

REPAIRCERT NZ UPDATE

Supporting New Zealand's Repair Certification Industry



UPDATE No.7 | 13/05/2022

Draft Technical Bulletin for Review & Comment

Technical Bulletin # 2-2022 Acid Wash



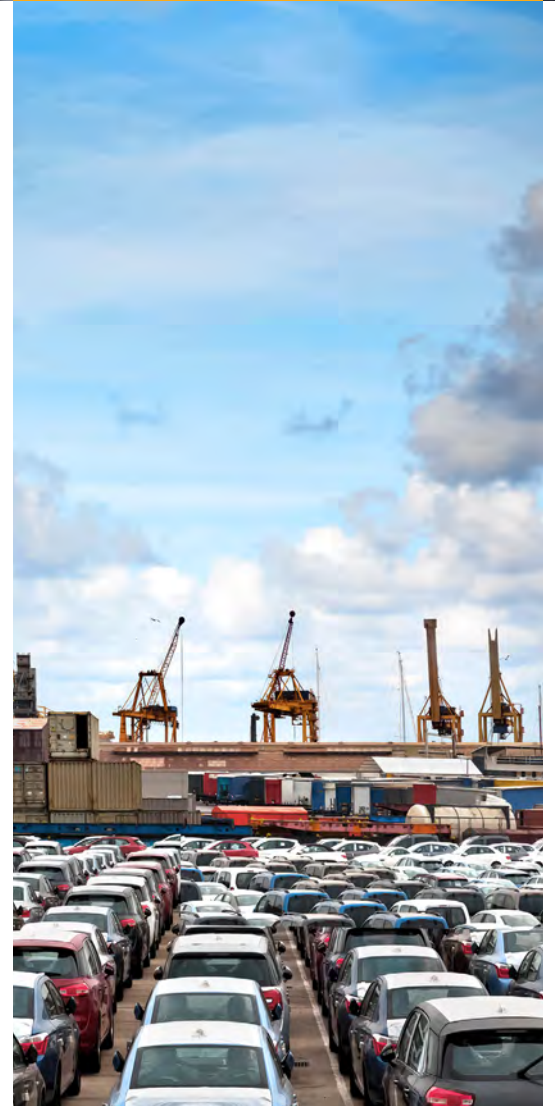
Accompanying this RepairCert NZ Update, you'll find a Draft of Technical Bulletin # 02-2022 Acid Wash. We've already provided some 'what to do when you see it' guidance to Waka Kotahi on this subject, which they're circulating to

Border Inspectors and Entry Certifiers to help them identify Acid Wash, and refer any vehicles that have been Acid Washed to Repair Certifiers.

We now want to provide Repair Certifiers with the same information, plus some further technical explanation around why it's not acceptable, and how to deal with it.

Technical Bulletin # 02-2022 Acid Wash is in Draft stage only, and we're keen to hear feedback from Repair Certifiers to see if we've missed anything, if there's unanswered questions, or if there's any other information on this subject that would provide Repair Certifiers with helpful guidance.

Please let's have your feedback - good, bad, or otherwise - to nj@repaircert.nz by the end of **Friday 27 May**. All thoughts and input will be appreciated. ■



Ensuring the Right Number of Repair Certifiers



One of the challenges that we collectively face ('we' within this context meaning the Repair Certifiers, Waka Kotahi, and RepairCert NZ), is to ensure that sufficient Repair Certifiers exist in order to provide an efficient service for the industry and the public. There should be enough Repair Certifiers, and in the right parts of the country, that the industry and the public can get reasonably prompt service without having to travel substantial distances to access the service. Waka Kotahi has done a lot of work in this area over recent years, bringing in many new much needed Repair Certifiers when Repair Certifier numbers reduced well below what was needed.

There's a balance to the 'sufficient Repair Certifiers' position however, and that is to ensure that there isn't an over-subscription of Repair Certifiers. Too many Certifiers (the same applies whether we're talking about Repair Certifiers, Heavy Certifiers, or LVV Certifiers) will result in the 'race to the bottom' - a term given to the situation where too much competition results in Certifiers dropping their standards to drop their prices to get the work. When this happens, some Certifiers will become frustrated and leave the system, and often the ones who leave are the ones the system doesn't want to lose.

Specialist certification is a highly-specialised and critical element of transport safety, with a high level of responsibility for public safety, and inspection quality must be maintained. In order to achieve optimum inspection quality, the Certifiers need sufficient work to stay sharp (to maintain familiarity with the many technical requirements they have to apply, and they need sufficient work to stay economically viable.

Because of those principles above, RepairCert NZ has a very strong view that Waka Kotahi needs to give, when considering every application, very careful consideration as to whether or not there is a need for more Certifiers in a given area, before any assessment or appointment process takes place.

RepairCert NZ is discussing this with Waka Kotahi, and we hope to achieve a common understanding that will enable, into the future, the right level of Repair Certifier numbers around the country to ensure that a skilled and motivated network of Certifiers exist, who can provide the industry and the public with good service. ■

New Repair Certifier Induction Training Presentation

RepairCert NZ Induction Course



Waka Kotahi have recently introduced a requirement that the first 30 certification files of a new Repair Certifier are 'file reviewed'. This is a 'desk-top audit' of the certification documentation prior to the LT308 being issued to ensure that the new Repair Certifier is making good decisions. Where problems are identified during the file review, coaching and support is provided to the new Repair Certifier.

This has been a Waka Kotahi function until earlier this year, however this has now been handed

over, as part of the Contract for Services, to RepairCert NZ to undertake from here-on. Waka Kotahi and RepairCert NZ are aware that a proper pre-appointment training programme is required for new Repair Certifiers so that they fully understand the various technical and operational aspects of repair certification, and this is something that RepairCert NZ will be developing into the future.

In the meantime, RepairCert NZ has - as a result of early involvement in the file review process - recognised that in the interim, new Repair Certifiers need something in the way of training immediately.

We have gained approval from Waka Kotahi to make a one-day 'Induction Training' programme mandatory as part of the appointment conditions, to provide new Repair Certifiers with a very basic understanding of the requirements, of their obligations, and what 'right' looks like. While a one-day session is nowhere near enough, it's intended to bridge the gap until the full system is developed, and provide some 'kick-off' help to those coming in until the new system is developed.

The Induction Training programme is incorporated with a Power-point Presentation, and is now ready for use with any future appointments. ■



Give Us Your Feedback

These are early days for RepairCert NZ, and, as that old Carpenters song goes, 'we've only just begun'.

There's a lot to get on with (our 'to-do list' is going to take three to five years), things keep changing, and we're getting pulled in a lot of different directions. Because of these pressures, it's very difficult to know whether or not we're doing well in terms of prioritisation.

We're going to explain the 'road-map to 2026' when we meet up with Repair Certifiers at the July road-show, but in the meantime, we're keen to get your feedback on how you think we're doing at this early stage.

So - short of complaining that our five-year plan hasn't been achieved in the first five months - please let's hear what your thoughts are, particularly if you have any big concerns about the direction or the prioritisation of things within RepairCert NZ.

You're welcome to email or phone the tech staff on their email addresses shown on this RepairCert NZ Update, or you're also welcome to contact Nikki Kidd ('NJ') via email on nj@repaircert.nz or on (04) 595-4755, or Tony Johnson via email at tony@lvvta.org.nz or phone (0274) 790-907. ■

Vehicle Import Forecast for the Next Two Months

As you all know, the effect of Covid has caused huge interruptions to our import/export industries, dramatically affecting product delivery across the board in New Zealand, and the used car industry has not gone unscathed.

The impact on the volume of used vehicles being imported into New Zealand, since the beginning of Covid, has been significant. Currently the industry is importing around 7,000 vehicles a month, a far cry from the 18,000 units you were used to pre-Covid.

The Vehicle Import Forecast table below shows indicative numbers through to the end of June 2022. We thought you might find this useful to help plan ahead for the coming months. ■

Vehicle Import Forecast lists for May and June 2022

- **OWV:** heavy machinery items.
- **Load:** Vehicles that are leaving our shore to overseas ports.
- **T - Ship:** Trans Ship. Transported from port of entry to other ports throughout New Zealand.

ETA	Vessel	Voy	LOP	Vehicles Discharge					Load	
				Total	New	Used	T - Ship	OWV	Export	T - Ship
4-May-22	Nabucco	EF204	WWO	1,088	897			191		
7-May-22	Palmela	187A	MOL	2,104	405	1,447	144	108	345	
9-May-22	Tarago	EF205	WWO	186	103			83		
10-May-22	Trans Future 6	137	TFS	728	517	181		30		162
11-May-22	Dream Angel	28	TFS	1,656		1,656				13
13-May-22	Paganella	2208	Armacup	2,130	1,038	977		115		3
14-May-22	Amethyst Ace	102A	MOL	799	488	45	171	95		
14-May-22	Themis	EZ202	WWO	700	550			150		
15-May-22	Don Juan	2258	Armacup	1,545	1,481			64		
17-May-22	Tugela	EF206	WWO	698	456			242		
19-May-22	Leo Spirit	55A	MOL	1,850	500	1,350			300	54
19-May-22	Hoegh Tokyo	101	Hoegh	775	650	5	30	90		
20-May-22	Wisteria Ace	115	MOL	1,400	1,350	50			300	
21-May-22	Morning Crystal	2209	Armacup	1,580	730	792		58		
21-May-22	Trans Future 7	137	TFS	1,300	600	670		30		
25-May-22	Tonsberg	EF207	WWO	691	516			175		
			Total	19,230	10,281	7,173	345	1,431	945	232
2-Jun-22	Trans Future 5	141	TFS	1,300	600	670		30		
5-Jun-22	Hoegh Jacksonville	50	Hoegh	775	650	5	30	90		
7-Jun-22	Cattleya Ace	TBA	MOL	2,400	1,200	1,200			300	
7-Jun-22	Parsifal	EF210	WWO	451	235			216		
10-Jun-22	Turandot	2259	Armacup	1,690	1,000	500	180	10		
14-Jun-22	Titus	EF208	WWO	727	594			133		
15-Jun-22	Dream Jasmine	20	TFS	1,500		1,500				
16-Jun-22	MOL Vessel TBA	TBA	MOL	2,500	1,250	1,250				
16-Jun-22	Onyx Ace	TBA	MOL	1,800	1,750	50				
16-Jun-22	Trans Future 6	138	TFS	1,300	600	670		30		
23-Jun-22	Paganella	2210	Armacup	1,690	1,000	500	180	10		
24-Jun-22	Garnet Ace	TBA	MOL	1,800	1,750	50				
25-Jun-22	Hoegh Seoul	122	Hoegh	775	650	5	30	90		
28-Jun-22	Thalatta	EF211	WWO	650	500			150		
30-Jun-22	Trans Future 7	138	TFS	1,300	600	670		30		
			Total	20,658	12,379	7,070	420	789	300	0

Acid Wash

What It Is and How to Fix It

Supporting New Zealand's Repair Certification Industry

Purpose

This Technical Bulletin aims to provide guidance and assistance to Repair Certifiers in the following three areas:

1. understanding the 'rust treatment' process that has been applied to used imported vehicles prior to entry into New Zealand - commonly referred to as Acid Wash; and
2. the reasons why this 'Acid Wash Treatment' requires Repair Certifier assessment; and
3. describing the correct treatment methods that are used to remove the existing Acid Wash materials (prior to the development of an appropriate corrosion treatment and protection programme).



Image 1.

Background

Border Inspection and Entry Certification have continued to observe an increasing number of used imported vehicles that have had acid-based substances sprayed indiscriminately over the underbody (including suspension and mechanical components).

The 'Acid Wash' term is used to describe a process where acids (of unknown concentrations), have been applied haphazardly to the underbody of the vehicle prior to export, with the false expectation that this is a 'quick fix' for any visible rust.

Border Inspectors and Entry Certifiers have been unsure whether to refer this for Repair Certification, as in many instances, corrosion (rust) may not be immediately apparent at the time of the inspection.

For this reason, and to provide clarification, a Position Statement on Acid Wash has been developed for all Border Inspectors and Entry Certifiers to read and understand, so that they are both confident and consistent in referring affected vehicles for repair certification assessment.

Explanatory Notes

With the expectation that Acid Wash-affected vehicles will consistently be referred to Repair Certifiers for inspection, this Technical Bulletin has been created to assist Repair Certifiers in developing appropriate rectification procedures that will by necessity, require additional preparation steps, prior to the application of legitimate corrosion treatment and protection schedules.

Classification of Acid Wash

Corrosion treatments that are substantially acid-based are described as being neutralisers/removers. These mineral or organic acid solutions react directly with iron oxide (rust). Their effectiveness will vary according to the:

- acid type (citric/hydrochloric/sulphuric/phosphoric etc.); and
- concentration; and
- severity of the rust present; and
- processes used prior, during, and after application.

Phosphoric acid is the most common acid used for neutralising/removing rust on steel, and is the predominant acid used for 'Acid Washing'.

In comparison to other mineral acids, phosphoric acid is relatively weak and less reactive to most surfaces, all the same, there is the opportunity for the acid solution to continue reacting with metals and other coatings (especially in instances where the acid wash solution may include other more aggressive acids, such as hydrochloric and sulphuric acids).

The Proper Processes

For corrosion (rust) to be neutralised/removed correctly:

- all loose, scaly rust is mechanically removed (cleaned back to bare metal as much as possible) prior to application of neutraliser/remover; and
- at the time of application, the acid treatment needs to be 'worked' into the rusted or oxidised surfaces, by a brush or abrasive pad etc.; and
- it must not be allowed to dry during that time; and
- importantly, requires thorough rinsing and drying, prior to the application of corrosion inhibitors/topcoats.

Closer Inspection of Acid Washing, as Commonly Used on Imported Vehicles

Once we understand the correct processes for corrosion treatments and protection, it becomes immediately apparent when we look at the following examples (shown in the images and descriptions below), that the Acid Wash practice is entirely ineffective, and in many instances, may be detrimental to the vehicle structure in the long term.



Image 2: loose/flaking rust scale has not been removed and is still present.



Image 3: very little iron oxide (rust) is neutralised/removed when acids are indiscriminately applied and not properly worked into the surface.



Images 4 and 5: the dry phosphorous coating created by the acid reaction to the metal (the white, powdery coating seen on the surface), is detrimental to the adhesion of subsequent topcoats.



Image 6: acids not neutralised/removed (especially in difficult to access areas e.g. the inside of box sections and welded seams), can continue to attack any exposed metal surfaces, breaking down or degrading other protective coatings that they come in direct contact with, and allowing further corrosion to develop.

Rectification Suggestions

In Acid Wash situations, the dried phosphoric coating **MUST** be neutralised/removed *prior* to the application of correct rust treatment programmes. This can be achieved by either:

1. soda-blasting; or
2. water-blasting, possibly followed by the application of one of the following options:
 - an alkali solution such as caustic soda or ammonia, in water; or
 - a 2:1 solution of muriatic (hydrochloric acid) and water; or
 - detergent diluted in water e.g., multi-purpose cleaners, dishwash and laundry liquids (preferably with high suds levels to break down the acid residue more efficiently).

If water-blasting followed by the application of one of the cleaning agents referred to above, a second water blast or thorough rinse is needed to completely remove any chosen cleaning agent, followed by thorough drying.

Corrosion Treatment and Protection

The correct corrosion treatment and prevention processes can then begin, and should be an appropriate combination of:

- **surface preparations** (rust scale removal) by mechanical means (sanding and grinding etc.) and/or media blasting; and
- **rust treatments** (removers/neutralisers and converters); and
- **protective coatings** (epoxy primers, sealers and underseals); and
- **corrosion prevention systems** (cavity waxes and penetrating oils/fluids).





In Summary

If the correct procedures are followed, any Acid Wash-affected vehicle can be repaired successfully, have the correct corrosion treatments applied, and the proper protection processes restored.

Additional information on corrosion (including preparations, treatments etc.) will become available over time, via a series of Technical Bulletins currently under development by RepairCert NZ.



FOR FURTHER INFORMATION PLEASE CONTACT REPAIRCERT NZ.