



Countries: UNITED STATES Document ID: IK0300074
 Availability: ISIS, NotSIR Revision: 0
 Major System: SPRINGS AND SUSPENSION Created: 3/1/2021
 Current Language: English Last Modified: 3/11/2021
 Other Languages: NONE Author: David Horner
 Viewed: 86

Less Info

Hide Details

Coding Information

Copy Link	Copy Relative Link	Bookmark View My Bookmarks	Add to Favorites	Print	Provide Feedback	Helpful 3	Not Helpful 1
-----------	--------------------	---	------------------	-------	------------------	--------------	------------------

Title: CV Air Spring Failure in Roll-Back / Wrecker-Hook Applications

Applies To: Vehicle Applications: Roll-Back & Wrecker-Hook (Recovery) built before 11/9/20 with feature codes 14TBL or 14TBM or 14TDG IROS Suspension and with 0014899 Suspension air control valve pressure release in cab SUSPENSION, REAR, AIR, SINGLE

CHANGE LOG

Please refer to the change log text box below for recent changes to this article:

03/11/2021 - Article Created

DESCRIPTION

Navistar has identified a failure condition where operators or technicians may report air leaking from rear suspension air spring(s).

In normal application conditions when switching feature code 0014899 to dump, the height control valve receives command to exhaust air and not refill the air springs until receiving fill command. When the rear air springs do not have air the frame rail will rest on the axle stops. The air springs are not pinched between the top and bottom plates (Figure 1).

In Roll-Back & Wrecker-Hook (Recovery) applications built before 11/9/20 with IROS suspension feature codes and suspension dump feature code 0014899, air spring failure may occur under certain circumstances when the air spring is pinched between the top and bottom plate. Body builder designs may not restrict the range of motion for hydraulic body controls which cause the frame rail to rise from the axle stops and the air springs to be stretched open & collapse without air pressure (Figure 2). The operator retracts the hydraulics toward the stowed position, the frame rail lowers back onto the axle stop and pinches the collapsed air spring (Figure 3). A pinched air spring may leak air (Figure 4). In some cases, the rubber may also be dislodged from the bottom spring plate (Figure 5).

Navistar has taken the following actions in production as result of failures

- Reduced the overall height of air spring- Effective 3/16/20
 - Reduced the maximum extended length of the rear shock absorber- Effective 9/28/20
 - Blocked suspension dump feature code in Roll-Back & Wrecker-Hook (Recovery) applications- Effective 11/9/20
- 0014899- SUSPENSION AIR CONTROL VALVE Pressure Release Control In Cab





Figure 1: Normal view of air spring when suspension is dumped

Picture taken after suspension has fully dumped



Figure 2: Collapsed Suspension Air Spring

Picture taken when body builder hydraulic controls are operated while suspension is dumped



Figure 3: Pinched Suspension Air Spring (CONDITION IS NOT NORMAL)

Picture taken when body builder hydraulic controls are operated back towards the stowed / transport position while suspension is dumped



Figure 4: Torn Air Spring

Picture taken after air spring has been removed from vehicle to inspect for leaking air



Figure 5: Damaged Air Spring

Picture taken after air spring has been removed from vehicle to inspect for leaking air

SYMPTOM(s)

Diagnostic Trouble Code(s) & Dashboard Indicator Light(s):

DTC/Light	Description
N/A	

Customer Observations or Concerns:

- Failed rear suspension air spring in Roll-Back (Recovery)& Wrecker-Hook (Recovery) applications
- Collapsed, pinched, torn

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Tool Number	Comments	Instructions
N/A			

SERVICEPARTS INFORMATION

Kit Description	Part Number	Quantity Required	Notes
SPRING, AIR RIDE	GY1R10171	2	3890365C1
ABSORBER, SHOCK ABSORBER	4214011C2	2	

DIAGNOSTIC STEP(s)

Refer to Repair Steps below

REPAIR STEP(s)

1. Park vehicle on dry, level ground, install wheel chocks, set parking brake, and place transmission in Park
2. Replace both rear air springs and both rear shocks with the part numbers provided in this document using [CV Technician Manual \(Service & Diagnostic\) 0001111853](#)
3. Remove wheel chocks, repair complete

WARRANTY INFORMATION

Warranty Claim Coding:

Refer to the [Warranty Coding Manual](#) for Group and Noun Codes.

Standard Repair Time(s):

Refer to the [SRT Manual](#) for Repair Times

OTHER RESOURCES

[Master Service Information Site](#)

 Hide Details

Feedback Information

Viewed: 85
Helpful: 3
Not Helpful: 1

No Feedback Found