TECHNICAL BULLETIN
 # 06 - 2025 (November 2025)

Post-collision SRS Reinstatement

Best-practice Guidance for Inspection, Assessment, & Replacement of Supplementary Restraint Systems

Supporting New Zealand's Repair Certification Industry

About RepairCert NZ Technical Bulletins

These Technical Bulletins have been developed to support Specialist Light Vehicle Repair Certifiers (Repair Certifiers) in ensuring autobody repairs are carried out safely and correctly. Repair Certifiers should, in the first instance, be guided by (if available) relevant Vehicle Manufacturer's Information and Repair Industry Information, and in the absence of such information, refer to the guidance provided within RepairCert NZ Technical Bulletins. These Technical Bulletins can be used by the wider autobody repair industry.

Purpose

This Technical Bulletin advises Repair Certifiers in the inspection, assessment, and replacement of supplementary restraint system (SRS) components, on motor vehicles fitted with modern safety equipment, following a collision.

It also reinforces the importance of applying the relevant Vehicle Manufacturer's Information and Repair Industry Information *(see Note 1)* to ensure that the applicable requirements are met.

Note 1	'Vehicle Manufacturer's Information' (also known as 'OEM Information') refers to any documentation from the vehicle manufacturer, including the Body Repair Manual (BRM), and related requirements, recommendations, and guidelines. 'Repair Industry Information' means information from recognised repair industry sources such as Thatcham, I-CAR, and Ezi-Methods. To learn more about Vehicle Manufacturer's Information and Repair Industry Information, click *here* to view *RepairCert NZ Information Sheet # 02-2024 Repair Method Options* on the *RepairCert NZ website*.

Applicable Requirements

This Technical Bulletin combines non-mandatory Best-practice Guidance, together with the relevant mandatory legislative requirements (referred to as 'applicable requirements') to support Repair Certifiers in relation to this subject.

The applicable requirements stem from *Land Transport Rule: Vehicle Standards Compliance 2002 (Compliance Rule)*, and *Land Transport Rule: Vehicle Repair 1998 (Repair Rule)*.

The *Compliance Rule* requires that an unregistered vehicle must undergo repair certification if it has '*significant damage or deterioration to its structure, chassis, body-to-chassis attachment, suspension, or occupant protection system'*.

The *Repair Rule* specifies that *'a repair to a vehicle, its structure, systems, components or equipment, must restore the damaged or worn vehicle, structure, system, component or equipment so that they are within safe tolerance of the state of the vehicle, structure, system, component or equipment when manufactured.'*

The *Light Vehicle Repair Vehicle Inspection Requirements Manual (Repair VIRM)* sets out the requirements that Repair Certifiers must meet to achieve the objectives of the *Compliance Rule* and the *Repair Rule* (see the 'Repair VIRM Requirements' section at the back of this Technical Bulletin).

Background

A Case Study

It is important that a Repair Certifier, when carrying out a repair certification on a vehicle where one or more SRS deployments have occurred, or where the vehicle has, or may have, sustained damage to any of its SRS or SRS-related components, carries out the correct inspection and assessment process, so that appropriate repair instructions can be issued to the repairer.

A case study detailed in *RepairCert NZ Update # 31 (12/04/2024)* highlighted the importance of getting the pre-repair inspection and assessment process right *(see Note 2)*.

Note 2	Click *here* to read the '*Case Study - Asking the Right Questions*' article in *RepairCert NZ Update # 31* (go to Page 3), on the *RepairCert NZ website*.

The collision-damaged van detailed in the case study featured front subframe damage and SRS airbag deployment. The subframe and both front airbag modules were replaced by a qualified technician at the vehicle manufacturer's authorised dealership.

The dealership subsequently provided a signed copy of the *NZTA Declaration Form for SRS, ABS, and/or ESC Inspections (see Note 3)* to confirm that the SRS reinstatement process had been carried out correctly.

Note 3	Click *here* for more information about the *NZTA 'Declaration Form for SRS, ABS, and/or ESC Inspections'* in *RepairCert NZ Update # 29* (go to Page 4) , on the *RepairCert NZ website*.

As part of the SRS inspection process, the Repair Certifier asked the repairer whether the clock spring or any other SRS-related components required inspection and/or replacement. The technician told the Repair Certifier *"yes, you'll need to fit a new clock spring and steering column"*.

So, even though the technician (remembering that the technician was a staff member of the authorised dealership) had already completed and signed the *NZTA Declaration Form for SRS, ABS, and/or ESC Inspections*, other vitally important safety-critical SRS components that the Vehicle Manufacturer's Information required to be replaced, had not, in fact, been replaced.

Had it not been for a highly experienced and vigilant Repair Certifier asking the right questions, the vehicle's repair would have been non-compliant and potentially unsafe.

This case study, and other similar situations, have compelled RepairCert NZ to develop this Technical Bulletin to support Repair Certifiers in applying the correct processes when presented with a collision-damaged vehicle (which, for the purposes of this Technical Bulletin, includes all SRS-related components).

Overall Responsibilities of a Repair Certifier

Importance of Applying the Correct Inspection Process

A post-repair SRS scan is essential in ensuring that the SRS in a vehicle which has been collision-damaged will function as the vehicle manufacturer intended. The deployment of SRS is precisely engineered to seamlessly integrate with other passive safety systems (such as collision energy absorption and energy transfer structures, including crush zones, and the strategic use of high-strength materials) to manage impact forces and optimise occupant protection.

Similarly, a thorough inspection of each SRS component for damage is also a critical element of a correct repair certification process. In some cases, a pre-repair SRS scan (SRS pre-scan) can also provide information which will help a Repair Certifier.

Inspections and Scans

When carrying out the repair certification of an affected vehicle, it is recommended that a Repair Certifier:

- arranges for, prior to the commencement of repairs, an SRS pre-scan (as specified in the 'SRS Pre-scanning' section of this Technical Bulletin) to be carried out; and
- carries out one or more inspections for damage of all SRS components (as specified in the 'Inspection of SRS Components' section of this Technical Bulletin) to ensure that the correct replacement of SRS components occurs (as specified in the 'Replacement of SRS Components' section of this Technical Bulletin).

SRS post-scanning, together with any necessary system programming (also known as coding or initialisation), and any necessary calibration of specific components within the system (as specified in the 'Repair VIRM Requirements' section of this Technical Bulletin), must be carried out after the completion of the repairs.

SRS Pre-Scanning

When an SRS Pre-scan Should Occur

An SRS pre-scan should be carried out prior to repairs if there is a requirement for an SRS pre-scan within the Vehicle Manufacturer's Information (which may be specified within a vehicle manufacturer's Body Repair Manual [BRM], Position Statement, or Technical Bulletin), and if it is practical and beneficial to do so *(see Notes 4 and 5)*.

For vehicles where there is no requirement for an SRS pre-scan from the vehicle manufacturer, an SRS pre-scan is recommended as a matter of good practice, wherever it is practical and beneficial to do so *(see Note 5)*.

Note 4	Many vehicle manufacturers require that collision-damaged vehicles (regardless of impact severity) have a pre-scan or 'health check' performed prior to any repairs being undertaken. It is recognised that, as explained in Note 5, there are some circumstances where this cannot be practically achieved.
Note 5	Situations where it would not be 'practical' for a Repair Certifier to require an SRS pre-scan to be carried out are where: • a vehicle's electrical system has been significantly affected by fire damage or significant collision-damage; or • a vehicle has already been repaired, particularly if this has occurred overseas, before importation into New Zealand. A circumstance where it would not be 'beneficial' for a Repair Certifier to ensure that an SRS pre-scan is carried out, is where the level, or absence, of safety technology (particularly in an older vehicle) means that no useful safety-related information would be gained by carrying out an SRS pre-scan.

Suitably Qualified & Experienced Technician

If a Repair Certifier requires that an SRS pre-scan is carried out, the Repair Certifier should engage a suitably qualified and experienced technician to perform an appropriate SRS pre-scan (which involves the interrogation of the associated electronic control systems, and looks for Diagnostic Trouble Codes [DTCs] which may be logged in the system following a collision) prior to the commencement of repairs.

Responsibilities of Technician

When carrying out an SRS pre-scan, it is the responsibility of the suitably qualified and experienced technician to ensure that the SRS pre-scan is appropriate, whether it is performed by a vehicle manufacturer's authorised dealership or an independent business.

It is recommended that vehicle manufacturer-approved diagnostic tools are used to carry out an SRS pre-scan.

Inspection of SRS Components

Inspection for Damaged SRS Components

A Repair Certifier should carry out a thorough inspection of all SRS components to *(see Note 6)*:

- identify any damaged SRS components; and
- identify any damaged mounting brackets, fittings, and hardware associated with any SRS components.

Note 6	If a vehicle has already been repaired prior to presentation for repair certification, for reasons such as the vehicle has been repaired overseas before importation into New Zealand, a full inspection for damaged SRS components should still be carried out.

SRS and SRS-related Components

The SRS and SRS-related components which should be inspected by a Repair Certifier will usually comprise some or all of (but not limited to):

- airbag modules including, but not limited to, driver, front passenger, side, seat and seat cushion, centre, curtain, and knee (bolster) *(see Note 7)*; and
- clock spring (may also be called a spiral cable, squib, or rotary coupler); and
- wiring harness(es) and connectors; and
- steering column assembly (and mounting brackets), and steering wheel *(see Note 8)*; and
- dashboard and dashboard frame; and
- front and rear seatbelts, seatbelt pretensioners and load limiter assemblies (both retractor and buckle types); and
- airbag warning light (may also be called an SRS warning light or Malfunction Indicator Lamp [MIL]); and
- SRS control module(s); and
- crash sensors (such as direct impact, rollover, pressure, and pre-crash); and
- seat occupancy sensors; and
- seat position sensors; and
- an airbag deactivation/disconnection switch and warning lamp (primarily for the front seat passenger airbag module) *(see Image 1)*.

Note 7	Some of the latest vehicle designs feature additional SRS airbag modules and pyrotechnic devices such as pedestrian impact protection and detection systems.
Note 8	To find out more about steering damage, click *here* to view *RepairCert NZ Technical Bulletin # 01-2026 Steering System Damage Analysis*, which is available on the *RepairCert NZ website*.

Hidden Damage to SRS Components

In addition to obvious items such as deployed airbag(s), there may be damage to other SRS components (such as the steering column and other items listed in the 'SRS and SRS-related Components' sub-section of this Technical Bulletin) that are not immediately visible until a physical inspection is carried out by a Repair Certifier.

In some situations, physical inspection may require the removal, and further dismantling of SRS components and sub-assemblies.

The relevant Vehicle Manufacturer's Information, in particular the BRM, can be a valuable resource for locating and identifying SRS components *(see Image 2 and Note 1)*.

Image 1: *Example of a passenger airbag deactivation/ disconnection switch.*

Image 2: *Excerpt from a Kia BRM, depicting SRS components and their respective locations.*

Guidance on Specific SRS Components

To follow are some of the SRS components which should undergo an especially thorough inspection by a Repair Certifier, with some guidance on what to look for.

Airbag Modules

While deployed airbags are usually immediately obvious *(see Image 3)*, the airbag type and location (such as seat and curtain airbags) may determine that further inspection and damage assessment is required.

A Repair Certifier should inspect the areas surrounding deployed airbags including their attachment points, mounting brackets, and trims and tethers, for cracks, splits, tears, distortion, or misalignment.

In the interests of general safety, it is important that Repair Certifiers (and anyone else) working in and around deployed air bag modules are aware of not only the dangers and possible health hazards associated with the handling of often toxic airbag material residues, but also the possibility that for vehicles equipped with Dual-stage (or Dual-threshold) and Multi-stage airbag systems, airbag modules may not necessarily have fully deployed (dependent on crash severity), and may be capable of a further deployment.

Image 3: *Deployed driver's side airbags (steering wheel and knee bolster).*

Seatbelt Assemblies and Pretensioners

A Repair Certifier should inspect seatbelt webbing for tearing or fraying *(see Image 4)*, and mounting locations and anchorage points for deformation and misalignment.

For buckle-type seatbelt pretensioner systems, a Repair Certifier should inspect the buckle and buckle covers for damage, or shortening in the length of the buckle stalk *(see Image 5)*. On some systems, a red tab may be visible, indicating that the pre-tensioner system has deployed.

For retractor-type seatbelt pretensioner systems, the most obvious sign that the pretensioner has deployed is the position of the seatbelt and the non-operation of the seatbelt retractor mechanism.

For a seatbelt being worn at the time of impact, deployment of the pretensioner locks the seatbelt in the extended position *(see Image 6)*, whereas a seatbelt not being worn at the time of impact will typically deploy, but the seatbelt will be drawn in tightly and locked in the fully retracted position.

Image 4: *Physical seatbelt inspection.*

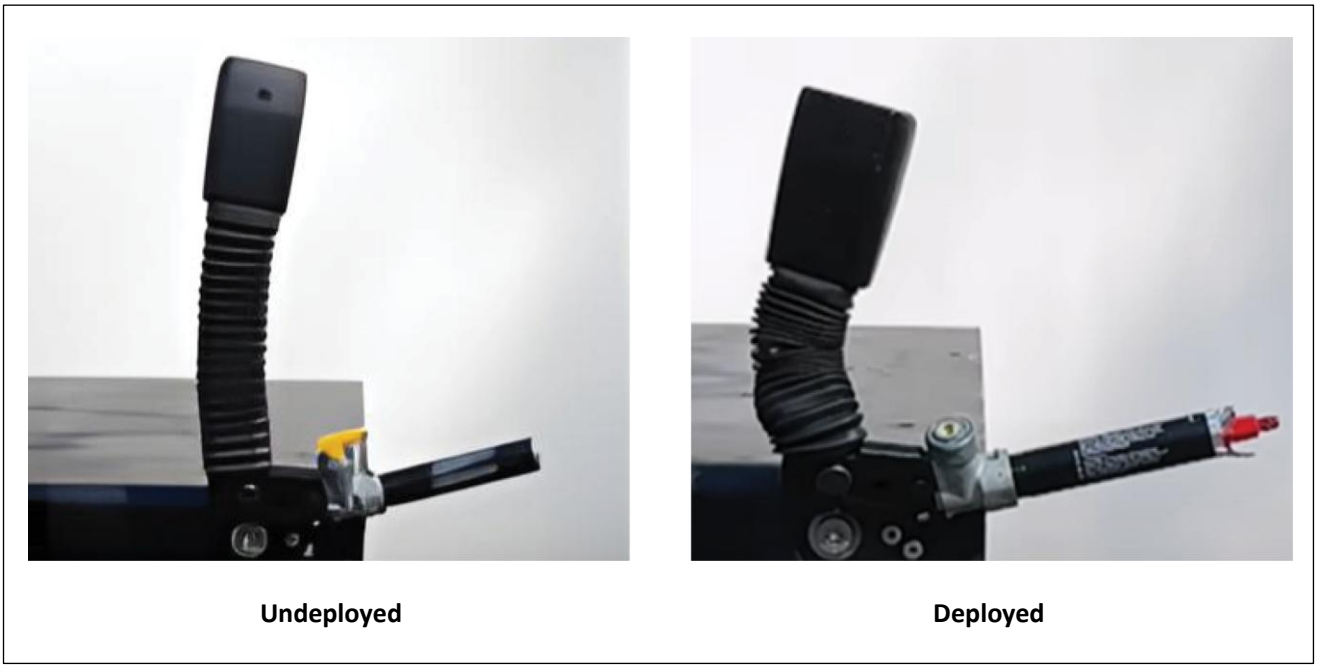


Image 5: *Example of a typical buckle-type seatbelt pretensioner before and after deployment.*

Image 6: *A retractor-type seatbelt pretensioner with the belt locked in its extended position (as worn by the occupant).*

Sensors and Control Modules

Various types of SRS sensors can be fitted in a wide variety of locations both inside and outside of the vehicle cabin *(see Image 7)*, with most control modules being positioned in well-protected areas within the passenger compartment (usually on, or close to, the centre floor tunnel) *(see Image 8)*.

In addition to following the vehicle manufacturer's model-specific post-collision SRS procedures, a Repair Certifier should carry out a visual examination of the mounting locations of sensors and control modules to identify possible damage or misalignment. This misalignment would otherwise go undetected in the component replacement, and diagnostic scanning and programming/calibration procedures provided within the Vehicle Manufacturer's Information. Even minor misalignment or incorrect orientation of sensors can impair system operation.

Sensor and control module wiring and connectors should also be inspected for any flash-burning or shorting *(see Image 9)*.

Removal of other components such as interior and exterior trims, seats, floor coverings, and bumper covers, may be necessary to provide access for a physical inspection.

Image 7: *Frontal impact sensor (fitted to the radiator core support in this example).*

Image 8: *Typical location of SRS control modules.*

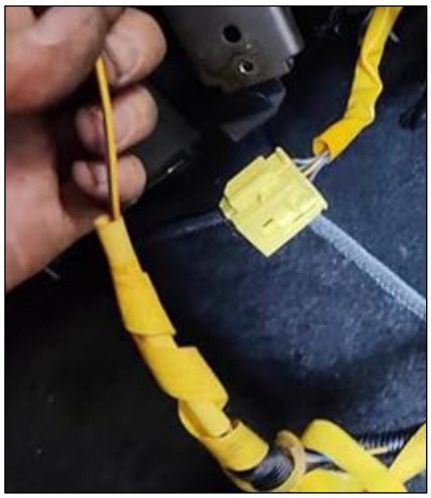


Image 9: *Inspect sensor and control module wiring and connectors for damage.*

Basic System Check

A Repair Certifier should turn the ignition on and check that the SRS warning light or MIL illuminates, and the self-check procedure is successful (light goes out shortly after ignition is turned on).

A number of vehicle manufacturers state that the MIL will go out even though the SRS may still have DTCs present – in some instances, the MIL will remain illuminated only if there are major SRS malfunctions. For this reason, the MIL and self-check system should not be solely relied on for confirmation that the SRS is fully operational *(see Image 10)*.

Image 10: *Example of SRS MIL self-check system.*

Any SRS component showing signs of damage by exposure to water may indicate that the vehicle is water-damaged, and will trigger the appropriate requirements for water-damaged vehicles. Best-practice Guidance for water-damaged vehicles is under development at the time of the release of this Technical Bulletin, and once completed will be available on the *RepairCert NZ website*.

Replacement of SRS Components

Correct Replacement

A Repair Certifier should confirm all SRS components that are replaced are:

- replaced with the correct components; and
- fitted correctly.

Source Information for SRS Component Replacement

When replacing SRS components, a Repair Certifier should consult:

- where available, any relevant vehicle manufacturer's model-specific information on post-collision inspection, replacement, and repair procedures for SRS *(see Note 1, and example shown in Image 11)*; or
- where relevant vehicle manufacturer's model-specific information is not available, other general Vehicle Manufacturer's Information, or Repair Industry Information *(see Note 1)*.

Trusted Repair Industry Information such as Thatcham escribe, I-CAR and Ezi-methods (both NZ and USA) *(see Note 1, and Images 12 and 13)* provide detailed information on SRS component replacement requirements after deployment. Care must be taken however, to ensure the information is relevant for the vehicle being repaired and repair certified, as overseas markets may have differing specifications.

Supplemental Restraints 0-1

Repairs and Inspections Required After a Collision DOC # 5807146

Warning: Proper operation of the Supplemental Inflatable Restraint (SIR) sensing system requires that any repairs to the vehicle structure return the vehicle structure to the original production configuration. Not properly repairing the vehicle structure could cause non-deployment of the airbag(s) in a frontal collision or deployment of the air bag(s) for conditions less severe than intended.

Warning: Do not repair or replace the seat stitching or seams in the seat back trim cover with an internal mounted seat side airbag module. Replace the complete seat back trim cover from the OEM. Non-OEM seat stitching may cause improper airbag deployment which could result in personal injury

Note: General Motors (GM) vehicles, systems and components are engineered, tested and manufactured to protect vehicle occupants based upon both government mandated and internal corporate requirements relative to durability. NVH (noise/ vibration/harshness), occupant protection, and vehicle safety. Only authentic Genuine GM Parts are designed, engineered, manufactured and tested to the General Motors internal and government mandated standards and are the only ones equivalent to the original equipment installed on the vehicle.

1. After ANY collision, perform the following belt operational and functional checks:
   - Turn the ignition switch to the ON position. Verify proper operation of the seat belt reminder lamp with the belt buckled and the belt unbuckled.
   - For each seating position:
     1. Inspect the shoulder belt guide to ensure that the seat belt webbing is seated flat in the guide slot and that the seatbelt webbing does not bind.
     2. Verify that the seat belt buckle is accessible.
     3. Fully extend the seat belt webbing. Verify that the seat belt webbing does not have any twists or tears.
     4. Allow the seat belt webbing to retract. Verify that the seat belt webbing returns freely and completely back into the retractor
     5. Snap the seat belt latch plate into the buckle. Sharply tug on the seat belt latch plate and the buckle. Verify that the seat belt latch plate and the buckle remain locked when tugged.
     6. Push the button on the buckle. Verify the seat belt latch plate releases easily from the buckle and the button returns to its original position.
2. In instances of vehicle collision where damage is limited to minor outer body panel cosmetic distortion: visually inspect vehicle for extent of damage, repair and replace components as necessary.
3. In instances of vehicle collision where damage exceeds minor outer body panel cosmetic distortion, unrelated components can be subject to damage outside of obvious visual detection method in the area of impact. The table below references components requiring inspection or replacement to promote a safe and quality repair. Some inspections may require disassembly of vehicle components or additional functional tests. If you detect any damage, replace the component.

Component	Notes or Additional Instructions	Exceeds Minor Outer Body Panel Cosmetic Distortion without Airbag Deployment	Pretensioner Deployment	Seat Side Airbag Deployment	Frontal Airbag Deployment
Brakes & Steering					
Brake Pedal	-	Inspect	Inspect	Inspect	Inspect
Steering Column	Refer to Steering Column Accident Damage Inspection in Steering Column and Wheel.	Inspect	Inspect	Replace	Replace
Steering Wheel	-	Inspect	Inspect	Replace	Replace

Image 11: *Example of GM's SRS document 'Repairs and Inspections Required After a Collision'*

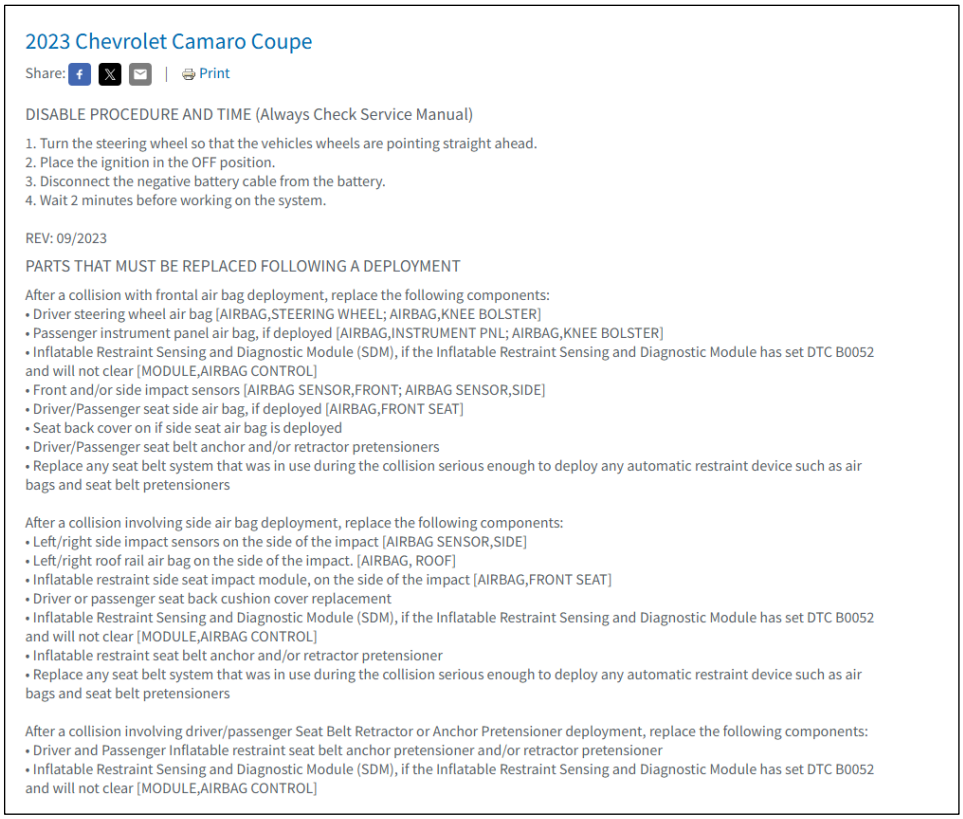
Land Rover Discovery 2005 – 5 Door 4x

1.7 Vehicle Safety Features

1.7.2 STS Replacement (2 Stage Deployment)

Check Or Replace / Deployed And Replaced	103(2) Pre-tensioners/ Grabbers	103(3) Driver & Passenger Airbags	103(4) Driver's Airbag	103(6) Inflatable Curtains LH or RH	103(9) Seat Airbag LH or RH
Seat Belt Reel Pre-tensioners/Grabbers	Replace	Replace	Replace	Replace	
SRS ECU	System Check	Replace After 3 Impacts	Replace After 3 Impacts	Replace After 3 Impacts	Replace After 3 Impacts
Front Impact Sensors LH/RH	System Check	Check & Replace if Damaged	Check & Replace if Damaged		
Side Impact Sensors LH/RH	System Check			Check & Replace if Damaged	Check & Replace if Damaged
Rear Side Impact Sensors LH/RH	System Check			Check & Replace if Damaged	Check & Replace if Damaged
Door Side Impact Sensors LH/RH	System Check			Check & Replace if Damaged	Check & Replace if Damaged
Instrument Panel Upper Section		Replace			
Seat Frame					Replace
Rotary Coupler		Replace	Replace		

Image 12: *Thatcham example of SRS replacement requirements for 2005 > Land Rover Discovery.*



2023 Chevrolet Camaro Coupe

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DISABLE PROCEDURE AND TIME (Always Check Service Manual)

1. Turn the steering wheel so that the vehicles wheels are pointing straight ahead.
2. Place the ignition in the OFF position.
3. Disconnect the negative battery cable from the battery.
4. Wait 2 minutes before working on the system.

REV: 09/2023

PARTS THAT MUST BE REPLACED FOLLOWING A DEPLOYMENT

After a collision with frontal air bag deployment, replace the following components:
• Driver steering wheel air bag [AIRBAG,STEERING WHEEL; AIRBAG,KNEE BOLSTER]
• Passenger instrument panel air bag, if deployed [AIRBAG,INSTRUMENT PNL; AIRBAG,KNEE BOLSTER]
• Inflatable Restraint Sensing and Diagnostic Module (SDM), if the Inflatable Restraint Sensing and Diagnostic Module has set DTC B0052 and will not clear [MODULE,AIRBAG CONTROL]
• Front and/or side impact sensors [AIRBAG SENSOR,FRONT; AIRBAG SENSOR,SIDE]
• Driver/Passenger seat side air bag, if deployed [AIRBAG,FRONT SEAT]
• Seat back cover on if side seat air bag is deployed
• Driver/Passenger seat belt anchor and/or retractor pretensioners
• Replace any seat belt system that was in use during the collision serious enough to deploy any automatic restraint device such as air bags and seat belt pretensioners

After a collision involving side air bag deployment, replace the following components:
• Left/right side impact sensors on the side of the impact [AIRBAG SENSOR,SIDE]
• Left/right roof rail air bag on the side of the impact. [AIRBAG, ROOF]
• Inflatable restraint side seat impact module, on the side of the impact [AIRBAG,FRONT SEAT]
• Driver or passenger seat back cushion cover replacement
• Inflatable Restraint Sensing and Diagnostic Module (SDM), if the Inflatable Restraint Sensing and Diagnostic Module has set DTC B0052 and will not clear [MODULE,AIRBAG CONTROL]
• Inflatable restraint seat belt anchor and/or retractor pretensioner
• Replace any seat belt system that was in use during the collision serious enough to deploy any automatic restraint device such as air bags and seat belt pretensioners

After a collision involving driver/passenger Seat Belt Retractor or Anchor Pretensioner deployment, replace the following components:
• Driver and Passenger Inflatable restraint seat belt anchor pretensioner and/or retractor pretensioner
• Inflatable Restraint Sensing and Diagnostic Module (SDM), if the Inflatable Restraint Sensing and Diagnostic Module has set DTC B0052 and will not clear [MODULE,AIRBAG CONTROL]

Image 13: *A sample from the I-CAR US 'OEM Restraints System Part Replacement Search' tool showing available information on SRS component replacement. (Click here to view the full procedure/information, on the I-CAR website).*

Note: A Repair Certifier should, where possible (and if available), include all relevant Vehicle Manufacturer's Information, and/or Repair Industry Information, in the *Repair Certification File*, to support transparency, accuracy, and compliance.

ONLY VEHICLE MANUFACTURER OR VEHICLE MANUFACTURER-APPROVED SRS COMPONENTS SHOULD BE USED TO MAINTAIN SYSTEM INTEGRITY AND ENSURE COMPLIANCE WITH THE REPAIR RULE.

Commonly Replaced SRS Components

SRS components that commonly require replacement include:

- **Airbags:** Deployed airbags will always require replacement *(see separate sub-section on 'Salvaged Airbags')*.
- **Seatbelts and seatbelt pretensioners:** If any seatbelt pretensioners have activated, the corresponding seatbelt assemblies will typically also require replacement. Where this has occurred, all seatbelts should be inspected post-collision, to ensure that they extend, retract, and lock properly.
- **Impact Sensors:** Any impact sensor that shows signs of physical damage, or brings up diagnostic scan errors, should be replaced. Some vehicle manufacturers require the replacement of all sensors on the affected side of the vehicle to ensure synchronised deployment.
- **Control Modules (Airbag Control Units):** Control modules that have recorded a crash event may require replacement and authorised reprogramming or resetting procedures, as specified within the relevant Vehicle Manufacturer's Information. Note however that some vehicle manufacturers allow control modules to be re-used several times on certain vehicle models.
- **Steering wheel and dashboard (including the dashboard mounting frame):** Any damage such as deformation, splits, or cracks, is typically not repairable and should be replaced. Structural integrity of these components is essential for the safe operation of the vehicle and to ensure correct SRS operation.

Other Considerations

Some components, such as the clock spring, steering angle sensor, seatbelt pretensioners, and the steering column (in cases of driver airbag deployment) may, as part of the Vehicle Manufacturer's Information, require replacement simultaneously to ensure system integrity, even if they appear undamaged.

Other important considerations can include observing torque setting specifications, and the replacement of specialised attachment methods, such as specialist rivets, and torque-sensitive one-time-use fasteners.

Repair VIRM Requirements

Mandatory Content

While the Best-practice Guidance contained in this Technical Bulletin (up to the Repair VIRM Requirements heading above) is provided as (non-mandatory) supporting information to help a Repair Certifier achieve the best possible outcomes, the following requirements are copied from the NZTA *Repair VIRM* (consolidated for clarification) and must in all cases be applied.

Appropriate Repair Methods

Vehicle Manufacturer's Information should be applied in the first instance, and where this is not available and relevant, then available and relevant Repair Industry Information should be applied *(see Note 1)*.

It is the responsibility of the Repair Certifier to justify any departure from the relevant Vehicle Manufacturer's Information or Repair Industry Information, and prove that the vehicle is returned to within a safe tolerance of its state when manufactured.

SRS Post-scanning and Programming/Calibration

When Post-scanning and Programming/Calibration is Required

An SRS post-scan and any necessary programming/calibration must be carried out upon the completion of repairs, if any vehicle safety system faults were identified during the inspection and repair process *(see Note 9)*.

Note 9	A fault can be indicated by, in addition to obvious physical signs such as a deployed airbag, the illumination of a warning lamp for SRS, ABS, ESC, or ADAS.

Objectives of Post-scanning and Programming/Calibration

An SRS post-scan and any necessary programming/calibration must confirm that all SRS components, including SRS airbags and restraint systems are functioning correctly, and will, in the vehicle's repaired condition, respond as the vehicle manufacturer intended in the event of a future collision.

Technician Attributes

An SRS post-scan and any necessary programming/calibration must be performed by a suitably qualified and experienced technician, appointed for the purpose by the Repair Certifier, who may be either *(see Notes 10 to 12)*:

- the manufacturer of the vehicle or the components, or an approved representative proven to be competent in the use of suitable interrogation equipment; or
- a person or company recognised as reputable and competent by the Repair Certifier, and trained in the interrogation of automotive electronic control systems; or
- an Entry Certifier or Border Entry Certifier, trained in the interrogation of automotive electronic control systems.

Note 10	When carrying out an SRS post-scan and programming/calibration, it is the responsibility of the suitably qualified and experienced technician to ensure that the SRS post-scan and programming/calibration is appropriate, whether it is performed by a vehicle manufacturer's authorised dealership or an independent business.
Note 11	It is recommended that vehicle manufacturer-approved diagnostic tools are used to carry out an SRS post-scan and programming/calibration.
Note 12	A person approved by a Repair Certifier to be a 'suitably qualified and experienced technician' must, as required the *Repair VIRM, Introduction, Section 3, subsection 3-1 (Duties and Responsibilities), Clause 10 (Delegation) section,* be listed as such in the Repair Certifier's *Performance Review System Manual.* Click *here* to view the *Duties and Responsibilities section* of the *Repair VIRM.*

Reports and Declarations

A suitably qualified and experienced technician must, when performing an SRS post-scan and any necessary programming/calibration:

- generate a report which:
  - shows that any SRS DTCs identified during the vehicle's SRS pre-scan (if present) have been cleared; and
  - confirms that all aspects of the vehicle's occupant protection system are functioning correctly;

and

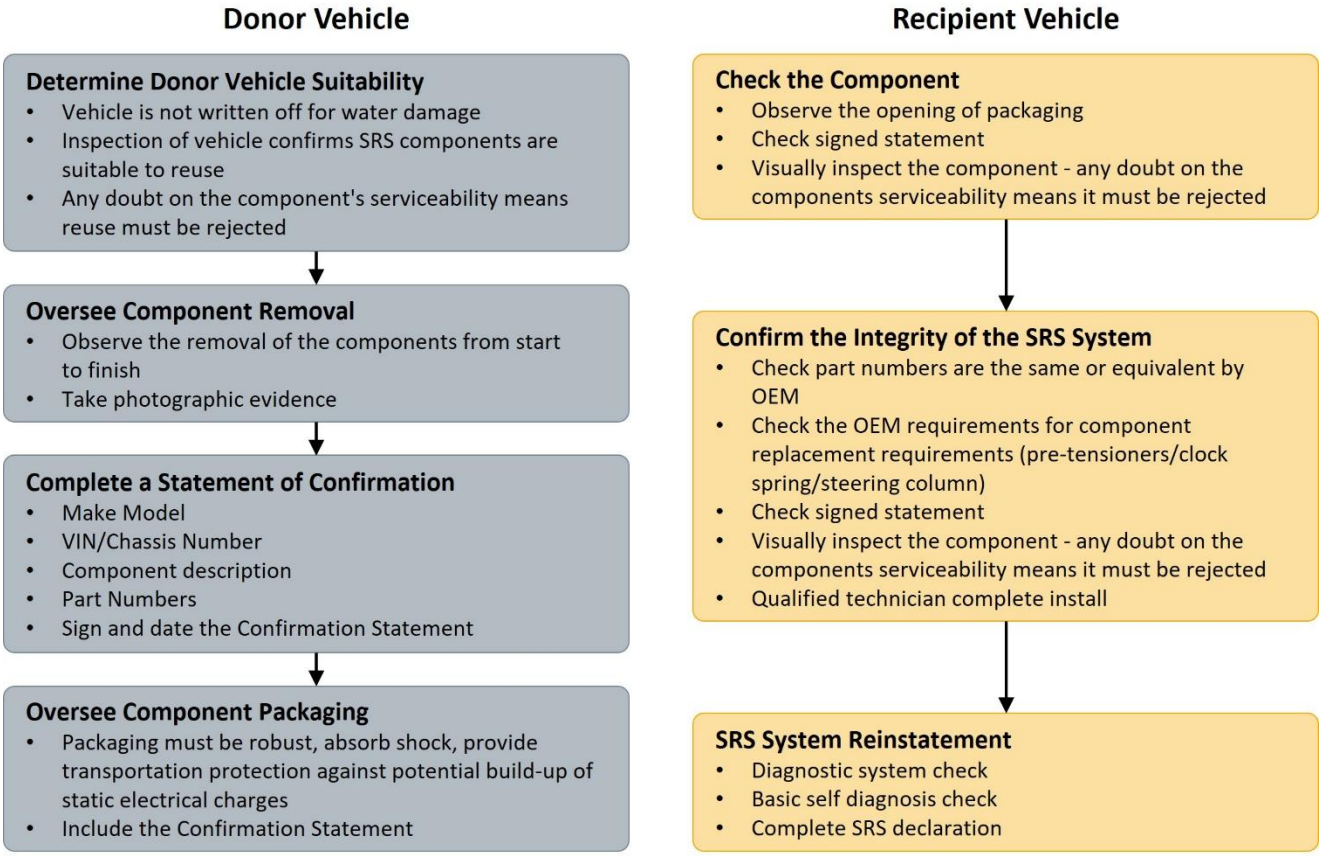
- complete an *NZTA Declaration Form for SRS, ABS, and/or ESC Inspections (see Note 13).*

Note 13	Click *here* to view the *NZTA Declaration Form for SRS, ABS, and/or ESC Inspections.*

Salvaged Airbags

A Repair Certifier must, if approving the use of salvaged airbags in a repair, oversee and document the removal of the airbags from the donor vehicle, or to delegate that responsibility to another Repair Certifier.

The following flowchart has been developed from information in the *Repair VIRM*, to outline the process for a Repair Certifier when approving the use of salvaged SRS airbags *(see Note 14)*.



Note 14	Further information on the suitability of using salvaged SRS airbags in repair certification can be found in *Repair VIRM Technical Bulletin 2 (Salvaged Airbags)*.

The process of using salvaged SRS airbags must be documented via *(see Note 15)*:

- the *RepairCert NZ Declaration Form #DF04a Salvaged SRS Component Statement Donor Vehicle* completed by the Repair Certifier who witnessed the removal of the SRS airbags from the donor vehicle (which may be delegated to another Repair Certifier if required); and

- the *RepairCert NZ Declaration Form #DF04b Salvaged SRS Component Statement Recipient Vehicle* completed by the Repair Certifier carrying out the repair certification.

Note 15	*RepairCert NZ Declaration Form #DF04a Salvaged SRS Component Statement Donor Vehicle* and *Declaration Form #DF04b Salvaged SRS Component Statement Recipient Vehicle* is available to Repair Certifiers on the *RepairCert NZ website*.

General SRS Requirements

An SRS airbag:

- cover must not show signs of damage, deterioration, or tampering; or
- warning light must, if originally fitted, remain fitted, and function normally; or
- component (such as the impact sensor, clock spring or wire harness) must not:
  - be repaired unless permitted by the vehicle manufacturer; or
  - be replaced with components of a different specification to the original component.

An SRS airbag must not be removed from a vehicle unless the vehicle is at least 14 years old and has been low volume vehicle certified for the airbag removal.

Repair Certification Documents

A Repair Certifier must upload to NZTA's electronic file repository (SharePoint), as part of the *Repair Certification File*:

- invoices for all replaced SRS components; and
- where it has been undertaken, a copy of the SRS pre-scan; and
- a copy of the SRS post-scan and any necessary programming/calibration reports; and
- a copy of the *NZTA Declaration Form for SRS, ABS, and/or ESC Inspections (see Note 13)*; and
- where one or more salvaged SRS airbags are used, a written record of the oversight process *(see Note 15)*; and
- all Vehicle Manufacturer's Information, or other Repair Industry Information, which is relevant to the SRS reinstatement process, that is referred to or relied upon to guide the repair process.

In Summary

The post-collision reinstatement of SRS components is very complex, and is an area where Repair Certifiers should be particularly well-versed, and vigilant, when assessing a vehicle requiring this repair work.

As motor vehicle occupant protection technology advances even further, this will become even more complex, and require ever-greater understanding and vigilance on the part of Repair Certifiers.

Referring to Vehicle Manufacturer's Information and consulting trusted Repair Industry Information sources such as Thatcham, I-CAR, or Ezi-Methods for model-specific SRS information is critical for accurate inspection, repair, and replacement of SRS components.

By following the Best-practice Guidance and *Repair VIRM* requirements provided in this Technical Bulletin, a Repair Certifier's decisions will be compliant with the *Compliance Rule* and *Repair Rule*.

FOR FURTHER INFORMATION PLEASE CONTACT REPAIRCERT NZ.