

November 2016 Technical Service

# RECALL CAMPAIGN 16V-333: ISOFIX CHILD RESTRAINT SYSTEM ANCHORS

Please perform the procedure outlined in this Service Information on all affected vehicles before customer delivery. In the event the customer has already taken delivery of the vehicle, please perform the procedure the next time the vehicle is in the shop.

This Service Information bulletin supersedes SI B41 01 16 dated August 2016.

# **MODEL**

E25 (Y3)	E26 (Y4)
1 23 (A3)	1 20 (X4)

## SITUATION

BMW AG is conducting a Voluntary Safety Recall involving the ISOFIX child restraint system anchors.

There is a potential for the ISOFIX (also known as LATCH - Lower Anchors and Tethers for Children) bracket to break while in use when specifically used with **ISOFIX-type rigid-style connector** child restraint systems. This rigid-style connector is mainly used in Europe but it is available in the US.

This issue is unlikely to occur using LATCH-type flexible-style connector child restraint systems which represent the majority of child restraint systems used in the US.

# **AFFECTED VEHICLES**

This Recall Campaign involves certain F25 (X3) vehicles produced from July 2010 to April 15, 2016 and F26 (X4) vehicles produced from April 2014 to April 15, 2016.

Vehicles which require this Recall Campaign to be completed will show it as "Open" when checked either in the "Service Menu" of DCSnet (Dealer Communication System) or with the Key Reader.

Approximately 188,670 vehicles are affected in the US.

## **CAUSE**

When specifically used with **ISOFIX-type rigid-style connector** child restraint systems, the lower anchor bars could become damaged over the lifetime of the vehicle.

## CORRECTION

Note: Prior to performing the ISOFIX recall, please review the informational video on the welding process.

To find this 9 minute video in TIS, please use the "Google Search" button that appears on the TIS homepage, and type "ISOFIX video" in the search field.

Alternatively you can access this video under "videos" in Group 41.

A reinforcing bracket (4) will be welded to the lower anchor bars and the vehicle body.

## **PROCEDURE**

Refer to the attached procedure to be performed by an approved body shop/collision center.

Due to the volume of vehicles that may need repair, it may be necessary to set up an efficient process to handle several vehicles at a time. For example, set up a streamlined process which allows for repairing multiple vehicles simultaneously (i.e. sending batches of vehicles to the body shop in an organized production fashion).

Please contact the Body Shop you do business with and suggest the following:

- 1. That one person prepares 4 to 5 vehicles in the Body Shop by removing the rear seats, the side bolsters and the luggage compartment floor trim, as per instructions.
- 2. A welder prepares the area and welds the ISOFIX reinforcement bracket as per the repair instructions.
- 3. The person who disassembles the seats and bolsters re-assembles them.
- 4. The felts can be pre-cut using the supplied template (located in repair instruction attachment)
- 5. The ISOFIX brackets can be prepared by removing galvanized finish (wire wheel).

# **PARTS INFORMATION**

Part Number	Description	Quantity
41 00 2 697 433	ISOFIX Bracket	4
52 20 2 697 913	Felt	4

Please monitor the Parts DCS for Dealer ordering.

# WARRANTY INFORMATION

Note: For questions regarding labor times, please review the time study video in TIS, under videos in Group 41. Use in conjunction with time study log.

Reimbursement for this Recall will be via normal claim entry utilizing the following information:

0 41 76 01 00

**Scenario A** – Entire repair performed under sublet by a CCRC or body shop, maximum amounts as listed below:

	Repair labor cost reimbursement: R&I,
	Trepail labor cost reillibursement. Ital,

Sublet Code 3 \$	20U UU	Repair and Refinish (Maximum amount \$260.00)
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#### And

Sublet Code 4	\$20.00	Repair material cost reimbursement (Maximum amount \$20.00)
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Scenario B - The BMW Authorized Center's Workshop Completely Performs this Repair

# Completion "before" vehicle delivery to the customer or the vehicle is already in the workshop

Labor Operation:	Labor Allowance:	Description:
00 64 560	17 FRU	Accessing and reworking ISOFIX mounting brackets as outlined in the repair attachment (Plus work).

Or:

### Completion after vehicle delivery to the customer

Labor Operation:	Labor Allowance:	Description:
00 64 054	19FRU	Accessing and reworking ISOFIX mounting brackets as outlined in the repair attachment (Main work).

And, when claiming the above labor operations:

### Additional time to prep vehicle for welding (Scenario B only)

Defect Code:	IXAXYIIX UU NIA^ II	Additional FRU Allowance for ISOFIX Scenario B
Labor Operation:	Labor Allowance:	Description:
41 99 000	1FRU	Prepare vehicle for welding



\*Note: Use Defect Code "85 82 03 99 NA" for claiming labor operation 41 99 000 only.

Work time labor operation code 41 99 000 is not considered a Main labor operation. Also, since the "work time" FRU allowance to be claimed is specified, a separate punch time is not

required.

And:

### Sublet - Bulk Materials

Sublet Code 4 \$20	()()()	Repair material cost reimbursement (Maximum amount \$20.00)
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Or:

Scenario C – Split Repair between an Authorized Center's Workshop (Mechanical) and a CCRC/body shop

# Completion "before" vehicle delivery to the customer or the vehicle is already in the workshop

Labor Operation:	Labor Allowance:	Description:
00 64 628	7 FRU	R&R Rear seat backrests (Includes seat bottom and bolsters), disconnection/reconnection of battery (Center workshop portion) (Plus work)

Or:

## Completion after vehicle delivery to the customer

Labor Operation:	Labor Allowance:	Description:
00 64 113	9 FRU	R&R Rear seat backrests (Includes seat bottom and bolsters), disconnection/reconnection of battery (Center workshop portion) (Main work).

And

Sublet Code 3	<b>UPDATE!</b> \$130.00	Repair labor and material cost reimbursement: (Maximum amount \$130.00) (CCRC/body shop portion)
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# **ATTACHMENTS**

View PDF attachment **B41 01 16 Repair Procedure**.

View PDF attachment **B410116Q&A**.

View PDF attachment **ISOFIX Recall FAQ**.

View PDF attachment **ISOFIX Time Study Log**.

View PDF attachment **Recall Notice B410116**.

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# **SAFETY RECALL NOTICE**

To: All Center Operators, Sales Managers, Service Manager, Parts Manager and Warranty Processor

RE: Recall Campaign 16V-XXX: ISOFIX Bracket B41 01 16

BMW Group is conducting a Voluntary Safety Recall (effective May 19, 2016) involving Model Year 2010-2016 BMW X3 SAVs and X4 SACs produced from July 2010 through April 2016.

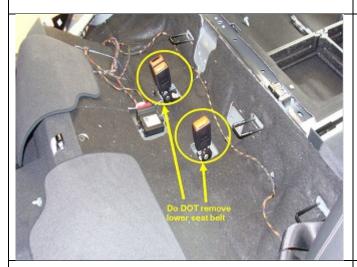
Owners will be notified by First Class mail about the Recall and will be instructed to bring their vehicles in for a free repair when parts are available.

Please be reminded that it is a violation of federal law (The Safety Act) for you to sell, lease or deliver any new motor vehicle covered by this notification until the recall repair has been performed. This means that centers may not legally deliver new motor vehicles to consumers until they are fixed or use/sell replacement equipment/parts subject to this recall. Note also that substantial civil penalties apply to violations of the Safety Act.

Also, you should not sell, lease or deliver any Certified Pre-Owned or used vehicles subject to a safety recall until the repair is completed.

Please follow any special instructions that we provide to you for the return or disposition of recall parts.

We appreciate all your assistance with this Recall.



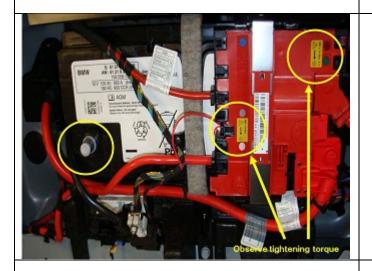
Remove upper and lower rear seats.
 Follow Repair Instruction "RA 52 26
 020 Removing and
 installing/replacing both backrests".
 Which includes the removal of the
 left and right side seat sections
 (bolsters).

Note: The lower seat belts must NOT be removed.

Note: Do Not replace lower seat belt anchor bolts. They can be reused.



2. Remove luggage compartment floor and storage trays. Follow Repair Instruction "51 47 102 Removing and installing/replacing luggage compartment floor trim panel"



 Disconnect negative battery cable and cover terminal.
 Refer to ISTA, "1200...Instructions for welding work (overload protection of control units)"

Note: When reconnecting battery always observe proper tightening torque.

Battery Negative (M6) = 5Nm



4. Fold back carpet and carpet underlayment as shown.

Note: Cover any exposed screw threads to prevent welding spatter from damaging threads.



5. Cover floor with welding blanket to protect carpet and underlayment.

Note: Ensure no vehicle wiring is exposed to welding spatter.



6. Cover the rear of the front seat with a welding blanket.



7. Cover rear luggage compartment floor with welding blanket or spark deflection paper (3M).

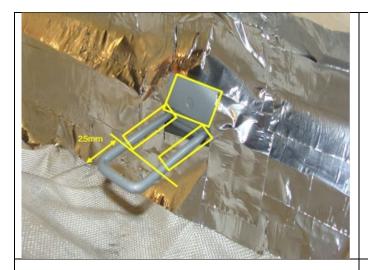
Note: It is imperative that the interior of the vehicle is NOT damaged by sparks or welding spatter during this process.



8. Protect roof liner from welding spatter.



9. Install aluminized foil around ISOFIX anchors.



- 10. Keep the areas shown exposed for surface preparation.
- 11. Remove paint in the areas shown.

  Note: Leave the end of the ISOFIX anchor untouched. Tape off the anchor, approximately 25mm from the end.



12. Remove paint from the designated areas using an abrasive belt. Only remove paint coating, DO NOT remove any metal.

Note: Do not use an aggressive grinding process. Damage to ISOFIX anchor may occur.

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13. Prepare ISOFIX anchor for welding. Note: Area at left is example of properly prepared area. Paint on end of anchor is intact.



14. Install reinforcement bracket as shown. Secure bracket with suitable clamp.

Note: It may be necessary to remove galvanized coating on reinforcement bracket to ensure a quality weld.



15. First, weld the left side of the bracket, progress to the top of the bracket as shown. Then continue to weld the left side of the remaining brackets as to allow time to cool.



16. Then, weld the right side of the bracket. Continue to weld the right side of the remaining brackets to allow time to cool.



17. Weld a continuous bead of weld to connect the left and the right sides. Complete all remaining brackets in this manner.



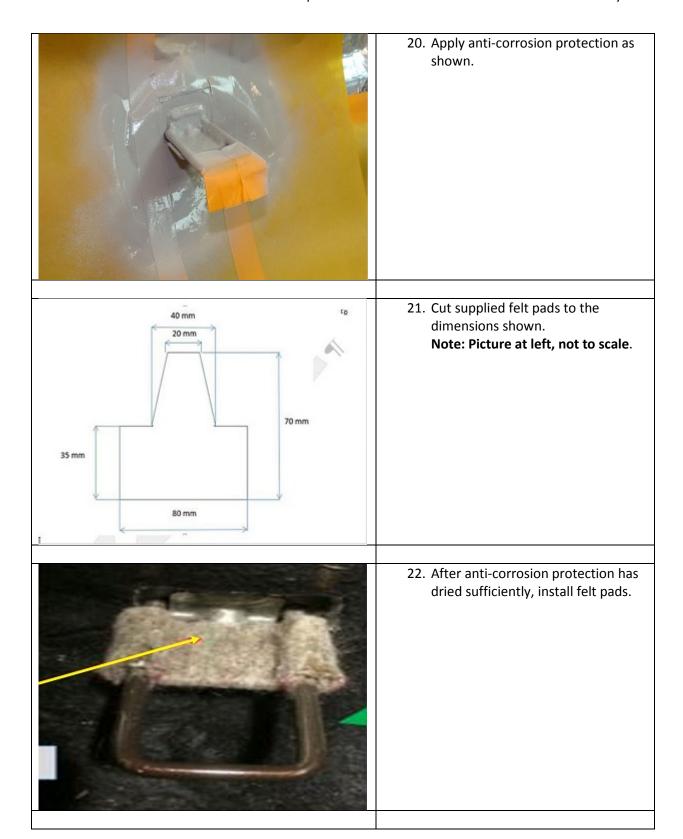
18. Example of properly executed weld is shown. Notice, the welding bead is continuous from left to right side.



19. Once the welds have sufficiently cooled, prepare the areas to reapply anti-corrosion protection.

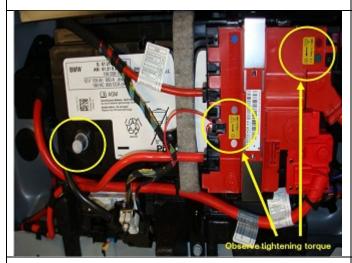
Use a stainless steel brush to clean the weld before applying anti-corrosion protection.

Note: Anti-corrosion protection can be sprayed on or applied with a brush. Product used does not have to be body color.



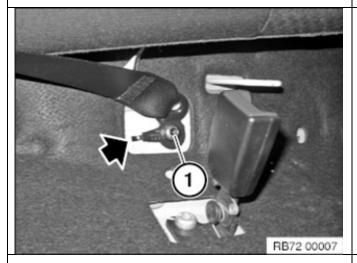


23. Lower view of felt installation.



24. Reconnect battery observing proper procedures.

Note: When reconnecting battery always observe proper tightening torque.
Battery Negative (M6) = 5Nm



25. Install lower seat belt anchor points (1). Note: Observe proper tightening torque (38Nm).

Note: Do NOT replace lower seat belt anchor bolts. They can be reused.



26. Once the battery is reconnected, reassemble vehicle in the reverse order of disassembly. Refer to "Remove upper and lower rear seats. Follow Repair Instruction "RA 52 26 020 Removing and installing/replacing both backrests".

Repair is complete.

# Model Year 2011-16 BMW X3 SAV, X4 SAC ISOFIX Child Restraint System Anchors Safety Recall 16V-xxx

# Q1. Which BMW models are affected by this Safety Recall?

Certain Model Year 2011-2016 BMW X3 SAVs and X4 SACs produced from July 2010 through April 2016.

### Q2. How many BMW vehicles in the US are affected by this Safety Recall?

Approximately 188,670 BMW vehicles in the US are affected.

### Q3. What is the specific issue?

This safety recall involves the lower anchor bars for use in attaching child restraint systems.

When specifically used with <u>ISOFIX-type rigid-style connector</u> child restraint systems, the lower anchor bars could become damaged over the lifetime of the vehicle. This rigid-style connector is mainly used in Europe but it is available in the US.

See the image below illustrating the rigid-style connectors.



This issue is unlikely to occur using LATCH-type flexible-style connector child restraint systems which represent the majority of child restraint systems used in the US.

# Q4. What can happen as a result of this issue?

If the lower anchor bar(s) become damaged during vehicle operation, this would increase the risk of injury to a child in a child restraint system attached to the lower anchor bars in a crash.

### Q5. How did BMW become aware of this issue?

BMW became aware of this issue through its quality control procedures.

### Q6. Why are other X3 and X4 vehicles not included in this Safety Recall?

Other vehicles produced outside the production period of July 2010 through April 2016 were manufactured with a different configuration of lower anchor bar.

# Model Year 2011-16 BMW X3 SAV, X4 SAC ISOFIX Child Restraint System Anchors Safety Recall 16V-xxx

# Q7. Can I determine if this issue exists in my vehicle?

This issue has only been known to occur with an ISOFIX-type rigid-style connector child restraint system. Therefore, if you use the LATCH-type flexible-style connector, your vehicle is unlikely to experience this condition.

This issue could be noticed when attempting to attach a child restraint system if the lower anchor bar is loose. It could also be noticed during vehicle operation if the child restraint system appears to be loose.

If you notice the above, place your hand between the seat back and seat cushion to locate the lower anchor bar. It is a small metal bar in a rectangular shape. Once located, make an attempt to move it back and forth to determine if it is loose.

Please contact an authorized BMW Center to have your vehicle inspected and, if necessary, repaired.

### Q8. Can I continue to drive my vehicle?

Yes. However, when you receive a letter asking you to have this service performed by an authorized BMW center, please do so as soon as possible. If you are not the only driver of this vehicle, please advise all other drivers of this important information.

### Q9. How will my vehicle be repaired?

A reinforcing bracket will be welded to the lower anchor bars and the vehicle body.

### Q10. Is BMW aware of any injuries involving the vehicles associated with this issue?

No.

### Q11. How will I be informed of this Safety Recall?

If your vehicle is affected, you will receive a <u>letter in July</u> via First Class mail advising you of this recall and requesting that you schedule an appointment with an authorized BMW center for service and repair.

To ensure BMW of North America, LLC has your most recent contact and vehicle information, please register your vehicle at <a href="http://www.bmwusa.com/myBMW">http://www.bmwusa.com/myBMW</a>. Registration is free, and will give you access to factory initiated campaigns and other information specific to your BMW vehicle.

### Q12. How long will the repair take?

This repair may take several hours; however, additional time may be required depending upon your BMW center's schedule. The repair will be performed <u>free of charge</u> by your authorized BMW center.

# Model Year 2011-16 BMW X3 SAV, X4 SAC ISOFIX Child Restraint System Anchors Safety Recall 16V-xxx

# Q13. Do I have to wait for my letter in order to have my vehicle serviced?

Yes. BMW is in the process of implementing this program to ensure that the necessary parts, tools and procedures are available at its authorized BMW centers, prior to instructing you to take your vehicle in for repair.

### ISOFIX Recall SI B41 01 16

### Frequently Asked Questions regarding the ISOFIX repair

### Q1. What reference materials are available for the ISOFIX repair?

A. There are several resources available. There are two videos in TIS, in Group 41. One is the overview of the process and the other is a time study video. This is in addition to the repair process which is attached to SI B41 01 16. Also, ISTA should be accessed for seat removal, battery disconnection and basic welding precautions. It is strongly recommended to review all available materials prior to attempting this repair.

#### Q2. How much welding is involved in this repair?

A. The majority of this job consists of component removal and preparation for welding. These repairs can be performed by any technician with a minimum level of training. However, the welding portion of this repair takes approximately 10 minutes to weld four ISOFIX reinforcement brackets to the vehicle. This requires someone proficient at MIG welding.

### Q3. What level of welding proficiency is needed to perform this repair?

A. We don't recommend any specific welding certification (Although ICAR training is a good idea). Any welder with a moderate level of proficiency will suffice (providing all conditions are met – refer to ISOFIX video in TIS, Group 41). If you are not confident with your level of welding proficiency, do not attempt this repair.

### Q4. Can I do this repair at my Center?

A. Yes, this repair can be done at an Authorized BMW Center in its entirety providing that there are personnel proficient at MIG welding. Also, the proper safety and welding equipment must be available as outlined in the ISOFIX video (in TIS). If attempting to perform the repair "in house", make sure all of the available materials are reviewed and all points can be met (MIG Welder, Welding blankets, spark paper, foil tape etc.). If you are not confident with your level of welding proficiency, do not attempt this repair.

### Q5. What if I don't not have personnel that can perform the welding process?

A. You can contact your local body shop or BMW Certified Collision Repair Center (CCRC). Make sure that you make available all of the necessary resource materials to make sure the repair is completed as per the procedure outlined in SI B41 01 16. Another option would be to contract with a portable welding service. Vehicles can be prepped in advance and the welding can be subcontracted.

# Q6. What is the allowable time for the ISOFIX repair?

A. Refer to the Warranty section of SI B41 01 16 for the recommended Warranty time. There are several scenarios which are outlined. The repair can be done entirely at the center, entirely at the body shop (or CCRC), or the repair can be split between the two.

### Q7. Can the ISOFIX repair be performed within the allotted time?

A. Yes, it is possible to perform the repair in the allotted time. As with any repair done frequently, the technician gains proficiency and improves efficiency with each repair. There is a time study available in TIS videos, under Group 41. This video demonstrates a technician performing the complete repair using no power tools, and with no assistance. In addition to that video, there is a time study log attached to SI B41 01 16. To improve efficiency, we have some recommendations on how to expedite some of the processes. These are also mentioned in this F.A.Q., refer to guestion 8.

### Q8. How can the repair process be expedited?

- A. Since this repair will most likely be done frequently, here are some recommendation to expedite the repair process:
  - The felts can be "pre-cut" to save time.
  - Multiple vehicles can be scheduled and set up using an "assembly line" process and then welded in batches.
  - ISOFIX brackets can be prepared in advance by removing galvanized coating with a wire wheel
  - Templates can be created to facilitate masking (for paint) and vehicle protection (welding blankets).

### Q9. Is it necessary to clear fault codes after battery disconnection/reconnection?

A. No, it is not necessary to clear fault codes resulting from battery disconnection. If the vehicle is in stock, it's part of the QC1. For customer vehicles, it's not necessary to reset these faults. These faults do not affect vehicle operation and no warning lights or Check Control Messages will be illuminated.

### Q10. What about resetting the clock?

A. Resetting the vehicle clock only takes a few seconds, and some vehicles update automatically.

### Q11. Is it required to add cavity wax into the area behind the ISOFIX anchors?

A. With regard to cavity wax, the area in question (behind the ISOFIX anchors) is not exposed to the elements, it is a closed area not subject to moisture. Our testing indicates that cavity wax is not needed and is therefore not part of the process.

Video Reference (number)	Operation	Approximate Segment Time	Cumulative Elapsed Time (rounded)	Approximate FRU (rounded)	Cumulative FRU Rounded	Comments
Video 1	Remove luggage floor, seat bolster, upper and lower seat. Disconnect battery.	11:29:00	11:29:00	2 FRU	2 FRU	Note: No power tools are used and one person is performing this recall with no assistance.
Video 2	Moving wire harness (EKP/Seat heater). Fold back carpet. Tape seat belt latches forward. Install spark deflection paper.	7:30	18:59:00	1.25 FRU	3.25 FRU	Use spark deflection paper as a backing for the welding blankets. This prevents any fiberglass from transferring to interior components. (Faster cleanup time and paper is reusable)
Video 3	Installation of welding blankets	13:43	32:41:00	2.3 FRU	5.55 FRU	
Video 4	Continued installation of welding blankets. Installation of foil tape (to connect blankets and prevent gaps)	17:45	50:26:00	2.75 FRU	8.3 FRU	An oppportunity to create templates for welding blankets to expedite installation.
Video 5	Preparation of ISOFIX brackets and cleaning of paint from ISOFIX anchors.	13:11	1:03:36	2.2 FRU	10.5 FRU	Prep of brackets can be done in advance (wire wheel) to remove galvanized coating. Be sure to remove paint completely in designated areas. Failure to do so will result in poor quality weld, excessive smoking and increased welding spatter.
Video 6	Clamping of ISOFIX brackets to ISOFIX anchors	1:58	1:05:33	.3 FRU	11 FRU	

Video 7						
	Welding Pocess - Welding brackets to anchors.	8:50	1:14:22	1.5 FRU	12.5 FRU	Actual welding time less than 10 minutes. Rest of job is entry level work.
Video 8	Post welding process, wire brushing (removal of slag), cleaning and preparation for paint (taping).	8:25	1:22:48	1.4 FRU	13.9 FRU	Can create template for masking of anchors to expedite painting process. Can save several minutes here.
Video 9	Spray painting of completed welds on anchors	1:18	1:24:05	.2 FRU	14 FRU	While paint is drying remove all blankets and paper/tape.
Video 10	Removal of Welding blankets	7:51	1:31:57	1.3 FRU	15.3 FRU	This should be done while paint dries (time saving opportunity)
Video 11	Preparation and installation of felts (cutting using template)	2:40	1:34:36	.5 FRU	15.8 FRU	Felts can be prepared in advance to save time
Video 12	Reinstallation of rear carpet (and removal of tape). Installation of wire harness.	1:36	1:36:11	.25 FRU	16 FRU	
Video 13	Installation of rear seat (upper portion) and lower seat belt anchors (includes torque wrench usage)	9:36	1:45:46	1.5 FRU	17.5 FRU	Torque wrench used, have ready in advance (do not replace lower seat belt anchor bolts).
Video 14	Reinstallation of seat bolsters (left and right), and upper seat bolster trim	3:35	1:49:21	.5 FRU	18 FRU	
Video 15	Reinstallation of rear seat (lower), reconnection of battery and reinstallation luggage floor (includes torqueing of battery terminal). Job complete.	2:36	1:51:56	.5 FRU	18.5 FRU	Job complete in under 19 FRU.