SWO Damage Assessment Criteria National Training Course



National Motor Vehicle Theft Reduction Council driving down vehicle theft

TRAINING GUIDE

Changes to the damage assessment criteria for the classification of statutory write-offs

Whilst the initial scheme had an immediate impact on stopping criminals using the identity of an extensively damaged vehicle to 're-birth' a matched stolen vehicle, more recently other deficiencies have been identified as criminals modified their preferred methods of operation. This has included using parts from stolen vehicles to repair less extensively damaged vehicles.

This is not surprising as these career criminals will attempt to find new ways to maintain their livelihood once one path is closed off. Achieving lasting reductions in profit-motivated vehicle theft therefore requires a stepped process that systematically closes off opportunities for re-birthing.

The National Motor Vehicle Theft Reduction Council (NMVTRC) and its stakeholders have therefore developed and updated the technical assessment criteria for passenger and light commercial vehicles (PLCs) to:

- Better align the damage criteria with modern vehicle design and fabrication techniques and materials.
- Close off gaps in industry and government processes that were being exploited by profit-motivated thieves.

In addition to improving vehicle safety, the new criteria will reduce the pool of damaged vehicles available for repair and consequently reduce the ability of profit-motivated thieves to manipulate the related process undetected.

Training guide

This training and reference material has been developed by the NMVTRC in consultation with the state and territory transport agencies and industry stakeholders.

Training in the new assessment criteria is being facilitated by the NMVTRC in cooperation with these parties.

Note: The contents of this guide are not a statement of laws and should not be used as legal advice. It is recommended that independent legal advice be obtained if application of any laws and or legislation is required. If necessary, questions should be directed to the relevant state or territory transport agency.

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Written-off vehicle legislation

A national framework for the management of written-off vehicles, first introduced in some parts of Australia in the mid 1990s requires all vehicles, that have been declared to be a total loss and meet a specific vehicle type and age criteria, to be assessed against a set of specific technical criteria and classified as either a repairable write-off (RWO) or a statutory write-off (SWO).

A SWO may only be sold subject to a statutory restriction that it may only be used for parts or scrap metal.

A RWO may be repaired and re-registered subject to the vehicle passing specific safety and identification inspections.

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SECTION 1: LEGISLATION BACKGROUND AND REVIEW

Section objective

Review legislation background and purpose; understand the key drivers and risks that determine the need for continual maintenance and review of the assessment criteria.

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1.1 WOV background

Written-off vehicle (WOV) legislation incorporating specific assessment criteria were first developed in South Australia and New South Wales in the mid 1990s. With an aim to improve road safety and consumer protection, and to clamp down on vehicle theft, re-birthing and related crime, the NMVTRC brokered introduction of harmonised national arrangements in the early 2000s, providing the following benefits:

- A consistent national approach.
- A framework upon which enhancements or new risk mitigation can be easily established.
- Mandatory compliance.
- Application of financial penalties for noncompliance.
- Establishing a single point of reference.

The national framework requires all vehicles, that have been declared to be a total loss and that meet a specific vehicle type and age criteria, to be assessed against a set of specific technical criteria and classified as either a repairable write-off (RWO) or a statutory write-off (SWO):

- SWO may only be sold subject to a statutory restriction that it may only be used for parts or scrap metal.
- RWO may be repaired and re-registered subject to the vehicle passing specific safety and identification inspections.

1.2 Assessment criteria review

In 2009 the NMVTRC, with the cooperation of Austroads, hosted a national workshop in response to concerns the WOV process was continuing to be manipulated by criminals to launder rebuilt repairable write-offs (RWOs) constructed with stolen parts. The workshop resolved that the existing criteria were in need of urgent updating to reflect the changes in vehicle design and construction and make the system more impervious to manipulation by criminal networks and fraudsters.

Through an extensive audit and review process incorporating an Expert Reference Group (ERG) of 21 stakeholder representatives from a cross section of transport agencies, police, insurers and motor trades, a number of key factors were identified. These include:

• The 'volume or area-based' criteria were too simple when applied to most modern vehicles and can result in severely damaged vehicles being categorised as repairable writeoffs when it should be obvious to a trained expert that the vehicle is suited only for dismantling or scrap.

- When the original criteria were established in the mid 1990s the average age of a vehicle at that time was 9.9 years, inferring the criteria was based on an Australian vehicle fleet built in the late 1980s to early 1990s.
- Fundamental changes which have occurred in the Australian passenger vehicle fleet from the late 1980s to the present include:
 - More high and ultra high strength steel, boron steel.
 - Composite materials (steels, foam and plastics).
 - Increased use of electronics.
 - Increased consumer, manufacturer and regulatory requirements for safety.
 - Environmental impacts on the build, operation and disposal.
- It is possible that a boron steel cross member could be catastrophically damaged with a damage area less than the current 300mm by 300mm requirement.
- Risk of delayed corrosion of key electronic components, including primary safety systems, in respect of immersed vehicles.
- Identification of existing criteria gaps, resulting in vehicles that are suitable only for dismantling being classified as RWOs, some including:
 - Vehicle roll overs not explicitly identified.
 - Heavy reliance on training, skill and experience of assessors to approximately interpret the criteria.
 - Lack of recognised qualification for an assessor. Although often coming out of the trade required supplementary training.

SECTION 1: LEGISLATION BACKGROUND AND REVIEW

CONTINUED

1.2 Assessment criteria review continued

The following lists detail the fundamental changes in the design and construction of vehicles from the 1990s to the present.

1990

- Fundamental vehicle structure press formed steel with a yield stress of 200MPa to 350MPa.
- Limited uses of high strength steels.
- Predominantly spot welded together. Reference vehicles for the Australian fleet late 1980s early 1990s would be the Holden VN Commodore and/or the Ford EA.

2000

- Fundamental vehicle structure manufactured from formed parts.
- Majority of metal parts are pressed, however hydro-forming is used to create some formed parts.
- A range of steel used which have yield stresses which range from 150MPa to over 800MPa.
- Structural foam and structural plastics are increasingly used.
- Bonding techniques used to connect structural elements include spot welding, fasteners, adhesives.
- Reference vehicles for the Australian fleet circa 2000 would be the Holden VX Commodore and/or the Ford AU Falcon.
- Electronics are used extensively in engine management, transmission control, traction control, braking systems (Anti-lock Brake Systems (ABS)), airbag and seatbelt pretension deployment.

2010

- The majority of metal parts are pressed; however hydro-forming is a technique which is also used to create formed parts.
- Tailored rolling is a new technique which allows smooth and quick transitions from one thickness to another. It involves creating a blank with various thicknesses which are then pressed or formed into the final shape.
- There are a range of metals (steel and/or aluminium) used which have yield stresses which range from 150MPa to over 1000MPa.
- Structural foam and structural plastics are now commonly used. The foams and plastics can be used in isolation, in combination with one another or the structural metals.
- The bonding techniques used in vehicles to connect structural elements include spot welding, laser welding, fasteners and adhesives.
- Electronics are used extensively in engine management, transmission control, braking systems (ABS, brake for distribution), collision avoidance (Electronic Stability Control), airbag and seatbelt pre-tensioner deployment, parking assistance (proximity sensing, reversing cameras), seat positioning, driver information display, tyre pressure sensors, etc.

A 'frequently asked questions' document produced by the NMVTRC provides some important detail as to why the changes were required. The document can be obtained from the NMVTRC website:

www.carsafe.com.au/images/stories/pdfs/2011_reports

Select: 'Updated Link Noti Form New Damage Assessment Criteria FAQs – Feb 2012 pdf'.



1.3 Changes to the assessment criteria of SWO vehicles

At the conclusion of the review process the NMVTRC proposed five key changes to the assessment criteria for the classification of SWO for PLCs. Most jurisdictions will adopt and implement the legislative changes by mid 2012, with the ACT and NT to follow in late 2012 and early 2013.

The five key changes include:

- Increasing the number of structural areas of the vehicle to be examined for potential evidence of impact damage from five to eight by adding the longitudinal rails, pillars and supplementary restraint systems to the current categories of roof, floor pan, firewall, suspension and mechanical components.
- Substituting the current 'volume or area-based' assessment with more specific indicators that the component has been subject to a significant structural load resulting in a fracture, cut, crack, buckle or fold.
- Requiring like areas of unconnected damage to select components (i.e. the pillars, floor pan, firewall, longitudinal rails and suspension) to be counted separately towards meeting the three count threshold for statutory write-off status.
- Rationalising the water damage criteria by treating any immersion fresh, brackish or salt water consistently. Significantly lowering the point of inundation of the cabin at which the vehicle must be classified as a statutory write-off to the level of the inner door sill.
- Providing greater clarity in respect of the level of fire damage or component stripping that would render a vehicle a statutory write-off.

Each point will be examined in greater detail in 'Section 3: Assessment criteria for the classification of SWOs' of this guide.

SECTION 2: ASSESSMENT AND WOV NOTIFICATION PROCESS

Section objective

Review the assessment process ensuring a clear understanding of assessor requirements including competencies, application of criteria and notification.

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2.1 The assessment process

Requiring a greater application of engineering principles to the damage assessment process is not expected to, in the vast majority of cases, unduly lengthen the classification process. Extensive in-field testing established that the three disqualifying criteria that constitute a SWO classification could be determined in the normal course of a standard assessment. Key to this outcome, however, is suitable assessor competency including knowledge of recognised repair, industry standards and a clear understanding of the total loss process.

(a) Assessor competency

Whilst not required in jurisdictions other than NSW, it is preferred that assessors undertaking the assessment of a damaged vehicle should have appropriate training, qualifications or experience, including but not limited to:

- A trade qualification or equivalent achieved through experience and or recognised prior learning in automotive vehicle body, paint, mechanical and/or electrical diagnosis and repair of the respective vehicle types.
- The successful completion and attainment of a recognised assessor training course.
- A demonstrated ability to competently evaluate vehicle damage to determine suitable repair cost, method and if it has suffered non-repairable damage.
- A demonstrated ability to understand and apply repair guidelines and standards as published by the relevant vehicle manufacturer, a peak motor trades association or specialist automotive training body.

It is a requirement in NSW that persons that carry out vehicle damage assessments must be competent and hold the prescribed qualifications as listed in its written-off vehicle laws.

A recognised assessor training course is intended to prepare and equip an individual that possesses relevant preexisting trade qualifications, with the skills and knowledge required to perform a range of high level evaluation and assessment functions in the automotive assessing industry. AUR 40511 Certificate IV in Vehicle Loss Assessing is an example of a training course that includes core units relevant to total loss process and WOV regulations.

Unit code	Unit description
AURVNA4001	Provide vehicle loss assessment and identify repair requirements
AURVNA4002	Provide vehicle total loss assessment
AURVNA4004	Apply insurance industry knowledge to vehicle loss assessment
AURVNA4006	Identify and value vehicle salvage
AURVNA4007	Apply automotive mechanical and electrical knowledge to vehicle loss assessment
AURVNA4008	Apply automotive body and paint knowledge to vehicle loss
AURVNN4001	Evaluate vehicle bodywork for damage and identify repair requirements

(b) Vehicle damage assessment

When undertaking a vehicle damage assessment, the assessor should:

- Apply the relevant repair guidelines and standards published by the appropriate vehicle manufacturer, a peak motor trades association or specialist automotive training body in so far as they relate to the structural integrity and safety of the vehicle.
- Upon determining a vehicle to be a total loss, apply the vehicle damage assessment criteria as required under the relevant jurisdictional legislation.

(c) Parts recyclers and auction houses

A vehicle assessment conducted within these businesses is typically limited to the evaluation of damage to determine salvage value for the purpose of dismantling or disposal on behalf of clients. In a situation where WOV notification has not occurred prior to the business taking possession of the vehicle, it is the business operator's responsibility to ensure the application of damage assessment criteria is applied by a suitably qualified person with the demonstrated ability equivalent to that of an assessor.

SECTION 2: ASSESSMENT AND WOV NOTIFICATION PROCESS CONTINUED

2.1 The assessment process continued

(d) Defining a total loss

'Total loss' is a typical insurance term referring to a vehicle that has been assessed as uneconomical to repair. Whilst the form of words used to define the term may vary lightly between Insurers and/or jurisdictions, they essentially achieve the same outcome.

In plain English the term refers to a vehicle where the market value less the salvage value is less than the cost of repair.

Example: Market value (\$2,000) Less salvage (\$500) = \$1,500 if the cost of repair exceeds \$1,500 then the vehicle would be considered uneconomical to repair = 'total loss'.



Note: The above diagram demonstrates the WOV process post the total loss decision for all jurisdictions other than NSW. NSW does not allow a 'No' or RWO option post the total loss decision.

2.2 WOV notification

Impacts to the WOV notification process arising from changes to the damage assessment criteria for the classification of SWO vehicle are detailed in 'Section 3: Assessment criteria for the classification of SWOs' of this guide. The following summarises the critical points of the notification process that are not affected by the change as they represent an important part of the assessment process.

(a) Vehicle types and ages

The prevailing vehicle type and age criteria have not changed with the new damage assessment criteria for the classification of SWOs.

(b) Notification responsibilities

Reporting requirements have not changed with the new damage assessment criteria for the classification of SWOs. The range of persons defined as notifiers is specified in the relevant jurisdictional laws. However, it may extend to but not be limited to insurers, self-insurers, auction houses, motor car traders, automotive dismantlers, recyclers and vehicle owners.

Notification responsibilities include:

- Motor vehicles that meet specific type and age criteria, assessed as a total loss.
- A notifier may authorise an agent to report a vehicle to the WOVR. In this case the personal details of the agent and the notifier must be included in the notification. The notifier is guilty of an offense if the agent does not notify the WOVR.
- When selling a vehicle, the notifier or agent should clearly specify in documentation whether a vehicle is a total loss and whether it has been reported to the WOVR.

(c) Notification process

Each state and territory transport agency offers a manual notification process while some also provide a web based reporting system.

It is necessary to lodge the WOVR notification with the jurisdiction in which the vehicle is registered. If the vehicle is unregistered, the notification should occur in the jurisdiction in which the damage rendering the vehicle a RWO or SWO occurred.



Manual notification

- Notification by the paper based system must be completed using the relevant jurisdiction's version of the model National written-off vehicle notification form.
- Manual notification requires all detail to be legible and include contact names and phone contact numbers.
- Notification is usually required by fax. Options for notification by alternative methods should be confirmed with the relevant state or territory transport agency.

Web based notification

• Check with your local registration authority about batch processing and auto-electronic lodgement options.

(d) Notification requirements

- The vehicle registration number must be transcribed directly from the registration plates on the vehicle unless there are no plates attached. In such a case, the registration number must be transcribed from the registration certificate or label.
- The VIN must be transcribed directly from the vehicle or the VIN plate (not from the compliance plate or documentation). All characters are to be recorded.
- Notification is required within seven days of the vehicle being assessed to be a total loss and before the vehicle is sold or disposed of.
- In the case of an auto dismantler, where the notification has not occurred before taking possession, notification is required within seven days after the auto dismantler makes the decision to demolish or dismantle the vehicle. In any event, notification must occur before the part containing the VIN is sold or disposed of.

(e) Information standards

Mandatory fields where information must be provided each time a notification is made to the WOVR include:

- Vehicle details (including, make, model, vehicle type and VIN)
- Notifier details (including, surname/company name/business name, given names/ABN/CAN, telephone and address)
- Incident details (including, write off type)
- Statutory declaration
- Damage coding
- Damage details

2.3 Jurisdictional variations

The new assessment criteria will be applied in all jurisdictions to PLCs.

There are some variations between jurisdictions in respect of how vehicle ages are calculated and the classes of vehicles that are subject to reporting as part of the more general written-off obligations. It is the notifier's responsibility to ensure they are fully conversant with any state or territory variations.

An important variation relates to the application of the new criteria in NSW. While NSW law bans the re-registration of most written-off vehicles, the new damage assessment criteria will be applied by Roads and Marine Services (RMS) to any vehicle considered for exemption from the general ban. Full details of the NSW scheme are available from the RMS website www.rms.nsw.gov.au/wov

Notifiers of NSW registered written-off vehicles also need to be aware that there is no provision to enter a vehicle onto its register in the category of repairable. All total loss vehicles are deemed statutory write-offs.

Section objective

To review and achieve a clear understanding of the new damage assessment criteria for the classification of statutory write-off vehicles.

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Under the national framework for the management of WOVs any PLC that has been determined to be a total loss by an insurer or other notifier as a result of:

- damage induced by a collision, fire, water inundation, other weather event, malicious action; or
- dismantling or stripping;

must be classified to be either a statutory write-off (SWO) or repairable write-off (RWO).

A SWO may only be sold subject to a statutory restriction that it may only be used for parts or scrap metal. A RWO may be repaired and re-registered subject to the vehicle passing specific safety and identification inspections.

A vehicle determined to be a total loss must be assessed against the damage assessment criteria as set out in the relevant jurisdictional legislation to determine its classification. There are 11 categories of potential damage that each vehicle must be assessed against, comprising:

- Three forms of specific 'event' related criteria (fire, water and vehicle stripping). If the vehicle meets any of these criteria, it must be classified as a SWO.
- Eight separate areas of potential structural damage to be reviewed.

These are set out on pages 14-31 of this guide. If the vehicle is assessed to have sustained damage to any three of the identified structural areas and/or supplementary restraints it must be deemed to be a SWO, e.g. two structural areas and supplementary restraints or three structural areas. Each different and separate area of damage to the pillars, floor pan, longitudinal rails or independent suspension mounts must all be counted separately towards meeting the 'three count threshold' for SWO status.

3.1 Incident types

Six incident types apply, each including an identification code required in the notification process. These include:

Code	Incident type	Description – damaged by
D	Dismantle	Legitimate removal of components for use as parts
F	Fire	Flames and heat, effecting structural components
Н	Hail	Frozen water
	Impact	Collision
Μ	Malicious	Vandalism including minor unauthorised stripping of parts
W	Water	Immersion in any water (fresh or salt)

3.2 Structural loading

As referenced in 'Section 1.2: Assessment criteria review' of this guide, changes in vehicle design and construction, especially in respect of the use of composite materials and advanced safety systems, mean that it is increasingly more complex to assure a complete and safe repair of a modern vehicle.

The fundamental premise which underpins the revised criteria is that the classification decision requires greater application of engineering principles to ensure that vehicles which should not be repaired on safety grounds are appropriately identified and classified as only suitable for parts or as scrap.

Through an independent audit of 400 damaged vehicles it was found:

"the volume or area-based criteria (300mm by 300mm) was too simple when applied to most modern vehicles and could result in severely damaged vehicles being categorised as repairable write-offs."

As a result the volume or area based criteria has been replaced by five individual structural loading indicators that are to be assessed against the damage criteria on PLCs. These include:

- Buckle
- Cracking
- Cut
- Fold
- Fracture

3.2 Structural loading continued

The following images depict a typical example of each structural loading indicator:



Buckle (top view)



Buckle (side view)







Cut



Fold







3.3 Damage assessment criteria

Three new criteria have been added to the existing eight. A vehicle deemed to be a total loss (and meets the type and age criteria) must be assessed against the 11 damage assessment criteria to determine its WOV classification. The damage assessment criteria are separated into two groups. These include:

Structural

- 1 Roof
- 2 Pillars*
- 3 Floor pan
- 4 Firewall
- 5 Longitude structural rails/chassis*
- 6 Suspension
- 7 Mechanical
- 8 Supplementary restraints*

Event

- 9 Fire
- 10 Water
- 11 Stripping
- * New criteria.

Any vehicle deemed to be a total loss that has damage to any three of the identified structural areas and/or supplementary restraints is deemed to be a SWO.

The technical reference guide developed by the NMVTRC provides clear definition and diagrams of the criteria. The document can be obtained from the NMVTRC website:

www.carsafe.com.au/images/stories/pdfs/2011_reports

Select: 'NMVTRC Technical Guide High Res Web pdf'.

(a) Roof

The criteria to be used for the vehicle's roof is that if the roof has been loaded such that individual structural element(s)/ member(s) have been structurally fractured, cut, cracked, buckled and/or is folded over onto itself, then the roof has an area of structural damage.





Roof – buckled

View of the roof, windscreen header, front left door header and 'A' pillar. The roof has been structurally loaded such that the windscreen header has buckled.









Roof support rail – folded

Internal view of lateral roof rail which due to structural loading has folded over onto itself.



(b) Pillars

The criteria to be used for the vehicle's pillars is that if the pillar(s) has/have been loaded such that an individual structural element has been structurally fractured, cut, cracked, buckled and/or is folded over onto itself, then the pillar has an area of structural damage.

Each pillar counts separately i.e., if three pillars are structurally damaged then based on the pillar damage alone the vehicle would have three areas of structural damage. Hence, the vehicle with three damaged pillars would be classified as a SWO.



'A' pillar - buckled

A vehicle 'A' pillar which has failed by buckling due to structural loads to the roof.









'A' pillar – cut

The 'A' pillar of a vehicle which has been cut (e.g. by emergency services personnel to permit occupant extraction).



(c) Floor pan

The criteria to be used for the vehicle's floor pan is that if the floor pan has been loaded such that individual structural element(s)/member(s) have been fractured, cut, cracked, buckled and/or is folded over onto itself, then the floor pan has an area of structural damage. Each different and separate area of damage to the floor pan must be counted individually, i.e. damage under the driver's seat and damage under the rear passenger side seat represents two areas of structural damage. Hence the vehicle would require only one other area of structural damage to be classified as a SWO.





Floor pan – buckled

A side view of a vehicle showing buckling and folding of the floor.





The floor panel commences from and includes inner sill panel where that panel attaches to the floor pan. It however, excludes the outer sill/rocker panel and internal stiffener and braces between the inner and outer panels.





Floor pan – buckled

View of the rear underneath of a vehicle showing buckling of the floor pan.



(d) Firewall

The criteria to be used for the vehicle's firewall is that if the firewall has been loaded such that an individual structural element(s)/member(s) have been fractured, cut, cracked, buckled and/or is folded over onto itself, then the firewall has an area of structural damage. If different and unconnected areas of damage are identified, each area counts separately.



Firewall – folded

View of the firewall showing a fold induced by impact damage.









Firewall - cracked

View through the front left wheel-well of the firewall showing a crack in the firewall.



(e) Longitudinal structural rail/chassis

The criteria to be used for the vehicle's longitudinal structural rails/ chassis is whether the longitudinal rails/chassis has been structurally loaded such that longitudinal structural element(s)/ member(s) have been structurally fractured, cut, cracked, buckled and/or is folded over onto itself.

Each longitudinal structural rail counts separately i.e. if two longitudinal structural rails are buckled and the front right suspension mount is damaged the vehicle would have three areas of structural damage and thereby be classified as a SWO.





Chassis rail – fractured View of longitudinal structural rail/chassis fractured due to impact.





If both longitudinal rails are damaged to the extent that they both require Original Equipment Manufacture replacement, a third count of damage is to be applied and the vehicle is to be classified as a SWO. Note: A deformable member that is designed to be removed and replaced is not considered a fundamental structure of the vehicle if damaged and such components are not to be registered as a damage count.





Chassis rail - buckled (side view)

View of a longitudinal structural/chassis rail which has buckled due to structural impact loading.



(e) Longitudinal structural rail/chassis continued





Chassis rail - folded

View of a longitudinal structural/chassis rail which has folded due to a side impact.







Deformable crush tube - damaged

This is an example of a deformable end plate that is designed to be removed and replaced. Such components are not to be registered as a damage count.



(f) Suspension

The criteria to be used for the vehicle's suspension is whether there has been any collision induced damage to any of the suspension mounts to the chassis/body. Assessment of independent suspension units (ISU) and live axles (i.e. connected axles) require different consideration. In the case of an ISU, each ISU which has sustained damage to a mount shall be counted as a separate area of structural damage. In the case of a live axle, damage to one or both mount(s) shall be counted as only one area of structural damage.



Suspension mount – fractured View of a fractured suspension mount.







Suspension and linkages - damaged

This is an example of damaged suspension components that do not form part of the damage criteria because components such as suspension arms and linkages are designed to be removed and replaced.



(g) Supplementary restraints

The deployment of supplementary restraints is an indication that the vehicle has been subject to a structural load. The criteria to be used for the vehicle's supplementary restraints is whether there has been any deployment of either an airbag (frontal, side and/or curtain) system within the vehicle occupant cabin and/or the activation of a seatbelt pre-tensioner. Deployment of supplementary restraint systems would be grouped. Deployment of a single or multiple airbag(s) (front, side or curtain) or pre-tensioner(s) can only account for one area of structural damage.



Pre-tensioner - active

View of a seat belt buckle showing a buckle with an active pre-tensioner.







Pre-tensioner – fired

View of a seat belt buckle showing a buckle with a used pre-tensioner.



(h) Mechanical components

The criteria to be used for the vehicle's mechanical components is whether there has been any collision induced damage to the engine block, transmission case, differential case(s) and axle housings such that the items are cracked, deformed and/or broken. Damage to the mechanical components would be grouped. Damage to single or multiple mechanical components can only account for one area of structural damage.



Engine mount – fractured View of fractured engine mount induced by a collision.





(i) Fire

The fire damage SWO criteria consider in-vehicle (engine compartment, occupant cabin and/or boot) and external damage. A fire (whether in-cabin or external) which causes the internal and/or external paint to blister on any three of the following structural members: roof, pillars, floor pan, firewall and or structural rails/chassis shall be deemed a SWO.

Paint blistering on the doors and/or external panels that are designed to be detached is not sufficient for the vehicle to be classified a SWO as these components can be replaced without affecting the rest of the structure.

In addition, where a vehicle has sustained a combination of exterior and interior fire damage such that it is determined to be a total loss, it is to be classified as a SWO.

(j) Water

Where the internal cabin of a vehicle is inundated with any water (fresh, salt and/or brackish water) such that the internal cabin water level rises above the level of the inner door sill for any period the vehicle is to be classified as a SWO.

(k) Stripping

Where a vehicle is stripped of interior or exterior parts, panels and components such as wheels, bonnet, guards, doors, boot lid and interior parts or a combination of these items, and is determined to be a total loss, it is to be classified as a SWO.

3.4 Damage coding

The damage location, coding and primary/secondary damage coding system has been simplified, eliminating multiple tables/ boxes and alpha (HPNL/LPNL) coding system in lieu of a numerical 1-41 for damage location and an alpha A-P coding system for damage severity.

The following list details the numerical damage location coding system.

Code Description

- 1 Passenger front
- 2 Driver front
- 3 Driver side
- 4 Driver rear
- 5 Passenger rear
- 6 Passenger side
- 7 Engine
- 8 Roof
- 9 Interior10 Front C/van and M/bike*)
- 11 Rear (C/van)
- 12 Left rear (M/bike)
- 13 Right rear (M/bike)
- 14 Whole vehicle
- 15 Floor pan (passenger front)
- 16 Firewall
- 17 Chassis/Structural rail (passenger)
- 18 Floor pan (driver rear)
- 19 Floor pan (driver front)
- 20 Floor pan (passenger rear)
- 21 Chassis/structural rails (driver side)
- 22 A Pillar passenger
- 23 A Pillar driver
- 24 B Pillar passenger
- 25 B Pillar driver
- 26 C Pillar passenger
- 27 C Pillar driver
- 28 D Pillar passenger
- 29 D Pillar driver
- 30 Engine block (cracked/fractured)
- 31 Transmission case
- 32 Differential case
- 33 Axle housing
- 34 Suspension (passenger front)
- 35 Suspension (driver front)
- 36 Suspension (passenger rear)
- 37 Suspension (driver rear)38 Air bag front
- 38 Air bag front39 Air bag side
- 40 Air bag curtain
- 41 Seat belt pre-tensioner

* While the new damage criteria apply only to PLCs these codes form part of the national data set for all written-off vehicles.

The following list details the alpha damage severity coding system:

Description Code Heavy panel А В Light panel С Heavy structural D Light structural Е Unrepairable F Major mechanical damage Minor mechanical damage G Н Major stripping Minor stripping J Major vandalism Minor vandalism Κ Water (salt) L Water (fresh) Μ Burnt/blistered Ν Ο Smoke and heat

P Minor smoke

3.5 National written-off vehicle notification form

To accommodate the changes a new model National witten-off notification form has been developed. Because forms also carry important local information there may be minor variations around the model template.

As covered previously in 'Section 2: Assessment and WOV notification process' the notification form includes the following data requirements.

(a) Vehicle details

Vehicle Make* Vehicle type* (please tick) Caravan[#] Trailer# Model* ☐ Motor vehicle □ Motorcycle Registration no. State or Territory Engine no. Date of Manufacture^{^ (NT)}, MM, YYYY VIN* (17 characters) Label no.2 (TAS) Label no.1 (SA, TAS) Approval no.(SA)



(b) Notifier details

Given name(s)*/ABN*/ACN*	Telephone*							
Address*	_		Postco	ode	1 1			
Type of notifier (please tick)	🗌 Insurer	Auction house	🗌 Dealer	🗌 Auto dism	antler	Assessor	🗌 Owner	🗌 Othe
					Insura	nce claim no		
c) Incident details								
c) Incident details								
Client/customer no. A lissw, dub, say	1	Date write-off decisio	n made* ₁	1	Notifie	r's reference no.		
c) Incident details								

Statutory declaration		
I declare that the information given on this form is true and correct.	Signature	Date
If notifying on behalf of a company or business, please print your full r	name here.	

(e) Damage coding

Damage coding (refer to reverse side of form for instructions)

1st Incident type	Damage location	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Damage severity														
	Damage location	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Damage severity														
	Damage location	29	30	31	32	33	34	35	36	37	38	39	40	41	
	Damage severity														
2nd Incident type	Damage location	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Damage severity														
	Damage location	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Damage severity														
	Damage location	29	30	31	32	33	34	35	36	37	38	39	40	41	I
	Damage severity														I

(f) Damage details

Damage details* (up to two incident types may be recorded)

A full description of the national damage assessment criteria for passenger and light commercial vehicles and how to apply them is set out in the publication Damage Assessment Criteria for the Classification of Statutory Write-Offs (2011) published by the National Motor Vehicle Theft Reduction Council and Austroads. A PDF version of the publication can be downloaded free of charge from carsafe.com.au or austroads.com.au

- 1. Incident type code: Select the 'incident type' that has resulted in the damage from one of the six kinds listed below and enter the code letter next to the 1st Incident type. If a second 'incident type' is involved, enter the applicable code letter next to the 2nd Incident type.
- 2. Damage location: Refer to the diagrams and list below and match an appropriate Damage severity code to each location where the vehicle is damaged. Enter the 'damage severity codes' against the numbered 'damage locations' in the 1st Incident type table on the front page. Only use the second table if a second incident type has also caused damage.

(g) Incident type

Incident type code					
D Dismantled	F Fire	H Hail	I Impact	Malicious/vandalism/stripped	W Water (salt or fresh)



(h) Damage location



(i) Damage severity codes

Damage severity code			
A Heavy panel	E Unrepairable	Minor stripping	M Water (fresh)
B Light panel	F Major mechanical damage	J Major vandalism	N Burnt/blistered
C Heavy structural	G Minor mechanical damage	K Minor vandalism	0 Smoke and heat
D Light structural	H Major stripping	L Water (salt)	P Minor smoke

SECTION 4: IMPLEMENTATION

Section objective

To examine and understand the individual and business risks associated with the change in damage assessment criteria for the classification of statutory write-off vehicles.

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4.1 By jurisdiction

Most jurisdictions will adopt and implement the legislative changes in the September to March period of 2012/13. It will therefore be important for businesses and individuals working on a national basis to be aware of the timings to ensure the correct damage assessment criteria and notification process is used accordingly. A number of issues or risks arising from the progressive roll out have been raised in the following section of this guide and should be considered by all businesses and or individuals against their own operational circumstance.

The following table details the proposed 'go live' dates for each jurisdiction.

Location	Go live date
Queensland	
New South Wales	
Victoria	
Australian Capital Territory	
Tasmania	
South Australia	
Western Australia	
Northern Territory	

4.2 Risks and mitigation

Through an independent audit of over 400 WOVs commissioned by the NMVTRC as part of the review process, it was found that the classification system was generally operating to a high level and there was no evidence of any deliberate manipulation of the classification process. The audit indicated that overall stakeholders had a strong understanding of the legislation, trained new employees accordingly and applied the criteria consistently.

The change in damaged assessment criteria for the classification of statutory write-offs, particularly with a progressive rollout by jurisdictions may increase the risk of error through misunderstanding and/or lack of planning by business. A number of risks and mitigation steps have been identified and listed for consideration by business and individuals.

Risk	Mitigation
Assessing and Insurance company electronic claim/ assessing management system have not been updated with the new criteria.	Damage assessment criteria specification should be obtained from the NMVTRC and systems updated to meet the changes.
Electronic claim/ assessing management systems will not be updated in time.	'Work around' manual or on line notification to be used until electronic claim/assessing management systems are updated.
Electronic claim/ assessing management systems cannot accommodate the progressive jurisdictional roll out.	'Work around' manual or on line notification to be used until the new legislation is achieved nationally.
Lack awareness of jurisdictional 'go live' dates.	The NMVTRC will accumulate a stakeholder list ensuring all are notified of the 'go live' date for each jurisdiction.
Assessors will not remember the new criteria and coding systems 'in the field'.	Quick reference guides have been produced and should be used by all assessors for 'in field' use/ reference.
Process errors occur in early stages.	All jurisdictional transport authorities have an amendment process.
New assessors starting require training.	The new criteria have been communicated to the relevant training authorities for reference in the Cert IV Loss Assessing course (AUR40511). All businesses should ensure training
	on WOV legislation is provided.
Not all assessors will be able to attend the NMVTRC training sessions.	Initial training sessions will be conducted in regional locations within each jurisdiction to maximise assessor attendance.
	DVD and online sessions are being considered as a solution to ensure 100% attendance of all assessors.

It is strongly recommended that all individuals and business prepare for the changes and review the risks applicable for their situation.

SECTION 5: TRIAL AND ASSESSMENT

Section objective

To review the reference guides designed for 'in the field' use and to assess knowledge retention of trainees through a practical and theoretical exercise.

Index

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5.1 Reference guide

A practical reference guide has been developed for 'in field' use. The laminated guide references key information provided in 'Section 3: Assessment criteria for the classification of SWOs' of this guide, it includes:

- Damage assessment criteria structural and event.
- Structural loading indicators.
- Incident types and codes.
- Damage location.
- Damage coding.
- Damage severity code.

5.2 Practical trial

Using a National written-off vehicle notification form and relevant training materials, participants will work individually and collaboratively to apply the WOV damage assessment criteria.

The practical trial process requires:

- Participants to break into four groups.
- Each group will assess one of the four vehicles provided.
- Each participant will complete a notification form.
- Groups will discuss their findings and prepare a single form.
- Each group will present their form and findings to the larger group including the use of digital images where possible.

The practical trail requires the identification and collection of the following information:

- Incident type.
- Structural loading.
- Categories of damage (structural and or event).
- Damage count to structural and/or supplementary restraints.
- Damage coding.
- Severity coding.

5.3 Theoretical assessment

The theoretical assessment contains 16 questions relating to the damage assessment criteria.

The assessment is not intended as a pass or fail measure. It is designed to ensure participants understand where the necessary information is provided in the training material and guides for future reference.



