

THE TOOTA GROUP

Wheel Assemblies • RunFlat Systems • Tire Protection

Static RunFlat Systems

Fitting Instructions and User Guide • TTG-FI-SR-001 • Rev. A – July 2026

Remember to carry the fitting instructions and fitting tool with the vehicle tool kit.

MAXIMUM RECOMMENDED SPEED WITH DEFLATED TIRES: 50 km/h

FITTING TOOLS

Static RunFlat systems are designed to be fitted to multi-piece wheels (either 2-piece bolt-together or 3-piece demountable flange) and tubeless tires. These instructions apply to 3-segment Static RunFlat systems.

IMPORTANT. The fixing bolt locking method is a combination of Loctite thread adhesive and double locking washers under the head of each fixing bolt.

Both methods must be used.

Equipment needed for fitting

- A) Static fitting rig — required for 3-piece demountable flange wheels, optional for 2-piece bolt-together wheels
- B) Torque limiting tool
- C) Toota RunFlat Lubricant, Part No. TTGR3810 (supplied with every RunFlat order)
- D) Loctite thread adhesive (supplied with the RunFlat)
- E) Beadspreader — only required if no fitting rig is available



STATIC FITTING RIG
Part No. RFI 043



TORQUE LIMITING TOOL
Part No. RFI 009



THREAD LOCKING ADHESIVE
Part No. RFI 013



TOOTA RUNFLAT LUBRICANT
Part No. TTGR3810



BEADSPREADER
Part No. RFI 016/A

STATIC RUNFLAT SYSTEM — USER GUIDE

If Static RunFlat systems are fitted in accordance with these fitting instructions they will give good service. Read this user guide carefully and bring it to the attention of all drivers using vehicles fitted with Static RunFlats.

Vehicles are fitted with RunFlat systems for two purposes:

1. To assist a driver in maintaining control if a tire fails at speed. Because the vehicle drops onto the RunFlat system instead of directly onto the wheel, a higher level of control is possible than if no RunFlat system were fitted.
2. To enable a driver to continue travelling to a place of safety with a deflated tire so the damaged wheel can be changed. With security vehicles, it may be necessary to travel some distance to reach a place of safety.

Static RunFlat systems are designed to meet extended runflat conditions. The system is designed to cover runflat distances at speeds up to 50 km/h. With two front tires deflated, steering control should be adequate to clear an area of hazard at lower speed (typically 20 km/h). In a serious emergency, traction and control can be maintained with all four tires deflated. This Statement of Claim is the only claim to RunFlat performance.

IMPORTANT: Underinflated and fully deflated tires fitted with RunFlat systems behave differently to fully inflated tires and vehicle handling is markedly different. Do not attempt violent maneuvers or sudden changes of direction with one or more tires deflated.

IMPORTANT: As a quality control measure, record the following in the vehicle log or service book at the time of fitting:

- i) Make, model, and registration number of the vehicle
- ii) RunFlat system batch number
- iii) Date, location of fitting agency, and name or quality control stamp of the fitter
- iv) Vehicle mileage at time of fitting

STATIC FITTING RIG

The Static Fitting Rig allows installation of Static RunFlat systems into multi-piece wheels (2-piece bolt-together and 3-piece demountable flange) and tubeless tires. The compression bracket is required for 3-piece demountable flange wheels but not necessary for 2-piece bolt-together wheels.

Safety instructions

Use of the Static Fitting Rig is always recommended for Static RunFlat installation — it makes the process safer, easier, and quicker. Failure to follow the recommendations and working methods here, or ignoring warnings, can lead to serious injury to the operator and other persons.

If using the fitting rig, do not turn the device on before thoroughly reading the instructions and all safety information provided on it. The device may only be operated by qualified persons authorized to operate it — a person who has read these operating instructions in full, completed appropriate training, and has knowledge of work safety and of servicing and adjusting the device. It is forbidden to operate the device under the influence of alcohol or drugs that impair physical or mental ability.

Observe the following conditions:

- The operator must be able to read and understand all information in these operating instructions.
- The operator must have full knowledge of the functioning and characteristics of the unit.
- Unauthorized persons must maintain a safe distance from the operator unit.
- The device must be installed in accordance with applicable regulations and standards.
- All persons operating the device must be properly trained in its service.
- Unauthorized modifications automatically relieve the producer of liability in the event of damage or accident.

Type of wheel rim	3-piece wheels with demountable flange; 2-piece bolt-together wheels
Main tire sizes	335/80R20, 365/80R20, 395/85R20, 12.00R20, 14.00R20, 16.00R20
Nominal working pressure (air supply)	7.0 bar
Air supply connection	1/4"
Max pressure exerted on wheel rim	10 T

Components of the Static Fitting Rig



FITTING RIG



METAL TIRE LIFTING ARM



COMPRESSION BAR



LOCKING NUT



COMPRESSION BRACKET



TOP PIECE EXTENSION



COMPRESSION PLATES



HYDRAULIC PUMP



HYDRAULIC CYLINDER



HYDRAULIC HOSES

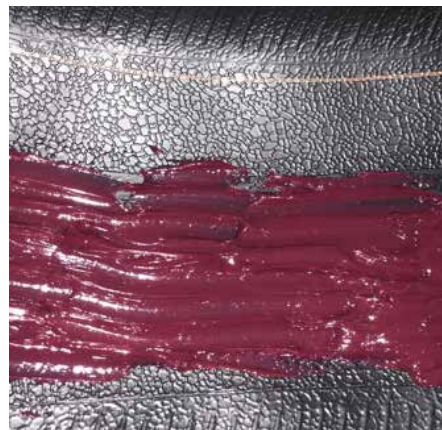


REMOVAL BLOCK

FITTING INSTRUCTIONS — 2-PIECE BOLT-TOGETHER WHEELS (NO FITTING RIG)

Keep these instructions with the fitting tools in the vehicle tool kit.

01 Apply Toota RunFlat Lubricant (TTGR3810) to the inside tread of the tire as uniformly as possible, using the supplied quantity per tire.



02 Insert the 3 segments inside the tire.



03 Assemble the 3 wedge bolts and 3 clamping plate bolts, making sure double locking washers are fitted under the head of each bolt. Apply the supplied thread adhesive to the bolts.



04 Put the wedge bolts in place to connect the 3 segments (4 to 5 threads).



05 Place the tire and the pre-assembled RunFlat around the wheel rim. Position RunFlat segments either side of the valve location.



06 Lift the top bead of the tire (ideally with the beadspreader) and insert plastic or wooden blocks to access the fixings, while keeping the RunFlat in contact with the bottom bead of the tire.



07 Use the torque limiting tool to tighten down each wedge bolt in turn to the torque setting marked on the identification label.



08 Fit clamping plate bolts at each joint position and tighten down the clamping bolts to the torque setting marked on the identification label.



09 Remove the blocks from the wheel.



10 Place the O-ring seal before completing the fitting of the 2-piece wheel (ring to be bolted on the body of the rim). Using long studding, tighten the ring evenly until flange nuts can be fitted.



11 Working in a criss-cross pattern, tighten opposite bolts until all flange nuts are hand tight, then repeat in stages until the specified torque has been reached.



12 Inflate the tire in a tire inflation safety cage and check for air leaks.

FITTING INSTRUCTIONS — 2-PIECE BOLT-TOGETHER WHEELS (WITH FITTING RIG)

Keep these instructions with the fitting tools in the vehicle tool kit.

01 Place the wheel rim on the centre plate of the fitting rig and lower it down with the hydraulic piston.



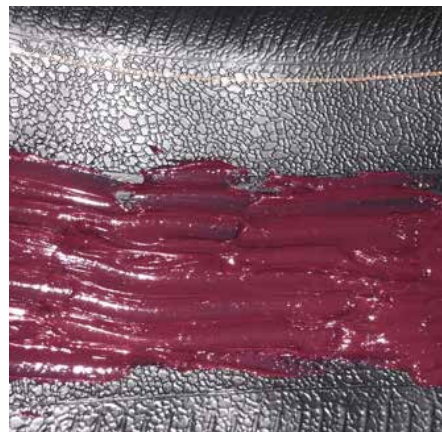
02 Place the tire on the fitting rig.



03 Lift the upper bead with the 3 metal tire lifting arms.



04 Apply Toota RunFlat Lubricant (TTGR3810) to the inside tread of the tire as uniformly as possible, using the supplied quantity per tire.



05 Assemble the 3 wedge bolts and 3 clamping plate bolts, making sure double locking washers are fitted under the head of each bolt. Apply the supplied thread adhesive to the bolts.



06 Insert the 3 segments inside the tire. Position RunFlat segments either side of the valve location.



07 Put the wedge bolts in place to connect the 3 segments (4 to 5 threads).



08 Lift the wheel up into the tire using the hydraulic piston.



09 Continue until the bottom of the wheel rim is level with the bottom tire bead.



10 Use the metal tire lifting arms to lift up the top bead of the tire. It may be necessary to release pressure from the hydraulic piston (which will lower the wheel and tire) to give more access to the bolts.



11 Use the torque limiting tool to tighten down each wedge bolt in turn to the torque setting marked on the identification label.



12 Fit clamping plate bolts at each joint position and tighten down the clamping bolts to the torque setting marked on the identification label.



13 Each joint should look like this when completed correctly. Release the 3 metal tire lifting arms to release the upper tire bead.



14 Place the O-ring seal before completing the fitting of the 2-piece wheel (ring to be bolted on the body of the rim). Using long studding, tighten the ring evenly until flange nuts can be fitted.



15 Working in a criss-cross pattern, tighten opposite bolts until all flange nuts are hand tight, then repeat in stages until the specified torque has been reached.



16 Inflate the tire in a tire inflation safety cage and check for air leaks.

FITTING INSTRUCTIONS — 3-PIECE DEMOUNTABLE FLANGE WHEELS (WITH FITTING RIG)

Keep these instructions with the fitting tools in the vehicle tool kit.

01 Place the wheel rim on the centre plate of the press and lower it down with the hydraulic piston.



02 Place the tire on the fitting rig and lift the upper bead with the 3 metal tire lifting arms.



03 Apply Toota RunFlat Lubricant (TTGR3810) to the inside tread of the tire as uniformly as possible, using the supplied quantity per tire.



04 Assemble the 3 wedge bolts and 3 clamping plate bolts, making sure double locking washers are fitted under the head of each bolt. Apply the supplied thread adhesive to the bolts.



05 Insert the 3 segments inside the tire. Position RunFlat segments either side of the valve location.



06 Put the wedge bolts in place to connect the 3 segments (4 to 5 threads) and position RunFlat segments either side of the valve location. Lift the wheel up into the tire using the hydraulic piston. Continue until the bottom of the wheel rim is level with the bottom tire bead.



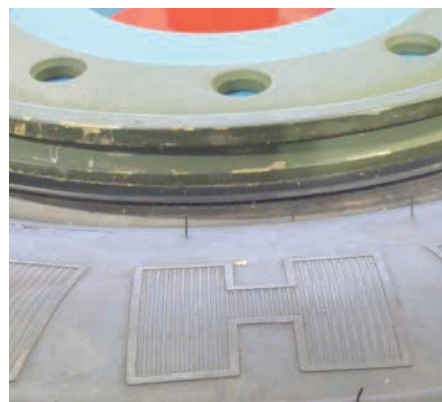
07 Use the metal tire lifting arms to lift up the top bead of the tire. It may be necessary to release pressure from the hydraulic piston (which will lower the wheel and tire) to give more access to the bolts. Use the torque limiting tool to tighten down each wedge bolt in turn to the torque setting marked on the identification label.



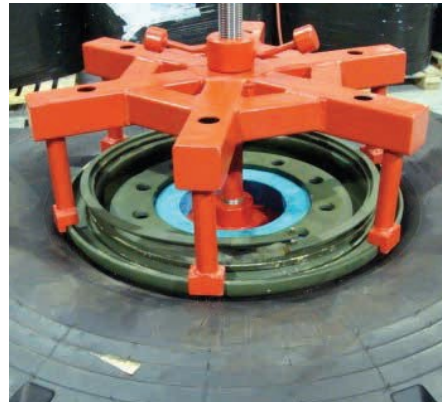
08 Fit clamping plate bolts at each joint position and tighten down the clamping bolts to the torque setting marked on the identification label.



09 Release the 3 metal lifting arms of the press to release the upper tire bead. Place the seal in position on the edge of the tire bead.



10 Screw in the compression bar and place the compression bracket on the demountable flange. Screw the locking nut onto the compression bar.



11 Place the two 40 mm square tube sections or compression plate under the wheel rim.



12 Compress the flange with the hydraulic piston and fit the locking ring.



13 Release the pressure. Remove the locking nut, compression bracket, and compression bar, and fit the safety locking clip to the locking ring.



14 Inflate the tire in a tire inflation safety cage and check for air leaks.

REMOVAL INSTRUCTIONS — 2-PIECE BOLT-TOGETHER WHEELS

Keep these instructions with the fitting tools in the vehicle tool kit.

01 Deflate the tire and undo all of the flange nuts in turn.



02 Remove the ring of the wheel.



03 Lift the top bead of the tire (ideally with the beadspreader) and insert plastic or wooden blocks to access the fixings. Undo all of the fixing bolts.



04 After all fixing bolts have been removed, lift the tire and RunFlat off the rim. Spread the tire bead apart (ideally with the beadspreader) and remove the RunFlat segments.



REMOVAL INSTRUCTIONS — 3-PIECE DEMOUNTABLE FLANGE WHEELS

Keep these instructions with the fitting tools in the vehicle tool kit.

01 Deflate the tire and compress the flange using the compression bracket, compression rod, and compression nut.



02 Remove the flange and seal.



03 Insert the metal tire lifting arms. Using the compression nut and removal block, use the hydraulic cylinder to push the wheel rim down.



04 Remove the RunFlat system from the wheel and tire assembly.



INSPECTION & REUSE

Static RunFlat systems are to be inspected at every tire change, every year, or after operation — whichever comes first.

Static RunFlat systems are designed to be returned to service after runflat use, subject to the following conditions:

01 If the system has been subjected to any form of ballistic or explosive attack, it is recommended that the complete system be changed. Alternatively, the RunFlat system may be returned to your authorized distributor or agent with an account of the runflat incident for detailed inspection. On no account should it be returned to service without this inspection process.

02 Otherwise, the following measures must be carried out by the workshop manager:

i) The system(s) involved in the runflat use should be cleaned and examined carefully for cracks, fissures, deformation, significant wear, or any mechanical damage sustained during runflat use. If there is any sign of damage, the unit must be returned to the authorized distributor or agent for detailed examination.

ii) If there is no sign of surface damage, the system(s) should be fitted to a bare wheel (wheel with no tire) from the vehicle to which the RunFlat systems were originally fitted. The wedge fixing bolts should then be tightened to the recommended torque setting. If the units can be rotated on the wheel, the RunFlat system(s) must be returned to the authorized distributor or agent for detailed examination.

iii) If there is no movement of the RunFlat system on the wheel, remove it and fit to the original wheel with new fixing bolts and double locking washers. The fitting should be recorded as for an initial fitting.

MISUSE OF RUNFLAT SYSTEM

- a) As soon as you become aware of a deflated tire, SLOW DOWN immediately.
- b) If circumstances permit, stop immediately to establish the cause of the tire failure.
- c) If an emergency requires you to continue, reduce speed to a maximum of 50 km/h and drive to the nearest point of safety. Avoid sharp turns or other violent maneuvers.
- d) At the first opportunity, stop and inspect the deflated tire for damage. If there are obvious signs of serious tire damage, do not continue — change the wheel.
- e) After any runflat use, report the occurrence to the workshop manager, who will arrange for the system to be inspected by the authorized distributor.

To reduce the risk of misuse of RunFlat systems, advice sheets should be issued as follows:

Vehicle dashboard

For your safety and security, the wheels on this vehicle are fitted with RunFlat systems inside the tires. These help you maintain control if a tire fails at speed, or continue with a deflated tire to a place of safety to have the wheel changed. DO NOT exceed 50 km/h with a deflated tire. Stop as soon as you can to change the wheel. Read the operating instructions in the vehicle logbook. Check tire pressures daily.

Vehicle logbook

For your safety and security, the wheels on this vehicle are fitted with RunFlat systems. They give improved driver control if a tire fails at speed and allow the vehicle to continue in an emergency with a tire deflated. Vehicles handle differently with deflated tires. DO NOT swerve sharply or carry out violent maneuvers with a deflated tire. DO NOT exceed 50 km/h with a deflated tire. Stop as soon as possible to have the damaged wheel changed. Check your tire pressures daily and report any runflat use to the workshop manager. Note: RunFlat systems have to be removed to change tires.

Driver's restroom

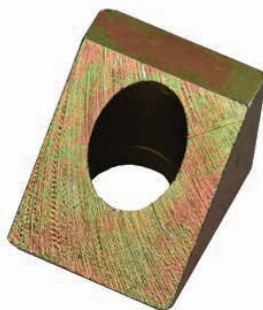
This vehicle is fitted with RunFlat systems for your safety and security. These assist in controlling the vehicle after a tire blow-out at speed and allow drivers to continue with a damaged tire in an emergency. Vehicles handle differently with deflated tires. Sudden turns or other violent maneuvers with underinflated tires can cause the vehicle to become unstable. As soon as you become aware of a deflated tire, SLOW DOWN immediately. DO NOT exceed 50 km/h with a deflated tire. In an emergency you can continue at reduced speed to a place of safety to have the damaged wheel changed. RunFlat systems have to be removed to change tires. Tire pressures must be checked daily to avoid damage to the RunFlats and the tires. Ask for more details from the workshop manager.

SPARES

All of the parts below are supplied with new RunFlat systems. They are also available as spares when changing tires, etc. For specific RunFlat systems, some spares may differ from those shown; it is strongly recommended to provide as much information as possible about the vehicle, wheel rims, tires, and the RunFlat system itself (if known) when ordering spares.



CLAMPING PLATE



WEDGE



FIXING BLOCK PIN



WASHER



FIXING BLOCK



BOLT

Storage of RunFlat systems

All systems must be stored before use in the following conditions:

- Dry and moderately ventilated conditions.
- Out of direct sunlight.
- Not subject to water exposure, e.g. rain or floods.
- Covered to ensure systems are dust- and contamination-free, in low light levels.
- Ideal storage temperature between 10 °C and 25 °C.

FITTING CHECKLIST

The following checklist is to ensure you have completed each stage of the fitting procedure.

CHECK ITEM	DONE ✓
Inside of tire lubricated with Toota RunFlat Lubricant (TTGR3810)	
Washers on every bolt	
Loctite applied to every bolt	
Wedge torqued to correct level	
Clamping plate fitted at each segment	
Clamping plate torqued to correct level	
RunFlat part number label attached	
Wheel seal fitted	
Tank valve seal fitted (if applicable)	
Tire inflated	

Fitting record

Vehicle make / model / registration: _____

RunFlat system batch number: _____

Date and location of fitting: _____

Fitter name / QC stamp: _____

Vehicle mileage at fitting: _____

WARRANTY TERMS

The manufacturer warrants that the products and solutions shall be free of defects and shall survive the intended purpose as determined, agreed, and tested with the client. If the product fails to survive the intended purpose as determined, agreed, and tested with the client, the manufacturer shall replace the product and conduct all required rework. The warranty does not extend to products it did not sell, nor does it apply to any third party. No guarantee extends beyond a first use of a system in runflat mode.

A product warranty of 12 months from the date of delivery applies, subject to the following conditions (failure to comply in full with all conditions shall imply that no warranty claim can be accepted):

- All systems must be fitted exactly in accordance with the fitting and inspection instructions.
- All systems must be fitted and refitted using the supplied fitting components, Loctite, and Toota RunFlat Lubricant (TTGR3810).
- Customers must keep full and accurate records showing the complete fitting, removal, and refitting history, with details of components and materials used.
- No tire sealant or other substances may be used inside the tire which could damage the RunFlat product.

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