

**SB-10046599-3503**



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 Viewed: 231

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Title: Steering Wheel Weld Inspection

Applies To: ProStar®, LoneStar®, TranStar®, WorkStar®, DuraStar®

**DESCRIPTION**

This article provides the procedure for removing the steering wheel and inspecting the three welds between steering wheel hub and armature on the ProStar®, LoneStar®, TranStar®, WorkStar®, and DuraStar®.

**RELEASE DATE**

August 2012

**SUPERSEDES**

N/A

**TOOLS REQUIRED**

Description
Steering Wheel Puller (ZTSE4926) - If not available, use flange puller (with flat tip adapter)
Yellow Paint

**PARTS INFORMATION**

Part #	Description	Qty.
3709085C91	Wheel, Steering 18 in Wheel ASM, LTHR, Radio, Engine Brake	If Required
3551707C1	Nut, Steering Wheel	If Required

**LABOR OPERATIONS**

Operation #	Description	Time
A05-3320	Remove steering wheel, inspect welds, and install steering wheel.	0.5 Hours

**REPAIR PROCEDURE**

**WARNING:**

To prevent personal injury or death, shift transmission to park or neutral, set parking brake, and block wheels before doing diagnostic or service procedures.

**WARNING:**

To prevent personal injury or death, remove ground cable from negative terminal of main batteries before disconnecting or connecting electrical components. Always connect ground cable last.

**Steering Wheel Removal:**

1. Remove horn pad (Figure 1, Item 2) by placing both hands on top of pad and using your fingertips underneath top edge (Figure 1, Item 3) of pad to gently pull upward toward you.
2. Disconnect wire connector from back of horn pad (Figure 1).



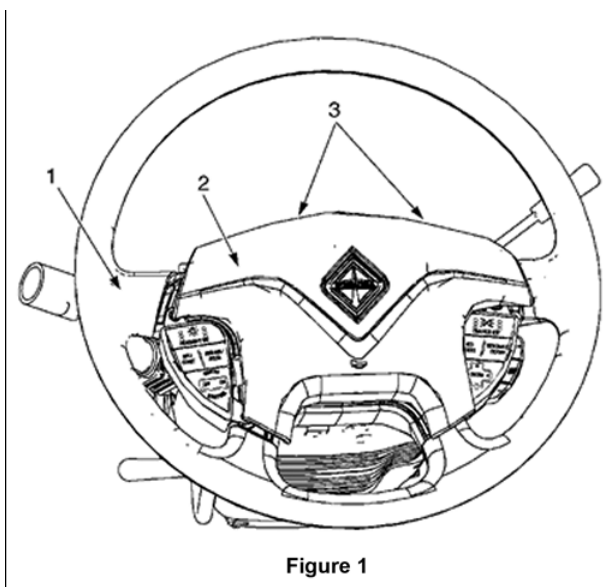


Figure 1

- 1. Steering wheel
- 2. Horn pad
- 3. Top Leading Edge

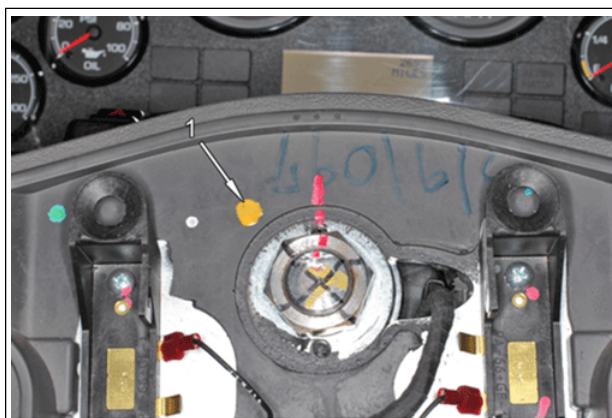
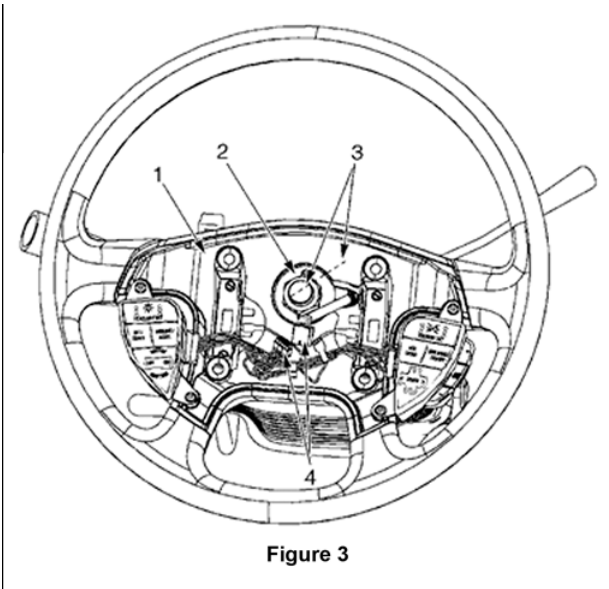


Figure 2

- 1. Yellow Paint Mark

- 5. Disconnect steering wheel harness connector (*Figure 3, Item 4*).
- 6. Remove retaining nut (*Figure 3, Item 2*) from steering wheel and steering column.





**Figure 3**

- 1. Steering Wheel
- 2. Retainer Nut
- 3. Reference Mark
- 4. Steering Wheel Harness Connector

**CAUTION :**

To avoid vehicle damage, do not use a H-bar type puller to remove the steering wheel.

7. Attach Steering Wheel Puller (ZTSE4926) (Figure 4A), if not available; attach a flange puller (with flat tip adapter) (Figure 4B) to the steering wheel. Apply enough pressure with puller to loosen steering wheel from steering column.

**NOTE:**

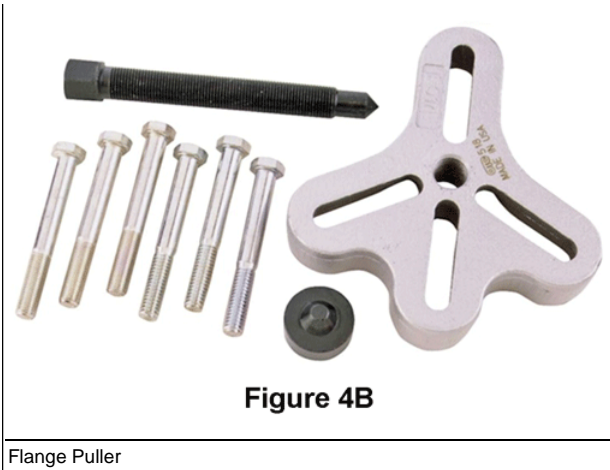
When attempting to remove the steering wheel, DO NOT strike Steering Wheel Puller with a hammer. If the steering wheel cannot easily be removed, STOP what you are doing and start a Tech Service Case File with the Chassis group for further instructions.

8. Proceed to remove the steering wheel if it will remove with ease; DO NOT force it.



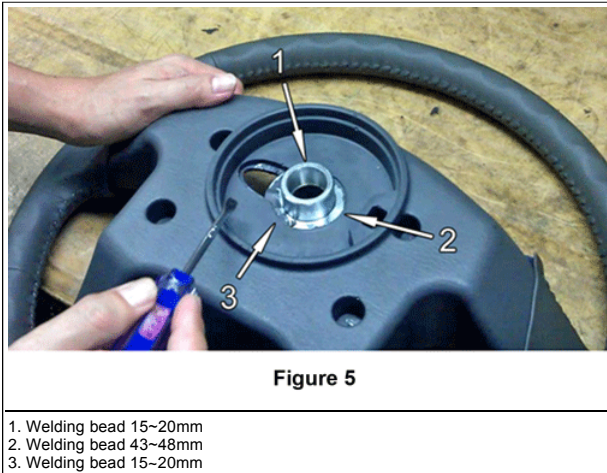
**Figure 4A**

Steering Wheel Puller - ZTSE4926

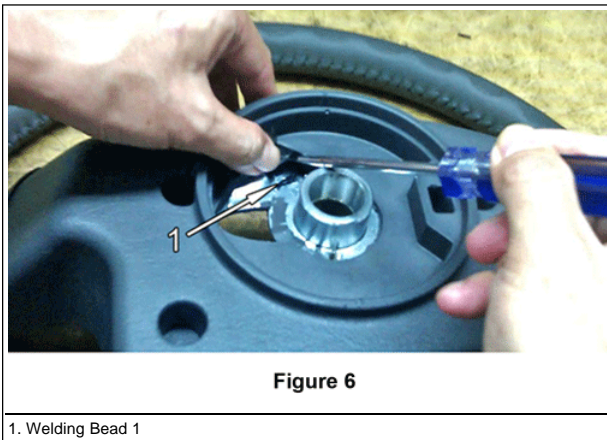


**Steering Wheel Welds Inspection:**

1. There are three welding beads between the steering wheel hub and armature (Figure 5, Items 1, 2, and 3).



2. Using a flathead screwdriver; pry up plastic cover slightly to check that Welding Bead 1 is present (Figure 6, Item 1).



3. Using a flathead screwdriver; pry up plastic cover slightly to check that Welding Bead 2 is present (Figure 7, Item 1).





**Figure 7**

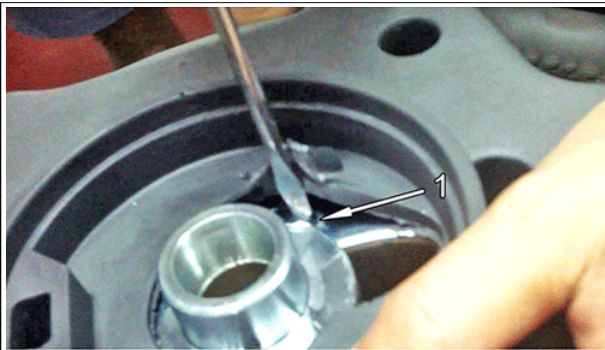
1. Welding Bead 2

4. Using a flathead screwdriver, pry up plastic cover slightly to check that Welding Bead 3 is present (*Figure 8, Item 1*).

5. If any of the three welding beads are missing or weld quality is questionable, install a new steering wheel.

**NOTE:**

**If the Steering Wheel needs to be replaced you MUST create a case file before replacing the Steering Wheels.**



**Figure 8**

1. Welding Bead 3

6. Flatten plastic cover after inspection (*Figure 9*).



**Figure 9**

7. Inspect and record steering wheel code (*Figure 10, Item 1*).

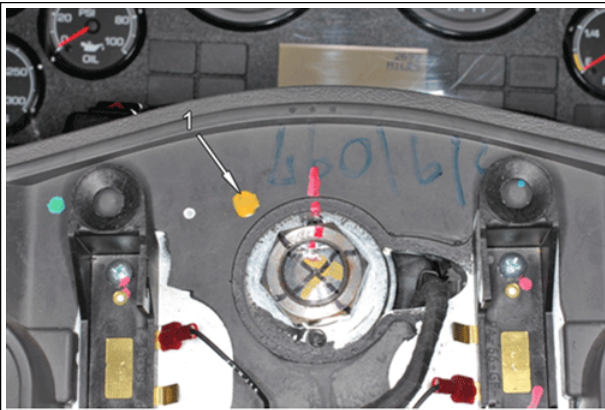




**Figure 10**

1. Steering Wheel Code

8. When inspection is complete and welds have been verified or a new steering wheel has been obtained and welds have been verified, mark the front side of steering wheel with a yellow paint mark, in the area immediately adjacent to the center hub (Figure 11, Item 1).

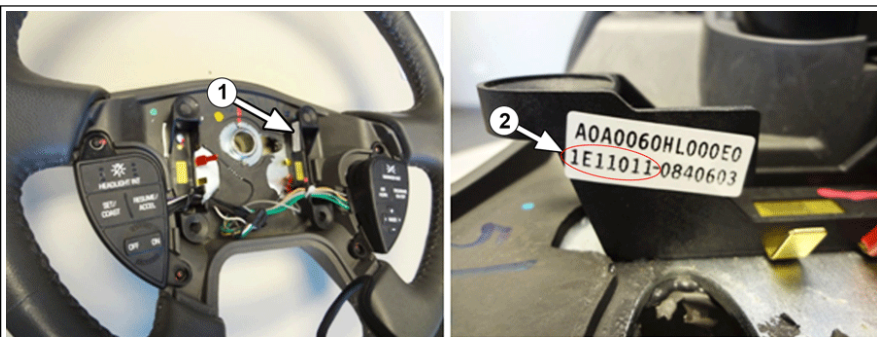


**Figure 11**

1. Yellow Paint Mark

9. Record information from date code tag (Figure 12, Item 1 and 2).

10. Document the steering wheel code and the date code on the Managed Repair File.  
 - Record the Julian Date Code (shown in Figure 12 and circled in red) (Figure 12, Item 2).



**Figure 12**

1. Date Code Tag  
 2. Julian Date Code

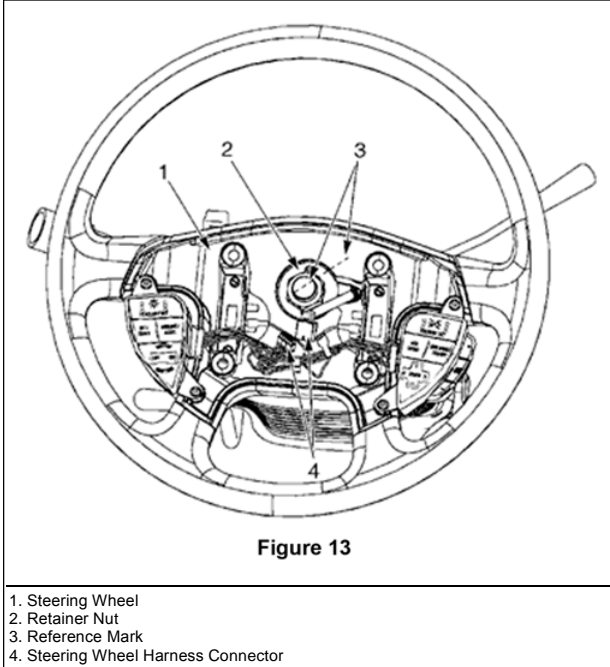
**Steering Wheel Installation:**

1. Position steering wheel on steering column shaft, make certain to align reference marks made during removal.
2. Install retaining nut (Figure 13, Item 2) on steering wheel and steering column.

-Torque nut to 63 lb-ft (85 N-m).

3. Connect steering wheel harness connector (Figure 13, Item 4).

4. Connect wire connector on back of the horn pad.



**CAUTION :**

**DO NOT** snap all four horn pad retaining posts in at the same time.

5. Position horn pad on top of steering wheel and align four horn pad retaining posts directly on top of their respective mating holes. Using the palm of your hand, gently tap each of the four horn pad corners starting with the lower right, then lower left, then upper right, and finally the upper left.

**WARRANTY INFORMATION**

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner as Warranty Code 01, Group 05000 Noun 252. It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

	GROUP	NOUN	C	WARR.	TP	PAD
GROUP _____						
NOUN _____						
C (CAUSE) Enter either 1, 2, 3. (see below)						
1. Inspected (No repair required).						
2. Inspected and repaired.						
3. Defective part from parts stock.						
WARRANTY (Warranty Code) _____						
TYPE PART Enter P for type part causing failure. _____						
PAD Enter 100 _____						

Warranty Claim Information					
Group	Noun	Cause (C)	Warranty Code	Description	Time (Hrs)
050000	252	B	01	Steering Wheel	0.5 Hours

Standard Repair Time		
Operation Number	Description	Time (Hrs)
A05-3320	Remove steering wheel, inspect welds, and install steering wheel.	0.5 Hours



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		Not Helpful:	0
Staff ID	Client ID	Comments	Created Date
U00AJB5		You received the following feedback From: U00AJB5 - Tony Buchman Email Address: SMTP:(Tony.Buchman@Navistar.com)Tony.Buchman@Navistar.com Feedback: Do they use this style wheel on Transtar, WorkStar, and Durastar? I thought it was only used on ProStar and LoneStar, but I could be mistaken. It is possible that they are using this style across all product as an interior upgrade. The reason I ask is that the steering wheels I am familiar with on TranStar, WorkStar, DuraStar use a different horn pad retention method and removal is different than described. Respectfully, Tony B.	9/5/2012 5:08:11 AM

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