



Revised August 2014

Dealer Service Instructions for:

# Safety Recall N46 / NHTSA 13V-252 Rear Structural Reinforcement

NOTE: An additional labor operation has been added to the recall that includes additional labor time to remove the aftermarket trailer hitch, if required.

**Models** 

2002 - 2007

(KJ) Jeep<sub>®</sub> Liberty

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery. Dealers should also perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

### Subject

The rear vehicle structure on about 973,000 of the above vehicles may allow fuel leakage during certain low-speed collisions. Fuel leakage in the presence of an ignition source can result in an underbody fire.

#### Repair

Vehicles equipped with an aftermarket or factory installed trailer hitch must have the hitch inspected and/or replaced. Vehicles without a trailer hitch must have a trailer hitch installed to improve, incrementally, the performance of the vehicle in certain types of low-speed collisions.

#### **Parts Information**

<u>Part Number</u> <u>Description</u>

**CBXTN461AA** Trailer Hitch Package (MSQ = 5)

Each package contains the following components:

<b>Quantity</b>	<u>Description</u>	
1	Hitch, Trailer	
6	Bolt, Hex Head	

<u>Each dealer</u> to whom vehicles in the recall were assigned will receive enough Trailer Hitch Packages to service about <u>20%</u> of those vehicles.

NOTE: A trailer hitch wiring harness is not included and/or part of the installation of the trailer hitch assembly.

<u>Part Number</u> <u>Description</u>

CBXTN462AA Trailer Hitch Bolt Kit (bolts missing)

Each kit contains the following components:

Quantity Description6 Bolt, Hex Head

SPECIAL NOTE: There are a small number of trailer hitch packages (CBXTN461AA) that may have been built without providing the necessary bolts to install the trailer hitch. Order the above Trailer Hitch Bolt Kit (CBXTN462AA) only after it is determined that the bolt package is missing from the trailer hitch package.

#### **Parts Information (Continued)**

Part Number Description

CBXTN454AA Thread Repair Kit

Each package contains the following components:

<b>Quantity</b>	<u>Description</u>
1	Bit, 27/64 Cobalt Drill
1	Tap, 1/2 - 13 Taper
2	Bolt, Hex Head $(1/2 - 13 \times 1.625)$

**Part Number Description** 

68266621AA Label, Trailer Hitch

68264812AA Bracket, 7-Pin Trailer Hitch Wiring Connector

<u>Part Number</u> <u>Description</u>

04318032 Compound, Thread Locking

NOTE: Thread Repair kit CBXTN454AA will be superseded to CBXTN454AB in the near future. The original "AA" kit has bolts that do not have thread locking compound on the bolts. The new "AB" kit will contain bolts with thread locking compound already applied to the bolt threads.

If the "AA" kit is used, 04318032 thread locking compound must be applied to the bolt threads. Thread locking compound is not required if the "AB" kit is being used.

### **Special Tools**

The following special tools are required to perform this repair:

➤ 2015800140 Clearance Gauge Set (Figure 1)

➤ 2019700230 Induction Heating Tool (Figure 1)

➤ 2019900230 Replacement Induction Heating Tool Coil Kit

NOTE: If a replacement coil is required, an induction heating tool coil kit can be ordered at dealer expense. To order call: 855-298-2687 or go online to: www.MoparEssentialTools.com and click on Equipment Catalog. Then enter item number in the search box or go to Collision Repair / Miscellaneous.

NOTE: Each involved dealer received <u>one</u> Induction Heating Tool, free of charge, through Mopar Essential Tools in July of 2014. Aditional Induction Heating tools can be ordered at dealer expense.





Figure 1 - Special Tools

#### **Service Procedure**

#### A. Inspect Vehicle

- 1. Inspect the **rear of the vehicle** for collision damage:
  - ➤ If there is no collision damage, continue to Step 2 of this procedure.
  - ➤ If there is minor collision damage, but no apparent frame damage, continue to Step 2 of this procedure.
  - ➤ If there is collision induced frame damage, the recall cannot be completed until the collision damage is repaired. Continue with Section H. Document Corrosion and/or Collision Damage.

NOTE: The cost of collision damage repair is the responsibility of the vehicle owner.

- 2. Inspect for a trailer hitch:
  - ➤ If the vehicle is equipped with a <u>factory</u> installed trailer hitch (looks identical to a CBXTN461AA replacement hitch), continue with Section G. Install Trailer Hitch Label.
  - ➤ If the vehicle is equipped with an <u>aftermarket</u> trailer hitch, continue with Section B: Measure and Inspect Aftermarket Trailer Hitch.
  - ➤ If the vehicle does not have a trailer hitch, continue with **Section C: Inspect** Frame Rails for Corrosion.

### **B:** Measure and Inspect Aftermarket Trailer Hitch

- 1. Lift the vehicle on an appropriate hoist.
- 2. Using Special Tool 2015800140 labeled KJ, measure the clearance between the fuel tank and the aftermarket trailer hitch (Figure 2):
  - ➤ If there is adequate clearance between the fuel tank and the aftermarket trailer hitch, continue with Step 3 of this procedure.
  - ➤ If there is inadequate clearance between the fuel tank and the aftermarket trailer hitch (Figure 2), continue with **Section C: Inspect Frame Rails for Corrosion**.

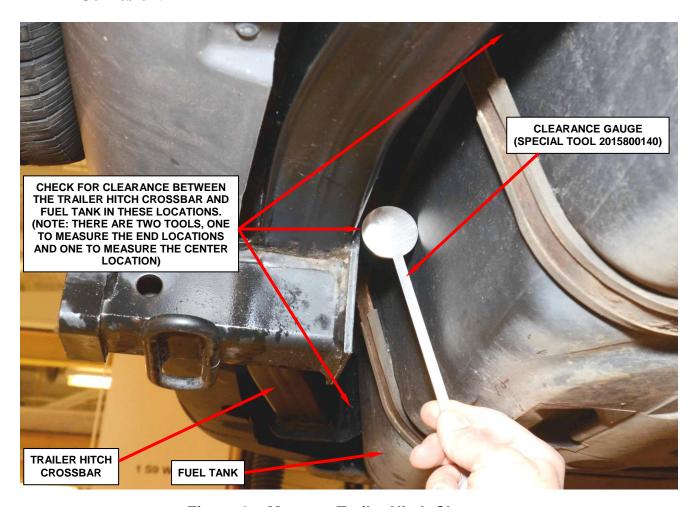


Figure 2 - Measure Trailer Hitch Clearance

- 3. Inspect the aftermarket trailer hitch for sharp edges and/or corners that could puncture the fuel tank in the event of a rear end collision (Figure 3):
  - ➤ If there are no obvious sharp edges and/or corners on the aftermarket trailer hitch, continue with **Section G. Install Trailer Hitch Label.**
  - ➤ If there are sharp edges and/or corners on the aftermarket trailer hitch, continue with **Section C: Inspect Frame Rails for Corrosion**.



Figure 3 – Inspect Aftermarket Trailer Hitch

#### C: Inspect Frame Rails for Corrosion

- 1. Lift the vehicle on an appropriate hoist.
- 2. Inspect the rear right and left frame rails for corrosion (Figure 4):
  - ➤ If there is little or no corrosion of the frame rails (level 1 or 2), continue with Section D. Install Trailer Hitch.
  - ➤ If there is light (level 3) to medium (level 4) corrosion of the frame rails (Figures 5 and 6), but no perforation of the frame rail metal, continue with **Section D. Install Trailer Hitch**.
  - ➤ If there is heavy corrosion and/or perforation through the frame rail(s) (level 5 corrosion), the recall cannot be completed until the corrosion damage is repaired (Figure 4). Continue with Section H. Document Corrosion and/or Collision Damage.

NOTE: The cost of the corrosion damage repair is the responsibility of the vehicle owner.

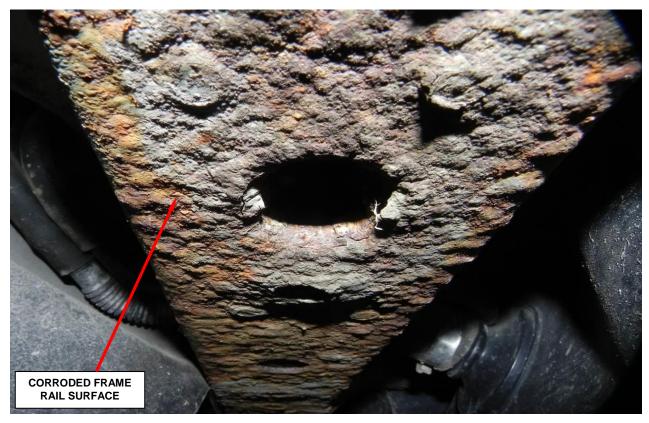


Figure 4 – Heavily Corroded Frame Rail (Level 5 Corrosion)



Figure 5 – Level 4 Corrosion



Figure 6 – Level 3 Corrosion

#### D. Install Trailer Hitch

- 1. <u>If equipped</u>, remove and discard the recovery bracket and/or shipping bracket located on the right and/or left rear frame rail (Figure 7).
- 2. <u>If equipped</u>, remove and discard aftermarket trailer hitch.

NOTE: If any studs and/or bolts are corroded in place, use the induction heating tool (special tool 2019700230) to heat the bolt/stud to aid in removal. Follow the instructions provided with the induction heating tool to appear to the induction heating tool.



Figure 7 – Recovery Bracket

operate the induction heating tool safely and effectively.

- 3. Using Mopar Penetrating spray, apply penetrating spray to the six trailer hitch mounting bolt holes on the frame rails.
- 4. Disconnect the exhaust tail pipe rubber hangers from the body.
- 5. Using a **12 mm x 1.75** tapered thread tap, chase the threads in all six trailer hitch mounting bolt holes on the rear frame rails (Figure 8).

CAUTION: Be sure to lubricate the thread tap with cutting-oil.



Figure 8 – Chase Threads in Weld Nut with a Tap

- 6. With the help of an assistant, place and secure the new trailer hitch onto a transmission jack (Figure 9).
- 7. Using the transmission jack, raise the trailer hitch into position (Figure 9).
- 8. Install all six trailer hitch mounting bolts in the right and left trailer hitch mounting holes, hand tight (Figure 10).
- 9. Tighten all six trailer hitch mounting bolts to 65 ft. lbs. (88 N⋅m) (Figure 10).

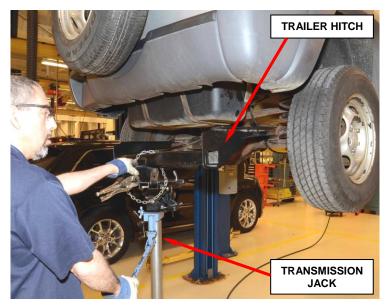


Figure 9 – Lift Trailer Hitch into Position

CAUTION: If any of the six trailer hitch mounting bolt holes strip-out before reaching the proper tightening specification, continue with Section E. Thread Repair.

If all trailer hitch mounting bolts achieve the proper tightening specification without stripping out, continue with Step 10 of this procedure.

- 10. Remove the transmission jack.
- 11. Connect the exhaust tail pipe rubber hangers.
- 12. For vehicles equipped with trailer wiring, continue with Section F.
  Trailer Hitch Wiring.
- 13. Continue with **Section G. Install Trailer Hitch Label.**



Figure 10 – Install Mounting Bolts (left side shown)

#### E. Thread Repair

- 1. Remove and discard the original bolt(s) that stripped-out.
- 2. Using the 27/64 inch drill bit provided in the repair kit, drill out the weld nut(s) threads (Figure 11).
- 3. Using the thread tap provided in the repair kit, tap new threads into the weld nut(s) (Figure 12).

CAUTION: Be sure to lubricate the thread tap with cutting-oil.

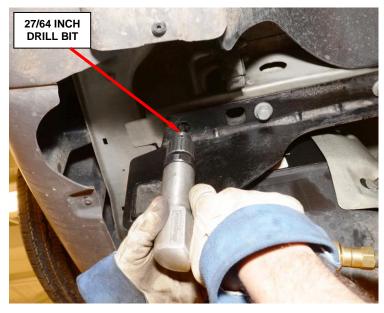


Figure 11 - Drill out Weld Nut(s) Threads

- 4. **For thread repair kit CBXTN454AA only**, install the provided conical washer onto the bolt with the crowned side towards the bolt head.
- 5. <u>For thread repair kit CBXTN454AA only</u>, apply three drops of thread locking compound to the bolt threads.
- 6. Install the provided oversized bolt(s) into the oversized hole and tighten to 65 ft. lbs. (88 N·m).
- 7. Remove the transmission jack.
- 8. Connect the exhaust tail pipe rubber hangers.
- For vehicles with trailer wiring, continue with Section
   F. Trailer Hitch Wiring.
- 10. Continue with **Section G. Install Trailer Hitch Label.**



Figure 12 - Tap New Threads into Weld Nut(s)

#### F. Trailer Hitch Wiring

NOTE: The following procedure is only to be performed on vehicles that had trailer hitch wiring previously installed. Vehicles that did not have a trailer hitch and/or trailer hitch wiring are not eligible for this procedure. If the customer requests trailer hitch wiring, the <u>cost to install wiring</u> is the vehicle owner's responsibility.

- 1. <u>For vehicle equipped with a 4-pin electrical connector</u>, secure the wiring as required with plastic tie straps.
- 2. <u>For vehicles equipped with a 7-pin electrical connector</u>, use the following procedure to install a 7-pin electrical connector bracket:

NOTE: The installation instructions below are basic guidelines to install a 7-pin connector bracket (P/N 68264812AA) to the trailer hitch. Deviation to these instructions may be required for proper installation.

- a. Place the bracket against the bottom of the hitch cross car beam and position approximately 6 8" to the left of the hitch receiver and the mounting tab pointing towards the front of the vehicle
- b. Using the bracket mounting holes as a template, mark the centers of the holes using the scribe
- c. Using the centering punch, create a divot at the scribe marks for the drill to center on.
- d. Using the hand drill and #27 drill bit, create two through holes for the mounting screws.
- e. Mount the bracket to the hitch using 2 tapping screws (1/4" hex socket) tighten until secure.

CAUTION: Do not over tighten the tapping or machine screws and nut. Use  $\frac{1}{4}$ " hand driver and sockets. The maximum torque should not exceed 26 in. lbs. (3 N·m).

- f. Secured the 7-way connector to the bracket using 4 screws and 4 nuts included in the kit.
- 3. Continue with Section G. Install Trailer Hitch Label.

### **G. Install Trailer Hitch Label**

- 1. Clean the area where the label will be applied with a clean lint-free cloth.
- 2. Remove the release paper from the back side of the label.
- 3. Install the label to the trailer hitch receiver as shown in Figure 13.

NOTE: If the vehicle has an aftermarket hitch, if possible, install the label in the factory trailer hitch label location (Figure 13). If the label does not fit in the factory hitch label location, install the label in a location where the user of the trailer hitch can see and read the label.

4. Lower the vehicle from the hoist and return the vehicle to the customer.

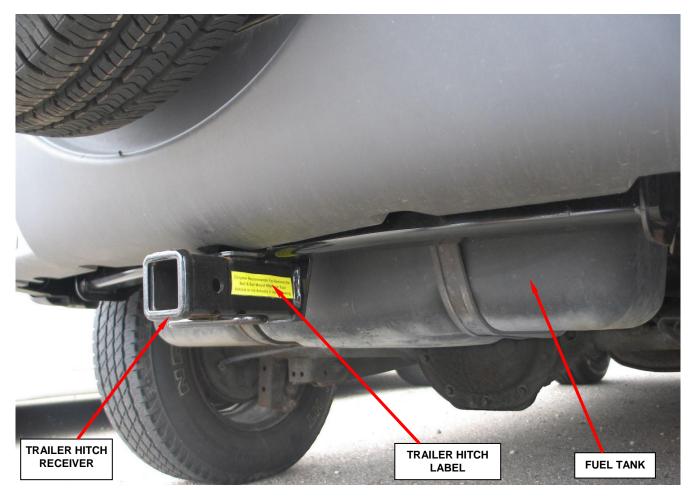


Figure 13 - Install Label on Right or Left Side of Trailer Hitch Receiver

### H. Document Corrosion and/or Collision Damage

NOTE: The following procedure is only required if the inspection performed in Section "A" or Section "C" determines that the vehicle cannot have a trailer hitch installed.

- 1. Using a digital camera, take legible image(s) of the affected area (trailer hitch assembly area undercarriage).
- 2. Print a paper copy of the provided "Level 5 Corrosion/Collision Damage" form.
- 3. Fill in the required information on the "Level 5 Corrosion/Collision Damage" form.
- 4. Attach the completed "Level 5 Corrosion/Collision Damage" form and legible image(s) to the recall claim.
- 5. Lower the vehicle from the hoist and return the vehicle to the customer.

RECALLS N45, N46 and N47					
LEVEL 5 CORROSION / COLLISION DAMAGE					
UNABLE TO COMPLETE RECALL					
Select the Recall that applies to the below VIN.					
	Recall N45	Recall N46	Recall N47		
VIN (last 8 digits):		Repair Order #:	Inspection Date:		
Dealer Code:	Dealer Contac Phone Number				
	Level 5 Corrosion/Collision Dam hitch attachment points are in	nage - Inspection revealed damag capable of supporting the proper			
Reason for Denial: Level 5 Corrosion/ Collision Damage Inspection Revealed					
By signing, Customer is acknowledging that he/she has been advised by the Service Manager that, due to the existence of Level 5 Corrosion/Collision Damage, the condition of the vehicle (identified by VIN above) does not allow the installation of a Chrysler OEM hitch assembly or replacement mounting bolts. Customer further acknowledges that he/she has been advised what, if any, repairs (at customer's expense) are needed before installation can be performed.					
Customer's Name:		Customer's Signature:			
			Date:		
Service Manager:		Service Manager's Signature:			
	ed the document explaining /Collision Damage detail No	Customer signature acquired  Yes No	Date:		

#### **Completion Reporting and Reimbursement**

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by Chrysler to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

	Labor Operation	Time
Inspect the vehicle for a trailer hitch, frame corrosion and/or collision damage and install trailer hitch label	<u>Number</u> 13-N4-61-81	Allowance 0.4 hours
Inspect the vehicle for a trailer hitch, frame corrosion and/or collision damage, install a new trailer hitch and install trailer hitch label	l 13-N4-61-82	0.8 hours
Inspect the vehicle for a trailer hitch, frame corrosion and/or collision damage, remove aftermarket trailer hitch, install a new trailer trailer hitch and install trailer hitch label	13-N4-61-83	1.0 hours
Related Operation		
Repair one, two, or three threaded hole(s)	13-N4-61-50	0.2 hours
Repair four, five, or six threaded holes	13-N4-61-51	0.4 hours
Extract bolt(s)/stud(s) with induction heating tool	13-N4-61-52	0.2 hours
Document vehicles with "Level 5" frame corrosion and/or collision damage	13-N4-61-53	0.1 hours
Install 7-Pin Electrical Connector Bracket	13-N4-61-54	0.2 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

Refer to **Warranty Bulletin No. D-14-14** and follow the detailed instructions in the Warranty Bulletin to process this claim for "Level 5 Corrosion/Collision Damage.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

#### **Dealer Notification**

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

#### **Owner Notification and Service Scheduling**

All involved vehicle owners known to Chrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

#### **Vehicle Lists, Global Recall System, VIP and Dealer Follow Up**

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers <u>must</u> perform this repair on all unsold vehicles <u>before</u> retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

# **Additional Information**

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations Chrysler Group LLC