

# SERVICE BULLETIN

UTILITY TRAILER MANUFACTURING CO.



August 15, 2016

UTM Reference: SB-08-200 / 410219  
NHTSA Reference #16E045

## IMPORTANT NON-COMPLIANCE EQUIPMENT RECALL NOTICE

**Subject: BENDIX® SR-5 VALVE**

Dear Customer:

This letter is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Utility Trailer Manufacturing Co. ["Utility"], in consultation with the National Highway Traffic and Motor Vehicle Safety Administration, has decided to notify its customers that a defect which relates to motor vehicle safety exists in certain 2014-2016 refrigerated trailers, dry van trailers and flatbeds. In response to this situation, Utility is initiating a voluntary Non-Compliance Equipment Recall to address the potential defect and to address concerns.

### ***The problem:***

This recall includes all Bendix® SR-5 trailer spring brake valves manufactured between January 1, 2014 and March 4, 2016. The SR-5 is a trailer only product so no powered vehicles (tractors) are impacted. This issue potentially affects any trailer that utilizes this valve. This action does not impact SR-5 spring brake valves manufactured prior to or after the stated dates. These valves may have been improperly machined which may cause the parking brake chamber to fail while the trailer is parked. If the parking brake chamber fails while the trailer is parked, the trailer may roll away, increasing the risk of crash or injury.

### ***Affected trailers:***

This recall notice provides instructions for the following trailers:

- Certain Dry Vans built between January 2014 and March 2016
- Certain Reefer Vans built between January 2014 and March 2016
- Certain Flat Beds built between January 2014 and March 2016

You are receiving this notice because Utility's records show you as the purchaser of one or more of the affected trailers.

- Attached is a list of your trailers' VIN; if your trailer is not equipped with a Bendix® SR-5, please disregard.

### **Next Steps:**

Please review the attached Bendix summary of SR-5 recall and remedy. Bendix will supply Utility dealers with 200 kits to ramp up a ready supply. Utility PDC will stock the kits for resupply needs. Kits will contain a recall form that must be completed and submitted to Utility Warranty.

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*\*Please Note* - recall forms that are included in the kit is generic to Bendix. Recall forms must be received by Utility Trailer Manufacturing – Field Service Department.

***The following actions can be taken by vehicle owners until the final remedy is available:***

- When parking, drivers should **always use** the yellow “PARKING BRAKE” button to assure both the tractor and trailer (including yard tractors) are parked: **do not** park your vehicle using only the red “TRAILER AIR SUPPLY” button.
- **SPECIAL NOTE FOR IN-YARD MANEUVERING**: Park vehicle on level surfaces, lower the fifth wheel and ensure the landing gear is in contact with the ground prior to pulling away. As an additional precaution, wheel chocks are recommended.

***What you should do:***

Contact your local Utility dealer’s service department to schedule the intended remedy.

***If you need help:***

If you have any questions or concerns that your dealer is unable to resolve, please call Utility Trailer Manufacturing Co. / Field Service Department at 800-423-6591.

If after having attempted to take advantage of this recall you believe you have not been serviced according to this bulletin within a reasonable amount of time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, D.C., 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to <http://www.safercar.gov>.

***If you are the lessor of this vehicle:***

Please forward a copy of this notice to the lessee within ten days to comply with federal regulations.

We apologize for any inconvenience this Non-compliance Equipment Recall may cause but your safety is our first concern. Thank you for your understanding.

Sincerely,

Utility Trailer Manufacture Co. / Field Service Department

# Bendix SR-5 Trailer Spring Brake Relay Valve Recall

July 2016



- Issue Description
- Symptoms on Affected Trailers
- Root cause
- Production & Field Solutions
- Status – Timing of remedy

# Issue Description

## From NHTSA Web Portal

### **Describe the defect:**

Certain SR-5 Trailer spring brake valve bodies were machined without a radius (Internal check valve seat)

### **Describe the cause:**

During transition to a new valve body supplier, a radius dimension was inadvertently omitted from a revised engineering drawing.

### **Describe the safety risk:**

Under certain conditions (primarily off-highway or in trailer yards) there can be a delay in the application of the spring brakes to park the trailer after the operator pulls the dash valve button. This slow to park condition could lead to trailer roll away after decoupling from the tractor.

### **Impacted Product**

This recall includes all Bendix SR-5 trailer spring brake valves manufactured between January 1, 2014 and March 4, 2016.

**No Accidents or Injuries Reported or Claimed**



# Symptoms on Affected Trailers

If the internal leakage develops in the SR-5, a leak can be heard or observed. This leakage will continue until the trailer reservoirs & spring brake chambers are depleted of air pressure.

- If coupled to a tractor, a leak may be heard from the exhaust of the dash valve (Bendix® MV-3™ dash control valve) or from the tractor protection valve.
- If uncoupled, a leak may be heard at the supply (red) gladhand on the trailer.

Additionally, if uncoupled & the internal leakage is present, there will be a loss of air pressure in the trailer reservoir, resulting in the eventual parking of the brakes. 'Slow to apply' condition can range from 30 seconds to several minutes depending on the severity of the leak (compared to <3 second compliance requirement). Lastly, empty reservoir may impact the function of other air powered features on the trailer, such as slider locking pins, if so equipped.

## Bendix observations from discussions @ Impacted Fleet Customer

- Driver reported trailer “following switcher tractor” during de-couple
- Fleet reported one event at dock where trailer moved, causing dock plate bridge (used by tow motor to enter trailer) to marginally contact trailer.
- Fleet owner viewed issue as a safety concern - Risk of tow motor dislodging bridge.
- Common switcher operator practice is to only set the trailer brakes to minimize cycle time
- Switcher trailer combinations vulnerable to roll prior to landing gear touchdown if SR5 is from date range & certain other conditions (system pressures, etc.) are present & tractor (yellow button) is not used.

### Interim Recommended Actions:

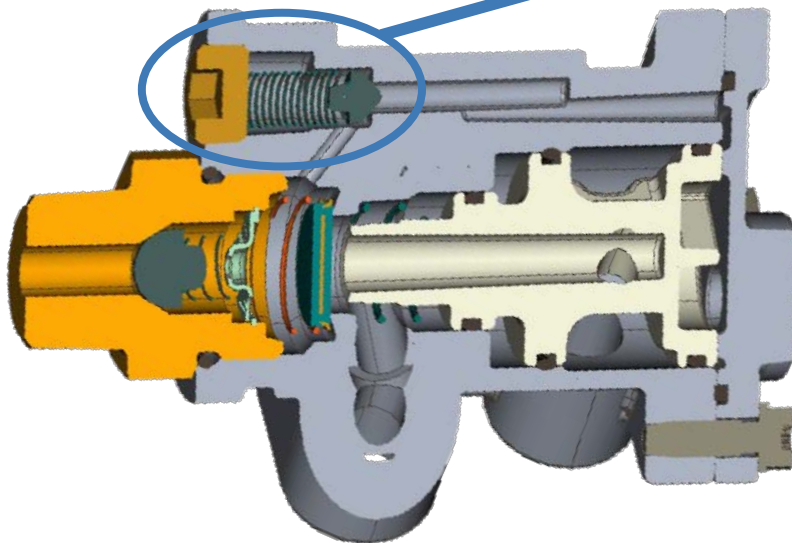
1. **Ensure use of Power unit parking during decoupling (Yellow Button)**
2. **Ensure Landing Gear contact with Ground prior to Pull away.**
3. **Usage of Wheel Chocks**
4. **Park on Level Ground**

# Root cause

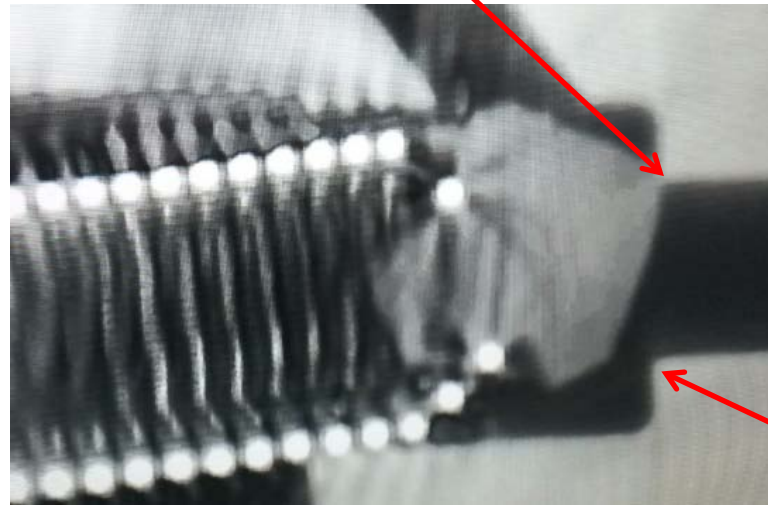
## Missing Radius on Aluminum valve Body

When combined with certain field conditions – causes misalignment of internal Check Valve

Sectional view of check valve assembly in seated position



Caught on Sharp Edge



Missing Radius on Valve Body



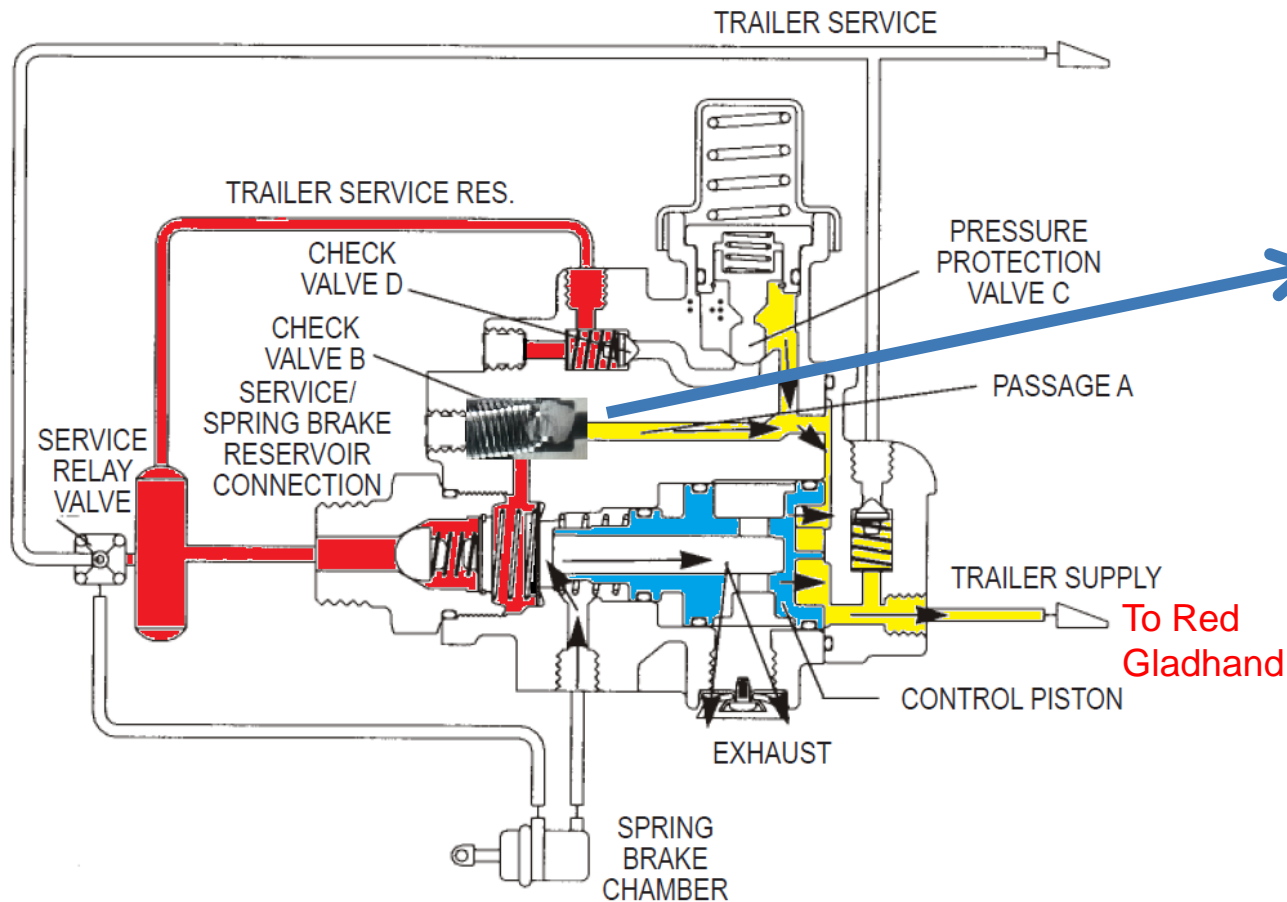
Check Valve seat  
(Radius Present / Radius Not Present)

If Valve becomes Misaligned, Leakage can be Large enough to cause 'Slow to Park'

# Root cause

## Missing Radius on Aluminum valve Body

When combined with certain field conditions – causes misalignment of internal Check Valve



If Leakage is present (& large enough), the leaking air provides enough back pressure on the main control piston (**BLUE**) to prevent normal movement. If the main piston does not move, immediate exhaust (<3 seconds) cannot happen.

This is how the leakage from the check valve is causing the 'slow to park' condition.

Once leakage fully exhausts tank pressure, the backpressure drops, the main piston moves & the trailer parks.

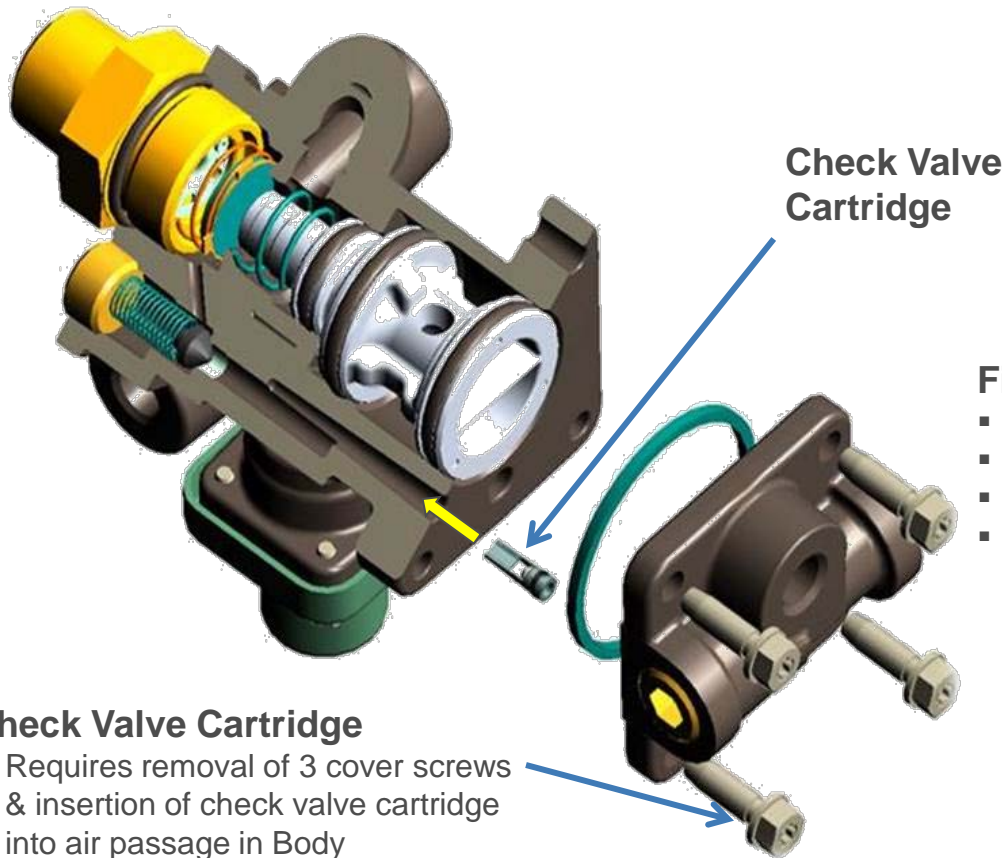
Missing Radius (combined with other conditions) can cause leakage – preventing immediate parking



# Solution

## Production Remedy - Re-introduce Radius on Valve Body (Began on Mar 4, 2016)

Field Remedy – Field Rework Procedure to insert a Redundant Check valve cartridge in air passageway. Procedure will not require removal & replacement of SR-5.



### Check Valve Cartridge

- Requires removal of 3 cover screws & insertion of check valve cartridge into air passage in Body
- Successfully remedied 100% of field returns w/ issue.



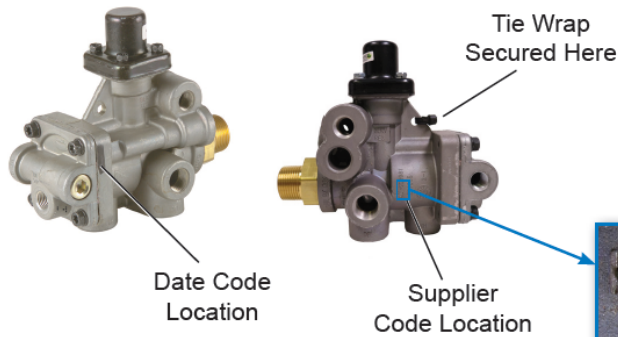
### Field Remedy Kit

- Fully Validated as of June 15 2016
- Bendix is in process of production ramp up of kit
- Target Kit Release Date – August 2016
- Follow-up Recall letters for both OE & AM customers will be mailed in late July, early August & will include:
  - Details on Identification of affected valves (Date codes)
  - Details for Kit ordering
  - Recall claim form – to track Trailer VIN's per NHTSA recall requirements & ensure reimbursement
  - Installation instructions (Including Video on website)
  - Post installation Identification (tie wrap on valve)



# Action Required For Identifying the Recalled Bendix® SR-5™ Valve

## How do I know if the valve has been replaced on my vehicle?



To verify that the Bendix® SR-5™ valve has been repaired per the recall campaign, look for the presence of a black or green tie wrap secured to the valve body. **No further action is required.**



Green Tie Wrap  
(supplied in recall repair kit)

## Identifying SR-5 valves covered in this field action

### Valve Identification

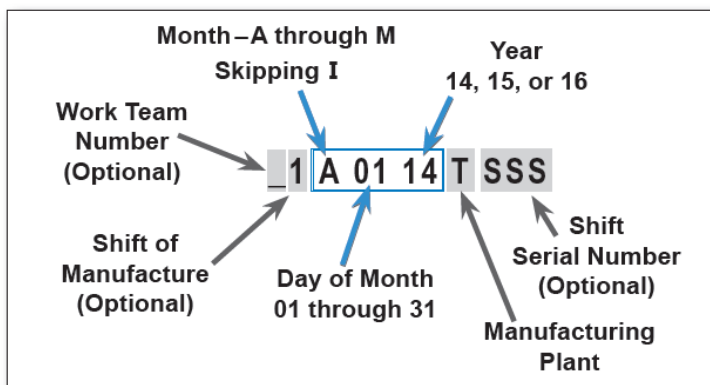
The Bendix SR-5 valves covered by this campaign can be identified by the supplier code and the date of manufacture located on the valve body. Verification of both is required to determine if the valve is a part of the campaign. Valves covered by this campaign must meet the following criteria:

1. The supplier code—"IKD"—cast in the body and located as shown in the illustration above; and
2. The date of manufacture between January 1, 2014 and March 4, 2016, inclusive. To verify the date code see *Interpreting the Date Code* below.

### Interpreting the Date Code

A date code is stamped (not cast) on the SR-5 valve body housing. *Locate the date code – removing the paint coating, if necessary – to read the code.* Disregard the Work Team Number, Shift of Manufacture, Manufacturing Plant and Shift Serial Number codes shown in gray below. The portion of the date code that determines the date of manufacture is highlighted and can be interpreted as follows:

- The first field is the month (A=January, B=February, etc. – excluding the letter I – so that J=September, and so on),
- The next two fields are the day of the month (e.g. 01 = 1<sup>st</sup>); and
- The next two fields are the year (e.g. 14=2014)



Valves included in this field action were manufactured during the period:

January 1, 2014 through March 4, 2016  
That is, A0114T through C0416T

For recall support, call the Recall Assistance Center at 1-877-345-9526  
8 a.m. – 5 p.m. Monday – Friday EDT

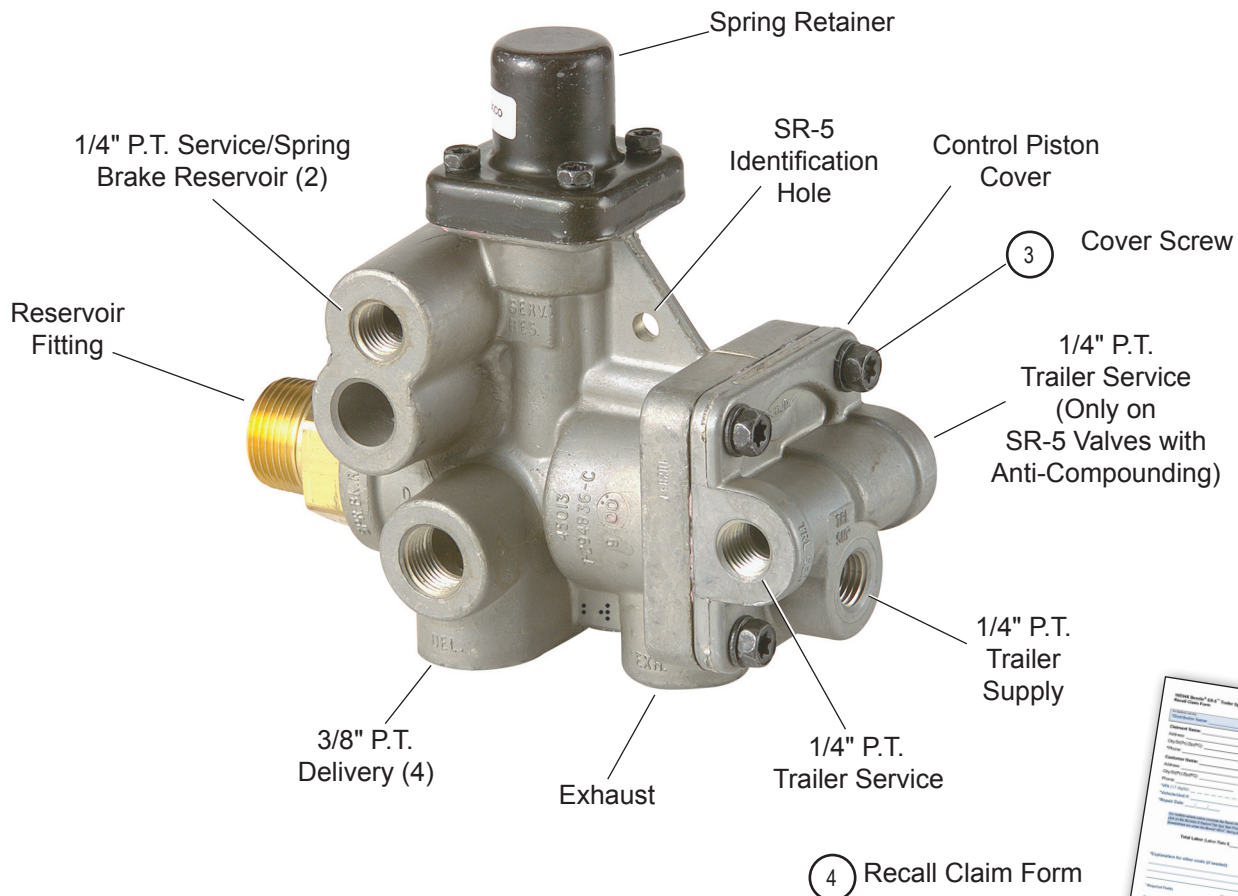
For technical support, call the Tech Team at 1-800-AIR-BRAKE (1-800-247-2725)  
8 a.m. – 6 p.m. Monday – Thursday and 8 a.m. – 5 p.m. Friday EDT



# Installation Instructions

Recall Campaign No. 16E045

## FIELD REPAIR KIT FOR THE BENDIX® SR-5™ TRAILER SPRING BRAKE VALVE



The Bendix SR-5 Field Repair Kit Consists of the Following:

Key No.	Description	Qty.
1	Check Valve Cartridge	1
2	Green Tie Wrap	1
3	Cover Screw	1
4	Recall Claim Form	1
5	Bendix Decal (not shown)	1

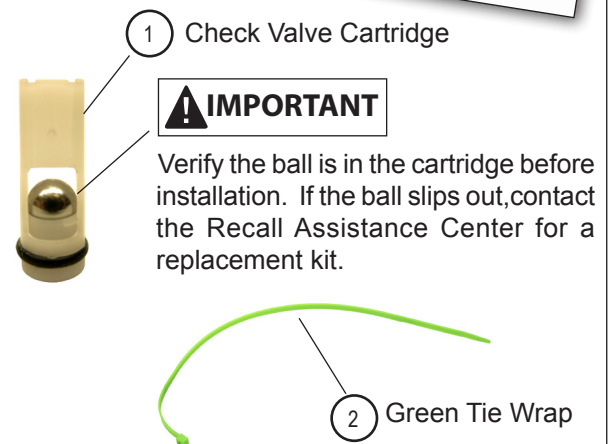


Figure 1 – Bendix SR-5 Trailer Spring Brake Valve Exterior View



## GENERAL SAFETY GUIDELINES

**WARNING! PLEASE READ AND FOLLOW THESE INSTRUCTIONS**

### TO AVOID PERSONAL INJURY OR DEATH:

**When working on or around a vehicle, the following guidelines should be observed AT ALL TIMES:**

- ▲ Park the vehicle on a level surface, apply the parking brakes and always block the wheels. Always wear personal protection equipment.
- ▲ Stop the engine and remove the ignition key when working under or around the vehicle. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. Where circumstances require that the engine be in operation, **EXTREME CAUTION** should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated or electrically-charged components.
- ▲ Do not attempt to install, remove, disassemble or assemble a component until you have read, and thoroughly understand, the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
- ▲ If the work is being performed on the vehicle's air brake system, or any auxiliary pressurized air systems, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle. If the vehicle is equipped with a Bendix® AD-IS® air dryer system, a Bendix® DRM™ dryer reservoir module, or a Bendix® AD-9si® air dryer, be sure to drain the purge reservoir.
- ▲ Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
- ▲ Never exceed manufacturer's recommended pressures.
- ▲ Never connect or disconnect a hose or line containing pressure; it may whip and/or cause hazardous airborne dust and dirt particles. Wear eye protection. Slowly open connections with care, and verify that no pressure is present. Never remove a component or plug unless you are certain all system pressure has been depleted.
- ▲ Use only genuine Bendix® brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, wiring, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
- ▲ Components with stripped threads or damaged parts should be replaced rather than repaired. Do not attempt repairs requiring machining or welding unless specifically stated and approved by the vehicle and component manufacturer.
- ▲ Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
- ▲ For vehicles with Automatic Traction Control (ATC), the ATC function must be disabled (ATC indicator lamp should be ON) prior to performing any vehicle maintenance where one or more wheels on a drive axle are lifted off the ground and moving.
- ▲ The power **MUST** be temporarily disconnected from the radar sensor whenever any tests **USING A DYNAMOMETER** are conducted on a vehicle equipped with a Bendix® Wingman® system.
- ▲ You should consult the vehicle manufacturer's operating and service manuals, and any related literature, in conjunction with the Guidelines above.

## GENERAL

This instruction sheet is intended to provide the necessary information to service the Bendix® SR-5™ trailer spring brake valve with an internal check valve cartridge. This is in connection with Recall Campaign number 16E045.

This kit contains a check valve cartridge (1), a green tie wrap (2) and one cover screw (3). The cover screw (3) is included in the event one is damaged or lost during the installation process.

## PREPARATION

1. Use a wire brush to clean the exterior of the SR-5 valve especially around the control piston cover. Use compressed air to blow away loose debris to ensure that the valve does not become contaminated when being serviced.
2. Verify that the valve does not have a black or green tie wrap through the SR-5 identification hole. If a tie wrap is present, this valve has already been serviced with this kit. Return the vehicle into service.
3. Verify the valve meets the recall criteria as outlined in the **RECALL GUIDELINES** section of this document. If the valve falls outside of these parameters, return the vehicle to service.

## DISASSEMBLY

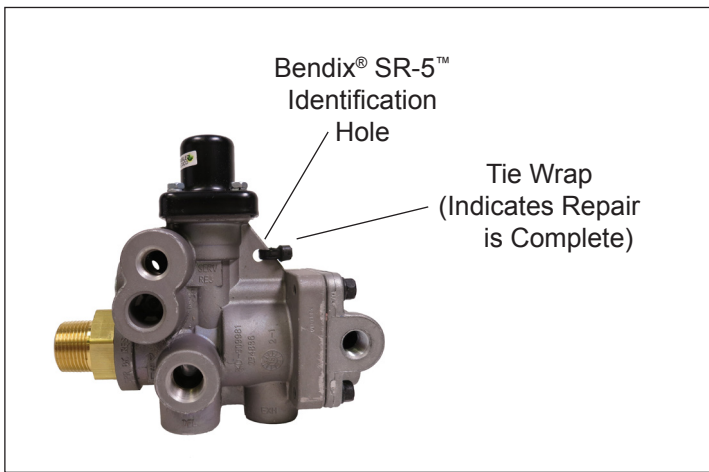
The installation of this kit requires that the control piston cover be loosened, but not completely removed from the valve body.

1. Identify and disconnect all the air lines connected to the control piston cover. *(Refer to Figure 4.)*
2. It is necessary to rotate the fitting in the trailer supply port to complete this step. Rotate the fitting counterclockwise only (loosening) no more than 90°. *(Refer to Figure 3.)*
3. Remove cover screws "B", "C", and "D". While holding the control piston cover in place, loosen cover screw "A" 4-5 turns. Carefully rotate the cover clockwise – pivoting on screw "A" – until the check valve passage in the body is visible. Hold the cover in this position to retain the control piston in the body. *(Refer to Figure 5.)*

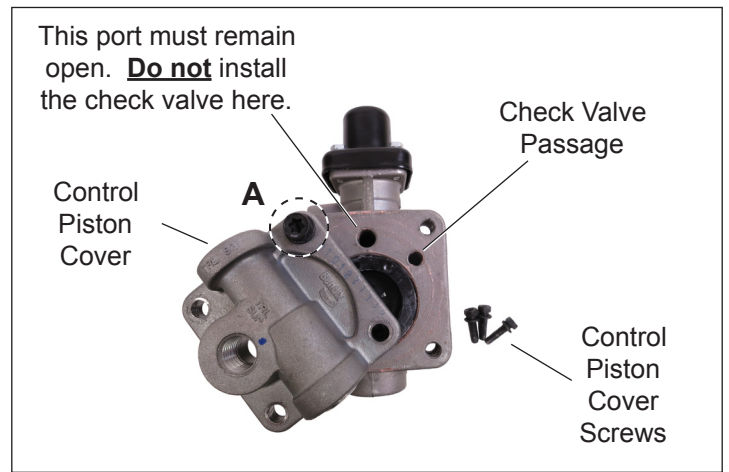


**OVER-ROTATING THE COVER MAY ALLOW THE CONTROL PISTON AND RETURN SPRING TO COME OUT OF THE VALVE. IF THIS HAPPENS, REMOVE ANY DEBRIS THAT MAY ADHERE TO THE PISTON AND REINSERT, SPRING FIRST. *(Refer to Figure 7.)***

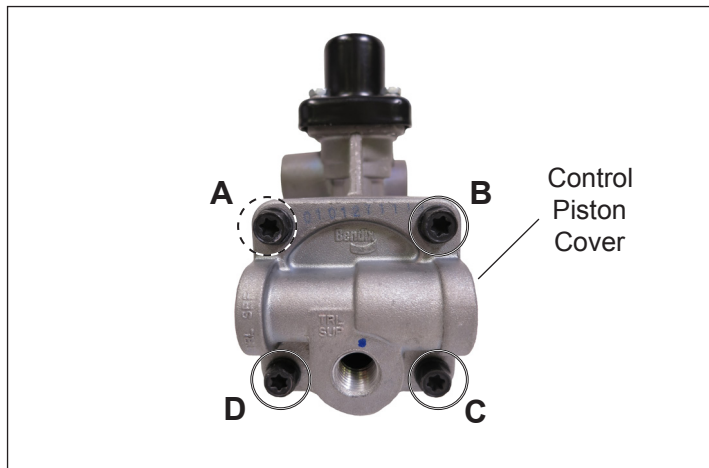
4. Exercise caution to prevent damage to the cover seal as shown in Figure 6.



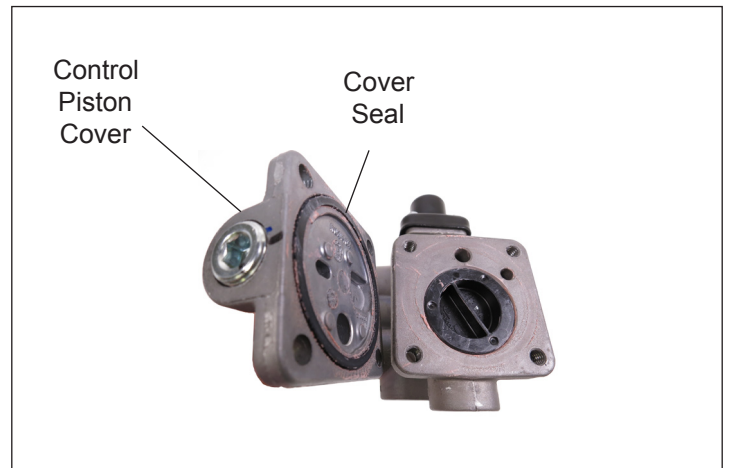
**Figure 2 – Tie Wrap Location**



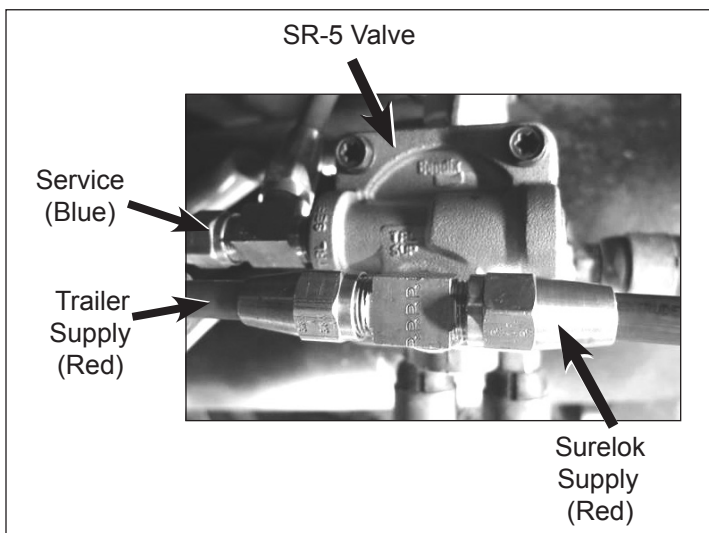
**Figure 5 – Check Valve Passage**



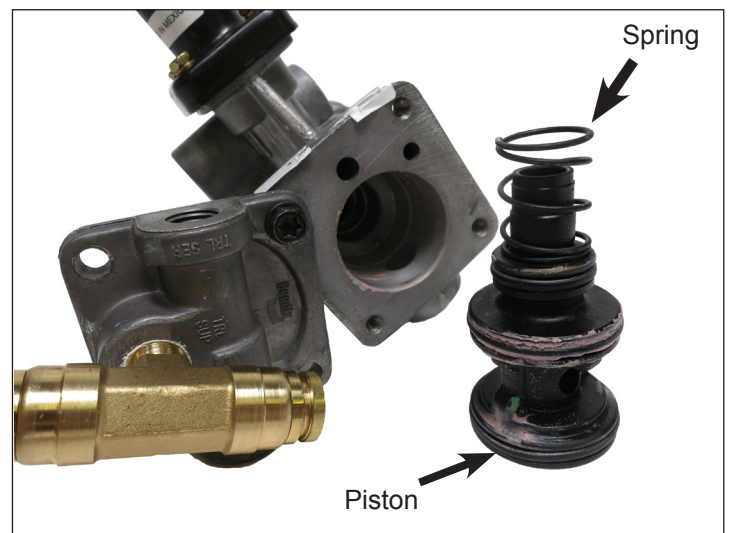
**Figure 3 – Control Piston Cover Screws**



**Figure 6 – Cover Seal**



**Figure 4 – Piston Cover Air Line Connections**



**Figure 7 – Piston and Spring**



## ASSEMBLY

### CAUTION

1. Ensure that the check valve cartridge (1) is intact as shown in Figure 8.
2. Holding the larger diameter (o-ring end) of the check valve cartridge (1) insert the pointed end into the air passage. Push the check valve cartridge (1) in lightly with your finger until it is flush with the body housing. (Refer to Figure 8.)

### ATTENTION

THE CHECK VALVE CARTRIDGE (1) WILL FIT SNUGLY INTO THE CORRECT AIR PASSAGE. DO NOT INSERT THE CHECK VALVE CARTRIDGE (1) INTO THE LARGER AIR PASSAGE.

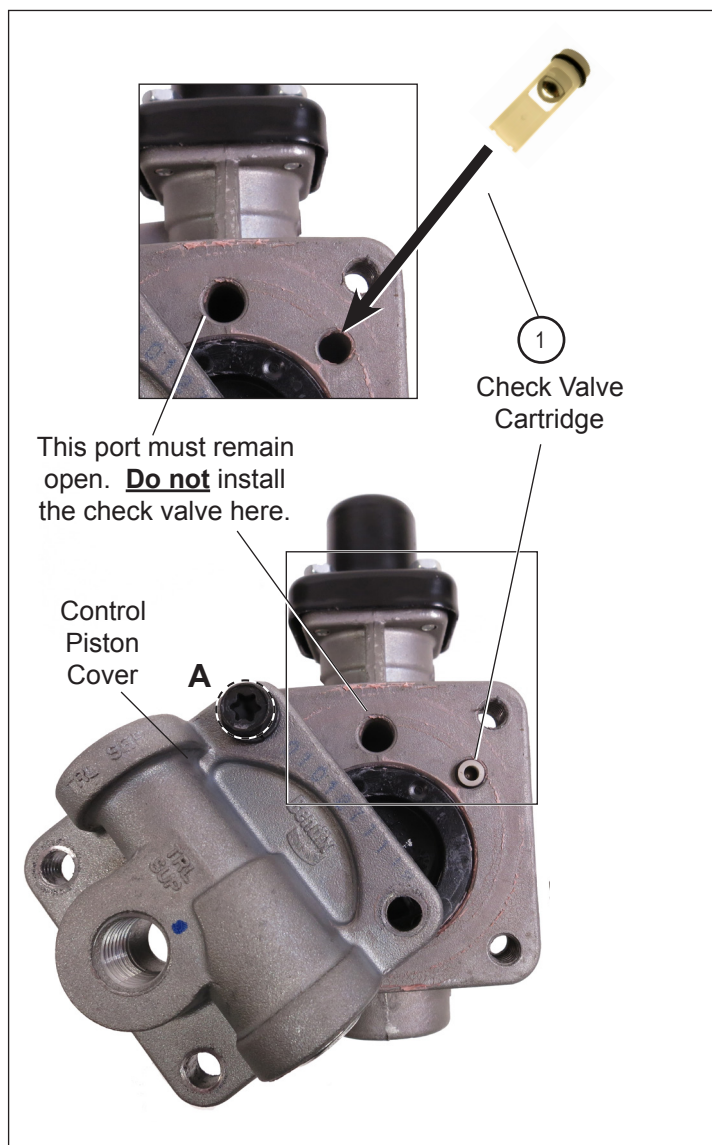
3. Rotate the cover back into position and install the three screws. Torque all four screws in a crossing pattern to 100 in-lbs. (A, C, D then B). (Refer to Figure 3.)
4. Reposition any fittings that may have been moved and reconnect the air lines.
5. Perform OPERATIONAL AND LEAKAGE TESTS before placing the vehicle back into service.

## OPERATIONAL AND LEAKAGE TESTS

This test can be performed by connecting the red trailer gladhand to a tractor or an external air source. Check the air source gauge against a gauge known to be accurate before performing these tests.

1. Block all wheels or hold the vehicle by means other than the air brakes, and drain all pressure from the trailer reservoir.
2. Install a gauge in the trailer reservoir(s). Connect the air source to the red supply gladhand of the trailer on which the Bendix® SR-5™ trailer spring brake valve is to be tested. Build the trailer to full system pressure by placing the tractor park control valve in the charge position, or by applying an external air source. Make sure that the spring brake chambers release before the reservoir starts to fill.
3. When full system pressure is reached –and the spring brakes are fully released–apply a soap solution to the control piston cover and fittings that were removed during the repair. A one inch bubble in five seconds is permissible.
4. Place the trailer air supply valve in the exhaust position, or disconnect the external air source. The spring brakes should apply. This will be evident by a full exhausting of chamber pressure at the SR-5 valve exhaust port.

If the repair was completed correctly, the park brakes should be set, and the reservoir pressure should hold steady with no decay. If the valve does not perform properly, repeat the installation procedure and retest.



**Figure 8 – Check Valve Cartridge Installation**

5. Drain the reservoirs and remove the gauge that was installed in the trailer reservoir(s) for testing purposes. Reinstall the fitting that was removed. Recharge the trailer air system and check for leaks using a soap solution. A one inch bubble in five seconds is permissible.
6. For identification purposes, secure the green tie wrap (2) through the identification hole located on the valve body. (Refer to Figure 2.)
7. Included in this kit is a Bendix decal (5) that can be placed on the trailer upon completion of the valve installation. The installation of this decal is not required; however, it may be helpful for quick identification of the trailers that have been serviced per the recall.

## RECALL DOCUMENTATION

Upon completion of the Bendix® SR-5™ valve repair, complete the Recall Claim Form (4) provided. This documentation is required for labor reimbursement and for NHTSA completion verification.

### RECALL GUIDELINES

*Note: Bendix SR-5 valves with a green or black tie wrap through the identification hole in the body have already been repaired. No further servicing is required. (Refer to Figure 2.)*

The SR-5 valves covered by this campaign can be identified by the supplier code and the date of manufacture located on the valve body. Verification of both is required to determine if the valve is a part of the campaign. Valves covered by this campaign must meet the following criteria:

1. The supplier code—"IKD"—located as shown in Figure 9; and
2. The date of manufacture between January 1, 2014 and March 4, 2016, inclusive. To verify the date code see INTERPRETING THE DATE CODE below.

### INTERPRETING THE DATE CODE

A date code is stamped (not cast) on the SR-5 valve body housing. *Locate the date code – removing the paint coating, if necessary – to read the code.* Disregard the Work Team Number, Shift of Manufacture, Manufacturing Plant and Shift Serial Number codes shown in gray below. The portion of the date code that determines the date of manufacture is highlighted and can be interpreted as follows:

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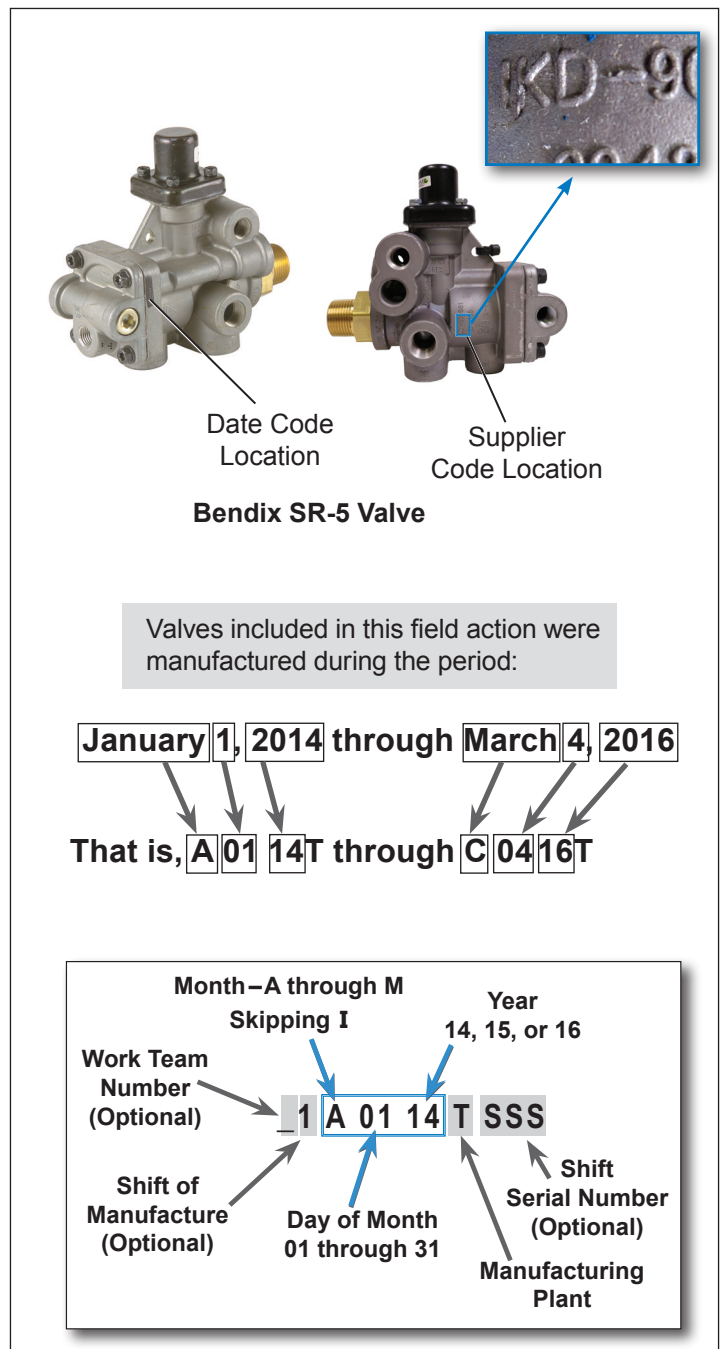


Figure 9 – Recall Identification





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