

RODGARD® RUNFLAT SYSTEM

Instruction and User Guide



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TO REORDER WHEELS, TIRES, RUNFLATS OR PARTS:

CALL (716) 710-5175

OR EMAIL: runflats@hutchinsoninc.com

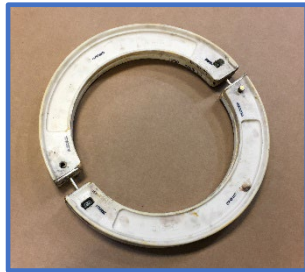
Hutchinson Industries Defense & Mobility Systems
92 Monsignor Valente Drive, Buffalo, New York 14206

Phone: (716) 710-5175 **Website:** www.hutchinsoninc.com **Email:** runflats@hutchinsoninc.com

RODGARD RUNFLAT KIT CONTENTS (Included)



A
1 x Runner



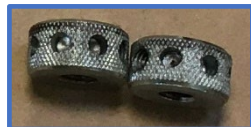
B
2 x Roller Segments



C
1 x Metal Tire Valve Stem (alloy/steel)



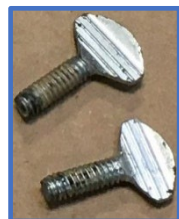
D
2 x Eye Bolt



E
2 x Spanner Nut



F
1 x Spanner Adjustment Tool



G
2 x Thumb Screw



H
2 x Hex Head Bolt



I
1 x Runflat Lubricant Packet



J
1 x Thread Locker



K
1 x Rubber Friction Strip



L
1 x Hutchinson Installation Label



M
1 x Hutchinson Runflat Label



N
1 x Rodgard Runflat System User Guide

TPMS RELOCATION BRACKET KIT CONTENTS (Included)

TPMS Relocation Kit (Part Number RP-14838-01):



A 1 x Aluminum Bracket
Part Number: RP-14835-01



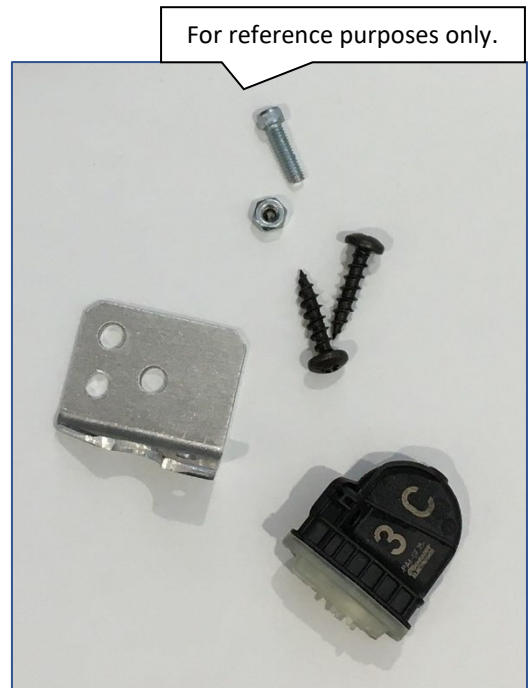
B 1 x #5-40 x 1/2 Socket Head Screw
Part Number: RP-14836-01



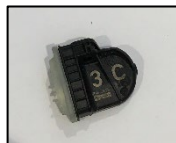
C 1 x #5-40 Nylon Lock Nut
Part Number: RP-14837-07



D 2 x #8 Self-Tapping Screws
Part Number: RP-12370-01



Not Included In The TPMS Relocation Kit:



1 TPMS Sensor



2 Silicon Sealant/Adhesive



3 Power drill

REQUIRED HAND TOOLS, EQUIPMENT AND HARDWARE

Not included in the Rodgard Runflat kit:



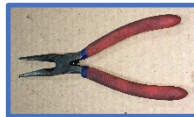
1
Wheel



7
Tape Measure



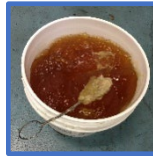
2
Tire



8
Pliers



3
Standard Tubeless Tire Mounting Machine*



9
Tire Mounting Grease/Soap



4
Bead Breaker Slide Hammer



10
Wooden Blocks



5
9/16" [14 mm] Socket Extension Ratchet



11
Tire Valve Core Remover



6
Standard Tubeless Tire Mounting Tools

*Two (2) tire irons can be used in place of a tire mounting machine.

SAFETY NOTES AND ASSEMBLY PREPARATION

IT IS MANDATORY FOR YOU TO FOLLOW INSTRUCTIONS AS OUTLINED IN THE USER GUIDE. FAILURE TO COMPLY WITH THIS PROCEDURE AND/OR NON-USE OF THESE TOOLS CAN ADVERSELY AFFECT THE OPERATION OF THE RUNFLAT AND REDUCE ITS LEVEL OF PERFORMANCE. HUTCHINSON SHALL NOT BE HELD LIABLE TO ANY CLAIMS IF THE INSTRUCTIONS IN THIS PAMPHLET ARE NOT FOLLOWED BY THE USER.

- The Rodgard Runflat System is installed during the tire installation.
- The instructions in this user guide are intended for standard Rodgard Runflat systems only. If different hardware is included in your kit, please contact Hutchinson.
- To help assist with installation, some photos do not depict the lubricant on the roller and runner.
- For first time installation, it may be beneficial to install the system on the wheel without the tire. This will allow you to become familiar with the steps prior to full installation
- It also may be beneficial to have an assistant help with the assembly.

RODGARD RUNFLAT DISASSEMBLY

Disassembly: STEP 1

Use Tire Valve Core Remover (11) to remove tire valve core and deflate the assembly completely until there is no air pressure felt in the tire.



11



Disassembly: STEP 2

Use Tire Mounting Machine (3) to unseat both inboard and outboard tire beads. If machine is not available, use bead breaker (4).



3



-or-

4



Disassembly: STEP 3

Use the Tire Mounting Machine (3) or Tire Iron (6) to remove outer tire bead.



3



-or-

6



Disassembly: STEP 4

Use Wooden Blocks (10) to create space to access runflat. Locate and remove both Hex Head Bolts(H) with a Socket Extension Ratchet (5).



10



H



5



Disassembly: STEP 5

Remove Wooden Blocks (10). Insert Tire Iron (6) to remove Runner (1).



10



6



A



Disassembly: STEP 6

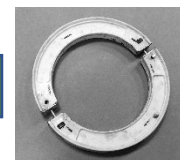
Tilt Tire (2) and remove each Roller Segment (B).



2



B



Disassembly: STEP 7

Using a Tire Mounting Machine (3) or a Tire Iron (6), remove bottom tire bead out of the rim.



3



-or-

6



RODGARD RUNFLAT INSPECTION CRITERIA

NOTE: After a wheel has operated in runflat mode, Hutchinson recommends that the Rodard Runflat is always replaced together with the tire.

These recommendations are intended to be used as a guideline to make a visual determination if a Rodgard Runflat can be re-used when replacing the tire.

Due to the nature of the product and materials used, Hutchinson cannot warranty future performance or be held liable for any assessment with the form, fit or function of the product under the depicted criteria.

1. When to replace a Rodgard Runflat?

- a. Hutchinson recommends replacing any Rodgard Runflat that is older than five years. The date of manufacture can be found on the "Hutchinson Runflat Label" affixed to the wheel.
- b. If the wheel has operated in runflat mode.
- c. If the runflat, roller or runner has any visible cracks.

2. When should a Rodgard Runflat be inspected?

- a. At every tire change.
- b. If the vehicle has operated in runflat mode.

3. How to inspect a Rodard Runflat?

- a. Inspections should occur on a fully disassembled Rodgard Runflat. Follow disassembly instructions.
- b. The Rodgard Runflat should be cleaned and examined carefully for cracks, damage, excessive wear, or mechanical damage sustained during use. Use clean towels to remove debris from the runner and roller bearing surfaces. If needed, use water and, not solvents, to remove runflat lubricant, dust or residue.
- c. Inspect the following components for signs of damage or excessive wear
 - i. Roller segments (B)
 - ii. Runner (A)
 - iii. Metal tire valve (C)
 - iv. Hardware (Eye Bolt (D), Hex Head Bolt (H), Thumb Screw (G), Spanner Nut (E))
- d. If damage or excessive wear is found, replace components as needed. This may include corrosion, cracks, galling, and bending or deformation.

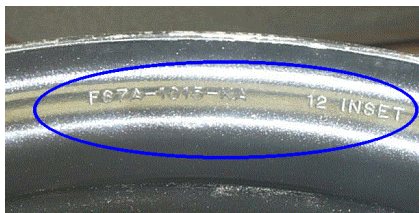
HOW TO ORDER RODGARD RUNFLAT PARTS

1. If a Rodgard Runflat needs to be reordered, refer to Hutchinson Runflat Label (M) for the part number.



2. If there is no label, record all wheel markings. Whether you are using a steel or alloy wheel, there is usually an area on the rim where the manufacturer stamps various codes, or wheel markings. The codes are a series of numbers and letters that provide coded information about the wheel such as its size. Please record all alphanumeric characters.
3. Record tire size.
4. Send all information to Hutchinson.

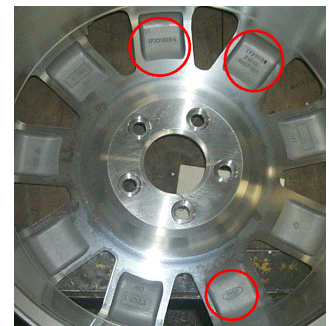
Places to locate wheel markings:



Inside lip of rim



Inside drum of rim (ex: 14 x 6 wheel)



Inside face of hub (alloy)



Outer face of disc (steel)



Inner face of disc (steel)



Outer face of hub (alloy)

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OR EMAIL: runflats@hutchinsoninc.com

HOW TO ORDER RODGARD RUNFLAT PARTS

RUNFLAT ASSEMBLY KIT PART NUMBERS (includes runner, roller and components)

| | | |
|----------------|-------------|----------|
| 16 INCH WHEELS | 16" RRF-STD | RP-10578 |
| 17 INCH WHEELS | 17" RRF-STD | RP-10584 |
| 18 INCH WHEELS | 18" RRF-STD | RP-10586 |

RODGARD RUNFLAT RUNNER, ROLLER AND COMPONENTS

| Component Description | | Rodgard Part Number | Specification/Size |
|-----------------------|---|---------------------|--------------------|
| A | Runner | RP-10589-01 | 16" |
| | | RP-10591-01 | 17" |
| | | RP-10592-01 | 18" |
| B | Roller Segments | RP-10566-01 | 16" |
| | | RP-10572-01 | 17" |
| | | RP-10574-01 | 18" |
| C | Metal Tire Valve Stem (1.17" LG) | RP-10538-03 | alloy wheels |
| | | RP-10538-01 | steel wheels |
| D | Eye Bolt | RP-10554-01 | |
| E | Spanner Nut | RP-10557-01 | |
| F | Spanner Adjustment Tool | RP-10595-01 | |
| G | Thumb Screw | RP-10559-02 | |
| H | Hex Head Bolt | RP-10560-01 | 16", 18" |
| | | RP-10560-02 | 17" |
| I | Runflat Lubricant Packet (118ml / 4oz) | MP-13240-01 | |
| J | Thread Locker (1ml / .034 oz) | MP-10535-01 | |
| K | Rubber Friction Strip | RP-12710-01 | |
| L | Hutchinson Installation Label | RP-13808-01 | |
| M | Hutchinson Runflat Label | RP-13983-01 | |

RODGARD RUNFLAT INSTALLATION AND TPMS RELOCATION INSTRUCTIONS

Assembly: STEP 1

Install Hutchinson Installation Label (L) on outside of the Wheel (1) near valve. Install Hutchinson Runflat Label (M) on Wheel (1) near valve. Make sure area is free of dirt and grease.



L



M

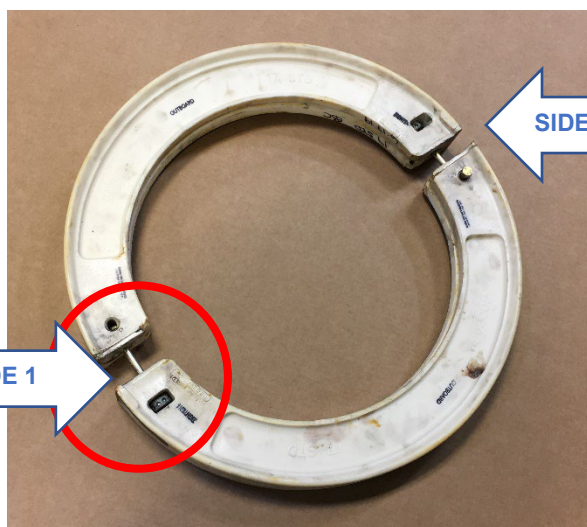


1



Assembly: STEP 2

On Side 1: Remove 1 Hex Head Bolt (H) and 1 Thumb Screw (G) from one side of the Roller Segments (B).



SIDE 2

SIDE 1

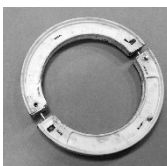
H



G



B



Assembly: STEP 3

On Side 2: On the Roller Segment (B), Rotate Spanner Nuts (E) to the end of the Eyebolt (D) by hand or with the Spanner Adjustment Tool (F).



B



E



D

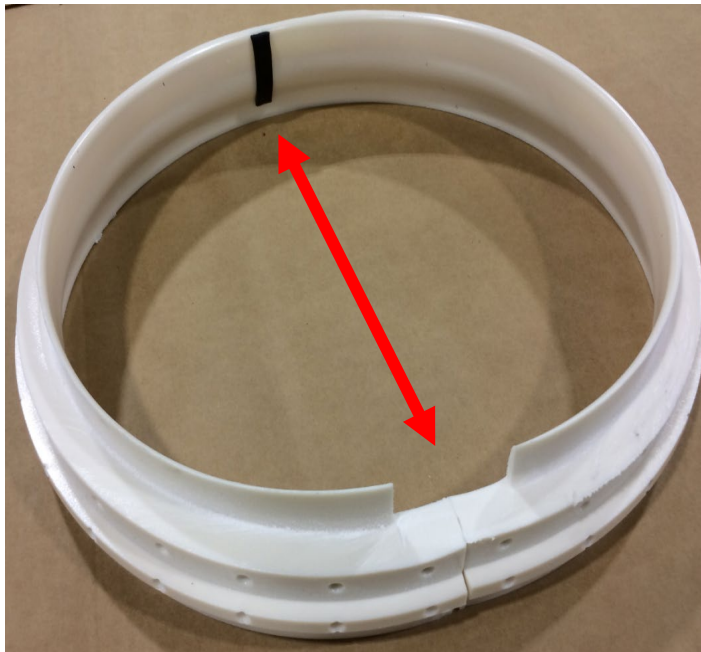


F

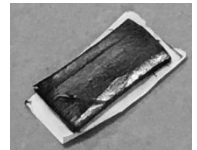


Assembly: STEP 4

Apply Rubber Friction Strip (K) to inside center of the Runner (A) opposite the opening



K



A



Assembly: STEP 5

Evenly apply packet of Runflat Lubricant (I) to outside of the Runner (A) bearing surface



I



A



Assembly: STEP 6

Apply Tire Mounting Grease/Soap (9) on the bead of the Tire (2).



9



2



Assembly: STEP 7

Install Metal Tire Valve Stem (C) on Wheel (1).



C



1



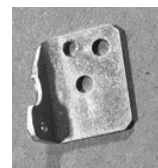
Assembly : (TPMS Relocation Bracket) STEP 8

Add a small amount of Silicone (2) to the Bracket (A).

For illustration purposes only.



A



2



Assembly : (TPMS Relocation Bracket) STEP 9

Attach the TPMS Sensor (1) to the Bracket (A) using the Socket Head Screw (B). Tighten until snug with the Nylon Lock Nut (C). *If your TPMS does not fit the bracket supplied, contact Hutchinson for a replacement bracket; (716) 852-1435 or runflats@hutchinsoninc.com.*



1



A



B



C



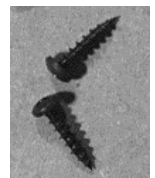
Assembly : (TPMS Relocation Bracket) STEP 10

Attach the assembled TPMS Sensor (1) and Bracket (A) from Step 9 to the Roller Segment 90° from the hardware. Secure with the Self-Tapping Screws (D) using an electric drill. Make sure the TPMS Sensor (1) is located near the tire valve.

For illustration purposes only.



D



3



Assembly: STEP 11

Using Tire Mounting Machine (3) install inboard tire bead halfway. If mounting machine is not available, use two Tire Irons (6).



3



-or-

6



Assembly: STEP 12

Separate the Roller Segments (B) opposite from the Roller Segment joint measured in Step #3. Begin installing the Roller Segments (B).



B



Assembly: STEP 13

Install the Runner (A) on the wheel. Make sure the outboard side of the wheel is facing up.



A



Assembly: STEP 14

Tilt Tire (2) to insert the Runner (A). Runner (A) must be seated in correct position on the drop center of the Wheel (1). Make sure the location of the Metal Tire Valve Stem (C) is aligned to the center of the open gap of the Runner (A).



2



A



1



C



Assembly: STEP 15

Place Wooden Blocks (10) between the Wheel (1) and Tire (2) to allow clearance to assemble Roller Segments (B).



10



1



2



B



Assembly: STEP 16

Rotate the entire unit until the hardware location of the Roller Segments (B) is approximately 90° from the Valve Stem (C).



For illustration purposes only.

B



C

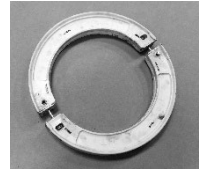


Assembly: STEP 17

Lift Roller Segments (B) so the groove sits on the Runner (A) tongue and the Eye Bolts (D) engage in the slot on Side 1 of the Roller Segment (B).



B



A



D



Assembly: STEP 18

While pulling the tire bead back with a Tire Iron (6), orient the Eye Bolt (L) so the eye is visible through the hole in the Roller Segments (B).



6



L



B



Assembly: STEP 19

Insert a Hex Head Bolt (H) and tighten with a Socket Wrench (5) to Roller Segment (B) surface.



H



5



B



Assembly: STEP 20

Use the Spanner Adjustment Tool (F) and turn the Spanner Nut (E) toward the Wheel (1). Tighten both ends equally until the Roller Segments (B) have a gap between 6 – 16mm. Use a standard tape measure to verify gap. Confirm Tire Valve (C) is still in Runner (A) gap.



F



E



1



B



C



A



Assembly: STEP 21

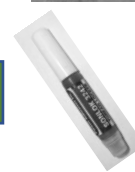
Clean Thumb Screw (G), apply Thread Locker (J) and insert into the Spanner Nut (H). Use Pliers (8) to tighten Thumb Screw (G) until snug. Rotate Thumb Screw (G) towards the outside of the Tire (2) until contact is made.



G



J



H



1



2



Assembly: STEP 22

Remove Wood Blocks (10) and tools from inside of the Tire (2). Apply Tire Mounting Grease/Soap (9) on the outboard tire bead and install. Finish mounting the tire bead onto the Wheel (1). Be careful of the fill valve as it may damage during installation. Inflate Tire (2) to recommended pressure. Balance the assembly and mount on the vehicle.



10



2



9

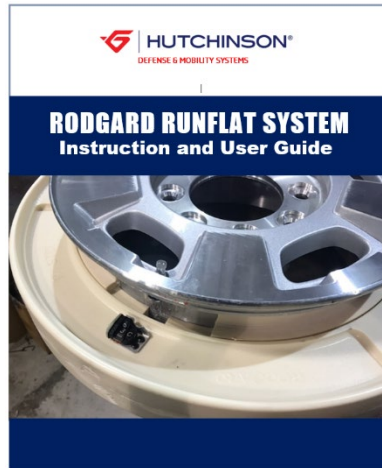


1



Assembly: STEP 23

Keep Rodgard Runflat Instruction and User Guide with the vehicle spare for future reference.



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