#### **CHAPTER 32**

#### CLEANING INSTRUCTIONS – CRANES MOBILE TELESCOPIC

- 32.1 This chapter provides basic and specific cleaning requirements for selected vehicles. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this chapter.
- 32.2 Cranes are very complex pieces of machinery. While all contamination and BRM must be removed, the main areas of concern are:
  - a. external areas, front;
  - b. external areas, rear;
  - c. suspension;
  - d. stabilisers and stands;
  - e. boom and boom housing;
  - f. main cabin;
  - g. crane cabin;
  - h. engine engine compartment;
  - i. tyres (new, old and spares).
- 32.3 All points are not specific to all cranes.

#### **External Areas, Front**

32.4 The cleaning instructions for the Crane's external front areas include the points detailed in Table 32-1.

#### **EXTREME CAUTION**

#### **ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the cranes electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician

#### Table 32-1: Cleaning Instructions for the Crane's Front External Areas

Serial	Comments or Tasks	Technical Time (hours)
1	Remove all CES and clean individually. Where possible/practical do not refit until vehicle cleared by DA.	
2	The operator is required to be with the vehicle throughout the cleaning process.	
3	All cables are to be fully extended and cleaned of oil and grease to	

Serial	Comments or Tasks	Technical Time (hours)
	ensure there is to be no soil, plant or insect material embedded.  Cables are to be re-oiled by operator after inspection.	
4	Toolboxes and storage compartments are to be emptied and cleaned.	
5	Clean the front areas of the vehicle ensuring they are free of BRM.	
6	<b>WARNING</b> Do not use water or steam to clean any interiors areas of the cranes electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician.	
7	Lights covers are to be removed or loosened; cleaned and damaged lights are to be removed to allow cleaning of the fitting so there is no soil, plant or insect matter.	
8	Rubber seals are to be cleaned of all soil, plant and insect matter.	

#### **External Areas, Rear**

32.5 The cleaning instructions for the Crane's external rear areas include the points detailed in Table 32-2.

Table 32–1: Cleaning Instructions for the Crane's External Rear Areas

Serial	Comments or Tasks	Technical Time (hours)
1	Toolboxes, bins and storage compartments are to be emptied and cleaned.	
2	Items that are likely to snag foliage are to be cleaned of all seed and plant matter.	
3	The turntable area is to be cleaned of all grease and oil to ensure there is no soil, plant or insect matter. Lightly regrease working surface only after inspection.	
4	Open panels on the hydraulic oil cooler. Inspect and clean if necessary.	
5	Clean all areas of the cranes base including the main lift ram. Clean all grease and oil to ensure there is no soil, plant or insect matter.	
6	Remove the hose cover. Inspect and clean if necessary.	
7	Clean all sides of the fuel tank.	
8	Mudflaps are to be removed and cleaned, in particular at the attachment points.	
9	Mud and other debris collect in the underside area of the chassis especially around the tail shaft and the axles. Ensure that these areas are cleaned well.	
10	The spare wheel is to be removed for cleaning and all tyres to be inspected and cleaned (refer to Tyres (New, Old and Spares) below).	

#### Suspension

32.6 The specific cleaning instructions for the Motor Grader's suspension include those points detailed in Table 32-3.

**Table 32-3: Cleaning Instructions for the Motor Grader's Suspension** 

Serial	Comments or Tasks	Technical Time (hours)
1	Ensure suspension rocker beam mounts on chassis are clean and free of soil, plant and insect material.	
2	Mud and other debris collect in the spring seat, where the spring is mounted to the axle assembly, and are difficult to remove from the base of the springs.	
	Ensure that this area is cleaned well.	
3	Mud and other debris collect in the inside area on the inner side of the wheel.	
	Ensure that this area is cleaned well.	
4	Ensure axles and mounts on chassis are clean and free of soil, plant and insect material.	
5	Check wheel arches for hollow support framework – flush if required.	
6	Check the inside of wheel rims and brake drums.	
7	Check axels and differential.	
8	Check all wheels; wheel guards; stone guards and mud guards.	
9	Remove all contaminated grease from universal joints.	

#### **Stabilisers and Stands**

32.7 The cleaning instructions for the Crane's Stabilisers and Stands include the points detailed in Table 32–4.

Table 32-4: Cleaning Instructions for the Crane's Supports and Stands

Serial	Comments or Tasks	Technical Time (hours)
1	Attachment points and frames are to be fully extended prior to cleaning.	
2	Stabilisers /supports are to be cleaned with a high-pressure water cleaner and attention is to be paid to the hollow tube areas.	
3	Stands are to be subject to high-pressure water cleaner, paying attention to the threaded area.	
4	Special attention is to be paid to the foot plates which are to be cleaned with a high-pressure water cleaner.	

#### **Boom and Boom Housing**

32.8 The cleaning instructions for a Crane's boom and boom housing include the point detailed in Table 32-5.

Table 32-5: Cleaning Instructions for a Crane's Boom and Boom Housing

Serial	Comments or Tasks	Technical Time (hours)
1	The boom is to be extended to facilitate cleaning. The boom can be extended and lowered to address occupational health & safety concerns (otherwise use scaffolding or cherry picker).	

chnical (hours)

#### **Main Cabin**

32.9 The cleaning instructions for the crane's main cabin include the points detailed in Table 32-6.

# **EXTREME CAUTION ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician

Table 32–6: Cleaning Instructions for the Crane's Main Cabin

Serial	Comments or Tasks	Technical Time (hours)
1	Remove any rubber floor mats and clean floor surface.	
2	Remove and clean all door rubbers, internal door panelling and clean all windowsills.	

Serial	Comments or Tasks	Technical Time (hours)
3	Remove and clean under the seat, including the rubber seat shroud.	
4	Remove any non-affixed floor panel if applicable and clean underneath.	
5	Remove rubber pedal covers and clean.	
6	Clean behind all cabin walls lining/panelling. Access will be required for inspection.	
7	All air-conditioning vents must be internally cleaned. Access will be required for inspection.	
8	<b>WARNING:</b> Do not use water or steam to clean any interior areas of the crane cabs dashboard electronics – Use air clean only and only under the supervision of a qualified technician. Clean the dashboard area (including the under area). Access will be required for inspection.	
9	<b>WARNING:</b> Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician.	
10	Clean inside all joystick controls. Access will be required for inspection.	
11	Check cleanliness of cabin roof, both inside and out.	
12	Clean ladder to cabin (may have hollow frame) and under each footstep.	
13	Internally clean all light covers. Access will be required for inspection.	
14	Empty windscreen reservoir.	
15	Check for false floor under cabin and remove for cleaning, if applicable.	

#### **Crane Cabin**

32.10 The cleaning instructions for a Crane's crane cabin include the points detailed in Table 32-7.

# **EXTREME CAUTION ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel or dashboard electronics – Use air clean only and only under the supervision of a qualified technician

Table 32–7: Cleaning Instructions for the Crane's Crane Cabin

Serial	Comments or Tasks	Technical Time (hours)
1	Remove any rubber floor mats and clean floor surface.	
2	Remove and clean all door rubbers, internal door panelling/insulation and clean all window sills.	
3	Remove and clean under the seat, including the rubber seat shroud.	
4	Remove any non-affixed floor panel if applicable and clean underneath.	
5	Remove rubber pedal covers and clean.	

Serial	Comments or Tasks	Technical Time (hours)
6	Clean behind all cabin walls lining/panelling. Access will be required for inspection.	
7	All air-conditioning vents must be internally cleaned. Access will be required for inspection.	
8	<b>WARNING:</b> Do not use water or steam to clean any interior areas of the crane cabs dashboard electronics – Use air clean only and only under the supervision of a qualified technician. Clean the dashboard area (including the under area). Access will be required for inspection.	
9	Clean inside all joystick controls. Access will be required for inspection.	
10	Check cleanliness of cabin roof, both inside and out.	
11	Clean ladder to cabin (may have hollow frame) and under each footstep.	
12	Clean all exterior areas of the crane cabin ensuring they are free of BRM.	
13	<b>WARNING:</b> Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician.	
14	Internally clean all light covers. Access will be required for inspection.	
15	Empty windscreen reservoir.	
16	Check for false floor under cabin and remove for cleaning, if applicable.	

#### **Engine Bay**

32.11 The specific cleaning instructions for the crane's engine and engine compartment include those points detailed in Table 32-8.

**Table 32-8: Cleaning Instructions for the Crane's Engine Compartment** 

Serial	Comments or Tasks	Technical Time (hours)
1	Clean the engine compartment and engine to ensure they are free of dust; built-up dirt and grease; insect and plant material.	
2	Ensure any engine openings/breathers are taped or plugged to stop ingress of water.	
3	Ensure the starter motor and alternator are covered and taped to stop ingress of water.	
4	Do not direct high-pressure water jets at any of the engine openings/breathers, or at any of the electrical/electronic components.	
5	Remove the brake booster assembly and pedal pivot housing and check to ensure the housing is free of insect or plant material.	
6	Remove the clutch pedal pivot housing cover and check to ensure the housing is free of insect or plant material.	
7	Remove heater assembly and clean heater core to remove all dirt, dust, plant and insect material.	
8	Clean heater/ventilation fan housing to ensure it is free from dirt, dust, plant and insect material.	

9	Remove the air cleaner flexible line from the air plenum in the right-hand front mudguard assembly and ensure it is free from insect and plant material.	
10	Remove battery and clean battery terminals, leads and the battery box.	
11	Remove the air cleaner element and dispose of. Replace the air cleaner element with a new part.	
12	The radiator is to be air-blown clean and, if necessary, hand-picked clean of all seed and insect matter.	
13	Flush radiator and oil cooler from both sides to verify fin/core cleanliness.	
14	Loosen radiator shroud to let any loose debris fall through after flushing.	

#### Tyres (New, Old and Spares)

32.12 The cleaning instructions for Tyres (New, Old and Spares) include the points detailed in Table 32-9.

Table 32-9: Cleaning Instructions for Tyres (New, Old and Spares)

Serial	Comments or Tasks	Technical Time (hours)
1	All tyres are to be washed and scrubbed to remove all BRM.	
2	Damaged tyres are to be inspected and their suitability for return to Australia determined. If necessary, damaged tyres (for example, perished, cracked or split) are to be removed and disposed of in accordance with the tyre disposal policy.	
3	Cracked tyres have the risk of containing BRM therefore perished tyres are to be subject to disposal.	
4	All tyres are to be treated with an approved residual insecticide after cleaning.	
5	Fitted tyres that are damaged should be replaced with new tyres.	
6	Used and fitted tyres on rims are to be individually verified that the tyres are on rims, inflated with beading sealed and that the tyres are clean, free of water and other BRM.	
7	Tyres that are not fitted to rims are to be stored in such a manner that water cannot collect inside the tyre. The preferred DA solution is that tyres are stored within containers. Tyres not fitted on rims will require fumigation on return to Australia.	
8	DA considers a Non-Commercial consignment of tyres to contain a maximum of 8 tyres (inclusive of the wheels on the vehicle) and be imported with an accompanying vehicle. If tyres are to be transported back to Australia in containers or crates, please refer to the DA BICON (Biosecurity Import Conditions system) internet site (http://www.agriculture.gov.au/import/online-services/bicon) for the commodity "tyres".	

#### Annexes:

- Cleaning Instructions Crane Tadano ATF 30-TL 30 Tonne Cleaning Instructions Crane Tadano AR200M-1 20 Tonne A.
- B.
- C. Cleaning Checklist - Cranes Mobile Telescopic

#### **ANNEX A TO CHAPTER 32**

#### **CLEANING INSTRUCTIONS – TADANO ATF 30-TL 30 TONNE**

- 1. This chapter provides basic and specific cleaning requirements for selected vehicles. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this Annex.
- 2. The cleaning requirements that follow are in addition to those points for mobile cranes included in Chapter 32 of this publication.

#### **External Areas, Front**

3. The cleaning instructions for the Tadano's external front areas, as illustrated in Figures 32A-1 to 32A-4, include the points detailed in Table 32A-1.



Figure 32A-1: Tadano's External Areas, Front



Figure 32A-2: Tadano's Storage Bin



Figure 32A-3: Tadano's Electrical Instrument Fuse Panel



Figure 32A-4: Tadano's Stone Guards

Table 32A-1: Cleaning Instructions for the Tadano's External Areas, Front

# **EXTREME CAUTION ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the cranes electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician

Serial	Comments or Tasks	Technical Time (hours)
1	The operator is required to be with the vehicle throughout the cleaning process.	
2	Toolboxes and storage compartments are to be emptied and cleaned (refer Figure 32A-2).	
3	<b>WARNING</b> Do not use water or steam to clean any interiors areas of the cranes electrical instrument fuse panel (refer Figure 32A-3) – Use air clean only and only under the supervision of a qualified technician.	
4	Clean all wheels; wheel guards; stone guards and mud guards using high-pressure water (refer Figure 32A-4).	
5	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **External Areas, Rear**

4. The cleaning instructions for the Tadano's external rear areas, as illustrated in Figures 32A-5 to 32A-10, include the points detailed in Table 32A-2.



Figure 32A-5: Tadano's Lifting Tackle Bins



Figure 32A-6: Tadano's Hydraulic Oil Cooler



Figure 32A-7: Tadano's Main Lift Ram



Figure 32A-8: Tadano's Hose Cover



Figure 32A-9: Tadano's Under Service Channel



Figure 32A-10: Tadano's Tail-shaft Brake

Table 32A–2: Cleaning Instructions for the Tadano's External Rear Areas

Serial	Comments or Tasks	Technical Time (hours)
1	Toolboxes, bins and storage compartments are to be emptied and cleaned (refer Figure 32A-5).	
2	Open panels on the hydraulic oil cooler. Inspect and clean if necessary (refer Figure 32A-6).	
3	Clean all areas of the cranes base including the main lift ram. Clean all grease and oil to ensure there is no soil, plant or insect matter (refer Figure 32A-7).	
4	Remove the hose cover. Inspect and clean if necessary (refer Figure 32A-8).	
5	Mud and other debris collect in the underside area of the chassis especially around the tail shaft and the axles. Ensure that these areas are cleaned well (refer Figures 32A-9 and 32A-10).	
6	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **Stabilisers and Stands**

5. The cleaning instructions for the Crane's Stabilisers and Stands, as illustrated in Figure 32A-11, include the points detailed in Table 32A-3.



Figure 32A-11: Tadano's Outrigger Stabiliser Stands

Table 32A-3: Cleaning Instructions for the Crane's Supports and Stands

Serial	Comments or Tasks	Technical Time (hours)
1	Stabilisers /supports are to be cleaned with a high-pressure water cleaner and attention is to be paid to the hollow tube areas.	
2	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **Boom and Boom Housing**

6. The cleaning instructions for a Forklift's boom and boom housing, as illustrated in Figures 32A-12 to 32A-16, include the point detailed in Table 32A-4.



Figure 32A-12: Tadano's Boom Sections



Figure 32A–13: Tadano's Boom Top



Figure 32A-14: Tadano's Hoist and Tackle



Figure 32A-15: Tadano's Hydraulic Distribution Under



Figure 32A-16: Tadano's Hydraulic Distribution

Table 24A-4: Cleaning Instructions for a crane's Boom and Boom Housing

Serial	Comments or Tasks	Technical Time (hours)
1	The boom is to be extended to facilitate cleaning. The boom can be extended and lowered to address occupational health & safety concerns (otherwise use scaffolding or cherry picker). Refer to Figures 32A-12 and 32A-13.	
2	All winch ropes, wire ropes and slings are to be extended to full length and subject to a high-pressure water clean using degreaser, if required, to remove all soil, plant and insect matter (refer Figure 32A-14).	
3	All electrical and hydraulic lines are to be separated and all grease and soil debris cleaned from in between them (Refer to Figures 32A-15 and 32A-16).	
4	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **Main Cabin**

7. The cleaning instructions for an excavator's cabin, as illustrated in Figures 32A-17 to 32A-24, include the points detailed in Table 32A-5.



Figure 32A-17: Tadano's Main Cabin



Figure 32A-18: Tadano's Main Cabin Dash



Figure 32A-19: Tadano's Main Cab Door Skin



Figure 32A-20: Tadano's Main Cab Skin



Figure 32A-21: Tadano's Main Cab Dash Air Vents



Figure 32A-22: Tadano's Main Cab Vents



Figure 32A-33: Tadano's Main Cab Vents Rear

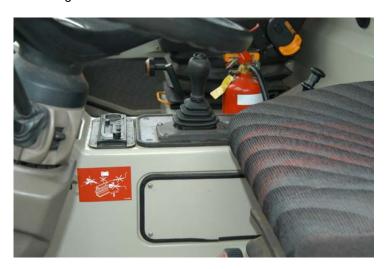


Figure 32A-44: Tadano's Main Cab Shift Console

### **EXTREME CAUTION**

#### **ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician

Table 32A-5: Cleaning Instructions for the Crane's Main Cabin

Serial	Comments or Tasks	Technical Time (hours)
1	Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician (refer Figure 32A-17 and 32A-18).	
2	Remove and clean all door rubbers, internal door panelling and clean all windowsills (refer Figure 32A-19).	
3	Clean behind all cabin walls lining/panelling. Access will be required for inspection (refer Figure 32A-20).	
4	All air-conditioning vents must be internally cleaned. Access will be	

32A-12

Serial	Comments or Tasks	Technical Time (hours)
	required for inspection (refer Figure 32A-21 to 32A-23).	
5	Clean inside all joystick controls. Access will be required for inspection (refer Figure 32A-24).	
6	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **Crane Cabin**

8. The cleaning instructions for a Tadano's crane cabin, as illustrated in Figures 32A-25 to 32A-30, include the points detailed in Table 32A-6.



Figure 32A-55: Tadano's Crane Cab



Figure 32A-66: Tadano's Crane Cab Seat



Figure 32A-77: Tadano's Crane Cab Insulation



Figure 32A-88: Tadano's Internal Rear of Crane Cab





Figure 32A-99: Tadano's Crane Cab Air-conditioner



Figure 32A-30: Tadano's Crane Cab Instrument Electrical Fuse Panel

#### **EXTREME CAUTION**

#### **ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician

Table 32A-6: Cleaning Instructions for the Excavator's Cabin

Serial	Comments or Tasks	Technical Time (hours)
1	Remove and clean all door rubbers, internal door panelling/insulation and clean all windowsills (refer Figure 32A-25).	
2	Remove and clean under the seat, including the rubber seat shroud (refer Figure 32A-26).	
3	Clean behind all cabin walls lining/panelling. Access will be required for inspection (refer Figure 32A-27 and 32A-28).	
4	All air-conditioning vents must be internally cleaned. Access will be required for inspection (refer Figure 32A-29).	
5	<b>WARNING:</b> Do not use water or steam to clean any interiors areas of the crane cabs electrical instrument fuse panel – Use air clean only and only under the supervision of a qualified technician (refer Figure 32A-30).	
6	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **Engine – Engine Compartment**

9. The specific cleaning instructions for the crane's engine and engine compartment, as illustrated in Figures 32A–31 to 32A-34, include those points detailed in Table 32A-7.



Figure 32A-31: Crane's Engine Compartment



Figure 32A-32: Tadano's Radiator Grill and Air-conditioner



Figure 32A-33: Tadano's Battery Box & Air Cleaner



Figure 32A-34: Tadano's Air Filter

### Table 32A-7: Cleaning Instructions for the Mack's Engine Compartment

Serial	Comments or Tasks	Technical Time (hours)
1	Clean the engine compartment and engine to ensure they are free of dust; built-up dirt and grease; insect and plant material (refer Figure 32A-31).	
2	Clean heater/ventilation fan housing to ensure it is free from dirt, dust, plant and insect material (refer Figure 32A-32).	
3	Remove battery and clean battery terminals, leads and the battery box (refer Figure 32A-33).	
4	Remove the air cleaner element and dispose of (refer Figure 32A-34). Replace the air cleaner element with a new part.	
5	Refer to Chapter 32 for detailed cleaning guidelines.	

#### **ANNEX B TO CHAPTER 32**

#### **CLEANING INSTRUCTIONS – TADANO AR-200M-1 20 TONNE**

- 1. This annex provides basic and specific cleaning requirements for selected vehicles. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this annex.
- 2. The cleaning requirements that follow are in addition to those points for mobile cranes included in Chapter 32 of this publication.

#### **External Areas, Front**

3. The cleaning instructions for the Tadano's external front areas, as illustrated in Figures 32B-1 to 32B-4, include the points detailed in Table 32B-1.



Figure 32B-1: Tadano's External Areas



Figure 32B–2: Tadano's Storage Bin



Figure 32B-3: Tadano's Bash Plate



Figure 32B-4: Tadano's Transmission

Table 32B-1: Cleaning Instructions for the Tadano's Front External Areas

Serial	Comments or Tasks	Technical Time (hours)
1	Toolboxes and storage compartments are to be emptied and cleaned (refer Figure 32B-2).	
2	Clean the front areas of the vehicles bash plate ensuring it are free of BRM (refer Figure 32B-3).	
3	Clean the transmission areas using water only. Do not use high- pressure water (refer Figure 32B-4).	
4	Clean all wheels; wheel guards; stone guards and mud guards using high-pressure water (refer Figure 32B-5).	
5	Refer To Chapter 32 for detailed cleaning guidelines.	

#### **External Areas, Rear**

4. The cleaning instructions for the Tadano's external rear areas, as illustrated in Figures 32B-5 to 32B-8, include the points detailed in Table 32B-2.



Figure 32B-5: Tadano's External Areas, Rear



Figure 32B-6: Tadano's Crane Turntable



Figure 32B-7: Tadano's Rear Hydraulics



Figure 32B-8: Tadano's Spare Wheel

Table 32B-2: Cleaning Instructions for the Tadano's External Rear Areas

Serial	Comments or Tasks	Technical Time (hours)
1	The turntable area is to be cleaned of all grease and oil to ensure there is no soil, plant or insect matter. Lightly regrease working surface only after inspection (refer to Figure 36B-6).	
2	Clean all areas of the cranes hydraulics including the main lift ram. Clean all grease and oil to ensure there is no soil, plant or insect matter (refer Figure 32B-7).	
3	Remove the spare wheel and clean as per "Tyres (New, Old and Spares)" in Chapter 32 (refer Figure 32B-8).	
4	Refer To Chapter 32 for detailed cleaning guidelines.	

#### Suspension

5. The specific cleaning instructions for the Crane's suspension, as illustrated in Figures 32B-9 and 32B-10, include those points detailed in Table 32B-3.



Figure 32B-9: Tadano's Front Suspension



Figure 32B–10: Tadano's Rear Suspension

Table 32B-3: Cleaning Instructions for the Crane's Suspension

Serial	Comments or Tasks	Technical Time (hours)
1	Ensure suspension rocker beam mounts on chassis are clean and free of soil, plant and insect material (refer Figure 32B-9 and 32B-10).	
2	Clean all wheels; wheel guards; stone guards and mud guards using high-pressure water	
3	Refer To Chapter 32 for detailed cleaning guidelines.	

#### **Stabilisers and Stands**

6. The cleaning instructions for the Crane's Stabilisers and Stands, as illustrated in Figures 32B-11 to 32B-14, include the points detailed in Table 32B-4.



Figure 32B-11: Tadano's Outrigger Stabiliser Stand



Figure 32B–12: Rear Stabilisers - Foot Removed (Left), Foot Fitted (Right)



Figure 32B–13: Tadano's Stabiliser Stand Stowed on Wheel Mudguard



Figure 32B–14: Tadano's Rear Hydraulic Stabiliser Controls

Table 32B-4: Cleaning Instructions for the Crane's Supports and Stands

Serial	Comments or Tasks	Technical Time (hours)
1	Stabilisers /supports are to be cleaned with a high-pressure water cleaner and attention is to be paid to the hollow tube areas.	
2	Refer To Chapter 32 for detailed cleaning guidelines.	

#### **Boom and Boom Housing**

7. The cleaning instructions for a Forklift's boom and boom housing, as illustrated in Figures 32B-15 to 32B-19, include the point detailed in Table 32B-5.



Figure 32B-15: Tadano's Boom Head



Figure 32B-16: Tadano's Hoist and Tackle Stowed

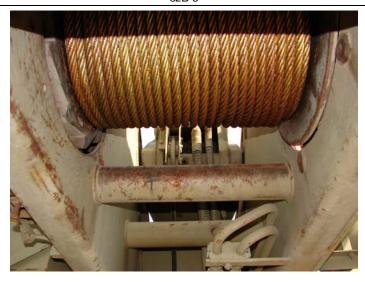


Figure 32B-17: Tadano's Rear Cable Drum



Figure 32B–18: Tadano's Boom Extension Meter



Figure 32B–19: Tadano's Hydraulic Distribution

Table 24B-5: Cleaning Instructions for a crane's Boom and Boom Housing

# **EXTREME CAUTION ELECTRICAL COMPONENTS**

Do not use water or steam to clean the crane booms extension meter – Use air clean only or hand-wipe and only under the supervision of a qualified technician

Serial	Comments or Tasks	Technical Time (hours)
1	The boom is to be extended to facilitate cleaning. Refer to Figures 32B-15 and 32B-16.	
2	All winch ropes, wire ropes and slings are to be extended to full length and subject to a high-pressure water clean using degreaser to remove all soil, plant and insect matter (refer Figure 32B-17).	
3	Do not use water or steam to clean the crane booms extension meter. Use air clean only or hand-wipe and only under the supervision of a qualified technician (refer to Figure 32B-18).	
4	Check along all hydraulic for the presence of soil, plant and insect matter (refer Figure 32B-19).	
5	Refer To Chapter 32 for detailed cleaning guidelines.	

#### **Main Cabin**

8. The cleaning instructions for an excavator's cabin, as illustrated in Figures 32B-20 and 32B-21, include the points detailed in Table 32B-6.



Figure 32B–20: Tadano's Main Cab Dash



Figure 32B-21: Tadano's Main Cab Under-Dash

#### Table 32B-6: Cleaning Instructions for the Excavator's Cabin

# **EXTREME CAUTION ELECTRICAL COMPONENTS**

Do not use water or steam to clean any interiors areas of the crane cabins electrical instruments – Use air clean only and only under the supervision of a qualified technician

Serial	Comments or Tasks	Technical Time (hours)
1	Do not use water or steam to clean any interiors areas of the crane cabins electrical instruments – Use air clean only and only under the supervision of a qualified technician (refer Figure 32B-19).	
2	Clean all dash components, pedal covers and joystick controls (refer Figure 32B-20).	
3	Clean behind and under the dash area. Access will be required for inspection (refer Figure 32B-21).	
4	Refer To Chapter 32 for detailed cleaning guidelines.	

#### **Crane Cabin**

9. The cleaning instructions for a Tadano's crane cabin, as illustrated in Figures 32B-22 to 32B-24, include the points detailed in Table 32B-7.



Figure 32B–22: Tadano's Crane Cabin



Figure 32B-33: Tadano's Crane Cabin Seat



Figure 32B-44: Tadano's Crane Cab Boom Tilt Meter

32B-12

# EXTREME CAUTION ELECTRICAL COMPONENTS

Do not use water or steam to clean any interiors areas of the crane cabs electrical instruments or the Boom Tilt Meter – Use air clean only and only under the supervision of a qualified technician

Table 32B-7: Cleaning Instructions for the Excavator's Cabin

Serial	Comments or Tasks	Technical Time (hours)
1	<b>WARNING:</b> Do not use water or steam to clean any interiors areas of the crane cabs electrical instruments – Use air clean only and only under the supervision of a qualified technician.	
2	Do not use water or steam to clean any interiors areas of the crane cabins electrical instruments – Use air clean only and only under the supervision of a qualified technician (refer Figure 32B-22).	
3	Remove and clean under the seat, including the rubber seat shroud (refer Figure 32B-23).	
4	<b>WARNING:</b> Do not use water or steam to clean the Boom Tilt Meter – Use air clean only and only under the supervision of a qualified technician (refer Figure 32-24).	
5	Refer To Chapter 32 for detailed cleaning guidelines.	

#### **Engine – Engine Compartment**

10. The specific cleaning instructions for the crane's engine and engine compartment, as illustrated in Figures 32B–25 to 32B-29, include those points detailed in Table 32B-8.



Figure 32B-25: Crane's Engine Compartment



Figure 32B-26: Tadano's Radiator



Figure 32B–27: Tadano's Battery Box



Figure 32B–28: Tadano's Air Filter



Figure 32B-29: Tadano's Filters

### Table 32B-8: Cleaning Instructions for the Mack's Engine Compartment

Serial	Comments or Tasks	Technical Time (hours)
1	Clean the engine compartment and engine to ensure they are free of dust; built-up dirt and grease; insect and plant material (refer Figure 32B-25).	
2	The radiator is to be air-blown clean and, if necessary, hand-picked clean of all seed and insect matter (refer Figure 32-26).	
3	Remove battery and clean battery terminals, leads and the battery box (refer Figure 32B-27).	
4	Remove the air cleaner element and dispose of (refer Figure 32B-28). Replace the air cleaner element with a new part.	
5	Refer To Chapter 32 for detailed cleaning guidelines.	

# ANNEX C TO CHAPTER 32 CLEANING CHECKLIST – CRANES MOBILE TELESCOPIC

## All serials may not be specific to all Mobile Telescopic Cranes

Vehicle Registration No: .....

Serial	Description	Tick
	External Areas - Front	
1	All cables fully extended and cleaned of oil and grease. Cables re-oiled after inspection.	
2	Toolboxes and storage compartments emptied and cleaned.	
3	The front areas of the vehicle cleaned.	
4	All wheels; wheel guards; stone guards and mud guards cleaned.	
5	Suspension rocker beam mounts on chassis clean.	
6	The spring seat, where the spring is mounted to the axle assembly cleaned.	
7	Inside area on the inner side of the wheel cleaned.	
8	Axles and mounts on chassis are clean.	
9	Lights covers have been removed or loosened; cleaned and damaged lights have been removed to allow cleaning of the fitting.	
10	Rubber seals have been cleaned.	
	External Areas - Rear	
1	Toolboxes, bins and storage compartments have been emptied and cleaned.	
2	Items that are likely to snag foliage have been cleaned.	
3	The turntable area has been cleaned of all grease and oil. (Lightly regrease working surface only after inspection.)	
4	Panels on the hydraulic oil cooler have been opened, inspected and cleaned.	
5	All areas of the cranes base including the main lift ram have been cleaned.	
	1	

Serial	Description	Tick
6	The hose cover has been removed and cleaned.	
7	All sides of the fuel tank have been cleaned.	
8	Mudflaps have been removed and cleaned, as have the attachment points.	
9	The underside areas of the chassis (especially around the tail shaft and the axles) have been cleaned.	
10	The spare wheel has been removed for cleaning and all tyres to be inspected and cleaned.	
	Suspension	
1	Suspension rocker beam mounts on chassis clean.	
2	The spring seat, where the spring is mounted to the axle assembly cleaned.	
3	Inside area on the inner side of the wheel cleaned.	
4	Axles and mounts on chassis are clean.	
5	Wheel arches have been cleaned.	
6	The inside of wheel rims and brake drums have been cleaned.	
7	All wheels; wheel guards; stone guards and mud guards cleaned.	
8	Universal joints have been cleaned.	
	Stabilisers and Stands	
1	Attachment points and frames have been fully extended cleaned.	
2	Stabilisers /supports have been cleaned.	
3	Stands have been subject to high-pressure water cleaning.	
4	The foot plates have been cleaned.	
	Boom and Boom Housing	
1	The boom have been extended and cleaned.	
2	All external, non-affixed plates on the boom arm have been removed and cleaned.	

Serial	Description	Tick
3	The boom and all hydraulic lines have been cleaned.	
4	All grease has been removed from the boom housing.	
5	All hydraulic rams have been extended and cleaned. Hydraulic lines and cabling have been wiped clean, conduit has been flushed and if necessary, the conduit has been removed.	
6	All winch ropes, wire ropes and slings have been extended to full length and cleaned.	
7	The winch drum has been degreased and cleaned.	
8	All winch ropes, wire ropes and slings have been re-oiled after inspection.	
9	All hydraulic lines and mounting points have been cleaned.	
10	Any drainage holes or openings in the boom stick have been un-blocked and flushed.	
11	All contaminated grease has been removed from the rams and pivot points.	
12	All knuckles have been cleaned	
13	All electrical and hydraulic lines have been separated and all grease and soil debris cleaned.	
	Main Cabin	
1	Any rubber floor mats have been cleaned.	
2	The floor surface has been cleaned.	
3	All door rubbers, internal door panelling and windowsills have been cleaned.	
4	The seat and the rubber seat shroud have been cleaned.	
5	Ay non-affixed floor panels (if applicable) have been cleaned underneath.	
6	All rubber pedal covers have been cleaned.	
7	All cabin walls lining/panelling has been cleaned.	
8	All air-conditioning vents have been internally cleaned.	
9	The dashboard area (including the under area) has been cleaned.	
	I	

Serial	Description	Tick
10	All joystick controls have been cleaned.	
11	The cabin roof (both inside and out) has been cleaned.	
12	The ladder to the cabin (if applicable) and under each footstep has been cleaned.	
13	All light covers have been internally cleaned.	
14	The windscreen reservoir has been emptied.	
15	A check for a false floor under the cabin has been conducted and cleaned (if applicable).	
	Crane Cabin	
1	Any rubber floor mats have been cleaned.	
2	The floor surface has been cleaned.	
3	All door rubbers, internal door panelling and windowsills have been cleaned.	
4	The seat and the rubber seat shroud have been cleaned.	
5	Ay non-affixed floor panels (if applicable) have been cleaned underneath.	
6	All rubber pedal covers have been cleaned.	
7	All cabin walls lining/panelling has been cleaned.	
8	All air-conditioning vents have been internally cleaned.	
9	The dashboard area (including the under area) has been cleaned.	
10	All joystick controls have been cleaned.	
11	The cabin roof (both inside and out) has been cleaned.	
12	The ladder to the cabin (if applicable) and under each footstep has been cleaned.	
13	All light covers have been internally cleaned.	
14	The windscreen reservoir has been emptied.	
15	A check for a false floor under the cabin has been conducted and cleaned (if applicable).	

Serial	Description	Tick
	Engine and Engine Compartment	
1	The engine compartment and engine have been cleaned.	
2	Any engine openings/breathers have been taped or plugged to stop ingress of water.	
3	The starter motor and alternator have been covered and taped to stop ingress of water.	
4	High-pressure water jets have not been directed at any of the engine openings/breathers, or at any of the electrical/electronic components.	
5	The brake booster assembly and the pedal pivot housing have been cleaned.	
6	The clutch pedal pivot housing cover and the housing have been cleaned.	
7	The heater assembly and the heater core have been cleaned.	
8	The heater/ventilation fan housing has been cleaned.	
9	The air cleaner flexible line has been cleaned.	
10	The battery, battery terminals, leads and the battery box have been cleaned.	
11	The air cleaner element has been cleaned or has been disposed of. If disposed of, the air cleaner element has been replaced.	
12	The radiator has been air-blown clean and, if necessary, hand-picked clean.	
13	The radiator and oil cooler have been flushed from both sides to verify fin/core cleanliness.	
14	The radiator shroud has been loosened to let any loose debris fall through after flushing.	
	Tyres (New, Old and Spares)	
1	All tyres have been washed and scrubbed to remove all BRM.	
2	Cracked and perished tyres have been subject to disposal.	
3	All tyres have been treated with an approved residual insecticide after cleaning.	
4	Fitted tyres that are damaged have been replaced with new tyres.	
5	Used and fitted tyres on rims have been individually verified that the tyres are on rims, inflated with beading sealed and that the tyres are clean, free of water and other BRM.	

Serial	Description	Tick
6	Tyres that are not fitted to rims have been stored in such a manner that water cannot collect inside the tyre. Tyres not fitted on rims will require fumigation on return to Australia.	
7	The consignment contains a maximum of 8 tyres and is to be imported with an accompanying vehicle	
	or	
	The consignment contains more than a maximum of 8 tyres and will not be imported with an accompanying vehicle.	
	(Delete whichever is not applicable)	

Signed	Date:
Name:	