 - 0024.

The driver's floor mat is currently out of position, resting on the accelerator pedal. See attached photos 0014 - 0016.

The vehicle was identified using a GT1 and a short test was run. Faults were indicated as being stored in the EGS, CAN/Byteflight, and PM. See attached photos DSCN0008 – DSCN0010.

The EGS was identified. See attached photos DSCN0011 and DSCN0012. The EGS fault memory was read out. There is one fault stored: 51AC No message from Car Access System. This fault is not currently present and was stored at 78216 km (48601 miles). See attached photo DSCN0013. The EGS test code was read out. See attached photo DSCN0014. The EGS physical hardware number was read out. See attached photo DSCN0015.

The CAN/Byteflight (virtual module) was identified. See attached photo DSCN0016. The fault memory was read out. There is one fault stored: 5EC6 DSC5.7-E65 No message from EGS control module. This fault is not currently present. See attached photos DSCN0017 and DSCN0018.

The CAS was identified and its fault memory read out. There are no faults stored in the CAS. See attached photos DSCN0019 – DSCN0022.

The EMF was identified and its fault memory read out. There are no faults stored in the EMF. The EMF test code was also read out. See attached photos DSCN0023 – DSCN0027.

The DME was identified and its fault memory read out. There are no faults stored in the DME. See attached photos DSCN0028 – DSCN0031.

The PM was identified and its fault memory read out. There is one fault stored in the PM: A14E Driver rear window defroster. This fault is not currently present. See attached photos DSCN0032 – DSCN0035.

The SZL was identified and its physical hardware number and fault memory were read out. There are no faults stored in the SZL. See attached photos DSCN0036 – DSCN0038. The statuses of the gear selector switch were checked. All positions of the gear selector switch were correctly identified. See attached photos DSCN0039 – DSCN0045.

The engine was started. No warning lamps were illuminated in the instrument cluster. See attached photo DSCN0002. Check Control indicated, "All systems are OK". See attached photo DSCN0003.

The operation of the transmission gear selector was checked. Raising or lowering the gear selector switch to the first position shifted the transmission into neutral. See attached photo DSCN0004. Pressing the Park button on the end of the gear selector switch immediately shifted the transmission back into Park. Lowering the gear selector switch to the second

position shifted the transmission into drive. Because the driver's door was open, a gong was sounded and warnings were displayed in the instrument cluster. See attached photo DSCN0006.

Raising the gear selector switch to the second position shifted the transmission into reverse. Again, because the driver's door was open, a gong was sounded and warnings were displayed in the instrument cluster. See attached photo DSCN0007.

If the transmission was shifted into either drive or reverse and the driver's weight was removed from the driver's seat the transmission would shift into Park after a delay of approximately 1 to 1½ seconds. This test was repeated several times. The transmission always shifted into Park when the driver's weight was removed from the seat.

No faults could be found in the operation of the transmission at this time.

### Repair:

Not yet determined.

Attachments: Photographs: DSC\_0001 - DSC\_0024, DSCN0001 - DSCN0045

FSE Name	Michael Sorce
Market/Region	14 / Eastern
Center Name	Life Quality BMW
Inspection Date	2/13/07
Inspection Location	211 63rd St
City, State	Brooklyn, NY
	11220

Customer Name Customer Address	
City, State	Staten Island, NY
VIN/Chassis	DT36
Model & Mileage	750Li / 5851
Production Date	11/05

The customer stated that her car was parked on her driveway inside a gate. She started the vehicle, put the transmission selector in Reverse and backed up a few feet to the gate. She states that she then pressed the Park button, opened the door to get out of the vehicle to open the gate. She had her left leg out of the car and the right one still in the vehicle, when she realized that the car was moving backwards (driveway on level ground). Instead of pressing on the brake pedal with her right foot, she attempted to get out of the car as it was moving. She was knocked over by the open door and was dragged under the door and pinned between the door and the gate post. Her husband ran from his car (parked outside the gate) and jumped into her car, depressed the brake, applied the emergency brake and shut down the car. The customer could not tell me in what gear her husband found the car when he jumped in. The customer stated that she has had previous instances of the car moving (both forward and backwards) when she thought she was in Park. She claims that she brought them to the attention of her sales advisor, Jose Cordero. When she got no response from him, she called the sales manager (an un-named female) but never got a call back. The customer does admit that she always had some doubt that she was "doing it right" when putting the car in Park because of the number of incidents. The customer is under the care of a physician for unspecified head contusions, body hematoma and shoulder stiffness. Please inspect this vehicle for alleged failure of transmission interlock.

#### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

I inspected this vehicle on the morning of February 13<sup>th</sup>, 2007 in the shop of Life Quality BMW. It was an overcast day and the temperature was 22°F. The photographs were taken using a digital camera equipped with an internal speed light.

I inspected and verified the vehicle identification plate at the top of the dashboard (2), the vehicle identification label on the left side B-pillar (4) and the vehicle mileage (11).

I inspected the exterior of the vehicle (26, 28, 29, 31, 34, 36, 38, 40) and noted that the left front door and left front fender have been repainted. There were visual signs of orange peel, overspray and fish eyes in the paint (77, 82, 90, 93). It was very difficult to document the flaws in the paint with the camera due to the fact that the vehicle is painted white. The paint on the left front door and left front fender was also checked with an Elcometer (18) paint thickness gauge and it was found that the paint thickness on the left front fender and the left front door ranged anywhere between .5 mills to 16 mils (110, 111, 112, 113, 114, 116, 117). I noted that the seal at the top left hand corner of the left front door was missing (91) but was present on the right front door (102). I noted that the left front door was damaged in the area of the door hinges (63, 64, 65, 66, 67, 69, 71, 72), the door brake was replaced (74) and the door was removed and or adjusted which can be noted by the damage and lack of paint on the door hinge bolts that attach to the body of the vehicle (69, 84) and the poor adjustment of the left front door (95, 98). I also noted that the left front fender has been adjusted and or removed which is visible by the location of the fender in relation to the fender securing bolts. The bolts/fender are in a different position then they were from the factory (69, 86, 105, 106, 108).

I verified and noted that at the time of inspection the air bag light and seat belt light were

illuminated in the Instrument Cluster (14) and that there was a warning in the Control Display informing the customer of a of a fault in the Passive Restraint System (23).

I inspected and verified that the when selecting Park, Reverse, Neutral or Drive with the transmission selector switch that the transmission shifted into the correct gear and also that the correct corresponding indicator light was illuminated when that gear was selected (16, 17, 19, 22).

I verified that when the vehicle is in gear (Drive, Neutral or Reverse) and you open the driver door and exit the vehicle under 2km/h that the transmission shifts into park. This function was functioning correctly at the time of inspection.

I verified that when you are in Drive or Reverse and you push and hold the parking brake button, that the brakes do apply and the vehicle comes to a stop.

I verified that the brake and accelerator pedal rubber pads were present and were not damaged or excessively worn (56, 59, 61). I also verified that the brake pedal and accelerator pedal moved freely and fluently.

I verified that the driver side floor mat fasteners were present and that the floor mat was installed correctly (52, 53).

I performed a short test of the vehicle and several test plans related to the customer's complaint with the BMW GT1 tester. Please see the attached copy of the Diagnosis Report (DT36534 Diagnosis Report.pdf) for the results.

At the time of the inspection the vehicle functioned as it should. I could not duplicate the customer's complaint.

## Repair:

Not yet determined.

Attachments: Pictures, Diagnosis Report.

FSE Name	Mike Donahoe
Market/Region	43 Central
Center Name	Kelly BMW
Inspection Date	10/8/2007
Inspection Location	4050 Morse Road
City, State	Columbus OH

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	750iLA 18,161
Production Date	05/2005

Customer complains for alleged transmission park failure.

### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

This vehicle was inspected the morning of October 8, 2007, inside and outside the workshop of Kelly BMW, 4050 Morse Road, Columbus, Ohio, 43230, on a sunny day with the ambient temperature of 79°F.

I observed the vehicle identification plate at top of dashboard. (1) I observed the B-pillar VIN plate. (2) I observed vehicle tire data plate on left B-pillar. (3) I observed the vehicle odometer. (4)

I performed a walk around vehicle and observed no visible damage to exterior of vehicle. (5,6,7,8)

I verified shifter handle is operational and that transmission would engage park. (9) The transmission entered park with an audible click. I verified transmission gear indicator on instrument cluster. (10,11,12,13) I verified that brake lights are operational. I attempted to shift transmission without applying brake. I was unable to shift without brake application and warning in cluster indicated that brake must be applied to shift transmission. I placed the vehicle on a slight incline and engaged park. The transmission engaged park each time I attempted to engage park function. I parked the vehicle nose up the incline and nose down the incline. The park functioned properly on each attempt.

I verified transmission function and operation optically from under vehicle. I found no defects in transmission position or function. (15,18) The emergency park release mechanism is positioned properly and is not disengaged. (14,16,17) I verified differential position and operation. (19) I observed no defects in differential operation. (20) The rear axle flanges on differential are positioned correctly and appear tight. (21,22)

This vehicle is equipped with Comfort Access. I verified transmission park function with the key in the CAS and with key out of CAS. I verified that transmission engaged park when the key was removed and when engine stop button was actuated.

I interrogated vehicle fault systems with BMW GT1 Tester. I observed no faults in EGS. I am including the BMW GT1 Tester diagnostic printout with this report. (DT27148.pdf)

#### Pictures used in this report.

DSC00001 View of vehicle identification plate at top of dashboard.

DSC00002 View of vehicle identification plate on B-pillar.

DSC00003 View of vehicle tire information plate on left B-pillar.

DSC00004 View of vehicle odometer.

DSC00005 View of front of vehicle.

DSC00006 View of left side of vehicle.

DSC00007 View of rear of vehicle.

DSC00008 View of right side of vehicle.

DSC00009 View of transmission gear shifter.

DSC00010 View of transmission gear indication in instrument cluster.

DSC00011 View of transmission gear indication in instrument cluster.

DSC00012 View of transmission gear indication in instrument cluster.

DSC00013 View of transmission gear indication in instrument cluster.

DSC00014 View of park release handle under left lower dash area.

DSC00015 View of transmission splash cover.

DSC00016 View of emergency park release on left side of transmission.

DSC00017 View of emergency park release on left side of transmission.

DSC00018 View of transmission.

DSC00019 View of differential.

DSC00020 View of differential.

DSC00021 View of left side differential axle flange.

DSC00022 View of right side differential axle flange.

### Repair:

Not yet determined.

### **Attachments:**

FSE Name	Mike Donahoe
Market/Region	46 Central
Center Name	International
	BMW
Inspection Date	2/8/2005
Inspection Location	2400 S. 108 <sup>th</sup> St
City, State	Milwaukee WI

Customer Name	
Customer Address	
City, State	Palmyra WI
VIN/Chassis	D
Model & Mileage	745iA 33081
Production Date	04/2002

Customer complains for alleged rolling in park.

#### Root Cause:

Not yet determined.

## Diagnostic Path:

This vehicle was inspected the afternoon of February 8, 2005, inside and outside the workshop of International BMW, 2400 South 108<sup>th</sup> Street, Milwaukee, Wisconsin, 53227, on a cloudy day with the ambient temperature of 26°F.

I observed the vehicle identification plate at top of dashboard. (1) I observed the left B-pillar VIN plate. (2) I observed vehicle tire data plate on left front B-pillar. (3) I observed the vehicle odometer. (4)

I performed a walk around the vehicle and observed damage to left rear bumper. (5,6,7,8) The left rear bumper cover is cracked and deformed. (9,10,11) I verified transmission shifter operation. (14) The shifter and display operated properly. (13) I verified park function. I placed the vehicle on a slight incline behind the workshop and engaged park. I then moved the shifter to drive and reverse without activating brake. The transmission did not engage drive or reverse properly and alerted with chime and display that brake must be depressed. I depressed brake pedal and engaged drive, reverse, and park approx 60 times to test function. I observed no defects in park operation on incline. The vehicle battery voltage when inspected was 12.3v. The engine was started and the voltage increased to 14.5v. I verified left front seat occupancy sensor operation. The sensor indication went from "not occupied" to "occupied" when sitting in left front seat and back to "not occupied" when exiting the vehicle. I verified that when exiting vehicle that the transmission engaged park. I found no defects in transmission or park operation.

I observed no defects in differential operation. Left and right differential output flanges are tight and in position. (15,16,17)

I interrogated vehicle fault systems with BMW DIS+ Tester. I observed a fault in EGS, 507D, Parking Gear incorrectly disengaged. The fault in EGS is due to technician disengaging park during troubleshooting. The fault is not in the EGS when vehicle was first brought in. I am including the BMW DIS+ Tester diagnostic printout with this report.

## Pictures used in this report.

DSC00001 View of vehicle identification plate at top of dashboard.

DSC00002 View of vehicle identification plate on B-pillar.

DSC00003 View of vehicle tire information plate on B-pillar.

DSC00004 View of vehicle odometer.

DSC00005 View of front of vehicle.

# **Internal Field Report**

DSC00006	View of left side of vehicle.
DSC00007	View of rear of vehicle.
DSC00008	View of right side of vehicle.
DSC00009	View of impact damage to left rear bumper cover.
DSC00010	View of impact damage to left rear bumper cover.
DSC00011	View of impact damage to left rear bumper cover.
DSC00012	View of drivers seating area.
DSC00013	View of shifter position P on cluster.
DSC00014	View of transmission shifter.
DSC00015	View of differential.
DSC00016	View of left differential flange position and half shaft mounting.
DSC00017	View of right differential flange position and half shaft mounting.
Repair: Not yet dete	rmined.

# Attachments

FSE Name	Mike Donahoe
Market/Region	41 Central
Center Name	International
	BMW
Inspection Date	3/5/2007
Inspection Location	2400 S 108 <sup>th</sup> St
City, State	West Allis WI

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	7 <del>50iA 7</del> ,045
Production Date	06/2006

Customer complains for alleged transmission park failure.

#### **Root Cause:**

Not yet determined.

# Diagnostic Path:

This vehicle was inspected the morning of March 5, 2007, inside and outside the workshop of International BMW, 2400 South 108<sup>th</sup> Street, West Allis, Wisconsin, 53227, on a sunny day with the ambient temperature of 27°F.

I observed the vehicle identification plate at top of dashboard. (1) I observed the B-pillar VIN plate. (2) I observed vehicle tire data plate on left B-pillar. (3) I observed the vehicle odometer. (4)

I performed a walk around vehicle and observed slight damage to right rear bumper cover. (5,6,7,8) The right side of the bumper cover is scratched and dented. (13,14,15)

The tires are Dunlop Winter Sport M3. (9,10,11,12) The vehicle tire size is 235/55R17. The tire pressures measured LF 35PSI, LR 38psi, RR 38psi, and RF35psi. The tires tread depth measured, LF 6mm, LR 6mm, RR 6mm, and RF 6mm.

I verified that transmission would engage park. (16) I verified transmission gear indicator on instrument cluster. (17,18,19) I verified that brake lights are operational. I attempted to shift transmission without applying brake. I was unable to shift without brake application and warning in cluster indicated that brake must be applied to shift transmission. (20,21) I placed the vehicle on a slight incline and engaged park. The incline angle is approx. 25-30°. The transmission engaged park each time I attempted park function. I parked the vehicle nose up the incline and nose down the incline. The park functioned properly on each attempt.

I verified that left front seat occupancy sensor operation. The left front seat indicated not occupied and assigned when entering and exiting the vehicle.

I verified transmission function and operation optically from under vehicle. I found no defects in transmission position or function. (26) The emergency park release mechanism is positioned properly and not disengaged. (27,28) I verified differential operation. (22) The rear axle flanges on differential are positioned correctly. (23,24) I observed no defects in differential operation. (25)

I verified parking brake function. I observed no faults in EMF module or operation.

This vehicle is equipped with Comfort Access. I verified transmission park function with the key in the CAS and with key out of CAS. I verified that transmission engaged park when the key was removed and when engine stop button was actuated.

I interrogated vehicle fault systems with BMW GT1 Tester. I observed no faults in EGS. I am including the BMW GT1 Tester diagnostic printout with this report. (DT06852.pdf)

Pictures used in this report.

DSC00001 View of vehicle identification plate at top of dashboard.

DSC00002 View of vehicle identification plate on B-pillar.

DSC00003 View of vehicle tire information plate on left B-pillar.

DSC00004 View of vehicle odometer.

Attachments:

DSC00005 View of front of vehicle.
DSC00006 View of left side of vehicle.
DSC00007 View of rear of vehicle.
DSC00008 View of right side of vehicle.
DSC00009 View of left front wheel and tire.
DSC00010 View of left rear wheel and tire.
DSC00011 View of right rear wheel and tire.
DSC00012 View of right front wheel and tire.
DSC00013 View of right rear bumper cover.
DSC00014 View of right rear bumper cover.
DSC00015 View of right rear bumper cover.
DSC00016 View of transmission gear shifter.
DSC00017 View of transmission gear indication in instrument cluster.
DSC00018 View of transmission gear indication in instrument cluster.
DSC00019 View of transmission gear indication in instrument cluster.
DSC00020 View of transmission gear indication in instrument cluster.
DSC00021 View of transmission gear indication in instrument cluster.
DSC00022 View of differential.
DSC00023 View of left side differential axle flange.
DSC00024 View of right side differential axle flange.
DSC00025 View of differential.
DSC00026 View of transmission.
DSC00027 View of emergency park release on left side of transmission.
DSC00028 View of emergency park release on left side of transmission.
Repair:
Not yet determined.

FSE Name	Mike Donahoe
Market/Region	35 Western
Center Name	BMW of Mountain
	View
Inspection Date	12/4/2006
Inspection Location	150 E El Camino
City, State	Mountain Vw CA

Customer Name Customer Address City, State	
VIN/Chassis	D
Model & Mileage	750iA 11,363
Production Date	10/ 2005

Customer complains for alleged transmission park failure.

#### **Root Cause:**

Not yet determined.

## **Diagnostic Path:**

This vehicle was inspected the morning of December 4, 2006, inside and outside the workshop of BMW of Mountain View, 150 East El Camino, Mountain View, California, 94040, on a sunny day with the ambient temperature of 49°F.

I observed the vehicle identification plate at top of dashboard. (1) I observed the B-pillar VIN plate. (2) I observed vehicle tire data plate on left B-pillar. (3) I observed the vehicle odometer. (4)

I performed a walk around vehicle and observed slight damage to right rear door. (5,6,7,8) I was informed that the door was damaged before the alleged incident. (9,10)

I verified that left front seat occupancy sensor operation. (11) The left front seat indicated occupied and unoccupied properly. (SeatOccupancy.pdf)

I verified that transmission would engage park. (12) I verified transmission gear indicator on instrument cluster. (13,14,15) I verified that brake lights are operational. (16) I placed the vehicle on the ramp inside the parking garage and engaged park. The parking garage ramp angle is approx. 30-40°. The transmission engaged park each time I attempted park function. I parked the vehicle nose up the ramp and nose down the ramp. The park functioned properly on each attempt.

I verified transmission function and operation optically from under vehicle. 18,21) I found no defects in transmission position or function. The emergency park release mechanism is positioned properly and not disengaged. (17,22,23) I verified differential operation. (19,20) The rear axle flanges on differential are positioned correctly. I observed no defects in differential operation.

This vehicle is equipped with Comfort Access. I verified transmission park function with the key in the CAS and with key out of CAS. I verified that transmission engaged park when the key was removed.

I interrogated vehicle fault systems with BMW GT1 Tester. I observed no faults in EGS. I am including the BMW GT1 Tester diagnostic printout with this report. (Diagnostic pdf)

Pictures used in this report.

DSC00001 View of vehicle identification plate at top of dashboard.

DSC00002 View of vehicle identification plate on B-pillar.

DSC00003 View of vehicle tire information plate on left B-pillar.

DSC00004 View of vehicle odometer.

DSC00005 View of front of vehicle.

DSC00006 View of left side of vehicle.

DSC00007 View of rear of vehicle.

DSC00008 View of right side of vehicle.

DSC00009 View of right rear door.

DSC00010 View of right rear door.

DSC00011 View of left front seat bottom.

DSC00012 View of transmission gear shifter.

DSC00013 View of transmission gear indication in instrument cluster.

DSC00014 View of transmission gear indication in instrument cluster.

DSC00015 View of transmission gear indication in instrument cluster.

DSC00016 View of brake pedal.

DSC00017 View of emergency park release under left side of dash area.

DSC00018 View of transmission.

DSC00019 View of differential.

DSC00020 View of differential.

DSC00021 View of transmission.

DSC00022 View of emergency park release on left side of transmission.

DSC00023 View of emergency park release on left side of transmission.

### Repair:

Not yet determined.

## Attachments: