Australian Government

Australian Quarantine and Inspection Service

COMPACTORS

DISCLAIMER

The information provided in this guide merely aims to assist machinery importers meeting the Import Permit Conditions (Clean as New). Importers should note that this guide is not exhaustive and AQIS makes no warranties or representations with respect to the accuracy or completeness of that information and will bear no liability with respect to that information. Importers must satisfy all quarantine concerns and comply with quarantine conditions applicable at the time of entry. The Commonwealth through AQIS is not liable for any costs arising from or associated with decisions of importers to import based on conditions presented here which are not current at the time of importation. It is the importer's responsibility to verify the accuracy and completeness of the information at the time of importation.

Compiled by:
Matt Howard
AQIS Brisbane

The following cleaning/inspection guide has been segmented to facilitate the process. The segmentation is as follows:

Inquiries regarding this document should be directed to:
AQIS
Machinery & Military National Co-ordination Centre
PO Box 222
Hamilton QLD 4007

Phone: +61 (07) 32468706
Facsimile: +61 (07) 32468785
Email: aqis.machinery@aqis.gov.au

Information in this document is correct at time of publishing. Quarantine conditions may change without notice. Please contact AQIS to confirm details.

Australian Government
Australian Quarantine and Inspection Service

1. Engine, Chassis, Oil Tank & Housing

Image 2:
The right hand side of the Compactor engine Block. All non-affixed panels have been removed to facilitate cleaning and inspection.

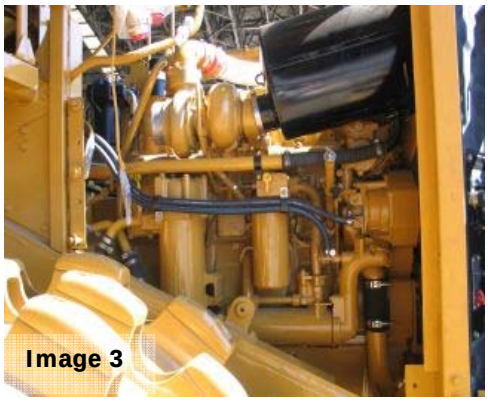


Image 3:
The left hand side of the Compactor engine Block. All non-affixed panels have been removed to facilitate cleaning and inspection.

Image 4:
All belly plates have been removed exposing the underside of the engine block for cleaning and inspection. The hollow chassis rails (red arrows) must be flushed on the presence of the inspecting officer to verify cleanliness.

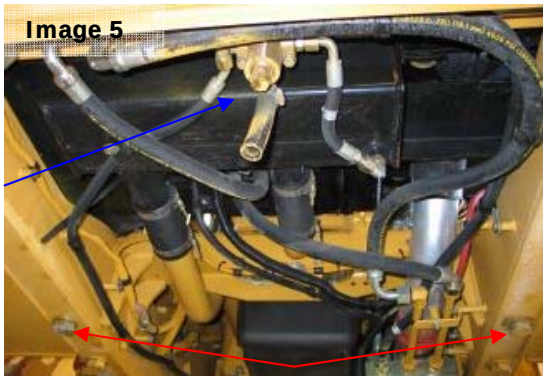


Image 5:
The underside of the radiator and shroud (blue arrow). The bolt hole access to the hollow chassis rail is highlighted again (red arrows).

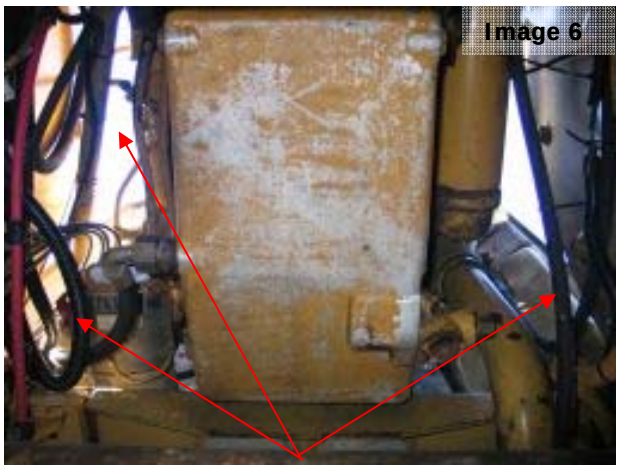
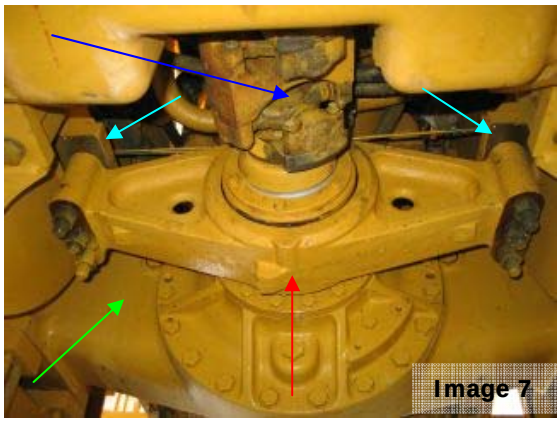


Image 6:
The sump under the front end of the Dozer. Ensure that this area has had all contaminated grease removed. All hydraulic hoses and wiring harnesses (red arrows) must be thoroughly cleaned and inspected.

Image 7:
The rear sway (red arrow) bar, universal joint (blue arrow) and diff (green arrows). All contaminated grease is to be removed from all universal joints and check all countersunk holes and ledges. Ensure the topside of the engine mounts (aqua arrows) is clean.



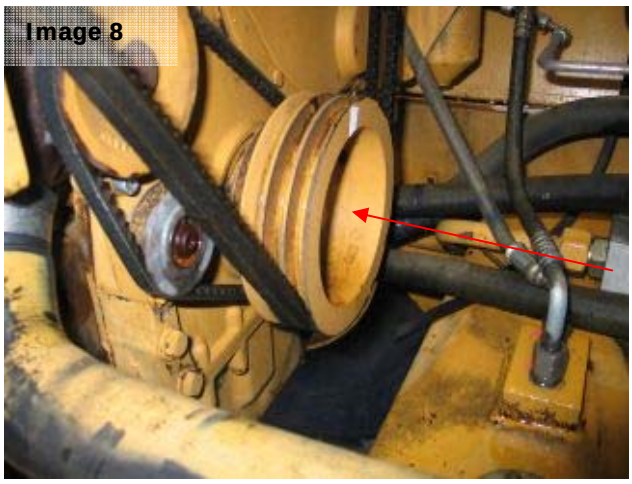


Image 8:
At the rear of the engine block are the harmonic balancers or flywheels (red arrow). These are generally concave and can harbour significant amount of contamination.

Image 9:
The front hollow chassis rails (red arrows). The four belly plate bolts are still in place in this illustration, however all must be removed and the area flushed to verify cleanliness.

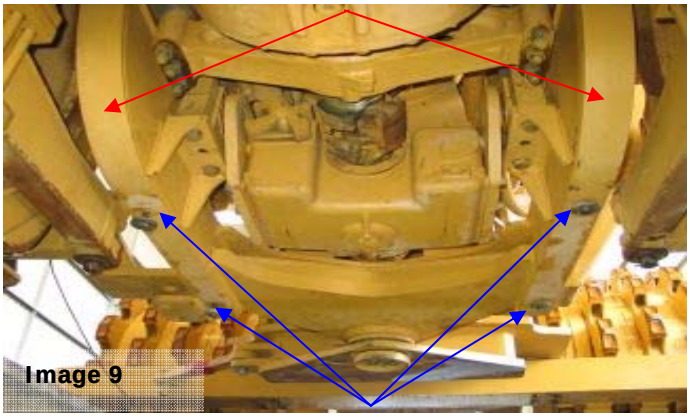


Image 10:
A rare sight as the cabin has been removed from the Compactor. The top of the block directly under the cabin is one of the most difficult areas to clean and inspect. The bell housing (red arrows) with the undulating surface can harbour contamination.

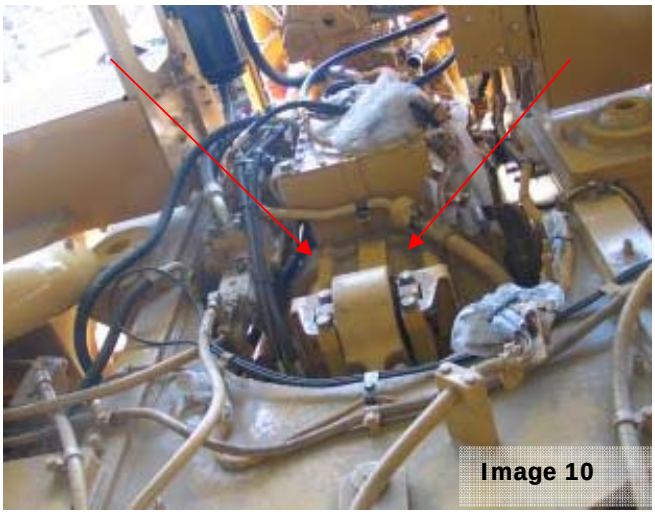
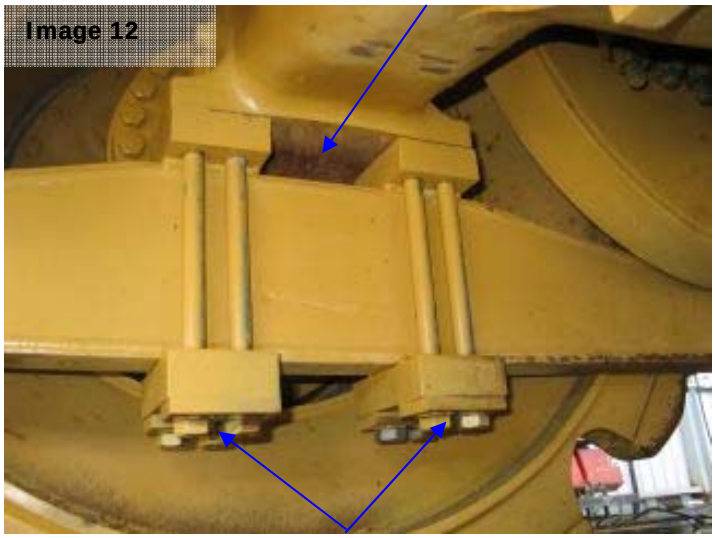
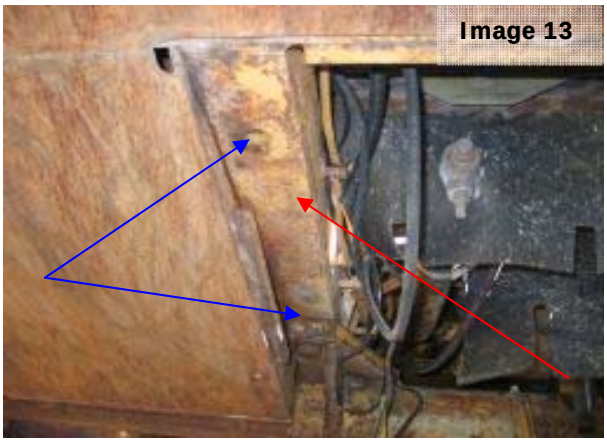


Image 11:
The front of the engine as seen from the pivot point. This area contains a myriad of ledges, hydraulic hoses and countersunk holes that all require thorough cleaning and inspection.

Image 12:
Ensure all engine mounts are free of contamination, including the reverse side.



Images 13 & 14:
These illustrations highlight the hollow chassis rails (red arrows) and drainage holes (where the belly plate bolts have been removed). The area will require flushing to verify cleanliness.



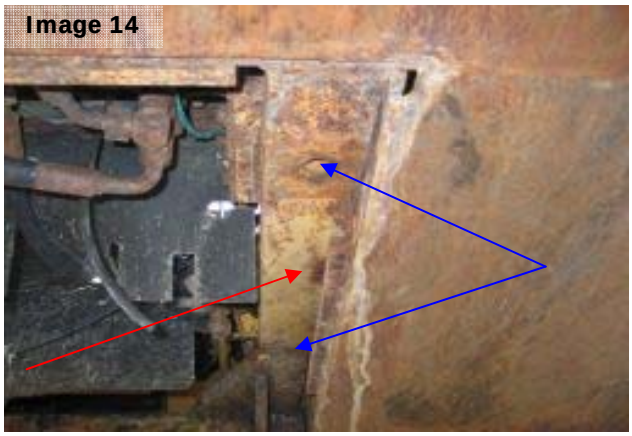


Image 15:
Just behind the pivot point, another belly plate has been removed, exposing another hollow channel (red arrows) that will require flushing to verify cleanliness. All contamination from the bottom pivot point (green arrow) must be removed.

Image 16:
One of the 'dropped' belly plates from under the Compactor. This one has no internal or external gussets, however all belly plates must be removed to facilitate cleaning, flushing and inspection.

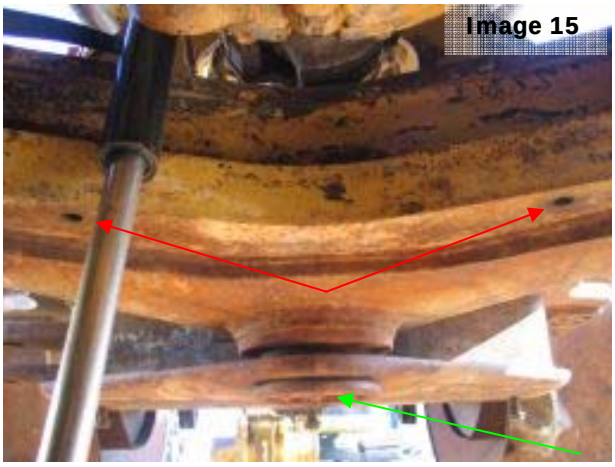
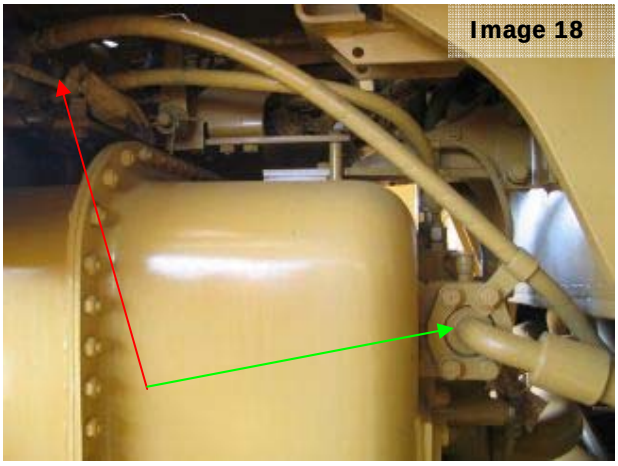


Image 17:
The oil tank under the cabin. The topside and rear of the oil tank is the most difficult to access.

Image 18:
The topside of the oil tank and under the cabin step. There can be numerous hollow channels (red arrow), ledges and hydraulic hoses and couplings (green arrow) that all require thorough cleaning and inspection.



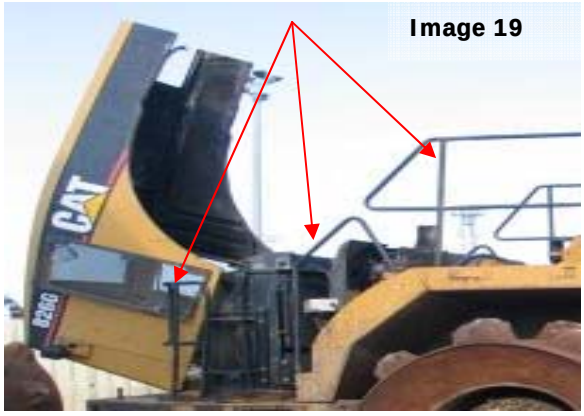


Image 19:
Some engine covers may tilt rearwards as illustrated, exposing the topside of the engine block. The engine covers must be checked for hollow rails and flushed if present. Check all handrails (red arrows) for open ends or drainage holes that can be flushed.

Image 20:
An illustration of a hollow channel in the engine cover (red arrow) of the Compactor. This will require flushing to verify cleanliness.

Image 21:
A fixed Compactor engine housing will non-affixed panels (red arrow) and hollow framework (blue arrow).

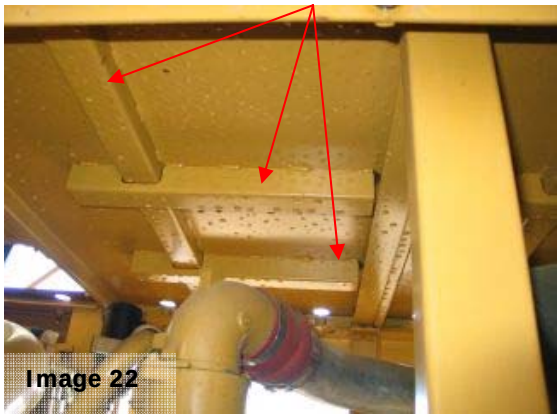
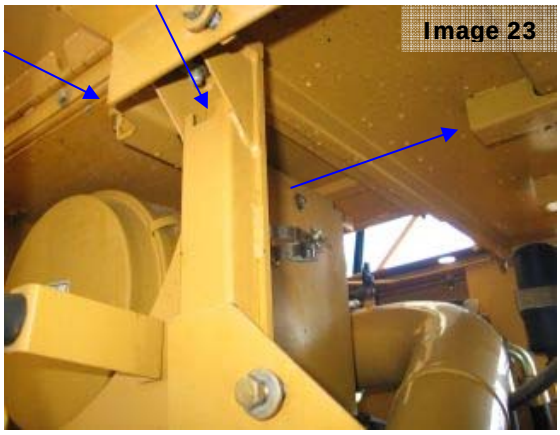


Image 22:
Illustrates the underside of the engine housing, where hollow, open-ended support channels (red arrows) may be located. All must be flushed to verify cleanliness.

Image 23:
Further illustrations of the hollow support framework that may be located under engine cover covers.



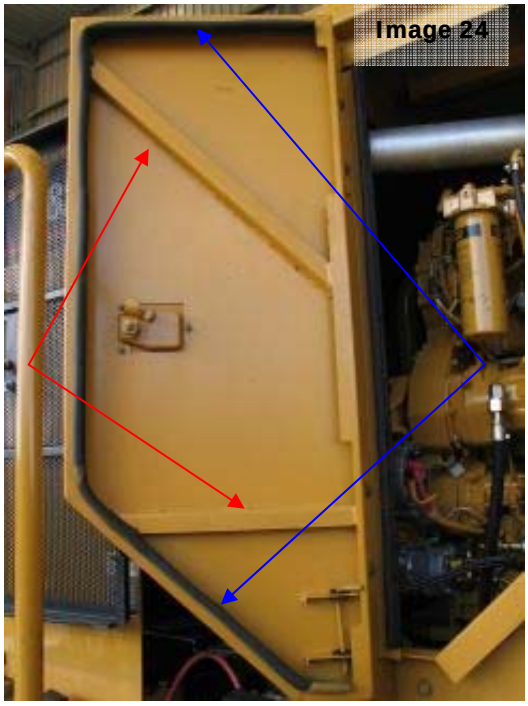
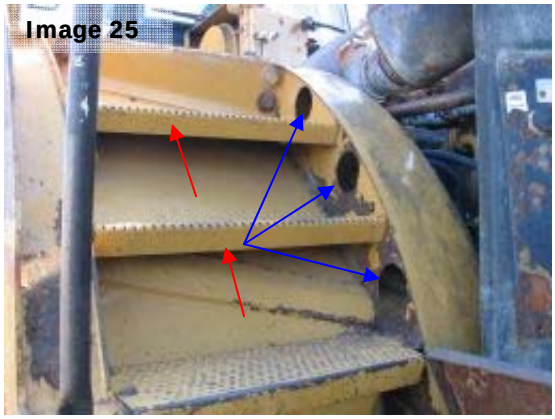


Image 24:
The hinged door to the engine bay has been opened, revealing spot welded support frames that are hollow (red arrows) and will require verification of cleanliness. All engine door rubbers must be cleaned and inspected (blue arrows).



Images 25 & 26:
On some of the larger model Compactors, above the rear Drum and along the side of the block, a small set of steps may be located. The underside of each footstep (red arrows) must be verified clean, but also the hollow cavities as highlighted by the blue arrows.

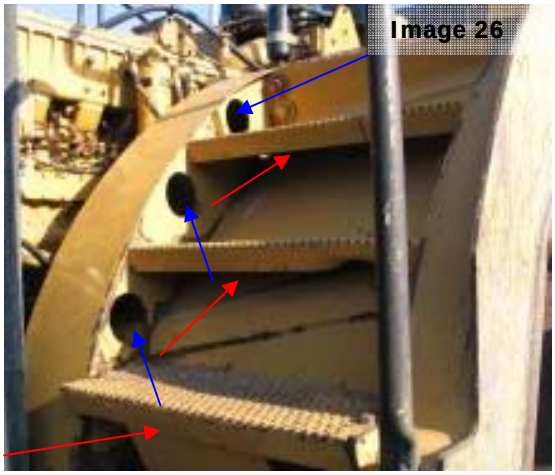
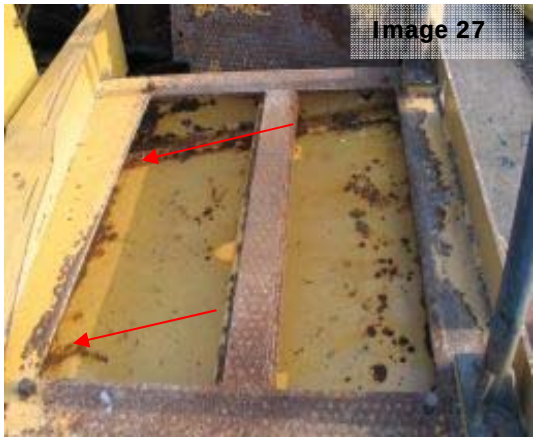
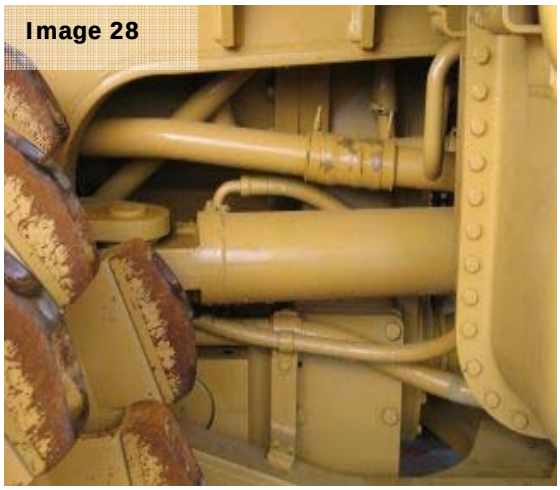


Image 27:
At the top of these steps seen in the last illustrations, a non-affixed panel has been removed, allowing access for cleaning and inspection.





Images 28 & 29:
The left and right hand side of the Compactor, just in front of the rear drums. On this model there are no non-affixed panels, allowing sufficient access to the side of the engine block for cleaning and inspection. On other models, non-affixed panels will need to be removed to allow this access.

2. Radiator & Rear End

Image 30:
The rear end, highlighting radiator grill (blue arrows), which must be removed to allow cleaning and inspection access inside the bottom of the shroud.

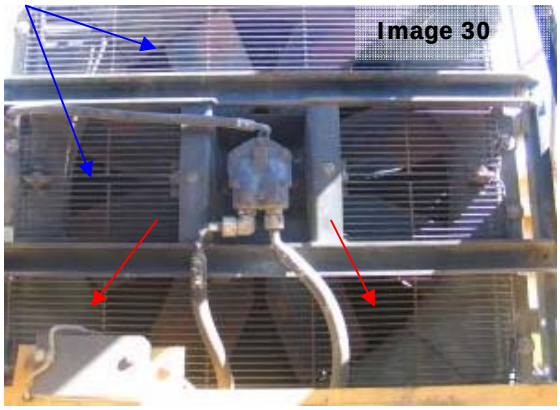
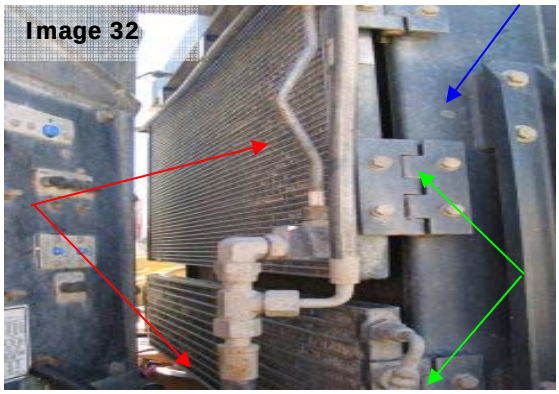


Image 31:
Another radiator grill on a different model of Compactor. This must be removed to allow access for cleaning and inspection inside the bottom of the shroud (red arrows).

Image 32:
The rear side of the radiator (blue arrow) and oil cooler (red arrows), which require flushing of the fins to verify cleanliness. On this model the oil cooler is hinged (green arrows), allowing the oil cooler to be opened (see next illustration) from the radiator fins and be flushed.



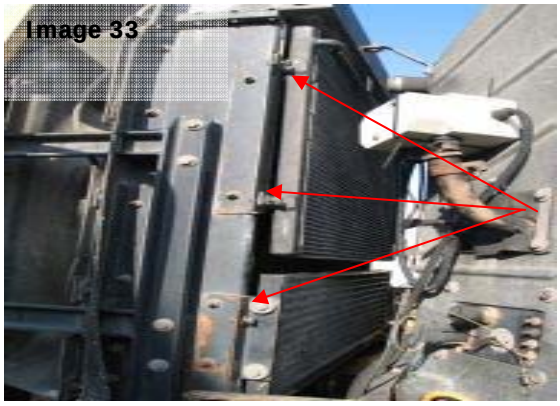


Image 33:
The opposite side of the radiator and oil cooler showing the bolts that can be removed (red arrows), allowing the oil cooler to be swung open so both the radiator and oil cooler can be flushed.

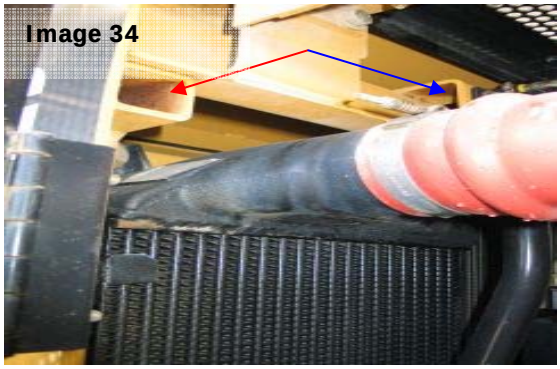


Image 34:
On some models there may be hollow channels (red arrow) and ledges (blue arrow) above the radiator that must be free of all contamination.

Image 35:
All air-filter pre-cleaner covers are to be removed to allow cleaning and inspection access.

3. Boots (Sheepfoot), Rims and Cleaning Bars

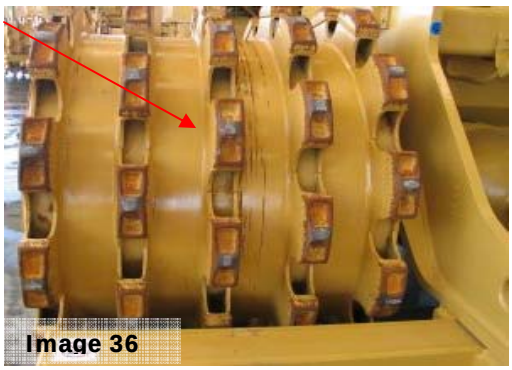


Image 36:
An example of some of the styles of boots that may be found on compactors. These boots are hollow and have an access point on the underside (illustrated next), and all must be flushed to verify cleanliness.

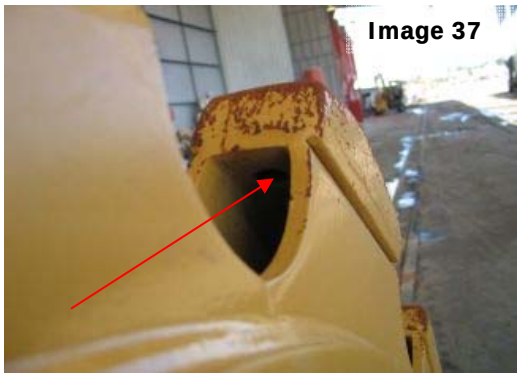


Image 37:
The underside of the boot on this style of compactor. Although not easily seen, there is a hole on the underside (where red arrow is highlighting) and these must all be flushed to verify cleanliness.

Image 38:
Another example of some of the styles of boots that may be found on compactors.

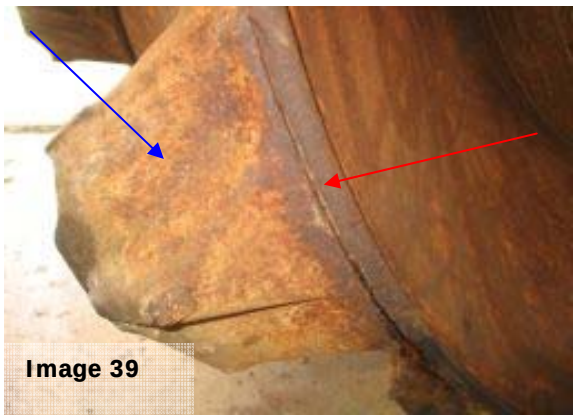


Image 39:
A close view of this boot reveals that it is not completely sealed (only spot welded) in place. The red arrow highlights the small recess, allowing contaminants inside this hollow cavity (blue arrow). These will require further investigation to verify cleanliness. Flushing via this small recess with a pin jet, will not suffice in removing contamination or verifying internal cleanliness.

Image 40:
These boots were only spot welded into place and the importer chose to remove the internal contamination by inserting a small access point into each boot.
There may be evidence on some drums that the boots have been repositioned at some stage (old welding tracks present). In this instance, the internal cleanliness of these boots will also be required.

Image 41:
Another example of some of the styles of boots that may be found on compactors. The boots illustrated in this shot are spot welded onto a semi-circular drum that is fitted to a roller wheel.

Image 42:
A close illustration highlighting the roller wheel (red arrow) and the semi-circular drums (blue arrows). These semi-circular drums must be removed to allow access for cleaning and inspection. The internal cleanliness of each spot-welded boot (green arrow) must also be verified.

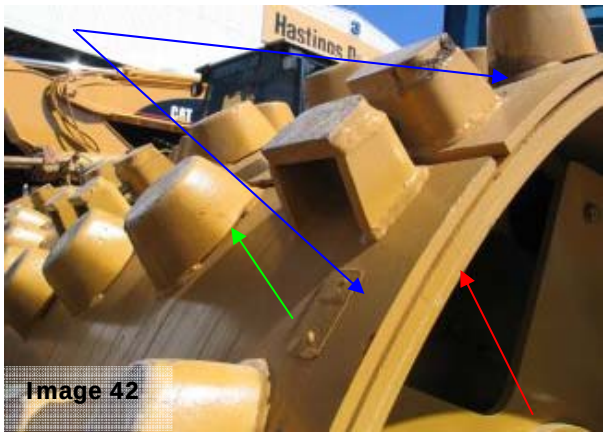
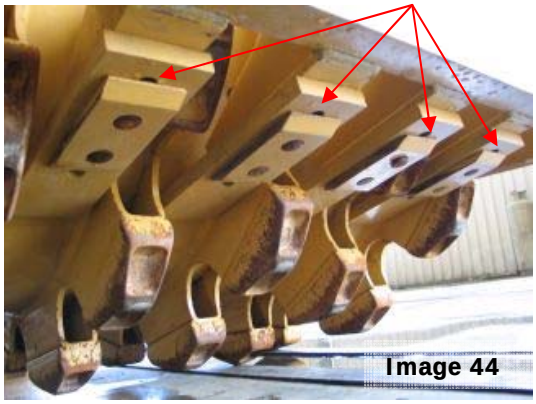


Image 43:
The semi-circular drums removed for cleaning and inspection.

Image 44:
An example of the cleaning bars that remove trash from between the boots when operating. Note the small holes on the underside (red arrows), which can harbour contamination and must be verified clean.



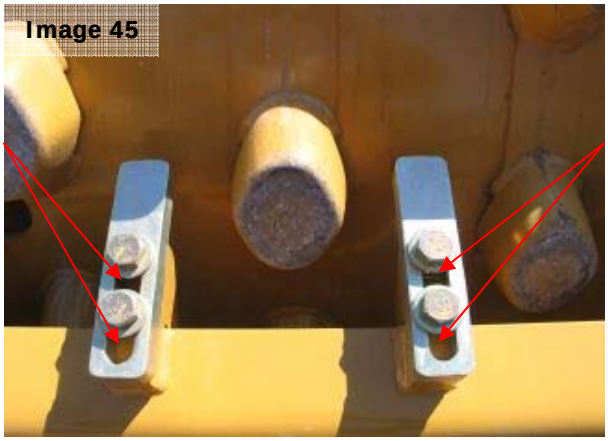


Image 45:
Another example of the cleaning bars found on Compactors. These cleaning bars also have small recesses (red arrows) where contamination can accumulate.

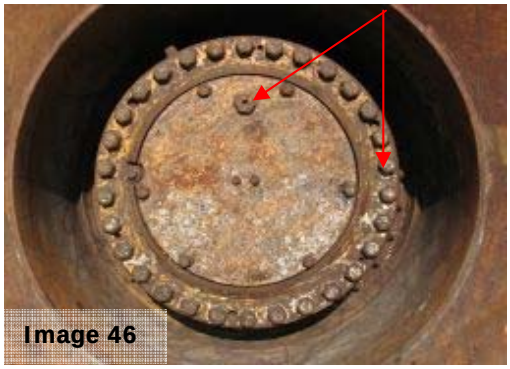


Image 46:
The outside of the Compactor rim. Check that all countersunk holes and around each nut is free of contamination.

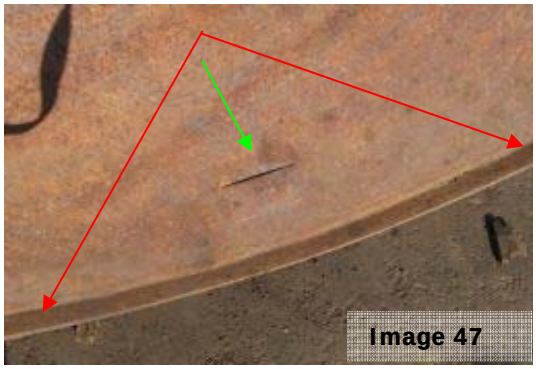


Image 47:
Check all surfaces of the rim (red arrows) for any cracks, splits or evidence of repair. The green arrow is highlighting a small seam (common on some models), which is not a split or repair. This seam will require flushing to verify cleanliness.

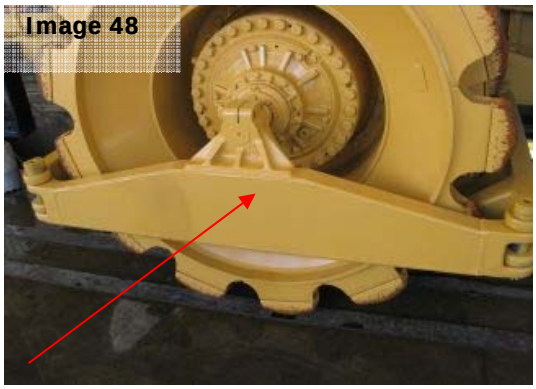


Image 48:
Another example of the outside rim, this time partly obscured by the cleaning bar (red arrow). Check that all countersunk holes and around each nut are free of contamination.

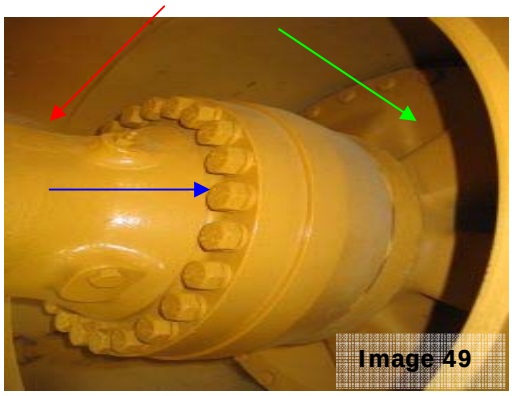


Image 49:
An example of an inside rim with no cover plates. Ensure that the top of the axel (red arrow), around each nut (blue arrow) and the undulating surfaces inside the rim (green arrow) are free of contamination.

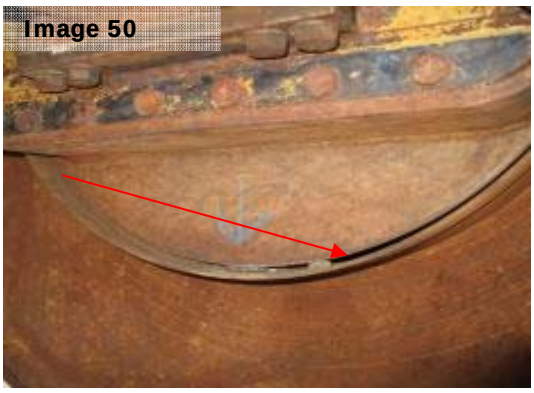


Image 50:
An inside rim cover with a large recess behind.

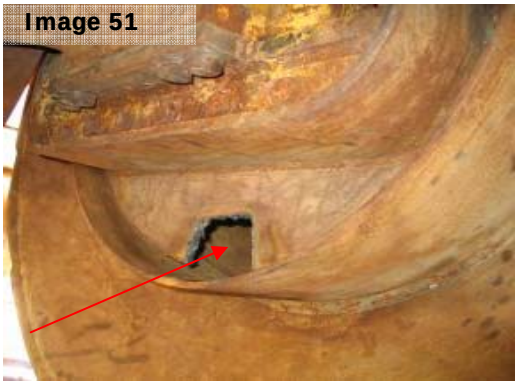


Image 51:
In order to verify cleanliness inside this recess, the importer chose to insert a small access point. AQIS does not order the cutting or removal of any part of any machine. AQIS requires access to all areas of the machine, how this is provided is up to the importer.

4. Cabin

Image 52:
The side view of a typical Compactor cabin.

Image 53:
The inside of the cabin. All rubber matting and pedal covers (red arrows) is to be removed and cleaned.

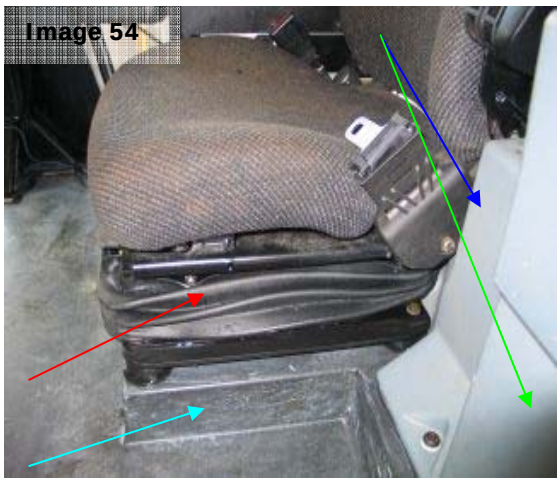


Image 54:
The rubber shroud under the seat must be internally and externally cleaned and inspected. Verify behind and inside all cabin wall linings (green arrow) and storage compartments (blue arrow) are free of contamination. On some models the air-conditioning unit is in the box section below the seat (aqua arrow) and access for cleaning and inspection will require that the seat is removed.

Image 55:
Access will be required to the joystick control panels to verify internal cleanliness.

Image 56:
Remove the air-filter cover (red arrow) and verify the cleanliness of the filter (pressurised air).

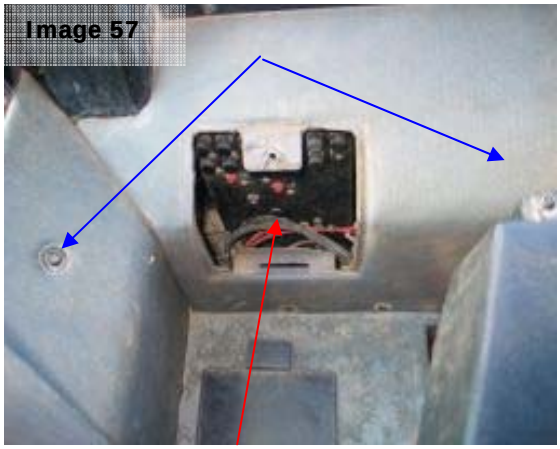


Image 57:
All internal cabin compartments (red arrow) are to be checked and all internal padding (blue arrows) is to be verified clean (and behind).

Image 58:
Verify behind all internal cabin wall linings is free of contamination.

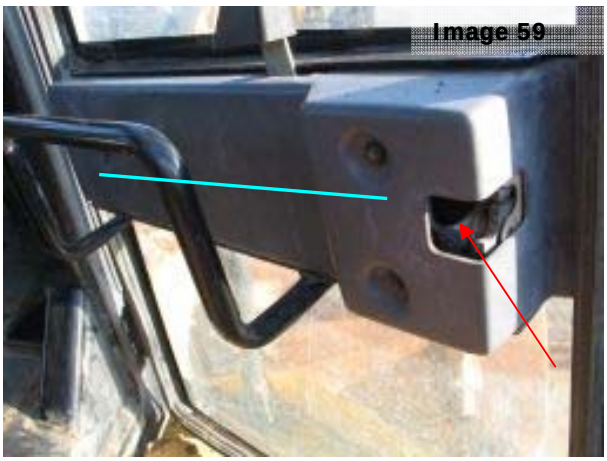


Image 59:
The door latches are hollow structures and verification of internal cleanliness is required.

Image 60:
On some models a small recess can be found between the cabin roof and the Roll Over Protection System (ROPS).

Image 61:
Underneath the cabin, the framework may be open-ended as illustrated (small triangular corners missing) and will require flushing to verify cleanliness.

Image 62:
Check all footsteps for cleanliness (including underside).

5. Articulated Pivot Point

Image 63:
The bottom pivot-point (red arrow) as generally seen on Wheel Loaders. This area is signified by several pivot points (above), universal joints (blue arrow) and a myriad of hydraulic hoses (green arrows), all requiring thorough cleaning and inspection.

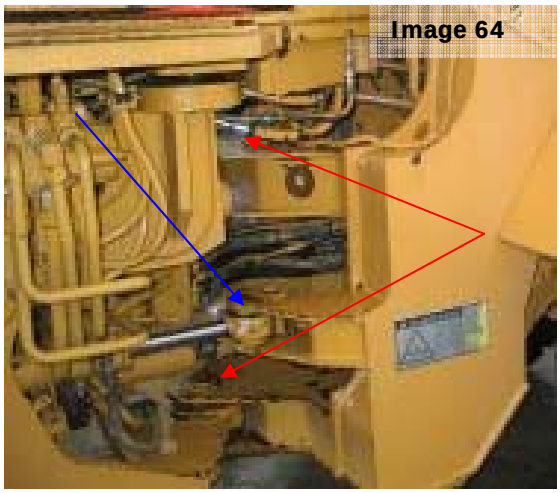
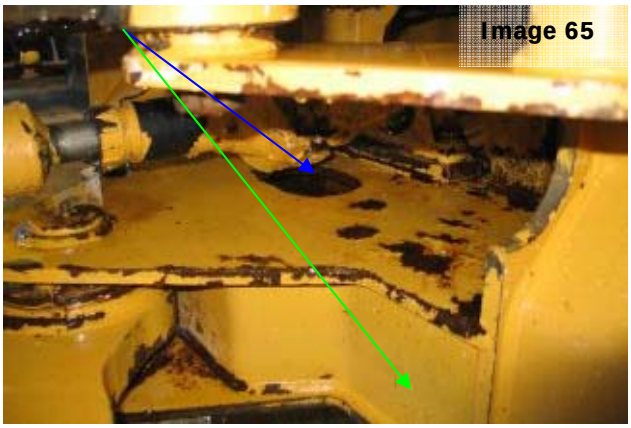


Image 64:
The pivot-points (red arrows) and hydraulic rams (blue arrow). All non-affixed panels and shrouds have been removed, allowing access for cleaning and inspection.

Image 65:
The bottom pivot-point from a slightly elevated angle. Check all hollow framework (green arrow) for entrance holes (blue arrow) or drainage holes underside. This are can harbour a significant amount of contamination and must be verified clean.



6. Front End

Image 66:
Illustration of the front end of a Compactor.

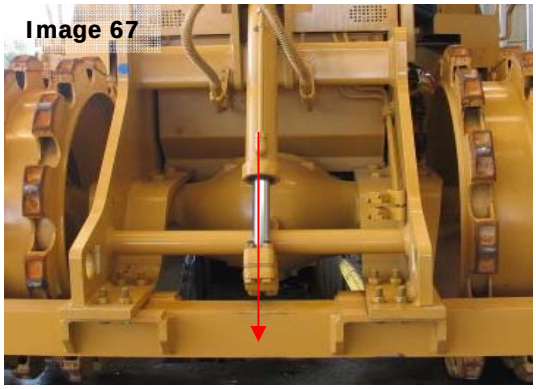


Image 67:
Check the cleaning bar (red arrow) for any cracks, splits, drainage holes or evidence of repair.

Image 68:
The non-affixed housing has been removed, allowing access for cleaning and inspection. This cover can be completely removed, if required. There are small recessed areas (red arrows) that will require flushing to verify cleanliness.

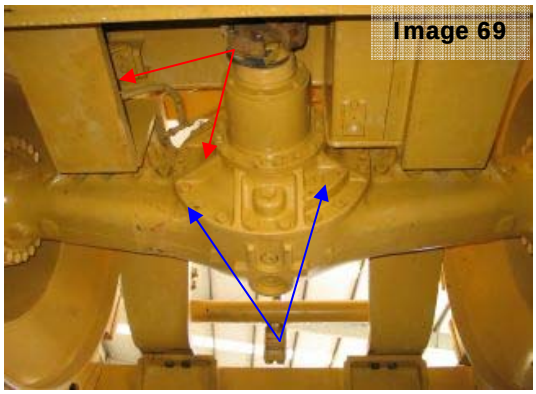


Image 69:
The front axel and differential. All ledges (red arrow), top of axles, countersunk holes (blue arrows) and inside wheel rims must be thoroughly cleaned and inspected.

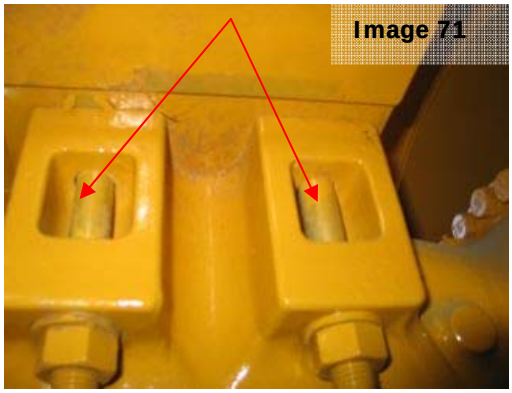


Image 70:
All contaminated grease is to be removed from all universal joints.

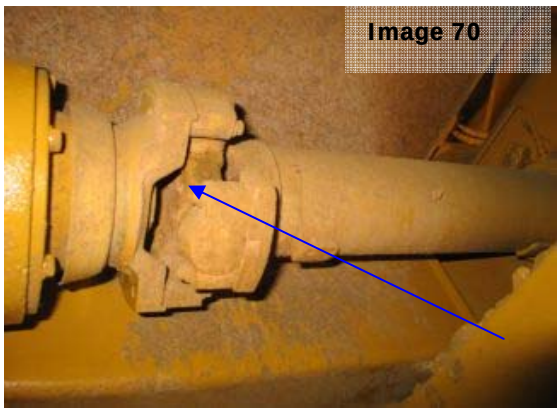
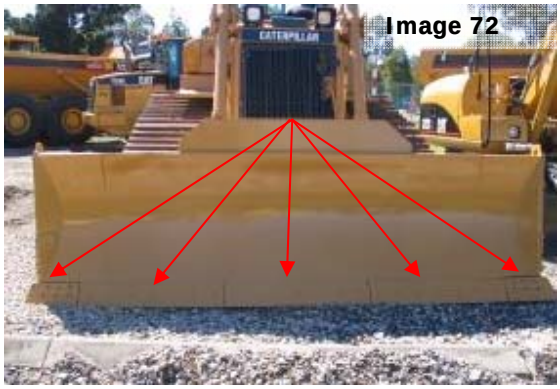


Image 71:
Axel mounts are generally concave as illustrated and require cleaning and inspection.

7. Blade

Image 72:
A typical blade on a Dozer. All cutting teeth (red arrows) must be loosened and flushed to verify cleanliness. Check for any cracks, splits or evidence of repair to all surfaces. If detected, the internal of the blade will have to be verified clean.



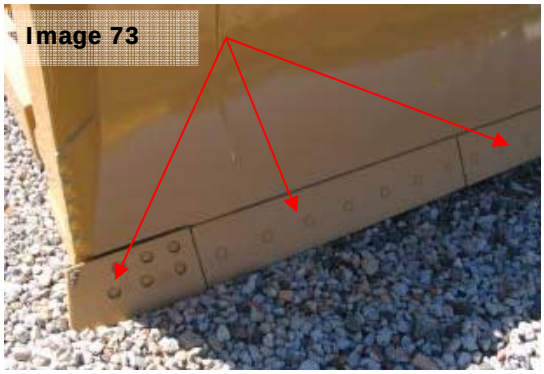
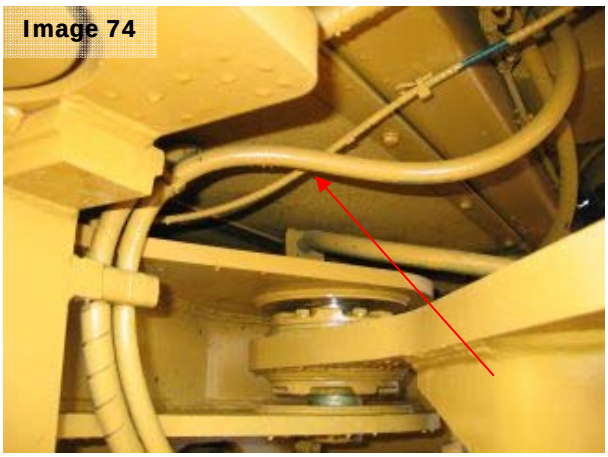
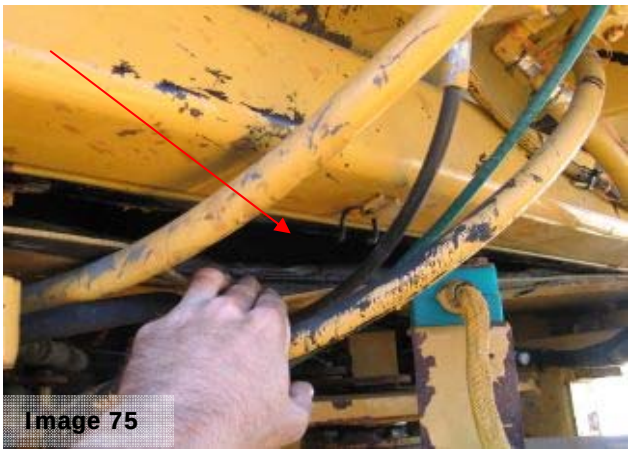


Image 73:
A close up of the cutting teeth on a blade that need to be loosed and flushed to verify cleanliness.

8. False Floors under Cabins



Images 74 & 75:
On some models of Wheel Loaders, under the cabin may be a false floor (red arrow). These are reasonably common and worth illustrating as this area can harbour a significant amount of contamination. The false floors can be made from hard rubber or compressed fibreboard and can be unbolted to allow access for cleaning and inspection.



9. General

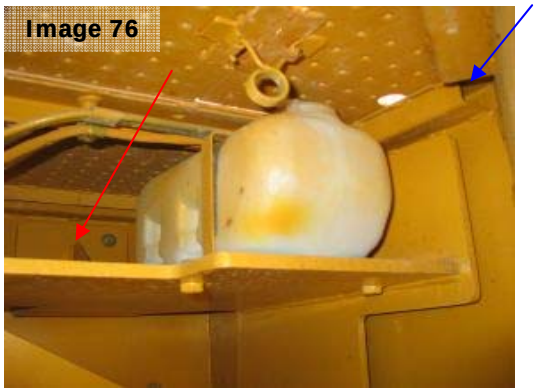


Image 76:
This illustrates the compartment under the cabin step. Like the oil tank on the other side, this area has ledges (red arrow) and hollow channels (blue arrow) that require cleanliness verification.

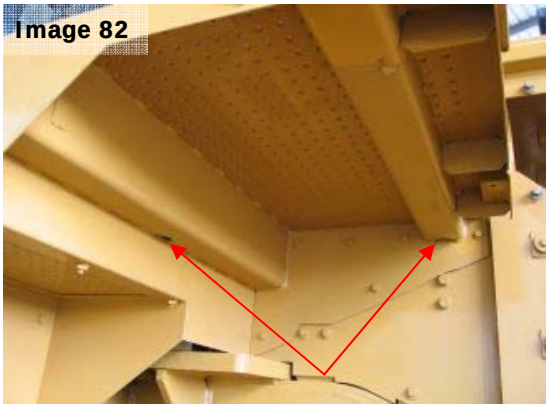
Image 77:
Remove all light covers and check the internal surfaces.

Image 78:
Check all wiring harnesses for internal cleanliness.

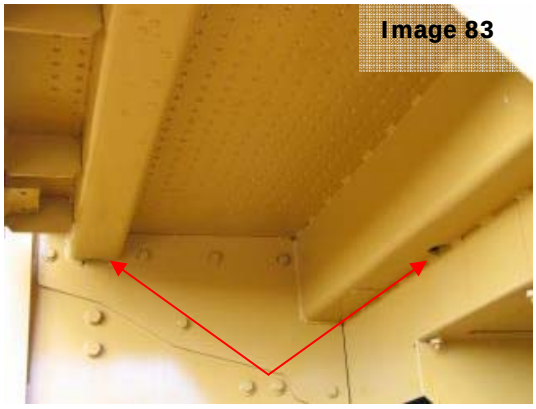
Image 79:
Check all looming around hydraulic hoses for internal cleanliness.

Image 80:
Batteries are to be loosened from the tie-down points for cleaning and inspection.

Image 81:
All non-slip checker plate is to be flushed to verify cleanliness.



Images 82 & 83:
The wheel arch as illustrated on some models. Note the small drainage holes (red arrows) on the underside of the support framework. These will require flushing to verify cleanliness.



Images 84 & 85:
Examples of the amount of dismantling required to facilitate cleaning and inspection.