



DROPS

DROPPED OBJECTS
PREVENTION SCHEME

Common Guidelines for Independent Dropped Object Surveys Revision 03

DROPS GLOBAL

e: admin@dropsonline.org

w: www.dropsonline.org



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PREFACE

Dropped Object Surveys and Inspections are a key element of dropped object control and prevention management systems. Asset personnel will regularly perform dropped object inspections as part of routine maintenance and operational activities.

Large scale Independent Dropped Object Surveys are undertaken periodically, typically by subcontractor personnel to complement the Asset's dropped object prevention strategy. These surveys provide added assurances that all potential dropped object hazards are identified, assessed and recorded such that control measures and corrective actions can be recommended and implemented within the Asset's Management System.

Many specialist access and inspection organisations offer 'Independent Dropped Object Surveys' to the oil and gas sector, in addition to qualified derrick or mast and substructure inspections and surveys. Each organisation employs their own unique tools and techniques to identify and record potential dropped objects in and around the derrick and other areas of the installation. For many, the process incorporates further integration of the survey findings and recommendations into the client's own maintenance management systems, ensuring corrective actions are implemented and monitored as appropriate.

Whilst it may be apparent that the characteristics of the dropped object inspection and survey deliverable can vary greatly between service providers, the objective remains the same. We are all committed to preventing harm to personnel and damage to equipment from dropped objects.

This document, published by **DROPS** provides best practice common guidelines for subcontractor personnel performing Dropped Object Surveys.



1 INTRODUCTION

These Common Guidelines should be applied by all subcontractor personnel conducting third party Independent Dropped Objects Surveys.

The purpose of these Guidelines is to:

- Establish minimum requirements for subcontractor personnel with regards to Independent Dropped Objects Surveys / Inspections
- Provide guidance on the completion of Dropped Objects Survey Reports and Dropped Objects Inspection Books
- Provide example templates for independent Dropped Objects Survey Reports
- Provide further supporting guidance for planning and management.



2 BASIC REQUIREMENTS

To ensure expectations are met with regard to the prevention of dropped objects, all subcontractor personnel conducting third party Independent Dropped Objects Surveys / Inspections should demonstrate competence in:

- Survey and Inspection Techniques
- Structural Integrity Assessment
- Industry Recognised Rope Access Certification
- Safe Working at Height Procedures
- Permit to Work Procedures
- Use of approved Tools at Height systems

Subcontractor personnel should also demonstrate a clear understanding of:

- DROPS Reliable Securing Best Practice (principles of Primary Fixing, Secondary Retention and Safety Securing)
- Safe Bolting Techniques
- Cargo Handling and Lifting Operations (including Lifting Equipment)
- Moving / Dynamic Equipment and Machinery
- Basic Knowledge of Drilling Equipment and Functions (due to the forces induced during operation, anti-collision systems and the following potentials for dropped objects)
- Awareness of relevant Safety Alerts and Safety (HSE) bulletins issued by equipment suppliers
- Task Risk Assessment
- Hazard Reporting
- Asset specific DROPS management system
- DROPS definitions (static/dynamic), causes, consequences (See Appendix 4.1)

To find out more about dropped object definitions, common causes and consequences, refer to pages 22 – 25 of [DROPS Reliable Securing \(Rev04\)](#).

3 INDEPENDENT DROPPED OBJECT SURVEY CRITERIA

These Common Guidelines are designed to ensure that all independent survey companies who perform Dropped Objects Surveys at any installation or facility perform them in accordance with the best practice criteria outlined within this document. This will ensure that all Dropped Objects Surveys performed will be consistent.

The best practice criteria are structured as follows:

- Inspection Areas
- The Survey
- Deliverables

To exemplify the criteria, these guidelines have been based on a typical mobile drilling rig. The principle however can be applied to all assets, structures and equipment.

3.1 Inspection Areas

3.1.1 Background

In establishing an effective dropped object management system, facilities, structures, sites and locations are typically separated into manageable Areas. Within these Areas, major structures may be separated further into Zones to represent levels, equipment areas and modules.

For each Area, an inventory should be prepared detailing and uniquely referencing all equipment that is located, stored, held, mounted, secured or used at height. This represents all the potential dropped objects in that area and the inventory may run to hundreds of items, depending on the location.

In many cases, the installation will already have an inventory, or make reference to an Equipment Family list or inventory within the Maintenance Management System.

It is important that those preparing the inventory and undertaking all subsequent assessments are intimate with the area, its equipment and all associated operations and interfaces.

3.1.2 Example Inspection Areas and Zones

The asset is separated into individual Areas and separated further by Equipment Zones. These Areas and Zones reflect the physical structure of the asset and any pre-existing inspection and maintenance management system area descriptions. It may be prudent to separate the asset according to established Area Authority systems.

It is important to note that all equipment in every Area and Zone must be individually identified and inspected separately. For example, each crane must have its own inspection frequency independent of the other cranes.

Example Areas and Zones for a typical Jack-Up Rig

AREA 1: Derrick and Rig Floor	
Zone 1	A-Frame / Crown / Crown Saver / Water Table
Zone 2	Crown underside to top of Fingerboard Level
Zone 3	Fingerboard / Monkey Board Level
Zone 4	Underside of Fingerboard Level to Rig Floor
Zone 5	Travelling Block / Top Drive / Racking Crane / Pipe Handling Equipment / Guides
Zone 6	Rig Floor Equipment
AREA 2: Cantilever and Substructure	
Zone 1	Derrick Substructure and Texas Deck (inc suspended equipment)
Zone 2	Top Side of Cantilever / Conveyors / Catwalk / Skate / Pipe Deck Equipment
Zone 3	Cantilever Deck Internal Areas
Zone 4	BOP Areas / Handling / Access Platforms
Zone 5	Handling cranes and winches
AREA 3: Main Deck / Upper Decks / Walkways / Platforms / Mezzanines	
Zone 1	Main Deck General Equipment / Laydown Areas / Welding Shop / Racks and Storage
Zone 2	Upper Decks / Walkways / Laydown Areas / Racks and Storage
Zone 3 / 4 / 5	Bow / Port / Stbd Leg Structures, Jack Houses and Walkways
Zone 6	Shaker House and Roof
Zone 7	Lifeboat / Ancillary / Emergency / Escape Equipment
AREA 4: Deck Cranes	
Zone 1 / 2 / 3	Deck Crane (e.g. Fwd / Port / Stbd etc) / Boom Equipment / Cabs / Engine Houses
Zone 4	Gantry Crane
AREA 5: Accommodation Structure Exterior	
Zone 1	Roof General Equipment / Comms Masts / Laydown Areas
Zone 2	Exterior Level Walkways / Laydown Areas
Zone 3	Lifeboat Platforms
AREA 6: Helideck	
Zone 1	Helideck, Helideck Structure, Walkways, Equipment
AREA 7: Fixed Third Party Equipment	
Zone 1 / 2 / 3 etc	Cementing Units / Snubbing / Wireline/CT etc
AREA 8: Other Areas	
Zone 1 / 2 / 3 etc	Machinery Spaces / Engine Room / Pump Room / Cement Room etc as determined by asset management team.



3.2 The Survey

The following outlines the minimum requirements for conducting a dropped object survey. (See also Section 2, Basic Requirements).

IMPORTANT: Independent surveyors are expected to identify and, wherever possible, assist with the removal of all potential dropped objects such as redundant equipment, debris or other unsecured non-essential items.

In undertaking the Dropped Object Survey, established Equipment Inspection Criteria should be followed closely for each Inspection Area and Zone. (See Appendix 4.6).

As a minimum, the following tasks must be performed and captured using the Dropped Object Survey Report Template:

- Describe and Photograph each equipment item by location within Inspection Area / Zone
- Include unique identification number to each item (equipment tag numbers)
- Inspect and document Primary Securing and Secondary Retention method(s) (See Section 3.2.1)
- Conduct risk analysis of each item (See Section 3.2.2 Risk Analysis)
- Inspect and document Safety Securing method(s) (See Section 3.2.3)
- Record equipment condition as Pass or Fail, including comments (i.e. Satisfactory or Reason for Failure)
- Record inspection frequency (i.e. weekly, monthly) as per Equipment Family Inspection Criteria or in response to risk analysis
- Identify requirement for Rope Access inspection (i.e. items that cannot be inspected without remote access support)
- Generate equipment item inspection criteria

IMPORTANT: All items identified during the survey not falling into a category on existing Equipment Inspection Criteria must be included in the Dropped Objects Survey report.

In the case that items of equipment or structure have been identified during the Dropped Object Survey that have not been included in the existing inventory or Equipment Inspection Criteria, the OIM and/or Area Authority in consultation with the independent surveyor will ensure that inspection criteria are developed for all such items. Where applicable, the inspection criteria will be incorporated into other relevant inventories as required.

The lead surveyor should communicate survey progress to the OIM daily.

3.2.1 Primary Fixing and Secondary Retention

The Primary method of securement (bolted, clamped, pin / hinged etc) should be clearly described in the report. Where Secondary Retention is installed or incorporated, the description should include the type of device by its recognized brand or type name (e.g. Brands such as Nyloc, Anco, Palnut, or Types such as wedge lock washer, metal lock nut etc). For further guidance, refer to DROPS Reliable Securing Rev04 – Securing Methods.

3.2.2 Risk Assessment

Where requested, each item captured in the survey can be evaluated to determine probability and consequence of failure. This activity will inform appropriate corrective actions and responses to the assessed risk, and could include but not be limited to:

- Removal or Replacement of item
- Replacement of fastening components (in association with OEM or Technical Authority)
- Installation of additional securing devices (such as safety nets, wires or lanyards)
- Increased frequency / priority or improved criteria of inspection, repair and maintenance

This assessment should be conducted by the inspector or subject matter expert in association with equipment operators and the OEM where applicable.

The following criteria may be considered.

PROBABILITY (could include but not be limited to)		
LOW	MEDIUM	HIGH
<ul style="list-style-type: none"> Equipment not located above primary working spaces, Equipment not exposed to frequent movement, heavy vibration, or environmental effects, Equipment not exposed to contact from other moving machinery, Equipment is not safety critical, Verified and robust securing method, Similar event has not been heard of in the industry. 	<ul style="list-style-type: none"> Equipment not located above primary working spaces, Equipment may be exposed to frequent movement, heavy vibration, or environmental effects, Equipment may be exposed to contact from other moving machinery, Equipment is safety critical, Questionable or unverified securing method, Similar event has been heard of in the industry. 	<ul style="list-style-type: none"> Equipment is located above primary working spaces, Equipment is continually exposed to frequent movement, heavy vibration, or environmental effects, Equipment is continually exposed to contact from other moving machinery, Equipment is safety critical, Poor or unsuitable securing method, Similar event has occurred more than once in the industry.

SEVERITY (could include but not be limited to)		
LOW (<55J)	MEDIUM (55-95J)	HIGH (>95J)
<ul style="list-style-type: none"> Potential for First Aid Case (slight injury) according to the DROPS Calculator, Slight asset damage, Slight environmental damage. 	<ul style="list-style-type: none"> Potential for Medical Treatment Case (Minor injury) according to the DROPS Calculator, Moderate asset damage, Moderate environmental damage. 	<ul style="list-style-type: none"> Potential for LTI (major injury) or worse according to the DROPS Calculator, Major asset damage or worse, Major environmental damage.



RESPONSE TO RISK (could include but not be limited to)		
LOW	MEDIUM	HIGH
<ul style="list-style-type: none">• Schedule corrective action if required• Annual survey• 6-12 month inspection• Assess requirement for safety securing.	<ul style="list-style-type: none">• Schedule corrective action• Annual survey• Min 3 month inspection• Install safety securing.	<ul style="list-style-type: none">• Immediate corrective action• Annual survey• Daily / Weekly inspection• Install safety securing.

3.2.3 Safety Securing

Where equipment secured at height is exposed to a risk of becoming disengaged from its fastenings, a safety securing device in the form of safety nets or safety wires and connectors should be installed. These devices must be clearly described in the report and where applicable a record of the type, rating and attachment point included.

The Lead Surveyor and all inspectors should be aware of the specific risk that the safety securing is responding to in order that the device can be checked, verified and that inspection criteria is developed for the device.

See DROPS Reliable Securing pages 18-21 for further information.



3.3 Deliverables

Within two weeks of completing the Dropped Object Survey the independent survey company must provide a hard copy and electronic copy of the following documentation to the OIM and Rig Manager.

- Dropped Objects Survey Report
- Failed Items List
- Dropped Objects Inspection Book / System (must be in editable format for updates)






Each of these documents must be supplied in accordance with the preferred electronic templates as provided by the client (i.e. MS Excel, Adobe PDF etc). These may also be incorporated within advanced electronic inspection systems that employ tablets or other digital devices.

See Appendix 4.2, 4.3 and 4.4 for examples.

3.3.1 Dropped Objects Survey Report

The Dropped Objects Survey Report details a list of all items inspected. The report will contain the following information:

- Location, Photograph, Description and Tag Number of Equipment (by Inspection Area)
- Description of Primary Fixing and Secondary Retention methods and condition (i.e., Pass / Fail)
- Risk Ranking (High, Medium, Low)
- Description of Safety Securing device and condition (i.e., Pass / Fail)
- Comments (record status of item i.e., Satisfactory or Reason for Failure)
- Inspection Criteria (what to inspect, what to look for)
- Inspection Frequency (populated from the 'Inspection Frequency' column of the Equipment Family Inspection Criteria or in conjunction with asset management systems and inventories, equipment users and OEM recommendations).

Typical Dropped Object Survey											
INSPECTION AREA A : TELESCOPIC GANGWAYS (Port and Starboard)											
AREA SPECIFIC DESCRIPTION											
ITEM	PHOTOGRAPH	REF	DESCRIPTION	FASTENING METHOD	RISK	SAFETY SECURI	COMMENTS	FREQU	ROPE AC	HOW TO INSPECT	NA
1		EEC 334A	Gangway Access Control Lamps (Port and Stbd)	Primary Fixing: Bolted on bracket to gangway structure. Secondary Retention: Nyloc Nuts. ■ PASS □ FAIL	LOW	None ■ PASS □ FAIL	Signs of collision damage.	060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of further damage or corrosion.	AS
2		GWPA 006-2	Gangway PA System (Port and Stbd)	Primary Fixing: Bolted to brackets. Brackets bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. ■ PASS □ FAIL	MED	Safety wires. □ PASS ■ FAIL	Carabiners corroded on safety wire. Replace with safety securing net.	060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing.	JZ
3		EEC 12553 EEC 12568	Cable trays, Cable conduit pipe runs & cable clamps	Primary Fixing: Cable trays clamped to gangway structure. Secondary Retention: Metal lock nuts. ■ PASS □ FAIL	LOW	Safety cables secured with carabiners. ■ PASS □ FAIL	Satisfactory. All Unistrut components as per OEM	180 Days	N	Check all securing bolts/lock nuts are in place on clamps. Check for signs of corrosion. Check integrity of safety securing. Remove all debris.	JZ
4		GWXS 001	Gangway Maintenance Platform Access Hatch	Primary Fixing: Hinged with single pin. Secondary Retention: Split pin. □ PASS ■ FAIL	HIGH	None. □ PASS ■ FAIL	Split pin corroded, to be replaced. Safety securing cable required for hatch.	030 Days	Y	Check all securing devices are in place. Check for signs of wear or corrosion. Check hinge securing. Check integrity of safety securing. Remove all debris.	DE
5		GWLF 001	Gangway Landing Foot	Primary Fixing: Bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. ■ PASS □ FAIL	HIGH	Chain device fitted. □ PASS ■ FAIL	Recommend appropriate rated safety cable secured with 4Pt shackles	007 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing.	JZ
<div> <div>Survey Report</div> <div>Failed Items</div> <div>Inspection Book</div> <div>+</div> </div>											




3.3.2 Failed Items List

The Failed Items List is extracted directly from the Failed Items recorded in the Dropped Object Survey Report and contains the following information:

- Location, Photograph, Description and Tag Number of Equipment (by Inspection Area)
- Description of Primary Fixing and Secondary Retention methods and condition (Pass / Fail)
- Risk Ranking (High, Medium, Low)
- Description of Safety Securing device and condition (Pass / Fail)
- Reason for Failure

Where an imminent risk of an item becoming a dropped object is identified during the survey, Remedial or Corrective Action should be taken where it is safe to do so. Any findings that present such risks must be reported immediately.

The Risk Ranking should inform the priority for any further action.

Typical Failed Items List										
INSPECTION AREA A : TELESCOPIC GANGWAYS (Port and Starboard)										
AREA SPECIFIC DESCRIPTION										
IT	PHOTOGRAPH	REF	DESCRIPTION	FASTENING METHOD	RISK	SAFETY SECURI	COMMENTS	ROPE AC	NA	
4		GWXS 001	Gangway Maintenance Platform Access Hatch	Primary Fixing: Hinged with single pin. Secondary Retention: Split pin. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	HIGH	None. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	Split pin corroded, to be replaced. Safety securing cable required for hatch.	Y		DE
5		GWLF 001	Gangway Landing Foot	Primary Fixing: Bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	HIGH	Chain device fitted. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	Recommend appropriate rated safety cable secured with 4Pt shackles	N		JZ
2		GWPA 006-2	Gangway PA System (Port and Stbd)	Primary Fixing: Bolted to brackets. Brackets bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	MED	Safety wires. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	Carabiners corroded on safety wire. Replace with safety securing net.	N		JZ
<div> Survey Report Failed Items Inspection Book + </div>										

3.3.3 Dropped Objects Inspection Book






The Dropped Object Inspection Book will be used by Asset personnel to conduct periodic inspections and is comprised of information gathered during the Dropped Object Survey in conjunction with information from the Equipment Family Inspection Criteria.

The Inspection Book is grouped by Inspection Areas. Each section will include the following:

- Location, Photograph, Description and Tag Number of Equipment (by Inspection Area)
- Description of Primary Fixing and Secondary Retention methods and condition
- Description of Safety Securing device and condition (Pass / Fail)
- Inspection Criteria (what to inspect, what to look for).

The Inspection Book should enable personnel to update and include:

- Condition Pass / Fail
- Comments (i.e. Reason for Failure)
- Revised Risk Ranking (in conjunction with Technical / Area Authority)
- New items (in conjunction with OEM, Technical / Area Authority or Subject Matter Expert)

Typical Dropped Object Inspection Book											
INSPECTION AREA A : TELESCOPIC GANGWAYS (Port and Starboard)											
AREA SPECIFIC DESCRIPTION											
I	PHOTOGRAPH	REF	DESCRIPTION	FASTENING METHOD	RISK	SAFETY SECURI	COMMENTS	FREQU	ROPE AC	HOW TO INSPECT	NA
5		GWLF 001	Gangway Landing Foot	Primary Fixing: Bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	HIGH	3T wire rope and shackles. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	(Enter comments)	007 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing.	JZ
4		GWXS 001	Gangway Maintenance Platform Access Hatch	Primary Fixing: Hinged with single pin. Secondary Retention: Split pin. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	HIGH	Safety cables secured with carabiners. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		030 Days	Y	Check all hinge pins and split pins are in place. Check for signs of wear or corrosion. Check integrity of safety securing. Remove all debris.	DE
2		GWPA 006-2	Gangway PA System (Port and Stbd)	Primary Fixing: Bolted to brackets. Brackets bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	MED	Safety net. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing net.	JZ
3		EEC 12553 EEC 12568	Cable trays, Cable conduit, pipe runs & cable clamps	Primary Fixing: Cable trays clamped to gangway structure. Secondary Retention: Metal lock nuts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	LOW	Safety cables secured with carabiners. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		180 Days	N	Check all securing bolts/lock nuts are in place on clamps. Check for signs of corrosion. Check integrity of safety securing. Remove all debris.	JZ
1		EEC 334A	Gangway Access Control Lamps (Port and Stbd)	Primary Fixing: Bolted on bracket to gangway structure. Secondary Retention: Nyloc Nuts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	LOW	Not applicable <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of further damage or corrosion.	AS
<div> Survey Report Failed Items Inspection Book + </div>											



3.4 Responsibilities

3.4.1 Independent Survey Companies

The Independent Survey Company is responsible for ensuring that:

- These common guidelines are adhered to during Dropped Object Surveys
- The Dropped Object Survey is conducted in accordance with the client's own Policies and Procedures
- A 'Fail' Condition is applied to any equipment not meeting the defined inspection criteria
- The OIM is informed of all equipment identified in need of immediate attention as soon as possible

3.4.2 Client Asset Personnel

All installation and shore based personnel responsibilities in respect of Dropped Object Management and Prevention are identified in the relevant Health and Safety Policies and Procedures Manual or Safety Management System.

4.0 APPENDIX

4.1 Definitions

Dropped Object






Dropped objects, derive their capability for damage and harm from the conversion of their potential energy to kinetic energy prior to impact. Appendix 4.5 contains a DROPS calculator, which can be used to assess the impact of a dropped object.

For the purpose of focusing prevention and elimination strategies dropped or potential dropped objects are classified as either static or dynamic.





Term	Definition
Static dropped object	A static dropped object is a solid object, initially at rest, that falls from its original position under its own weight. Examples of static dropped objects include nut dislodged in rig derrick, fallen cable tray due to failed (corroded) fastenings.
Dynamic dropped object	A dynamic dropped object is a solid object that breaks free from its fastenings due to the applied force from the impact of some other equipment or a moving object. Examples of dynamic dropped objects include the top drive hitting the rig floor, a stand of drill pipe falling across the derrick and hitting and breaking a light resulting in the light falling to the rig floor.
Primary Fixing:	The primary method by which an item is installed, mounted and secured to prevent the item falling (e.g. bolted connections, screws, pins, buckles, clips, welds etc.).
Secondary Retention	The engineered method for securing the primary fixing to prevent loss of clamping force or displacement of fastening components (e.g. locking washers, lock wire, split pins / cotter pins etc.).
Safety Securing	An additional mechanism for securing the item to the main structure, suitably selected to restrain the item or its components from falling should the primary fixing fail (e.g. rated steel or synthetic nets, lanyards, baskets, wires, slings, chains etc.).

4.2 Independent Dropped Object Survey Report Template

This document is used to capture the results of the Independent Dropped Object Survey. An electronic Excel copy of this template is available for download.




Typical Dropped Object Survey											
INSPECTION AREA A : TELESCOPIC GANGWAYS (Port and Starboard)											
AREA SPECIFIC DESCRIPTION											
I	PHOTOGRAPH	REF	DESCRIPTION	FASTENING METHOD	RISK	SAFETY SECURI	COMMENTS	FREQ	ROPE AC	HOW TO INSPECT	NA
1		EEC 334A	Gangway Access Control Lamp (Port and Stbd)	Primary Fixing: Bolted on bracket to gangway structure. Secondary Retention: Nyloc Nuts. ■ PASS □ FAIL	LOW	None ■ PASS □ FAIL	Signs of collision damage.	060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of further damage or corrosion.	AS
2		GWPA 006-2	Gangway PA System (Port and Stbd)	Primary Fixing: Bolted to brackets. Brackets bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. ■ PASS □ FAIL	MED	Safety wires. □ PASS ■ FAIL	Carabiners corroded on safety wire. Replace with safety securing net.	060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing.	JZ
3		EEC 12553 EEC 12568	Cable trays, Cable conduit pipe runs & cable clamps	Primary Fixing: Cable trays clamped to gangway structure. Secondary Retention: Metal lock nuts. ■ PASS □ FAIL	LOW	Safety cables secured with carabiners. ■ PASS □ FAIL	Satisfactory. All Unistrut components as per OEM	180 Days	N	Check all securing bolts/lock nuts are in place on clamps. Check for signs of corrosion. Check integrity of safety securing. Remove all debris.	JZ
4		GWXS 001	Gangway Maintenance Platform Access Hatch	Primary Fixing: Hinged with single pin. Secondary Retention: Split pin. □ PASS ■ FAIL	HIGH	None. □ PASS ■ FAIL	Split pin corroded, to be replaced. Safety securing cable required for hatch.	030 Days	Y	Check all securing devices are in place. Check for signs of wear or corrosion. Check hinge securing. Check integrity of safety securing. Remove all debris.	DE
5		GWLF 001	Gangway Landing Foot	Primary Fixing: Bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. ■ PASS □ FAIL	HIGH	Chain device fitted. □ PASS ■ FAIL	Recommend appropriate rated safety cable secured with 4Pt shackles	007 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing.	JZ
<div> <div>Survey Report</div> <div>Failed Items</div> <div>Inspection Book</div> <div>+</div> </div>											

Extract from Rig Example:





Dropped Objects Survey Report - Crown and Water table - Area 1					
Photo	Ref	Description / Location	Fastening Method	Condition	Control
	CWN010	Crown block sheaves and pins, central crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire	Condition : (X) Pass () Fail Comments : Satisfactory	Monthly
	CWN012	Dead line deflector sheave, Aft Crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire	Condition : (X) Pass () Fail Comments : Satisfactory	Monthly
	CWN014	Fast line sheaves, Fwd Crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire and safety chain	Condition : (X) Pass () Fail Comments : Satisfactory	Monthly
	WTT006	Timber block crown saver, underside of crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire, safety chain and 4 part shackle	Condition : (X) Pass () Fail Comments : Satisfactory	Monthly

4.3 Failed Items List Template

This document is used to capture items recorded as Failed during the Independent Dropped Object Survey. An electronic Excel copy of this template is available for download.






Typical Failed Items List										
INSPECTION AREA A : TELESCOPIC GANGWAYS (Port and Starboard)										
AREA SPECIFIC DESCRIPTION										
IT	PHOTOGRAPH	REF	DESCRIPTION	FASTENING METHOD	RISK	SAFETY SECURI	COMMENTS	ROPE AC	NA	
4		GWXS 001	Gangway Maintenance Platform Access Hatch	Primary Fixing: Hinged with single pin. Secondary Retention: Split pin. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	HIGH	None. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	Split pin corroded, to be replaced. Safety securing cable required for hatch.	Y	DE	
5		GWLF 001	Gangway Landing Foot	Primary Fixing: Bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	HIGH	Chain device fitted. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	Recommend appropriate rated safety cable secured with 4Pt shackles	N	JZ	
2		GWPA 006-2	Gangway PA System (Port and Stbd)	Primary Fixing: Bolted to brackets. Brackets bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	MED	Safety wires. <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL	Carabiners corroded on safety wire. Replace with safety securing net.	N	JZ	
<div> Survey Report Failed Items Inspection Book + </div>										

Extract from Rig Example:





Dropped Objects Fail List - Crown and Water table - Area 1				
Photo	Ref	Description / Location	Fastening Method	Condition
	CWN010	Crown block sheaves and pins, central crown	Primary Securing : Bolted Secondary Retention: None	Condition : () Pass (X) Fail Reason for failure: No secondary retention, requires lock nuts / lock wire
	CWN012	Dead line deflector sheave, aft Crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire	Condition : () Pass (X) Fail Reason for failure: Lock wire broken, need to replace lock wire
	CWN014	Fast line sheaves, fwd Crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire and safety chain	Condition : () Pass (X) Fail Reason for failure: Safety chain broken, requires new chain
	WTT006	Timber block crown saver, underside of crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire, safety chain and 2 part shackle	Condition : () Pass (X) Fail Reason for failure: Replace 2 part shackle with 4 part shackle

4.4 Dropped Object Inspection Book Template

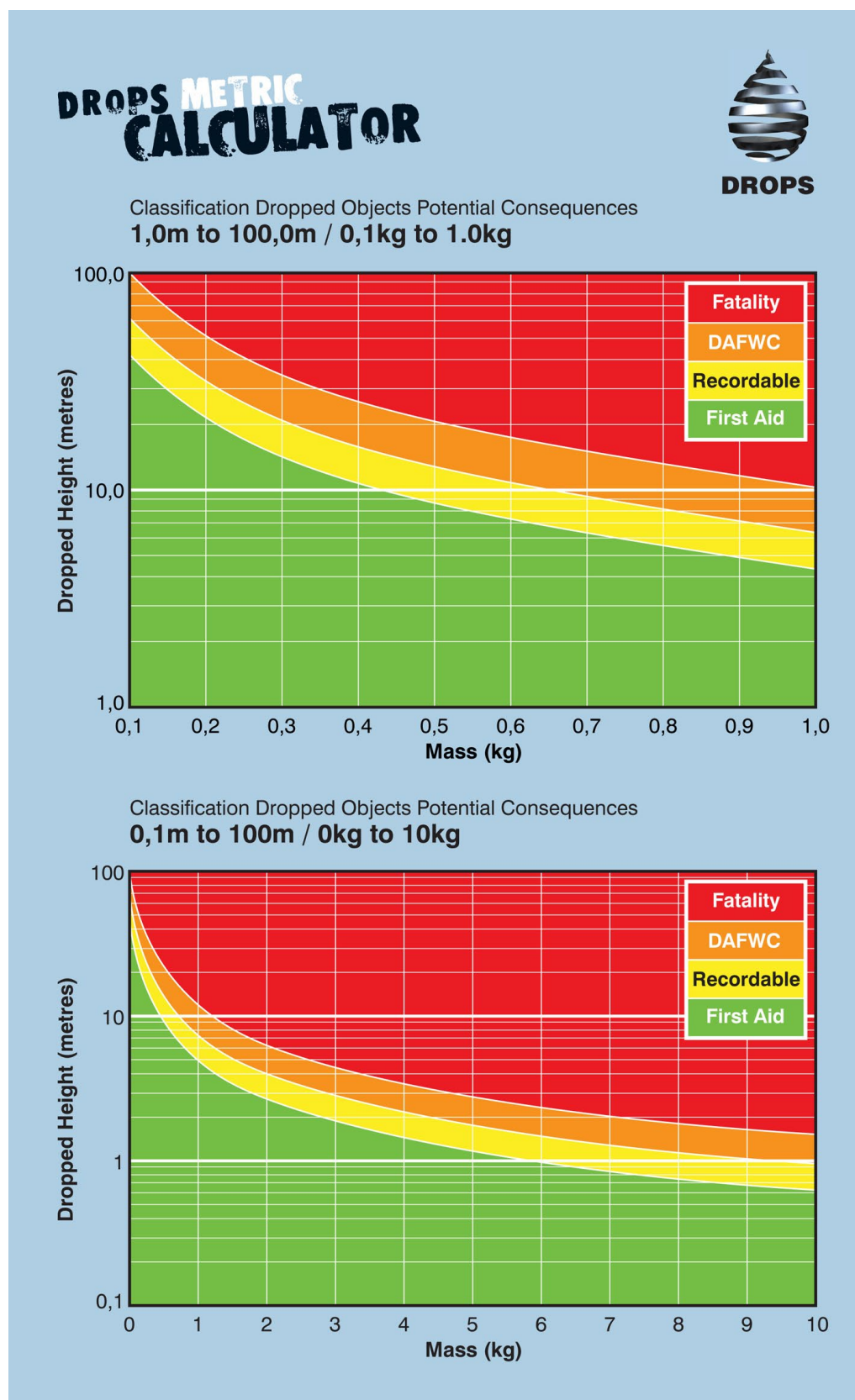
This document is a key deliverable from the Independent Dropped Object Survey and is used by Asset personnel to conduct periodic Dropped Object inspections. An electronic Excel copy of this template is available for download.

Typical Dropped Object Inspection Book										
INSPECTION AREA A : TELESCOPIC GANGWAYS (Port and Starboard)										
AREA SPECIFIC DESCRIPTION										
PHOTOGRAPH	REF	DESCRIPTION	FASTENING METHOD	RISK	SAFETY SECURI	COMMENTS	FREQL	ROPE AC	HOW TO INSPECT	NA
	GWLF 001	Gangway Landing Foot	Primary Fixing: Bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	HIGH	3T wire rope and shackles. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	(Enter comments)	007 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing.	JZ
	GWXS 001	Gangway Maintenance Platform Access Hatch	Primary Fixing: Hinged with single pin. Secondary Retention: Split pin. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	HIGH	Safety cables secured with carabiners. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		030 Days	Y	Check all hinge pins and split pins are in place. Check for signs of wear or corrosion. Check integrity of safety securing. Remove all debris.	DE
	GWPA 006-2	Gangway PA System (Port and Stbd)	Primary Fixing: Bolted to brackets. Brackets bolted to gangway structure. Secondary Retention: Lock Nuts fitted to bolts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	MED	Safety net. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of corrosion. Check integrity of safety securing net.	JZ
	EEC 12553 EEC 12568	Cable trays, Cable conduit pipe runs & cable clamps	Primary Fixing: Cable trays clamped to gangway structure. Secondary Retention: Metal lock nuts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	LOW	Safety cables secured with carabiners. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		180 Days	N	Check all securing bolts/lock nuts are in place on clamps. Check for signs of corrosion. Check integrity of safety securing. Remove all debris.	JZ
	EEC 334A	Gangway Access Control Lamps (Port and Stbd)	Primary Fixing: Bolted on bracket to gangway structure. Secondary Retention: Nyloc Nuts. <input type="checkbox"/> PASS <input type="checkbox"/> FAIL	LOW	Not applicable <input type="checkbox"/> PASS <input type="checkbox"/> FAIL		060 Days	N	Check all securing bolts/lock nuts are in place. Check for signs of further damage or corrosion.	AS
Survey Report Failed Items Inspection Book										

Extract from Rig Example:

Dropped Objects Inspection Book- Crown and Water table - Area 1 - Monthly					
Photo	Ref	Equipment	Fastening Method	How to Inspect	
	CWN010	Crown block sheaves and pins, central crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire	Inspection Procedure: Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard and securing bolts. Condition : () Pass () Fail Comments :	Signature
	CWN012	Dead line deflector sheave, Aft Crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire	Inspection Procedure: Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard and securing bolts. Condition : () Pass () Fail Comments :	Signature
	CWN014	Fast line sheaves, Fwd Crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire and safety chain	Inspection Procedure: Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard securing bolts and chain Condition : () Pass () Fail Comments :	Signature
	WT006	Timber block crown saver, underside of crown	Primary Securing : Bolted with lock nuts Secondary Retention: Lock wire, safety chain and 4 part shackle	Inspection Procedure: Check condition of safety slings and 4 part shackles. Check retaining bolts/lock washers/nuts are in place and secure and for signs of corrosion. Condition : () Pass () Fail Comments :	Signature

4.5 Dropped Object Calculator





4.6 Example Equipment Family Inspection Criteria

The following tables provide an example format, based on a typical mobile drilling rig, for the presentation of inspection criteria for each item of equipment that is located, stored, held, mounted, secured or used at height.

Equipment Family Inspection Criteria will be developed and managed by the Asset Management Team and provided to the Independent Inspection Company in order that the Dropped Object Survey can be conducted effectively.

The Independent Survey Company personnel shall use this criteria during the Dropped Object Survey and ensure it is inserted into the Survey Deliverables in accordance with the templates shown in this section.

In the case that items of equipment or structure have been identified during the Dropped Object Survey that have not been included in the Equipment Family Inspection Criteria, the OIM in consultation with the independent surveyor will ensure that inspection criteria are developed for all such items. Where applicable, the inspection criteria will be incorporated into the relevant Equipment Family Inspection Criteria table in accordance with the appropriate system Change Management process.

The following table shows an example of Equipment Family Inspection Criteria

AREA 1 Derrick Equipment Zone 1 (A-Frame / Crown / Water Table)				
Item	Family	Freq.	Possible Fastening method	How to inspect
1	Active heave cylinder hydraulic control lines, support wires Valve block, flex hoses & accumulator bottle	180 days	Hydraulic control lines pipe clamped together and secured to Active Heave Compensator with bolted flanges. Other control lines beam clamped to gin pole structure with turnbuckles and 4 part shackles Accumulator bottle pipe and support wires clamped to framework & beam clamped to gin pole structure. Valve block secured with bolted flanges.	Check beam clamps and bolts are secure and for any signs of corrosion, check all bolted connections and hoses are in good condition. Check support wires, turnbuckles and shackles, ensure shackles are fitted with split pins.
2	Cable trays, Cable conduit pipe runs & cable clamps	180 days	Cable trays with beam clamps to derrick structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped to derrick & gin pole structure.	Check cable tray/conduit runs are secure, ensure all brackets are tight and check for signs of corrosion.
3	Crown beams	180 days	Anco derrick bolts & self securing nut.	Check all securing bolts/lock nuts are in place, check for tar in beams.
4	Crown compensator framework idler sheave pennants & yolks	180 days	Pennants clevis pinned to yolks and secured with safety pin & R-clip. Pins secured with safety chain. Other end of pennant secured to crown compensator framework with clevis pin through adjuster bolt.	Check clevis pin and split pin for signs of wear and "R" clips secure. Visually inspect safety chain.
5	Degasser vent line brackets and clamps	180 days	Bolted in sections and secured with pipe clamp and beam clamped to derrick structure. All bolts come with lock washers or lock nuts.	Check all pipe clamp and bracket bolts/lock washers/nuts are in place and secure, check for signs of corrosion.
6	Electrical outlets and Junction Boxes	180 days	Base plate mounted and beam clamped to derrick and gin pole structure. All bolts come with lock washer or lock nuts.	Check all securing bolts/brackets are in place, check for signs of corrosion.
7	Hydraulic & Pneumatic piping (Low and High pressure)	180 days	U-clamped to brackets. Brackets bolted to derrick structure. All bolts come with lock washers or lock nuts.	Check clamps are tight and for signs of corrosion, check bolts/lock washers/nuts are in place and secure.
8	Sheaves below Active Heave Compensator	180 days	Bolted to Active Heave Compensator framework. Sheaves secured with clevis pins and split pin.	Check clevis and split pins for signs of wear, check bolts are in place and secure.



Item	Family	Freq.	Possible Fastening method	How to inspect
9	Traveling block guide tracks	180 days	Anco derrick bolts & self securing nut.	Check all bolts/lock washers/nuts are in place and secure, check for tar in beams.
10	Block hang off sling & Connecting arrangement	180 days	Hang off sling secured to pad eye with 4 part shackle. Safety sling fed through hang off sling hard eye and secured using 4 part shackle.	Check hang off shackle and safety sling shackle are appropriately secured, including split pins.
11	Crown compensator associated low and high pressure pipe work & valves	180 days	Pipe work threaded into low pressure accumulator bottle and secured with pipe clamps. Pipe runs secured with U-clamps to angle iron welded to compensator framework. All bolts come with lock washers or lock nuts. High Pressure pipe work flanged and bolted to compensator pistons. Compensator piston bolted to crown comp framework and secured with bolts.	Check beam clamps are tight and for signs of corrosion, check all welded connections for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure.
12	Crown compensator vertical guide beams.	180 days	Bolted to crown beams complete with lock washers or lock nuts.	Check all bolts/lock washers/nuts are in place and secure.
13	Crown wind wall cladding, framework and hinged doors	90 days	Wind wall framework bolted together with Anco derrick bolts and bolted to derrick structure with same. Cladding sheets bolted to wind wall framework. All bolts come with lock washers or lock nuts.	Check all securing bolts/lock washers/nuts are in place and condition of cladding for signs of damage.
14	Slick line sheave and wire	90 days	Safety chain/sling and Kenter link complete with 4 part shackle. Dead man clamp on winch secures wire line to drum.	Check condition of safety chain/sling and shackle; ensure shackles are fitted with split pins. Check dead man on drum.
15	Crown cluster Grease manifolds & grease lines	90 days	Beam clamped to crown cluster framework. Other manifolds welded to crown handrails. Grease lines contained in cable tray and beam clamped to derrick structure.	Check beam clamps are tight and for signs of corrosion, check all welded connections for signs of corrosion. Ensure grease lines are secure.
16	Snatch blocks, Shackles and pad eyes below water table	90 days	Safety sling fed through dedicated anchor point/pad eye down below tugger wire and anchored at separate point with 4 part shackle. Pad eyes welded to derrick structure, 4 part shackles secured to pad eye.	Check sheaves are secure and in good condition, check condition of safety sling and ensure both snatch block and tugger wire are retained. Check all shackles come with split pins. Visually inspect pad eye welds for signs of corrosion.
17	Water table access platforms	90 days	Welded to crown platform framework. Platform grating secured with grating clips.	Check condition of welds for signs of corrosion; ensure all grating clips are secure.
18	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	90 days	Bolted to derrick structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to Derrick and Gin pole structures. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion, check all grating clips are secure
19	Air line hoses	90 days	Tie wrapped all the way to the derrick level.	Check all air lines are tie wrapped using metal fasteners.
20	Globe lights, spotlights or floodlights, navigation air craft and Fluorescent Lights	90 days	Bolted onto base plate, base plate clamped to derrick structure, all bolts come with lock washers or lock nuts. Secured with safety slings and 4 part shackles. Fluorescent lights beam clamped to derrick structure.	Check condition of light and safety slings/shackles. Ensure both light and bracket are secured, check bolts on beam clamps are secure and for signs of corrosion. Ensure shackles are fitted with split pins.
21	Hydraulic and pneumatic flexible hose	90 days	Secured with JIC swage lock fittings and Crows feet couplings with R clips.	Check fittings are secure and R clips in place.
22	Telephone	90 days	Base plate mounted & bolted to crown wind wall framework. All bolts to have lock washers or lock nuts.	Check all bolts/lock washers/nuts are in place and secure.
23	Fall Protection System (Horizontal life lines)	90 days	Beam clamped and bracketed to Derrick structure.	Check all bolts/lock washers/nuts are in place and secure.
24	Crown camera	30 days	Camera base plate mounted, U-Bolted and beam clamped to access platform handrail or beams, safety sling attached to camera. All bolts to have lock washers or lock nuts.	Check condition of camera, safety slings and 4 part shackles. Ensure both camera and brackets are secured with safety sling. Check all bolted connections on clamps are secure and come with lock washers/lock nuts.
25	Air Winches	30 days	Dead man clamp on winch. Winch bolted to Derrick beams with bolts and lock nuts.	Check all bolts/lock washers/nuts are in place and secure. Check all welds for signs of corrosion. Check of dead man clamp for security.
26	"A" Frame and Gin Pole framework	30 days	Anco derrick bolts & self securing nut to derrick structure.	Check all securing bolts/lock washers/nuts are in place, check for tar in beams.



Item	Family	Freq.	Possible Fastening method	How to inspect
27	Wind vanes	30 days	Wind vane at top of active heave cylinder or secured at Crown. Base plate mounted & secured with safety chain & 4 part shackle. Other wind vanes base plate mounted and beam clamped to gin pole framework. All bolts come with lock washers or lock nuts.	Check condition of wind vane and safety sling. Check all beam clamps/bolts/lock washers/nuts are tight and for signs of corrosion. Ensure shackles are fitted with split pins.
28	Crown block sheaves & pins	30 days	Each set of sheaves bolted to crown with self locking nuts, anti jump bar frame bolted with nuts/bolts, jump bar bolted with lock nuts, bearing retainer plate bolts lock wired.	Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard and securing bolts.
29	Crown compensator low pressure accumulator bottle. Pipe work comes with thermal cladding	30 days	Bolted to crown compensator framework and crown compensator vertical guide beam. Pipe work secured with U-clamps to welded brackets. All bolts to have lock washers or lock nuts. Thermal cladding held on with fasteners.	Check beam clamps and bolts/lock nuts are tight, check all bolted connections and cladding are in good condition, check welds for sign of corrosion.
30	Crown compensator manual stroke indicator sheave and line at crown	30 days	Line shackled to idler sheave. Sheave secured with safety sling and 4 part shackle	Check condition of safety sling and ensure shackle is fitted with a split pin.
31	Dead line sheave and wire retainer	30 days	Sheave bolted to crown with self locking nuts, anti jump bar frame bolted, jump bar bolted with lock nuts, bearing retainer plate bolts lock wired.	Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard and securing bolts.
32	Fast Line and Dead man deflector sheaves and wire retainers	30 days	Sheave secured with clevis pin and lock plates. Bolts on lock plates lock wired. Framed sheave housing bolted to crown beams. Wire retainers welded/bolted to framing. All bolts are self locking or come with lock nuts.	Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard and securing bolts.
33	Fast line sheave and retainer	30 days	Sheave bolted to crown with self locking nuts, anti jump bar frame bolted, jump bar bolted with lock nuts, bearing retainer plate bolts lock wired.	Check all bolts and self locking nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of line guard and securing bolts.
34	Sand line sheave assy	30 days	Sheaves clevis pinned and secured with castle headed lock nut & split pin. Framework bolted to crown beams complete with self locking bolts or lock nuts.	Check pin for signs of wear, check lock nut for security and split pin in place.
35	Speakers	30 days	Bolted to base plate/bolted to structure. Safety sling fitted and bolts come with lock washers or lock nuts.	Check condition of safety slings/shackles; ensure shackles are fitted with split pins. Ensure both speaker / bracket are secure.
36	Storm lines	30 days	Four part shackles fitted to welded pad eyes.	Check all shackles are fitted with split pins.
37	Timber block crown saver and framework	30 days	Framework bolted to crown beams. Timber block secured with U-bolts to framework. Safety sling attached from framework to pad eye with 4 part shackles. All bolts come with lock washers or lock nuts.	Check condition of safety slings and shackles ensure shackles are fitted with split pins. Check retaining bolts/lock washers/nuts are in place and secure and for signs of corrosion.
38	Sheave motion sensor	7 days	Bolted to derrick structure complete with lock washers or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check for signs of corrosion.
39	Crown compensator cluster sheave & idler sheave guide roller assemblies come complete with wire retainers	7 days	Rollers clevis pinned and secured with retaining plate and lock wired bolts. Wire retaining pipe secured with pins and safety chains/slides with 4 part shackles. Roller assembly blocks bolted to crown compensator framework. All bolts come with lock washers or lock nuts.	Check all bolts/self locking washers/nuts are secure, check main pin lock plate and bolts are secure and lock wired. Check condition of roller assemblies. Check condition of safety chain / wire and shackles; ensure shackles are fitted with split pins.
40	Gates, hatches and latches to access crown & underside of crown	7 days	Welded pipe hinged to handrail structure come with spring close. Welded hinges, hooks & latches. Safety slings fitted with 4 part shackles.	Check all welds and bracket bolts for signs of corrosion. Check condition of safety slings/chains and shackles. Ensure shackles are fitted with split pins.
41	Main & folding work platforms	7 days	Platforms are secured with hinges, clamps, studs and bolts. They are also fitted with safety slings. All bolts to have lock washers or lock nuts and secured by 4 part shackles.	Check welded connections for signs of corrosion. Check grating clips are secure. Check hinge bolts/lock washers and nuts, condition of safety slings and shackles. Ensure shackles are fitted with split pins.
42	Tar build up	7 days	None.	Check for tar build up around crown cluster, remove all accumulations.



AREA 1: Derrick Equipment Zone 2 (Underside crown to Monkey Board Fingers)				
Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, Cable conduit pipe runs & cable clamps	180 days	Cable trays with beam clamps to derrick structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped to derrick & gin pole structure.	Check cable tray/conduit runs are secure, ensure all brackets are tight and check for signs of corrosion.
2	Crown compensator pistons, High Pressure pipe work, relief line & valves and piston end plates	180 days	High Pressure pipe work flanged and bolted together and secured with pipe clamps to piston body. Thermal cladding covers all pipe work. Piston bodies also secured with beam clamps to derrick structure. Piston end plates bolted to cylinder housing, relief valve threaded into compensator cylinder and secured with u-bolts to handrails All bolts to have lock washer or lock nuts.	Check pipe clamps and bolts/lock washer/nuts are tight and for signs of corrosion. Check all bolted connections are in good condition.
3	Derrick / Mast Structure	180 days	Anco derrick bolt & self securing nut.	Check all securing bolts/lock washer/nuts are in place, check for tar in beams.
4	Derrickman's escape device, anchor point framework and escape running line	180 days	Framework bolted to derrick structure, pad eye welded to framework, running line secured to beam clamp and bolted to derrick structure complete with 4 part shackle. All bolts come with lock washer or lock nuts.	Check all welds for signs of corrosion check all bolt/lock washers/nuts are in place and secure. Check condition of safety sling and ensure shackle is fitted with a split pin.
5	Electrical outlets and Junction Boxes	180 days	Base plate mounted and Beam clamped to derrick structure. All bolts come with lock washer or lock nuts.	Check all securing bolts/brackets are in place, check for signs of corrosion.
6	Hydraulic & Pneumatic piping (Low and High pressure)	180 days	U-clamped to brackets. Brackets bolted to derrick structure. All bolts come with lock washers and/or lock nuts.	Check clamps are tight and for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure.
7	Traveling block guide tracks	180 days	Anco derrick bolt & self securing nut.	Check all bolts/lock washers/nuts are in place and secure, check for tar in beams.
8	Degasser vent line brackets and clamps	180 days	Bolted in sections and secured with pipe clamp and beam clamped to derrick structure. All bolts to have lock washers or lock nuts.	Check all pipe clamp and bracket bolts/lock washers/nuts are in place and secure, check for signs of corrosion.
9	Drill String Compensator accumulator bottle	180 days	Bolted to support frame work, frame bolted to derrick structure. All bolts to have lock washers or lock nuts.	Check all bolts/lock washers/nuts are in place and secure.
10	Fingerboard control cabinets	180 days	Base plate mounted and bolted to derrick structure to have lock washers or lock nuts. Safety sling fitted with 4 part shackle.	Check securing bolts and condition of safety chain/sling and shackles. Ensure shackles are fitted with a split pin. Check all welds for signs of corrosion.
11	Racker cab support pennants	180 days	Pennants secured with turnbuckles and 4 part shackles to welded pad eyes on top of cab and secured to derrick beams with beam clamps.	Check turnbuckles locked and shackles secured, check all welds for signs of corrosion. Ensure shackles are fitted with split pins and beam clamps secured with bolts/lock washers or lock nuts.
12	Rig identification signs on outer wind wall	180 days	Bolted to cladding framework & secured with safety slings with 4 parts shackles. All bolts to have lock washers or lock nuts.	Check all securing bolts are in place, check condition of cladding for signs of damage, ensure safety slings/shackles in place and secure. Ensure shackles are fitted with split pins.
13	Top Drive System blower vent, motor and pipe work	180 days	Bolted to derrick structure to come with lock washers or lock nuts. Motor bolted to frame.	Check all bolts/lock washers/nuts are in place and secure. Check condition of vent for damage or corrosion.
14	Drill String Compensator accumulator pipe work	180 days	Clamped to accumulator & bolted in place, pipe work held by U-Bolts, to have lock washers or lock nuts.	Check clamps are tight and for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure.
15	Parker piston retract accumulator	180 days	Frame bolted to derrick structure with nuts and bolts, accumulator secured to frame with U-Bolts. All bolts to have lock washers or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check clamps for signs of corrosion.



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Item	Family	Frequency	Possible Fastening method	How to inspect
16	Snatch block attached to drill line below dead man deflector sheave	90 days	Secured to derrick structure with sling, turnbuckle and 4 part shackles.	Check turnbuckles locked and shackles ensuring split pins are fitted. Check condition of snatch block and safety sling.
17	Hydraulic and pneumatic flexible hose	90 days	Secured with JIC swage lock fittings and Crows feet couplings with R clips and or whip checks.	Check fittings are secure and R clips and or whip checks are in place.
18	Crown compensator cylinder lower access platform	90 days	Platform framework bolted to derrick structure. Grating & handrails welded to platform framework. All bolts come with lock washers or lock nuts.	Check condition of welds for signs of corrosion. Check all bolts, lock washers or lock nuts are secure. Ensure all grating clips are secure.
19	Ladders & Back scratchers (including Fall Protection System) walkways grating , rest platforms and hand rails	90 days	Bolted to derrick structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework Platform walkway bolted to Derrick and Gin pole structures All bolts to have lock washer or lock nuts	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion ,check all grating clips are secure
20	Rig tong counter balance slides & weights	90 days	Slides beam clamped to derrick structure at top. Slides welded to derrick structure at bottom and secured with welded stop plates. Counter weights secured on posts within welded framework. Counter balance running line shackled to pad eye and frame with 4 part shackle. Running line terminated with bull-dog clamps.	Check all welds for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure. Check shackles are fitted with split pins.
21	Monkey board wind wall cladding & framework, hinged & sliding access doors	90 days	Wind wall framework bolted together with Anco derrick bolts and bolted to derrick structure with same. Cladding sheets bolted to wind wall framework. Sliding door secured on runner rails, welded to cladding & walkway. Hinged door secured with welded hinges and latch.	Check all bolts/lock washers/nuts are in place and secure and condition of cladding for signs of damage.
22	Globe lights, spotlights or floodlights, navigation air craft and Fluorescent Lights	90 days	Bolted onto base plate, base plate clamped to derrick structure, all bolts come with lock washers or lock nuts. Secured with safety slings and 4 part shackles. Fluorescent lights beam clamped to derrick structure.	Check condition of light and safety slings/shackles/carabineer clips. Ensure both light and bracket are secured, check bolts on beam clamps are secure and for signs of corrosion. Ensure shackles are fitted with split pins.
23	Telephone and talk back system	90 days	Base plate mounted & bolted to wind wall framework. All bolts to have lock washers or lock nuts.	Check all bolts/lock washer/nuts are in place and secure.
24	Extend and retract Accumulator manifold	90 days	Base plate mounted to frame work. Framework clamped to derrick structure. Hydraulic hoses secured with hose clamps to framework. All bolts come with lock washers or lock nuts.	Check all bolts/lock washer/nuts are in place and secure.
25	Hydraulic/Mud hose service loop running lines and sheaves	90 days	Lines secured from forward to aft side of derrick by 4 part shackles and adjustable threaded eyebolts, bolts secured to beam clamp.	Check sheaves for signs of corrosion, all shackles. Ensure shackles fitted with split pins.
26	Fall Protection System (Horizontal life lines)	90 days	Beam clamped and bracketed to Derrick structure.	Check all bolts/lock washer/nuts are in place and secure.
27	Air water separators	30 days	Separators threaded onto pipe work.	Check for signs of corrosion/damage.
28	Fall arrestor / inertia reel	30 days	Secured by 4 part shackle.	Check shackles are in place, secure and fitted with split pins.
29	Rotary hose/service loop protection bar	30 days	Bar is welded to derrick beams.	Check for signs of corrosion/cracks.
30	Pad eye, shackle and sheave for stand lift cable	30 days	Base plate with welded pad eye bolted to monkey board sub-structure. Sheave attached to pad eye with 4 part shackle. Sheave secured with safety chain/sling and Kenter link/4 part shackle to derrick structure.	Check shackle ensuring split pins are fitted, check condition of safety sling and inspect welds for signs of corrosion.



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Item	Family	Frequency	Possible Fastening method	How to inspect
31	Air Winches & snatch blocks	30 days	Dead man clamp on winch. Winch bolted to Derrick beams with bolts and lock nuts. Sheaves secured by 4 part shackles.	Check all bolts/lock washers and nuts are in place and secure. Check all welds for signs of corrosion. Check dead man is secure. Check shackles are fitted with split pins.
32	Hand winches for pulling back hang off lines	30 days	Secured by welding, nuts and bolts, handles pinned in place.	Check all bolts/lock washers and nuts are in place and secure, check welds for signs of corrosion.
33	Drill String Compensator hoses	30 days	Secured to drop down piping by bolts/clamps, or WECO connections. Fitted with safety chains/slugs secured with 4 part shackles.	Check all bolts/clamps and chain/slugs/shackles are secure. Ensure shackles are fitted with split pins.
34	Fixed top drive service loop	30 days	Service loop brackets beam clamped to derrick structure. Service loops held in place by plates complete with bolts secured into horseshoe bracket and bracket bolts lock wired. Service loops terminated into electrical junction box. Each service loop secured with safety chain/sling and 4 part shackle.	Check condition of safety chain/sling/shackle, check all bolts are in place and lock wired. Ensure shackles are fitted with split pins.
35	Cameras with pan & tilt unit	30 days	Base plate mounted, U-bolted and beam clamped to access platform handrail. Safety wire attached to camera and back to base plate. All bolts have lock washers or lock nuts. Sling attached with 4 part shackle.	Check condition of camera and safety slings and shackles ensuring split pins are fitted. Ensure both camera and brackets are secured with safety sling. Check bolts on beam clamps in place and secure and for signs of corrosion.
36	Speakers	30 days	Bolted to base plate/bolted to structure. Safety sling fitted with 4 part shackle, bolts to have lock washers or lock nuts.	Check condition of safety slings/shackle ensuring split pins are fitted. Ensure both speaker and brackets are secured.
37	Storm line	30 days	4 part shackle to beam clamp, beam clamp complete with locking nuts, and safety sling fitted.	Check condition of bolts/lock nuts, safety sling and shackles, ensuring split pins are fitted.
38	Manual monkey board	30 days	Secured to derrick structure with Anco nuts & bolts also with safety sling and 4 part shackle.	Check condition of bolts/lock nuts, safety sling and shackles, ensuring split pins are fitted..
39	Finger boards	30 days	Bolted to derrick structure to have safety slings/chains and 4 part shackles. All bolts to have lock washers or lock nuts.	Check securing bolts/lock nuts, check condition of safety chain/sling and shackles ensuring shackles are fitted with split pins.
40	Bug Blower	30 days	Bolted/welded to derrick structure with safety sling and 4 part shackle. All bolts to have lock washers or lock nuts.	Check condition of bolts/lock nuts, safety sling and shackles, ensuring split pins are fitted.
41	Drill line guide, sheaves, supports & running line	30 day	Drill line kite supported by wire through sheave shackled to beam clamp. Running line fed through sheaves. Top sheave secured to beam clamp with turn buckle and 4 part shackle. Out rigger sheaves shackled to welded pad eye, beam clamps bolted to derrick structure.	Check condition of bolts/lock nuts, check all shackles are secure and fitted with split pins, and check wire for signs of wear. Check condition of sheaves and pad eyes for signs for wear/corrosion.
42	Hydraulic stabbing arm below upper racker cab	30 days	Stabbing arm body bolted to Framework. Framework beam clamped to derrick structure. Stabbing guide is bolted to stabbing arm and secured with safety chain between both. Hydraulic hoses pipe clamped to arm body.	Check securing bolts, locking nuts and safety chains/pins.
43	Upper racking arm head and frame work	30 days	Framework bolted and beam clamped to derrick structure. Racker and base secured onto framework through slew bearing housing with bolts. Racking arm moves along toothed track which is welded to framework. Steel stopper blocks come with rubber bumpers bolted to arm base to prevent it from running off track. Upper racking arm secured with clevis pins, keeper plates and lock wired bolts.	Check all welds for signs of corrosion, check all bolt and lock nuts are in place and secure. Check slide secured, check condition of safety chain/wire Full visual inspection for any loose objects



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Item	Family	Frequency	Possible Fastening method	How to inspect
44	Upper racker cab support framework, bumper bar, window protection cage and wiper	7 days	Racker cab welded to framework. Frame work beam clamped to derrick structure. Racker cab door secured with pin and lock nut through welded hinges.	Check all welds for corrosion and cracks, check bolt and lock nuts are in place and secure, full visual inspection for any loose objects.
45	Crown saver proximity switches.	7 days	Bolted to brackets and brackets welded to dolly track. All bolts come with lock washer or lock nuts.	Check all bolts are in place and secure, check all welds for signs of corrosion.
46	Pipe Handling Machine block interlock proximity switch.	7 days	Bolted to bracket welded to dolly track. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check all welds for signs of corrosion.
47	Gates, latches and hatches	7 days	Welded pipe hinge to handrail structure to have spring close. Welded hinges, hooks & latches. Safety slings fitted with 4 part shackles.	Check all welds and bracket bolts for signs of corrosion. Check condition of safety slings/chains and shackles ensuring shackles are fitted with split pins.
48	Work bench, framework & vice	7 days	Workbench framework beam clamped to Handrail structure. Bench top welded to framework. Vice bolted to bench top.	Check all bolts/lock washers/nuts are in place and secure. Inspect condition of safety slings if fitted. All hand tools to be fitted with appropriate lanyard.
49	Main & folding work platforms	7 days	Platforms are secured with hinges, clamps, studs and bolts. They are also fitted with safety slings. All bolts have lock washers or lock nuts and secured by 4 part shackles.	Check welded connections for signs of corrosion. Check grating clips are secure. Check hinge bolts/lock nuts, condition of safety slings and shackles, ensuring shackles are fitted with split pins.
50	Fingerboard cylinders with cable trays and pneumatic lines	7 days	Cylinder housings threaded into bottom of fingerboard secured with grub screws. Cable trays bolted to straps welded to fingerboard. Pneumatic lines secured to cable tray with tie wraps.	Check condition of all welds/straps and cable trays. Check for missing grub screws/bolts and that all air lines are secure.
51	Drill pipe and Drill collar latches	7 days	Latches secured by bolts come with lock tabs or split pins. Installed with safety sling/chain come with 4 part shackles.	Check condition of bolts/lock nuts, safety sling and shackles, ensuring split pins are fitted.
52	Mud hose operational and spare. May include inline third party sensor and kick out subs	7 days	Attached to gooseneck and top drive/swivel with WECCO connections, complete with safety slings and 4 part shackles on both ends.	Check hammer unions are tight. Check condition of safety sling and shackle ensuring split pins are fitted.
53	SCBA escape pack	7 days	Stored in upper cab or bolted to derrick in container. All bolts to have lock washer or lock nuts.	Check bolts/lock nuts are secure. Check escape set secured in container or inside racker cab.
54	Slings for catching dropped stands	7 days	Secured to derrick with 4 part shackles.	Check condition of safety sling and shackles ensuring split pins are fitted.
55	Stand lift cylinder	7 days	Secured with bolts and clevis pin. All bolts come with lock washers or lock nuts. Clevis pin come with split pin.	Check all bolts/lock washers and nuts are in place and secure, visual check on clevis pin for wear.
56	Stand lift wire arrangement	7 days	Spelter sockets, wedged sockets, swivel joint secured with split pins. Sheave comes with safety sling and 4 part shackle.	Check wire terminations, condition of wire, safety sling and check shackles ensuring split pins are fitted.
57	Tie back rollers for rig floor tuggers	7 days	Snatch blocks, 4 part shackles and turnbuckles attached to pad eyes, safety slings attached.	Check turnbuckles locked and shackles secured, check all welds for signs of corrosion. Check condition of safety sling and shackles ensuring split pins are fitted.
58	Monkey Board toe board	7 days	Two pins with split pins, each with safety sling and 4 part shackle.	Check condition of bolts/lock washers/nuts; check safety sling and shackles ensuring split pins are fitted.
59	Access platform and hatch below upper racker	7 days	Handrail framework welded together and welded to platform framework. Grating secured with clips. Platform beam clamped/bolted/welded to Derrick structures. Hatch secured with welded hinges.	Check all welded connections for signs of corrosion. Check grating clips are secure. Check all bolts/lock washers and nuts are in place and secure.
60	Upper racking arm head and slide assembly, drive roller assembly, guards and hoses	7 days	Racker head bolted to telescopic arm. Drive motor bolted to top of racker head complete with welded protection cage. Slide secured into racker head with bolts and nylon lock nuts complete with spring loaded slide keeper. Safety chain attached to slide and top of racker head and 4 part shackles.	Check slide secured, check condition of safety chain/wire. Check all bolts/lock washers and nuts are in place and secure. Full inspection for loose parts. Ensure all shackles are fitted with split pins.



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AREA 1: Derrick Equipment Zone 3 (Underside Monkey Board to Rig Floor)				
Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, Cable conduit pipe runs & cable clamps	180 days	Cable trays with beam clamps to derrick structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped to derrick & gin pole structure.	Check cable tray/conduit runs are secure, ensure all brackets are tight and check for signs of corrosion.
2	Derrick / Mast Structure	180 days	Anco derrick bolt & self securing nut.	Check all securing bolts/lock washers/nuts are in place, check for tar in beams.
3	Electrical outlets and Junction boxes	180 days	Base plate mounted and beam clamped to derrick & gin pole structure. All bolts come with lock washer or lock nuts.	Check all securing bolts/lock washers/lock nuts and brackets are in place, check for signs of corrosion.
4	Hydraulic & Pneumatic piping (Low and High pressure)	180 days	U-clamped to brackets. Brackets bolted to derrick structure. All bolts come with lock washers and or lock nuts.	Check clamps are tight and for signs of corrosion, check bolts/lock nuts/washers are in place and secure.
5	Degasser vent line brackets and clamps	180 days	Bolted in sections and secured with pipe clamp and beam clamped to derrick structure. All bolts come with lock washers or lock nuts.	Check all pipe clamp and bracket bolts/lock washers/nuts are in place and secure, check for signs of corrosion.
6	Drill line protection tunnel and protection plates	180 days	Square protection tunnel beam clamped to derrick structure. Protection plates also bolted with lock washers or lock nuts to derrick structure.	Check clamps are secure and for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure.
7	Heaters and pipe work above rig floor	180 days	Heaters & pipe work bolted to framework with lock washers or lock nuts. Frame work welded to wind wall framework.	Check all welded connections for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure.
8	Rig floor deluge pipe work & nozzles	180 days	U-clamped with lock washers or lock nuts to angle iron & welded to moon pool wind wall frame work. Nozzles threaded into pipe work.	Check all welded connections for signs of corrosion. Check all bolts in place and secure. Visually check all nozzles.
9	Traveling block guide tracks	180 days	Anco derrick bolt & self securing nut.	Check all bolts/lock washers/nuts are in place and secure, check for tar in beams.
10	Upper & lower racker hydraulic control manifold	180 days	Bolted to base plate, base plate bolted to framework with lock washers or lock nuts & beam clamped to derrick structure.	Check clamps are tight and for signs of corrosion, check bolts/lock washers/nuts are in place and secure.
11	Wireline unit	180 days	Base plate mounted and bolted to frame work. Frame work welded to dog house roof frame work. All bolts come with lock washers or lock wire.	Check all bolts in place and secure, check of all welds for signs of cracks/corrosion.
12	Drill String Compensator high pressure pipe work and hoses	180 days	Secured with beam clamps, u-bolts & lock nuts and bolts.	Check clamps are tight and for signs of corrosion, check bolts/lock washers/nuts are in place and secure.
13	Manipulator arm grease manifold	180 days	Manifold on plate welded to handrail.	Check condition of welds for any signs of corrosion.
14	Raised Back-Up System valve/solenoid assembly	180 days	Frame bolted to derrick structure, using lock nuts or lock wire.	Check all bolts/lock washers/nuts are in place and secure.
15	Hydraulic and pneumatic flexible hose	90 days	Secured with JIC swage lock fittings and crows feet couplings.	Check fittings are secure and R-clips and or whip checks are in place.



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Item	Family	Frequency	Possible Fastening method	How to inspect
16	Casing stabbing board or cherry picker	90 days	Board is secured with clevis bolts and nuts to welded pad eyes on beam clamp, bolted to derrick structure. Board framework hinged and also secured with clevis bolts and nuts. Platform handrails bolted and welded to framework of board, grating welded to framework. Adjustable platform contained within vertical tracks by clevis pinned rollers secured with locking plates. Pneumatic chain fall slung from welded pad eyes on board framework and adjustable platform. Pneumatic hoses secured with crows feet connection's and JIC fittings. Bolts with lock washers or lock nuts. Safety slings and 4 part shackles.	Check all welded connections for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure. Check clevis pins for signs of wear and locking plates secure. Visual check of all hoses for signs of wear. Ensure all shackles are fitted with split pins.
17	Casing stabbing board hinged tie back hooks	90 days	Hook arms and framework secured with clevis bolts and nuts to lower racker support framework. Hook release mechanism consists of wireline terminated onto hook framework with bull dog clip. Wire fed through sheave slung around upper racker access platform framework with a sling. All bolts come with lock washers or lock nuts and safety sling attached by 4 part shackle.	Check condition of safety sling. Ensure shackles are fitted with split pins. Check clevis bolt and nut are secure.
18	Wind wall cladding	90 days	Wind wall framework bolted together with Anco derrick bolts and bolted to derrick structure with same, cladding sheets bolted to wind wall framework.	Check all securing bolts/lock nuts are in place and condition of cladding for signs of damage.
19	Cement High Pressure pipe work	90 days	High Pressure pipe work secured by pipe clamps & bolts & beam clamped to derrick structure. All bolts come with lock washers or lock nuts.	Check clamps are secure and for signs of corrosion, check bolts/lock nuts are in place and secure.
20	Globe lights, spotlights or floodlights, navigation air craft and Fluorescent Lights	90 days	Bolted onto base plate, base plate clamped to derrick structure, all bolts come with lock washers or lock nuts. Secured with safety slings and 4 part shackles. Fluorescent lights beam clamped to derrick structure.	Check condition of light and safety slings/shackles/carabineer clips. Ensure both light and bracket are secured, check bolts on beam clamps are secure and for signs of corrosion. Ensure shackles are fitted with split pins.
21	High Pressure test line and target blocks	90 days	Pipe clamped to framework. Framework beam clamped to derrick structure. All bolts come with lock washers or lock nuts.	Check clamps are tight and for signs of corrosion, check bolts/lock nuts are in place and secure.
22	Telephone, speakers and tannoy light mounted above rig floor	90 days	Base plate mounted & bolted to wind wall framework. All bolts come with lock washers or lock nuts. Tannoy light, beam clamped to derrick structure, Safety slings fitted to speakers with 4 part shackles.	Check all bolts/lock washers/ nuts are in place and secure. Check condition of safety sling, shackle ensuring split pin is fitted. Ensure both speaker and brackets are secured.
23	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	90 days	Bolted to derrick structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to Derrick and Gin pole structures. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion, check all grating clips are secure.
24	Fall Protection System (Horizontal life lines)	90 days	Beam clamped and bracketed to Derrick structure.	Check all bolts/lock washers/nuts are in place and secure.
25	Stand pipe hard piping	90 days	Stand pipe secured to derrick structure by U-clamps & bolts that are beam clamped to derrick structure. All bolts come with lock washers or lock nuts.	Check clamps are tight and for signs of corrosion, check bolts/lock washers/nuts are in place and secure.
26	Block hang off sling & shackle	90 days	4 part shackle. Pin secured with welded safety chain.	Check hang off shackle is appropriately secured, including split pins.



Item	Family	Frequency	Possible Fastening method	How to inspect
27	Rig tong counter balance slides & weights	90 days	Slides beam clamped to derrick structure at top. Slides welded to derrick structure at bottom and secured with welded stop plates. Counter weights secured on posts within welded framework. Counter balance running line shackled to pad eye and frame with 4 part shackle. Running line terminated with bull-dog clamps.	Check all welds for signs of corrosion check all bolt/lock washers/nuts in place and secure. Check shackles are fitted with split pins.
28	Cameras with pan & tilt unit	30 days	Base plate mounted, U-bolted and beam clamped to access platform handrail. Safety wire attached to camera and back to base plate. All bolts come with lock washers or lock nuts. Sling attached with 4 part shackle.	Check condition of camera and safety slings and shackles. Ensure shackle fitted with split pin. Ensure both camera and brackets are secured with safety sling. Check bolts on beam clamps in place and secure and for signs of corrosion.
29	Drill floor manipulating arm and head	30 days	Manipulator arm bolted to slew bearing base plate mount. Base plate mount bolted to framework and beam clamped to derrick structure. Arm is clevis pinned to structure and secured with lock nuts. Tilt pistons also clevis pinned and secured in same way. Head is clevis pinned to manipulator arm, secured with washers & safety pins. Safety chain attached from head to arm with 4 part shackle. Claws secured with clevis pin.	Check all welds for signs of corrosion, check all bolt/lock washers/nuts are in place and secure. Check safety chain and shackle ensuring split pin is fitted, ensure claw is secure and full inspection for any loose objects.
30	Lower racker cab & support framework, window protective cage and wiper	30 days	Racker cab welded/bolted to framework. Framework beam clamped to derrick structure. Racker cab door secured with pin and lock nut through welded hinges. Window safety rail bolted to cab framework. Bumper bars welded/bolted to cab framework. Wind screen wipers secured by shafts of motors and motors bolted to cab framework.	Check all welds for signs of corrosion check all bolts in place and secure. Check safety sling in place and secured
31	Lower racking arm & Framework	30 days	Framework bolted and beam clamped to derrick structure. Racker and base secured onto framework through slew bearing housing with bolts. Racking arm moves along toothed track which is welded to framework. Steel stopper blocks come with rubber bumpers bolted to arm base prevent it from running off track. Upper racking arm secured with clevis pins, keeper plates and lock wired bolts.	Check all welds for signs of corrosion, check all bolts/lock washers/nuts are in place and secure. Full inspection for any loose objects.
32	Extending work platforms	30 days	Bolted to purpose built frame with lock washers or lock nuts. Safety sling attached by 4 part shackle.	Check frame for corrosion and all bolts come with lock washers or lock nuts. Inspect safety slings and ensure shackles are fitted with split pins.
33	Storm line	30 days	4 part shackle to beam clamp, beam clamp complete with locking nuts, with safety sling fitted.	Check all shackles are fitted with split pins. Check condition of safety sling.
34	Air water separators	30 days	Separators threaded onto pipe work.	Check for signs of corrosion/ damage.
35	V-door A-frame horizontal deflector roller & vertical bumper bar	30 days	Bolted to A-frame derrick structure. All bolts come with lock washers or lock nuts. Safety sling installed with 4 part shackle.	Check all bolts/ lock washers/nuts in place and secure. Check condition of safety sling and shackles fitted with split pin.
36	Belly beams	30 days	Anco derrick bolt & self securing nut.	Check all bolts/lock washers/ nuts in place and secure.
37	Cement hose	30 days	Connected to standpipe with 2202 connection fitted with safety sling and 4 part shackle.	Check hammer unions are tight. Check condition of safety sling and ensure shackle fitted with split pin.
38	Drill String Compensator hoses	30 days	Secured to drop down piping by bolts/clamps, or WECO connections. Fitted with safety chains/slugs secure with 4 part shackles.	Check all bolts/clamps and chain/slugs/shackles are secure, ensure shackles are fitted with split pins.



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Item	Family	Frequency	Possible Fastening method	How to inspect
39	Derrick Base Substructure securing pins	30 days	Pins held in place with bolts and lock nuts.	Check all bolts/lock washers/ nuts are in place and secure.
40	Dead line stabilizer/dampener	30 days	Bolted to derrick beam/walk way using lock washers and nuts.	Check all bolts/lock washers/ nuts are in place and secure.
41	Drill line guide, sheaves, supports & running line	30 days	Drill line kite supported by wire through sheave shackled to beam clamp. Running line fed through sheaves. Top sheave secured to beam clamp with turn buckle and shackle. Out rigger sheaves shackled to welded pad eye beam clamps bolted to derrick structure.	Check all shackles are secure and fitted with split pins, check wire for signs of wear. Check condition of sheaves and pad eyes for signs of wear/corrosion. Check turnbuckles locked and shackles secured, check all welds for signs of corrosion.
42	Pad eye, shackle and sheave for stand lift cable	30 days	Base plate with welded pad eye bolted to monkey board sub-structure. Sheave attached to pad eye with 4 part shackle. Sheave secured with safety chain/sling and Kenter link/4 part shackle to derrick structure.	Check shackle ensure split pin fitted, check condition of safety sling and inspect welds for signs of corrosion.
43	Air winches, Man riding winch and control hoses mounted above dog house	30 days	Base plate mounted and bolted to framework. Framework beam clamped to derrick structure. All bolts come with lock washers or lock nuts. Wire dead man at side of drum.	Check all bolts/lock washers/nuts are secure. Check all welds for signs of corrosion. Visual check to ensure dead man clamp is secure.
44	Dolly Track end plates	30 days	Bolted to dolly track. All bolts come with lock washers or lock nuts.	Check all bolts/lock washers/nuts are in place and secure.
45	Raised Back-Up System	30 days	Support blocks welded to dolly tracks, guide beams secured to blocks with lock wired bolts, lift cylinders secured to guide beams by clevis pins and split pins, clamping pistons bolted and lock wired, main rollers secured with roller pin and nut. Inner rollers have roller pin and split pins. Safety device for Raised Back-Up System consists of hook device secured with clevis pin.	Check all bolts/lock washers/nuts are in place and secure, check all rollers secure with split pins in place. Full visual inspection for any loose items.
46	Hydraulic V-Door systems	30 days	Bolted to V-Door with lock nuts, see manufacturer's guidelines.	Check all welds for signs of corrosion, check all bolt/lock washers/nuts in place and secure. Full visual inspection for any loose objects, reference manufacturer's guidelines.
47	Lay down sheaves	30 days	Bolted to derrick structure using bolts/lock nuts or studs with lock wire. Safety sling installed with 4 part shackle.	Check all bolts/lock washers/nuts are in place and secure. Check condition of safety sling and shackle fitted with split pin.
48	Loggers weight indicator	30 days	Clamped to drilling line above deadman.	Check all bolts are in place and secure.
49	Bug Blower	30 days	Bolted/welded to derrick structure with safety sling and 4 part shackle. All bolts come with lock washers or lock nuts.	Check all welds for signs of corrosion, check all bolt in place and secure. Check safety sling in place and secured. Check shackles are fitted with split pins.
50	Extending work platforms	7 days	Attached to a purpose built frame and bolted to derrick. Grating secured by clips and platform secured by safety sling and 4 part shackles. Platform hinges have bolts/lock nuts.	Check all frame welds for signs of corrosion check all bolt/lock nuts and retaining slings and shackles are in place. Ensure shackles are fitted with split pins. Full visual inspection for any loose objects.
51	Main & folding work platforms	7 days	Platforms are secured with hinges, clamps, studs, bolts. Fitted with safety slings. All bolts come with lock washers or lock nuts and secured by 4 part shackles.	Check grating clips are secure. Check hinge bolts/lock nuts, condition of safety slings and shackles are fitted with split pins.
52	Mud hose operational and spare. May include inline third party sensor and kick out subs	7 days	Attached to gooseneck and top drive/swivel with WECO connections, complete with safety slings and 4 part shackles on both ends.	Check hammer unions are tight. Check condition of safety sling and shackle. Ensure shackle fitted with split pin.
53	Rig floor manipulator arm access hatch above dog shack	7 days	Secured with welded hinges. Safety slings fitted with 4 part shackles.	Check all welds and bracket bolts for signs of corrosion. Check integrity of safety slings/chains and shackles. Ensure shackles fitted with split pins.



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Item	Family	Frequency	Possible Fastening method	How to inspect
54	Gates, latches and hatches	7 days	Welded pipe hinge to handrail structure come with spring close. Welded hinges, hooks & latches. Safety slings fitted with 4 part shackles.	Check all welds and bracket bolts for signs of corrosion. Check condition of safety slings/chains and shackles. Ensure shackles fitted with split pins.
55	Removable hand rails	7 days	Handrail framework bolted to platform framework. All bolts come with lock washers or lock nuts.	Check condition of bolts for signs of corrosion, check all bolts/lock washers and nuts are in place and secure.
56	Stand lift cylinder and wire arrangement	7 days	Secured with bolts and clevis pin, spelter sockets and wedged socket. All bolts come with lock washers or lock nuts. Clevis pin come with split pin.	Check all bolts/lock washers/nuts secure and in place, visual check on clevis pin for wear.
57	Lower and Intermediate racking arm slide assembly, drive roller assembly guards and hoses	7 days	Racker head bolted to telescopic arm. Drive motor bolted to top of racker head come with welded protection cage. Slide secured into racker head with bolts and nylon lock nuts come with spring loaded slide keeper. Safety chain attached to slide and top of racker head and 4 part shackles.	Check slide secured, check condition of safety chain/wire. Ensure shackles fitted with split pins. Full visual inspection for loose parts.
58	Top Drive System sensor	7 days	Bolted to bracket and bracket welded to dolly track. All bolts come with lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check all welds for signs of corrosion.
59	Pipe Handler Machine block interlock proximity switch	7 days	Bolted to bracket and bracket welded to dolly track. All bolts come with lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check all welds for signs of corrosion.
60	Traveling block Floor saver proximity switches	7 days	Bolted to bracket and bracket welded to dolly track. All bolts come with lock washer or lock nuts.	Check all bolts are in place and secure, check all welds for signs of corrosion.
61	Tie back rollers for rig floor tuggers	7 days	Snatch blocks, 4 part shackles and turnbuckles attached to pad eyes, safety slings attached.	Check condition of safety slings and shackles ensuring split pins are fitted. Check turnbuckles locked and shackles secured.

AREA 4: Derrick Equipment Zone 4 (Traveling Block / TDS / Compensator / PRS / PHM / PLS)

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Drill string compensator	7 days	Cylinder bolted to traveling block, piston secured to becket by becket pins and lock plates. Drill String Compensator top piston cover secured with wired bolts, top inspection plate secured with bolts. All hoses and service loop secured with clamps and safety sling.	Full inspection checking all retaining devices in place. Reference Original Equipment Manufacturer picture book if available.
2	Hook	7 days	Secured to Adapter yoke by Clevis pin and lock plate with tie wired bolts.	Full inspection checking all retaining devices in place; visual inspection of all welds for signs of corrosion/cracks. Reference Original Equipment Manufacturer picture book if available.
3	Pipe handler & associated hydraulic hoses	7 days	Secured to top drive by clevis pins, castle nut & split pin. All other clevis pins secured with washers & split pins. Other bolts secured with either lock wire or split pinned nuts. IBOP actuator roller held in place with hex head nut & bolt. All hydraulic hoses secured with either quick disconnect fittings or JIC swage lock fittings.	Full inspection checking all retaining devices in place. Reference Original Equipment Manufacturer picture book if available.
4	Top drive	7 days	Secured to hook by bail arm. All bolts secured with either lock wire or split pins. Bails in use secured on solid body elevator lugs by bolt and castle headed nut complete with split pin. Counterbalance chains secured to swivel with clevis pin. Top drive service loops secured within horseshoe plate mounting with plates bolts.	Full inspection checking all retaining devices in place; visual inspection of all welds for signs of corrosion/cracks. Reference Original Equipment Manufacturer picture book if available.
5	Top drive dolly frame & roller assemblies	7 days	Dolly frame welded to Top drive. Roller assembly blocks bolted and tie wired to Dolly framework. Roller assemblies secured by shafts and lock nuts.	Full inspection checking all retaining devices in place. Reference Original Equipment Manufacturer picture book if available.
6	Traveling block	7 days	Supported by drill lines from crown block & single line to drawworks drum and dead man anchor.	Full inspection checking all retaining devices in place. Visual inspection of drilling line for signs of wear and tar



			Secured to Adapter yoke by clevis pins and locking plates. Locking plate bolts are tie wired. Dolly frame support arms bolted to traveling block and tie wired.	accumulation. Reference Original Equipment Manufacturer picture book if available.
7	Traveling block dolly frame & roller assemblies	7 days	Dolly frame consists of welded framework. Roller housings bolted & secured with nylon lock nuts to dolly frame. Roller assemblies secured by shaft and lock nut. Proximity switch arm is bolted to dolly roller housing and secured with nylon lock nuts.	Full inspection checking all retaining devices and safety slings are in place and secured, ensure shackles are fitted with split pins. Reference Original Equipment Manufacturer picture book if available.
8	Fixed top drive service loop	7 days	Service loops held in place by plates complete with bolts secured into horseshoe bracket and bracket bolts lock wired. Service loops terminated into electrical junction box. Each service loop secured with safety chain/sling and 4 part shackle.	Check condition of safety chain/sling/shackle, check all bolts are in place and lock wired. Ensure shackles are fitted with split pins.
9	Drill String Compensator hoses	7 days	Secured by bolts/clamps, or WECO connections. Fitted with safety chains/slugs secured with 4 part shackles.	Check all bolts/clamps and chain/slugs/shackles are secure. Ensure shackles are fitted with split pins.
10	Mud hose	7 days	Attached to gooseneck and top drive/swivel with WECO connections, complete with safety slings and 4 part shackles on both ends.	Check hammer unions are tight. Check condition of safety sling and shackle; ensure shackle fitted with split pin.
11	Pipe Racking System rotation and drive motors	90 days	Secured by bolts complete with lock wire.	Check motor and gearbox bolts are tight and lock wire is in good condition.
12	Riser Handling Assembly turntable bearing bolts	90 days	Secured by bolts complete with lock wire.	Check bolts are tight and lock wire is in good condition.
13	Riser Handling Assembly link pivot pins	90 days	Secured by bolts complete with lock wire.	Check retaining bolts are tight and locking wire is in good condition.
14	Riser Handling Assembly hoist cylinder trunnions	90 days	Secured by bolts complete with lock wire.	Check bolts and lock wire tight, check bearings are in good condition.
15	Riser Handling Assembly hoist cylinder clevis	90 days	Secured by bolts complete with lock wire.	Check clevis is secure on rod and pin retaining bolts are tight with lock wire in good condition.
16	Pipe Racking System Components - long / short travel drag chains, drag chain trough, chain terminations and termination brackets	30 days	Chain secured by bolts / lock washers / lock nuts. Trough secured by bolts/lock washers/lock nuts. Chain termination secured by pin/lock washers/lock nuts. Termination bracket secured by lock wire.	Check chain is in good condition with no broken or worn links. Ensure hoses are secure and straight and in good condition. Check trough is undamaged and free from debris. Check cable tray is secure. Check bracket is in good condition. Ensure all bolts are tight and lock wire is in good condition.
17	Riser Handling Assembly hoist cylinder piping and flanges	30 days	Secured by bolts / lock washers / lock nuts and or lock wire.	Check piping is secure; flange bolts are tight and lock wire in good condition.
18	Pipe Racking System upper column assembly hoist sheave and jumper bars	30 days	Retained by bolt / nut and lock wire.	Check sheave in good condition. Check that retainer bolts, jumper bar bolts are tight and lock wire is in good condition.
19	Service Loop Components - hose supports and guide wire anchors	30 days	Secured by bottle screws / lock nuts and 4 part shackles. Secured by nuts / split pins.	Check all supports secure. Ensure bottle screw lock nuts are tight and shackles secured with split pins and in good condition. Check eye bolts and anchor bolts are tight with split pins and in good condition.
20	Pipe Racking System guards and bumper frames	30 days	Secured by bolts complete with lock wire. Safety wire and 4 part shackles. Frame secured with bolts / lock washers / lock nuts.	Check all bolts are tight and lock wire is in good condition. Check safety wire is correctly installed. Check bolts tight and dowel pin secure. Check shackles are fitted with a split pin.
21	Pipe Racking System hoist carriage components - linear actuator clevis, rope guard, motor and gearbox, actuator mounting brackets and actuator expansion tank	30 days	Secured by pin and split pin, bolts with lock wire. Secured by bolts / lock washers / lock nuts.	Check clevis pin is secure with split pin and in good condition. Check guard is in good condition with all bolts tight and lock wire in good condition. Check safety sling is in good condition. Check all bolts are tight. Ensure all fixtures are secure and lock wire is in good condition. Check tank is secure. Ensure shackles are secure with split pins in good condition.



Item	Family	Frequency	Possible Fastening method	How to inspect
22	Pipe Racking System arm assembly components - pivots, support arm, safety wire	30 days	Secured by pins and retaining bolts complete with lock wire. Arm secured by pins, washer and split pin. Safety wire comes with 4 part shackle.	Check all arm pivot pins secure with retaining bolts tight and lock wire in good condition. Ensure no excessive wear in bearings. Check support arm secure with split pins and washers in good condition. Ensure shackles are fitted with split pins.
23	Pipe Racking System hoist drum assembly and guard	30 Days	Secured by bolts complete with lock wire.	Check wire spooled correctly and anchor bolts are tight. Check guard is secure and in good condition. Ensure retaining bolts are tight and lock wire is in good condition.
24	Pipe Racking System cable trays	30 Days	Secured by bolts / lock washers / lock nuts.	Check bolts, lock washers / lock nuts, ensure cable trays are secure.
25	Pipe Racking System lifting jaw assembly components - hydraulic actuator linkage and cylinder	30 days	Actuator linkage secured by pin and retainer. Cylinder secured by bolts complete with lock wire.	Check all actuator link pin retainers are secure. Check cylinder retaining bolts are tight with lock wire in good condition.
26	Brackets	30 days	Secured by bolts / lock washers / lock nuts.	Check all bolts are tight and lock washers/lock nuts are in good condition.
27	Junction boxes and associated brackets	30 days	Secured by bolts / lock washers / lock nuts or lock wire.	Check junction boxes and associated brackets are secure - bolts are tight and fitted with lock nuts and or lock wire and in good condition.
28	Riser Handling Assembly tie back system control valve	30 days	Secured by bolts complete with lock wire.	Check valve block is secure. Check hydraulic hose clips and lock wire are in good condition.
29	Pipe Racking System hydraulic lines, hoses and associated fittings	30 days	Lines secured by brackets / lock washers / lock nuts. Hoses secured by fittings and hose clamps, clamps complete with lock washer / lock nut.	Check bolts /lock washers / lock nuts are secure. Check hoses are secure and in good condition. Ensure hose clamps are in good condition.
30	Riser Handling Assembly hydraulic piping hoses and associated fittings.	30 days	Clamps secured by bolts / lock washers / lock nuts or lock wire.	Check piping, hoses and associated clamps and or hose clips are secure and in good condition. Check all bolts / lock wire / lock nuts are in good condition.
31	Hydraulic control valves in primary link	30 days	Secured by bolts / lock washers / lock nuts or lock wire.	Check hydraulic valves, piping and hoses are secure. Check all bolts / lock wire / lock nuts are in good condition.
32	Riser Handling Assembly turntable bearing cover	30 days	Secured by bolts complete with lock wire.	Check retaining bolts are tight and lock wire is in good condition.
33	Riser Handling Assembly positioner tilt assembly	30 days	Secured by pin and split pin.	Check cylinders are secure. Ensure clevis and clevis pin are secure. Ensure lever assembly is secure. Check split pins are in place.
34	Riser Handling Assembly positioner guard	30 days	Secured by bolts complete with lock wire.	Check guard is secure and in good condition. Check all bolts / lock wire are in good condition.
35	Riser Handling Assembly positioner	30 days	Secured by bolts complete with lock wire.	Check pivot bolts are tight and lock wire is in good condition.
36	Riser Handling Assembly tool spindle	30 days	Secured by bolts complete with lock wire.	Check tool retaining bolts are tight and lock wire is in good condition.
37	Column assembly inspection hatch and door	30 days	Secured by bolts complete with lock wire.	Check all bolts are tight and lock wire is in good condition. Check door hinge and fastener are secure.
38	Pipe Racking System service loop guide rollers, carriage roller assembly and sheaves	7 days	Secured by pin / retainer nut / bolts and split pin / retainer clips. Safety wire and 4 part shackles.	Check roller is secure with split pins and in good condition. Check sheaves are secure and retainer nut / bolts are tight with split pin in good condition. Ensure wire is in good condition and shackles and split pins are secure.
39	Pipe Racking System camera	7 days	Secured by bolts / lock washers / lock nuts. Safety sling secured by 4 part shackle.	Check camera is secure and all bolts tight. Ensure safety sling is correctly installed and in good condition. Ensure shackle is fitted with a split pin.
40	Pipe Racking System arm carriage - guide roller assembly	7 days	Secured by mounting bolts with split pins and retainer clips.	Check all rollers are free and in good condition. Ensure retainers are tight. Check assembly mounting bolts are tight with split pins and in good condition.



Item	Family	Frequency	Possible Fastening method	How to inspect
41	Pipe Racking System hoist carriage components - counter balance, counter balance cylinder and guide roller assembly	7 days	Secured by pins, retaining bolts complete with split pins. Bolts complete with split pins.	Check clevis pin is secure with split pin in good condition. Check cylinder clevis secure on rod. Check rollers are free and in good condition with retainers tight. Ensure assembly bolts are tight with split pins in good condition.
42	Pipe Racking System - cable protector and safety wire	7 days	Secured by bolts complete with lock wire. Safety wire comes with 4 part shackle.	Check hose is in good condition with clamps and mounting brackets secure and lock wire in good condition. Check safety wire installed correctly and in good condition. Ensure shackles are fitted with split pins.
43	Pipe Racking System hoist wire kick back roller assembly	7 days	Secured by pins and retaining bolts complete with lock wire.	Check rollers are secure with split pins in good condition. Check all bolts are tight complete with lock wire.
44	Pipe Racking System lifting jaw assembly components - retaining latch, retaining latch bolt, hinge pin, claw cylinder, claw cylinder clevis, claw finger, roller jaw rollers, gripper jaw springs, gripper jaw dies, cylinder block, pipe guide	7 days	Retaining latch secured by split pin, latch bolt secured by pin and split pin, nut and lock wire. Hinge pin secured by bolts comes with lock wire. Cylinder secured by bolts complete with lock wire. Claw cylinder clevis secured by rod and retainer. Claw finger secured by pin and retainer. Roller jaw rollers secured by pin and retainer. Jaw springs secured by block and bolts complete with lock wire. Jaw dies secured by bolts complete with lock wire. Cylinder block secured by bolts complete with lock wire. Pipe guide secured by bolts fitted with lock wire.	Check latch assembly and split pins are secure and in good condition. Check pivot pin is secure with split pins. Check retaining nut is tight with lock wire/split pin in good condition. Check hinge pin is secure with retaining bolts tight complete with lock wire. Check cylinder trunnions are secure with bolts tight complete with lock wire. Check clevis is secure on rod and clevis pin retainer in place. Check claw finger pivot pin is secure and retainer in good condition. Ensure finger retaining screws are tight on shaft and shaft is in good condition. Check all rollers are free and springs are secure. Check dies are in good condition and secure in carriers. Ensure retaining bolts are tight complete with lock wire. Check cylinder block retaining bolts are tight complete with lock wire. Check pipe guide retaining bolts are tight complete with lock wire.
45	Hydraulic control valves in secondary link	7 days	Secured by bolts / lock washers / lock nuts.	Check valves are secure and all fittings and hoses are in good condition. Check all bolts / lock wire / lock nuts are in good condition.
46	Pipe Racking System proximity switches and flags	7 days	Secured by bolts / lock washers / lock nuts.	Check proximity switches and flags are secure. Check all bolts / lock wire / lock nuts are in good condition.
47	Riser Handling Assembly upper carriage yoke roller assembly	7 days	Secured by bolts complete with lock wire.	Check rollers are free and in good condition. Ensure retaining bolts are tight and lock wire is in good condition.
48	Riser Handling Assembly tie back system	7 days	Secured by pin and split pin.	Check assembly. Ensure cylinder, clevis and clevis pin are secure. Check proximity switches are secure. Check split pins are in place.
49	Riser Handling Assembly upper track roller assembly and pivot pin	7 days	Secured by retaining nuts complete with lock washers and lock nuts.	Check rollers are free and in good condition. Check roller retaining nuts and pivot pin are tight with lock washers / lock nuts in good condition. Ensure grease hoses are secure.
50	Riser Handling Assembly positioner accumulator	7 days	Secured by bolts / lock washers / lock nuts.	Check accumulator bracket is secure. Check all bolts / lock nuts are in good condition.
51	Corrosion	7 days	Check the area for excessive corrosion.	Check the area for excessive corrosion.



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AREA 2: Sub Structure Equipment Zone 5 (Moonpool / Cantilever / BOP Deck / Texas Deck Equipment)				
Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, cable conduit, pipe run's and cable clamps	180 days	Cable trays with beam clamps to derrick structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped to derrick & gin pole structure.	Check cable tray/conduit runs are secure, ensure all brackets are tight and check for signs of corrosion.
2	Choke & Kill lines	180 days	Bolted clamps complete with lock nuts, safety sling and 4 part shackle.	Check all clamp bolts/lock nuts are in place and secure. Check condition of safety sling and shackles fitted with split pin. Inspect all welds for signs of cracks / corrosion.
3	Deluge system	180 days	"U" Bolted to framework, welded to sub structure.	Check all clamp bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
4	Diverter system	180 days	Welded pipe work and U bolts with lock washers or lock nuts.	Check all clamp bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
5	Diverter system lock down dogs/support dogs	180 days	Bolted to Diverter housing complete with lock washers.	Check retaining bolts/lock washers are in place and secure.
6	Drainage system	180 days	"U" Bolted to welded framework.	Check all clamp bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
7	Fire & gas alarms	180 days	Bolted complete with lock washers or lock nuts, welded to sub structure.	Check all bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
8	Fixed lines - air, steam, water, hydraulic	180 days	Clamped / "U" bolted complete with lock washers or lock nuts, welded to sub structure. Hydraulic lines bolted clamps welded to substructure.	Check all clamp bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
9	Poor Boy degasser line	180 days	Clamped / "U" bolted complete with lock washers or lock nuts, welded to sub structure.	Check all securing bolts / nuts are in place and secure, check clamps for signs of wear/corrosion.
10	Tensioner grease manifold/ lines	180 days	Welded to substructure.	Check all welds for signs of cracks / corrosion.
11	Ducting	180 days	"U" Bolted to welded framework.	Check all clamp bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
12	Guide line extension arms	90 days	Bolted to internal cylinder complete with lock nuts/split pins.	Check all bolts are in place and secure, inspect all lock nuts, ensure split pins fitted.
13	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	30 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion. Check all grating clips are secure.
14	Lights - flood, fluorescent	90 days	Bolted with lock washers or lock nuts, secured by safety sling and 4 part shackle.	Check condition of safety slings, ensure shackles fitted with split pins. Ensure both light and brackets are secured, check bolts on beam clamps are secure and for signs of corrosion.
15	High pressure lines	90 days	Bolted clamps complete with lock washers or lock nuts, welded to sub structure.	Check all pipe clamp and bracket bolts/lock nuts are in place and secure, check for signs of corrosion.
16	Saddles - pod line, mux line	90 days	Secured by 4 part shackle and safety sling.	Check saddles are secure and in good condition, check condition of safety sling and ensure all shackles are fitted with split pins.
17	Hose reel spooling assemblies	90 days	Roller beam shackled to pad eye complete with safety pin.	Full visual inspection for any loose components.
18	Bell nipple hang off chains (jack up)	90 days	Secured by 4 part shackles.	Check shackles are fitted with split pins and are secure.
19	BOP control hoses	90 days	Clamped / screw fittings to sub structure/ Texas deck.	Check all clamp bolts / nuts are in place and secure.
20	BOPs / diverter (jack up)	90 days	Secured by boomers, chain 4 part shackles.	Inspect all securing components; ensure all shackles are fitted with split pins.



Item	Family	Frequency	Possible Fastening method	How to inspect
21	BOPs sliding trolleys (jack up)	90 days	Secured by boomers, chain 4 part shackles.	Inspect all securing components; ensure all shackles are fitted with split pins.
22	Bridge crane (jack up)	90 days	Mechanical components.	As per manufactures guidelines, full visual inspection for any loose objects.
23	Cantilever / pistons / dogs/(jack up)	90 days	Securing pin comes with split pin.	Inspect pins for wear, ensure all split pins are in place and secure.
24	Tensioners (jack up)	90 days	Secured by 4 part shackles.	Check shackles are fitted with split pins.
25	Removable BOP roof	90 days	Dogged to BOP roof.	Ensure all dogs are in place and secure.
26	Roller doors	90 days	Mechanically secured.	Full visual inspection for any loose components.
27	RBQ jumper hose	90 days	Safety slings and 4 part shackles.	Check slings for wear. Ensure shackles are fitted with split pins.
28	Electric door motors	90 days	Bolted onto welded plate.	Check all bolts are in place and secure. Inspect all welds for signs of cracks / corrosion.
29	Flow line	30 days	Clamped / "U" bolted complete with lock washers or lock nuts, welded to sub structure.	Check all clamp bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
30	Flow meter	30 days	Welded to flow line, lid secured by nut and bolt.	Check all bolts / nuts are in place and secure, inspect all welds for signs on cracks / corrosion.
31	BOP crane main blocks	30 days	Wire termination, center pin comes with safety pin.	Check wire for damage / wear. Check all bolts are in place and secure.
32	Cameras	30 days	Bolted to framework complete with lock washers or lock nuts. Secured by safety sling and 4 shackle.	Check condition of camera and safety slings; ensure shackles are fitted with split pins. Ensure both camera and brackets are secured with safety sling. Check bolts on beam clamps are in place and secure and for signs of corrosion.
33	Speakers	30 days	Bolted with lock washers or lock nuts, secured by safety sling and 4 part shackle.	Check condition of safety slings; ensure shackles are fitted with split pins. Ensure both speaker and brackets are secure.
34	Fall protection system (horizontal life lines)	30 days	Turnbuckles, beam clamps and 4 part shackles.	Check all clamp bolt lock washers or lock nuts are in place and secure. Ensure shackles are fitted with split pins.
35	Fall arrestors / inertia reels	30 days	Secured by 4 part shackles.	Check shackle is fitted with a split pin.
36	Sheaves - work tugger, man riding tugger, guide line tensioner, pod line tugger	30 days	Secured by safety sling and 4 part shackles.	Check sheaves are secure and in good condition, check condition of safety sling and ensure both snatch block and tugger wire are retained. Ensure all shackles are fitted with split pins.
37	Marine riser tensioner turn down sheaves	30 days	Center pin comes with locking plates and bolts.	Check pin for wear, check all bolts/locking plate are in place / secure.
38	Snatch blocks	30 days	Secured by safety sling and 4 part shackle.	Check sheaves are secure and in good condition, check condition of safety sling and ensure both snatch block and tugger wire are retained. Ensure all shackles are fitted with split pins.
39	Marine riser tensioner load ring	30 days	Lockdown dogs, fitted with 4 part shackles.	Check shackles are fitted with split pins.
40	Texas deck / gratings and handrails	30 days	Chains/ wires secured by 4 part shackles.	Check chains or slings for corrosion. Ensure all shackles are fitted with split pins.
41	Drop down access platform	30 days	Hinged / welded to framework.	Check welded connections for signs of corrosion. Check grating clips are secure. Check bolts/lock nuts and shackles are fitted with split pins.
42	BOP stabilizing posts	30 days	Bolted to underside of bridge crane.	Check all bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion.
43	Auxiliary hoist	30 days	Wire termination, center pin comes with safety pin.	Ensure termination secure with safety pin fitted and in good condition.
44	BOP crane, drive tracks, hose saddles, access platforms	30 days	Mechanical components. Saddle secured by safety sling and 4 part shackle. Access platforms welded and bolted to framework.	BOP crane full visual inspection for loose components, see manufacturers guide lines. Check all bolts / nuts are in place and secure. Inspect all welds for signs of cracks / corrosion. Check saddles are secure and in good condition, check condition of safety sling, shackles are fitted split pins. Access platforms check condition of welds for signs of corrosion, ensure all hand rail bolts are in place and grating clips are secure.



Item	Family	Frequency	Possible Fastening method	How to inspect
45	Supply hose reel for transporter	30 days	Mechanically secured to transporter.	Full visual inspection for loose components. See manufacturers guidelines.
46	Flow line covers (jack up).	7 days	Secured by chain or safety sling with 4 part shackle.	Check condition of all chains, safety slings and shackles, ensure shackles are fitted with split pins.
47	Hatches	7 days	Welded hinges to walkway. Safety slings fitted with 4 part shackles.	Check all welds and bracket bolts for signs of corrosion. Check condition of safety slings/chains and shackles. Ensure shackles are fitted with split pins.
48	Removable hand rails	7 days	Handrail framework bolted to platform framework. All bolts come with lock washers or lock nuts.	Check condition of bolts for signs of corrosion, check all bolts/lock washers and nuts are in place and secure.
49	Tie back rollers for tuggers	7 days	Snatch blocks, 4 part shackles and turnbuckles attached to pad eyes, safety slings attached.	Check condition of safety sling and shackles. Ensure shackles are fitted with split pins.
50	Extending work platforms	7 days	Attached to a purpose built frame and bolted to derrick. Grating secured by clips and platform secured by safety sling and 4 part shackles. Platform hinges have bolts/lock nuts.	Check all frame welds for signs of corrosion, check all bolt/lock nuts, retaining slings and shackles are in place and secure. Ensure shackles are fitted with split pins. Full visual inspection for any loose objects
51	Main and folding platforms	7 days	Platforms are secured with hinges, clamps, studs and bolts. They are also fitted with safety slings. All bolts come with lock washers or lock nuts and secured by 4 part shackles.	Check welded connections for signs of corrosion. Check grating clips are secure. Check hinge bolts/lock nuts, condition of safety slings and shackles. Ensure shackles are fitted with split pins.

AREA 3: Crane Equipment (A-Frame / Engine Cab and Access level / Boom and Lifting Equipment)

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, cable conduit, pipe runs & cable	90 days	Pipe/cable tray clamped complete with lock washers or lock nuts to handrail and crane structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped.	Check cable runs are secure; ensure all cable tray and conduit bolts/clamps/brackets are in place. Check for signs of corrosion.
2	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	90 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion, check all grating clips are secure.
3	Junction boxes and external fuse boxes	90 days	Bracketed to handrails and crane structure, complete with lock washers and or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
4	Sheaves and boom line dead man	90 days	Bolted to crane structure complete with lock washers, lock nuts or lock wire.	Check all bolts and lock plates are in place and secure.
5	Fuel hose reel	90 days	Bolted complete with lock washers / nuts to frame which is welded to crane structure.	Check all bolts / lock washers / nuts are in place and secure, check all welds for signs of cracks / corrosion.
6	Fire extinguisher box	90 days	Bolted complete with lock washers / nuts to frame which is welded to crane structure.	Check all bolts / lock washers / nuts are in place and secure, check all welds for signs of cracks / corrosion.
7	Hydraulic Lines and Hoses	90 days	Secured with pipe clamps.	Check clamps are secure and signs of corrosion, check bolts are in place and secure.
8	Wear strips	90 days	"U" bolted to boom.	Check all bolts / lock washers / nuts are in place and secure.
9	Lights, aircraft warning, flood, fluorescent, hazard, anti collision light	30 days	Bolted to stand with lock washers or lock nuts, secured with safety chain / sling with 4 part shackles. Stands welded to structure.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety sling/chain. Ensure shackles are fitted with split pin. Ensure all lenses are secure. Check all welds for signs of corrosion.
10	Grease manifold	30 days	Welded onto boom structure.	Check all welds for signs of cracks/ corrosion.
11	Boom Stops	30 days	Secured to crane structure with bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure.



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Item	Family	Frequency	Possible Fastening method	How to inspect
12	Crane Sign / Color code sign	30 days	Secured to crane structure with "U" bolts comes with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
13	Dead man Anchor	30 days	Castle nut and bolt with split pin.	Ensure castle nuts in place with split pins secure.
14	Engine exhaust system	30 days	"U" bolted to framework, bolted to crane structure.	Check all bolts / lock washers / nuts are in place and secure, check all clamps for signs of corrosion.
15	Expansion Cooling Tanks	30 days	Bolted to crane structure.	Check all bolts / lock washers / nuts are in place and secure.
16	Inspection Platforms	30 days	Welded/bolted with lock washer or lock nuts to crane structure.	Check condition of welds for signs of corrosion, Ensure all hand rail bolts are in place and grating clips are secure.
17	Radio Antennae	30 days	Bolted/bracket with lock washer or lock nuts to crane structure.	Check all bolts / lock washers / nuts are in place and secure.
18	Speakers and horns	30 days	Bolted/bracket with lock washers or lock nuts to crane structure comes with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings/ shackles, ensure shackles are fitted with split pin. Ensure both speaker and brackets are secured.
19	Air start receiver	30 days	Bolted/bracket with lock washer or lock nuts to crane structure.	Check all bolts / lock washers / nuts are in place and secure.
20	Cab/engine room access doors	30 days	Held on welded hinges with nut and bolt comes with split pins.	Check all nuts/bolts are secured with split pins. Check welds for signs of cracks / corrosion.
21	Drain valves	30 days	Screwed in to structure.	Check all screws in place and secure, ensure end caps secured by split pins.
22	Window guards	30 days	Bolted to operators cab.	Check all bolts / lock washers / nuts are secure and in place.
23	Windows / Wipers	30 days	Bolted to cab above window/ Rubber seal and bolted window frame	Check all bolts / lock washers / nuts are in place and secure. Check window seals for signs of wear, check window for damage.
24	Boom Rest Hose	30 days	Secured with metal tie wraps.	Check condition of all metal tie wraps/fasteners, inspect rubber hose for wear.
25	Boom section pins/Bolts	30 days	Each pin secured with split pin, bolts with self locking nuts. Follow Original Equipment Manufacturer (OEM) guidelines.	Inspection of pins to ensure split pin / self locking nuts in place. Follow OEM guidelines.
26	Drum mirror	30 days	Bolted to cab structure, safety sling attached fitted with 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check chain / sling assembly and shackle for signs of damage. Ensure shackles fitted with split pins.
27	Fall Protection System (Horizontal life lines)	30 days	"U" bolted to boom.	Check all bolts / lock washers / nuts are in place and secure.
28	Main block	7 days	All components bolted together. Hook and latch bolted complete with lock washers / lock nuts.	Check block for damage/signs of wear, Check all bolts / lock nuts are in place and secure.
29	Main block wooden bumper bars	7 days	Each secured by brackets and "U" bolts to boom.	Check all bolts / lock washers / nuts are in place and secure. Check bracket welds for signs of wear/corrosion.
30	Load Cells	7 days	Bolted to boom structure, secured with pin and locking plate.	Check all bolts in place and secure, Check locking plate secure.
31	Whip Line and Main Block Boom Saver / limit assembly	7 days	Chain assembly bracketed comes with 4 part shackles to structure.	Check chain / sling assembly for signs of damage, ensure shackle secure and fitted with split pin.
32	Main sheave pins	7 days	Secured by pin held by bolts complete with locking plate.	Check all bolts in place and secure, Check locking plate secure.
33	Headache Ball Assembly	7 days	Terminated to wire, secured by socket, safety bolt and split pin. Hook and latch bolted complete with lock washers / lock nuts.	Check condition of wire termination, ensure split pin and safety bolt are in place and secure. Check all bolts / lock nuts are in place and secure.
34	Boom components, angle indicator, pennants, protection rope rubbers, rollers and camera	7 days	Bolted to main strut, indicator arm secure with steel pin. Pennants secured by locking plate, rubbers lashed to boom, camera bolted / welded frame to boom by bolts with lock washers and nuts, safety sling with 4 part shackle.	Check all bolts / lock washers/bolts and holding screws are in place and secure. Ensure shackles are fitted with split pins.
35	Middle / floating sheave and guide sheaves	7 days	Floating sheave pinned to boom structure or pennants. Secured by lock washers / nuts or lock plates. Guide sheave bolted / welded frame to boom structure secured by lock washers / nuts.	Check pins are in place and secure. Check all bolts / lock nuts are in place and secure. Check all welds for signs of corrosion.



Item	Family	Frequency	Possible Fastening method	How to inspect
36	Boom upper and lower Limit Cut Out	7 days	Secured to crane structure with bolts complete with lock washers or lock nuts.	Check all bolts / lock nuts are in place and secure.
37	A frame sheave pin retaining plates	7 days	Retaining plates secured by bolts complete with locking plates.	Check all bolts / locking plates are in place and secure.
38	Anemometer	7 days	Bolted to post, clamped to handrail complete with lock washers or lock nuts. Fitted with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings, ensure shackle fitted with split pin.
39	Wind Sock pole & Illumination light	7 days	Clamped to crane structure, safety sling and 4 part shackle.	Check securing bolts and check condition of safety chain / sling, ensure shackle fitted with split pin.
40	Access hatch and drop down gates	7 days	Welded hinge with nut and bolt. Safety sling attached with 4 part shackles.	Check all welds and bolts for signs of corrosion. Check integrity of safety slings/chains and ensure shackles are fitted with split pins.
41	Winch Drum Guards and sheave guards	7 days	Whip and main line guards welded and bolted, secured with bolts and lock washers or lock nuts. Sheave guards bolted with lock washers or nuts.	Check all bolts / lock washers / nuts are in place and secure. Check all welds and bolts for signs of corrosion.

AREA 4: Crane Equipment (Complete Crane / Pipe Handlers including Truss beams and tracks)

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, cable conduit, pipe runs , cable and cable rollers	90 days	Pipe/cable tray clamped complete with lock washers or lock nuts to handrail and crane structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped. Rollers are bolted.	Check cable runs are secure. Ensure all cable tray and conduit bolts/clamps/brackets are in place. Check all bolts /lock washers or nuts are secure. Check for signs of corrosion.
2	Control Cab and Fire extinguisher box	90 days	Bolted/lock washers/lock nuts to main structure.	Check all bolts / lock washers / nuts are in place and secure.
3	Electric motor, gantry drive and hoist line covers	90 days	Bolted/lock washers/lock nuts to main structure.	Check all bolts / lock washers / nuts are in place and secure.
4	Hoist Legs	90 days	Hoist Line, terminated at drum.	Check hoist line for signs of wear or damage. Check dead man clamp at drum.
5	Junction boxes	90 days	Bracketed to handrails and crane structure, complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
6	Ladders & Back scratchers (including Fall Protection System) walkways grating , rest platforms and hand rails	90 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion. Check all grating clips are secure.
7	Signal box	90 days	Bolted complete with lock washers / nuts.	Check all bolts / lock washers / nuts are in place and secure.
8	Trolley access platform	90 days	Bolted complete with lock washers / nuts. Grating clamped to welded framework.	Check condition of welds for signs of corrosion. Ensure all hand rail bolts are in place and grating clips are secure. Check grating clamps.
9	Hydraulic Lines and hoses	90 days	Hydraulic lines secured with pipe clamps, hoses secured with JIC fittings.	Check clamps are secure and for signs of corrosion, check bolts are in place and secure, check hoses are secure.
10	Cab access doors	30 days	Held on welded hinges with nut and bolt comes with split pins	Check door hinges and split pins. Check welds for corrosion
11	Lights, flood, fluorescent and hazard	30 days	Bolted complete with lock washers or lock nuts to frame welded to structure, comes with safety sling and 4 part shackle.	Check condition of safety slings/shackles. Ensure both light and brackets are secured, check bolts on beam clamps are secured and for signs of corrosion. Ensure shackles are fitted with split pins.



Item	Family	Frequency	Possible Fastening method	How to inspect
12	Crane sign, speakers and horn	30 days	Bolted/bracket complete with lock washers or lock nuts to crane structure comes with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings, ensure shackles are fitted with split pin. Ensure both speaker and brackets are secured.
13	Window guards and wipers	30 days	Bolted to operators cab.	Check condition of guard and bolts / lock washer/lock nuts.
14	Dead man Anchor	30 days	Castle nut and bolt with split pin.	Ensure castle nuts in place with split pins secure.
15	Main sheave pins	30 days	Secured by pin plate held by bolts complete with locking plate.	Check all bolts in place and secure, Check locking plate secure.
16	Fall Protection System (Horizontal life lines)	30 days	"U" bolted to boom.	Check all bolts / lock washers / nuts are in place and secure.
17	Main block and hook	7 days	All components bolted together. Hook and latch nut and dowell pin assembly.	Check block for damage/signs of wear, check for wear on pin. Check all bolts or locknuts are in place and secure.
18	Block Limit assembly	7 days	Chain assembly bracketed comes with 4 part shackles to structure.	Check chain/sling assembly for signs of damage; ensure shackles are fitted with split pin.
19	Load Cells	7 days	Bolted to boom structure, secured with pin and locking plate.	Check all bolts in place and secure, Check locking plate is secure.
20	Pillar block housings	7 days	Bolted	Check all bolts / lock washers / nuts are in place and secure.
21	Access hatch and drop down gates	7 days	Welded hinges with nut and bolt. Safety sling attached with 4 part shackles.	Check all welds and bolts for signs of corrosion. Check integrity of safety slings / chains and ensure shackles are fitted with split pins.
22	Sheave guards	7 days	Guards bolted complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure.
23	Boom Camera (CCTV) & frame	7days	Bolted/welded frame, frame bolted to boom by bolts / lock washers/lock nuts and safety sling with 4 part shackle.	Check condition of camera, check bolts/clamps/brackets are secure and for signs of corrosion, check condition of safety wire and shackle. Ensure shackles are fitted with split pin.

AREA 5: Crane Equipment (Complete knuckle boom crane)

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cab support cross members and control cab	90 days	Welded to substructure cab bolted complete with lock washers and lock nuts to main structure.	Check condition of all welds for signs of corrosion / cracks. Check all bolts / lock nuts / washers are secure.
2	Cable trays, cable conduit, pipe runs & cable	90 days	Pipe/cable tray clamped complete with lock washers or lock nuts to handrail and crane structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped.	Check cable runs are secure, ensure all cable tray and conduit bolts / clamps / brackets are in place. Check for signs of corrosion.
3	Fire Extinguisher Box	90 days	Bolted comes complete with lock washers / nuts to frame which is welded to crane structure.	Check all bolts / lock washers / nuts are in place and secure, check all welds for signs of cracks / corrosion.
4	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	90 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion; check all grating clips are secure.
5	Hydraulic pumps motors, lines and hoses	90 days	Pump bolted with lock washers / nuts. Lines secured with pipe clamps and hoses secured with JIC fittings.	Check all bolts / lock washers / nuts are in place and secure. Check hoses are secure.
6	Junction boxes	90 days	Bracketed to handrails and crane structure, complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
7	Motor and swivel shaft	90 days	Bolted	Check all bolts are in place and secure.
8	Boom Tip Anti collision light	30 days	Bolted to stand with lock washers or lock nuts, secured with safety chain/sling with 4 part shackle. Stand welded to crane structure.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety sling/chain. Ensure all lenses are secure. Check all welds for signs of corrosion. Ensure shackles are fitted with split pin.
9	Cab/engine room access doors	30 days	Held on welded hinges with nut and bolt comes with split pins.	Check all nuts/bolts are secured with split pins. Check welds for signs of cracks / corrosion.
10	Crane Sign	30 days	Secured to crane structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.



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Item	Family	Frequency	Possible Fastening method	How to inspect
11	Flood Lights	30 days	Bolted with lock washers or lock nuts to frame welded to structure, complete with safety sling and 4 part shackle.	Check condition of safety slings/shackles. Ensure both light and bracket are secured, check bolts on beam clamps are secure and for signs of corrosion. Ensure shackles are fitted with split pin.
12	Plastic control line tilt track	30 days	Bolted with lock washers / nuts to magnet yoke.	Check all bolts / lock washers / nuts are in place and secure.
13	Speaker & horn	30 days	Bolted to frame which is welded to crane structure, safety sling fitted with 4 part shackles.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings, ensure shackles are fitted with split pins. Ensure both speaker and brackets are secured.
14	Window guards	30 days	Bolted complete with lock washers /nuts to operators cab	Check all bolts / lock washers / nuts are in place and secure.
15	Tubular Grippers and guides	7 days	Bolted complete with lock washers /nuts.	Ensure all lock bolts/nuts are in place and secure. Check dies are intact and secure.
16	Lifting Yoke	7 days	Swivel mounting and pins, bolted assembly.	Check bolt / lock washers / nut and lock plate in place and secure, check pins for signs of wear.
17	Magnet components, housing, rotating pistons, spring adjusters, plate retaining bolts and bumper bar	7 days	Housing bolted, pistons socketed and pin fitted with safety clips, spring adjusters with locking washers and lock nuts, plate retaining bolts bolted at top with allen screws and bumper bar welded.	Check bolt / lock washers / nut and lock plate in place and secure., check all welds for signs of cracks / corrosion and check pins for signs of wear. Check allen screws in place.
18	Hooks shackles and pad eyes	7 days	Pad eyes welded, hooks secured with 4 part shackle.	Check condition of pin for wear, ensure shackles are fitted with split pin.
19	Main sheave pins	7 days	Secured by pin plate held by bolts complete with locking plate.	Check all bolts in place and secure, Check locking plate secure.
20	Knuckle joint pins and lock plate	7 days	Pin, bolt and lock plate.	Check bolt / lock washers / nut and lock plate in place and secure. Check lock plate in place and secure.
21	Operating pistons and lock plates	7 days	Nut and bolt (lock plate).	Check bolt / lock washers / nut and lock plate in place and secure.
22	Sheave guards	7 days	Guards bolted complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure.
23	Access hatch and drop down gates	7 days	Welded hinge with nut and bolt. Safety sling attached with 4 part shackles.	Check all welds and bolts for signs of corrosion. Check integrity of safety slings / chains, ensure shackles are fitted with split pins.

AREA 6: Jack House Equipment (Top walkway to main deck) Legs

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, Cable conduit, pipe runs & cable	30 days	Pipe/cable tray clamped complete with lock washers or lock nuts to structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped	Check cable runs are secure. Ensure all cable tray and conduit bolts/clamps/brackets are in place. Check for signs of corrosion.
2	Junction boxes	30 days	Bracketed to handrails and structure, complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
3	External fuse Boxes	30 days	Bolted complete with lock washers / nuts to frame which is welded to structure.	Check all bolts / lock washers / nuts are in place and secure, check all welds for signs of cracks/corrosion.
4	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	30 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion. Check all grating clips are secure.
5	Inspection Platforms	30 days	Welded / bolted with lock washers or lock nuts to structure.	Check condition of welds for signs of corrosion. Ensure all hand rail bolts are in place and grating clips are secure.
6	Radio Antennae	30 days	Bolted/bracket with lock washers or lock nuts to structure.	Check all bolts / lock washers / nuts are in place and secure.
7	Signs	30 days	Secured to structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks/corrosion.



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Item	Family	Frequency	Possible Fastening method	How to inspect
8	Lights – Flood, Fluorescent	30 days	Bolted with lock washers or lock nuts to frame welded/bolted to structure, comes with safety sling and 4 part shackle.	Check condition of safety slings / shackles. Ensure shackles are fitted with split pins. Ensure both light and brackets are secured, check bolts on beam clamps are secure and for signs of corrosion.
9	Speakers and horns	30 days	Bolted/bracket with lock washers or lock nuts to structure. Comes with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings/shackles, ensure shackles are fitted with split pins. Ensure both speaker and bracket are secured.
10	Anemometer	30 days	Bolted to post, clamped to handrail complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings/shackles, ensure shackles are fitted with split pins. Ensure both speaker and bracket are secured.
11	Bull gear pin retaining plates.	30 days	Bull gear retained as per manufacturer's instruction.	Inspect Bull gear retention as per manufacturer's instruction.
12	Wind Sock pole & Illumination light	30 days	Clamped to structure, safety sling and 4 part shackle.	Check securing bolts and check condition of safety chain/sling and shackles. Ensure shackles are fitted with split pins.
13	Access Hatch	30 days	Hinged with nut and bolt.	Check all welds and bracket bolts for signs of corrosion.
14	Access drop down gates	30 days	Hinged with nut and bolt. Safety sling attached with 4 part shackle.	Check all welds and bracket bolts for signs of corrosion. Check integrity of safety slings/chains and shackles. Ensure shackle is fitted with split pin.
15	Jet piping	30 days	Clamped to leg structure bolted complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check for signs of corrosion.
16	Clamps	30 days	Clamps bolted complete with lock washers / lock nuts/welded to leg structure.	Check all bolts / lock washers / nuts are in place and secure. Check for signs of corrosion.
17	Unions	30 days	Unions held in place by circlips / packing.	Check all circlips or packing are in place. Check for signs of corrosion.
18	Leg Ladders	30 days	Leg ladders bolted/welded to leg structure complete with lock washers / lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check for signs of corrosion.
19	Anodes	30 days	Anodes welded to leg structure.	Check welds for cracks. Check welds and anodes for signs of corrosion.

AREA 7: Raised Catwalks / Conveyors / Walkways (Catwalks and Conveyors including Riser Skates and Wireline platforms)

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Rollers	30 days	Bolted secured with lock washers and nuts.	Check all bolts / lock washers / nuts are in place and secure.
2	Cable trays, Cable conduit, pipe runs & cable.	30 days	Pipe/cable tray clamped complete with lock washers or lock nuts to handrail and structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped.	Check cable runs are secure, ensure all cable tray and conduit bolts / clamps / brackets are in place. Check for signs of corrosion.
3	Drag chains	30 days	Secured with pipe clamps.	Check all bolts / lock washers / nuts are in place and secure.
4	Electric motor	30 days	Bolted/lock washers/lock nuts to main structure.	Check all bolts / lock washers / nuts are in place and secure.
5	Fire Extinguisher box	30 days	Bolted complete with lock washers / nuts to frame which is welded to crane structure.	Check all bolts / lock washers / nuts are in place and secure, check all welds for signs of cracks/corrosion.
6	Drive Covers	30 days	Retaining lugs.	Check all retaining lugs are in place and secure.
7	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	30 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion; check all grating clips are secure.
8	Junction boxes	30 days	Bracketed to handrails and structure, comes with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
9	Signal box	30 days	Bolted complete with lock washers / nuts.	Check all bolts / lock washers / nuts are in place and secure.



Item	Family	Frequency	Possible Fastening method	How to inspect
10	Hydraulic Lines and hoses.	30 days	Lines secured with pipe clamps. Hoses secured by means of JIC fittings.	Check clamps are tight, bolts in place and secure. Check for signs of corrosion. Check hose fittings are secure.
11	Lights – Flood, Fluorescent, Hazard	30 days	Bolted to stand complete with lock washers or lock nuts, secured with safety chain / sling with 4 part shackle. Stand welded/bolted to structure and or crane.	Check condition of safety slings / shackles. Ensure both light and brackets are secured, check bolts on beam clamps are secure and for signs of corrosion. Check all bolts/lock washers/nuts are in place and secure. Check lenses are secure. Check for any signs of corrosion including welds.
12	Speakers and horns	30 days	Bolted bracket complete with lock washers or lock nuts to crane structure, fitted with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure. Check condition of safety slings and shackles ensuring that split pin is fitted. Ensure both speaker and bracket are secure.
13	Windows / Wipers	30 days	Check all bolts / lock washers / nuts are in place and secure. Check window seals for signs of wear, check window for damage.	Check all bolts / lock washers / nuts are in place and secure. Check window seals for signs of wear, check window for damage.
14	Fall Protection System (Horizontal life lines)	30 days	Beam clamped and bracketed to structure.	Check all bolts / lock washers / nuts are in place and secure.
15	Access hatches and drop down gates	30 days	Hinged with nut and bolt. Safety sling attached with 4 part shackle. Hatch welded to structure.	Check all welds and bracket bolts for signs of corrosion. Check integrity of safety slings/chains and shackles ensuring split is fitted.
16	Camera	30 days	Bolted to frame, frame bolted to structure complete with lock washers/lock nuts and safety sling and 4 part shackle.	Check condition of camera. Check all bolts/clamps/bracket are secure. Check signs of corrosion. Check condition of safety sling and shackle, ensuring split pin is fitted.

AREA 8: Mast Equipment (All Communication Masts and surrounding elevated area)

Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, Cable conduit, pipe runs & cable	90 days	Pipe / cable tray clamped complete with lock washers or lock nuts to structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped.	Check cable runs are secure, ensure all cable tray and conduit bolts / clamps / brackets are in place. Check for signs of corrosion.
2	Junction boxes	90 days	Bracketed to handrails and structure, complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
3	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	90 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion, check all grating clips are secure.
4	Inspection Platforms	90 days	Welded / bolted complete with lock washers or lock nuts to structure.	Check condition of welds for signs of corrosion, Ensure all hand rail bolts are in place and grating clips are secure.
5	Radio Antennae	90 days	Bolted / bracket complete with lock washers or lock nuts to structure.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
6	Signs	90 days	Secured to structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
7	Lights - Fluorescent, Flood	90 days	Bolted with lock washers or lock nuts to frame welded to structure, complete with safety sling and 4 part shackle.	Check condition of safety slings / shackles, ensure shackles are fitted with split pins. Ensure both light and brackets are secured, check bolts on beam clamps are secure and for signs of corrosion.
8	Speakers and horns	90 days	Bolted / bracket complete with lock washers or lock nuts to structure, complete with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings /shackles, ensure shackles are fitted with split pins. Ensure both speaker and brackets are secure.
9	Wind Sock pole & Illumination light	90 days	Clamped to crane structure, safety sling and 4 part shackle.	Check securing bolts and check condition of safety chain/sling and shackles, ensure shackles are fitted with split pins.



Item	Family	Frequency	Possible Fastening method	How to inspect
10	Anemometer	90 days	Bolted to post, clamped to handrail complete with lock washers or lock nuts. Complete with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure, check condition of safety slings and shackles, ensure shackle is fitted with split pin. Ensure both speaker and brackets are secured.
11	Access Hatch	90 days	Hinged with nut and bolt.	Check all welds and bracket bolts for signs of corrosion.
12	Access drop down gates	90 days	Hinged with nut and bolt. Safety sling attached with 4 part shackles.	Check all welds and bracket bolts for signs of corrosion. Check integrity of safety slings / chains and shackles. Ensure shackles are fitted with split pins.

AREA 9: Fixed Third Party Equipment (Cement units / Snubbing units / Wireline units)

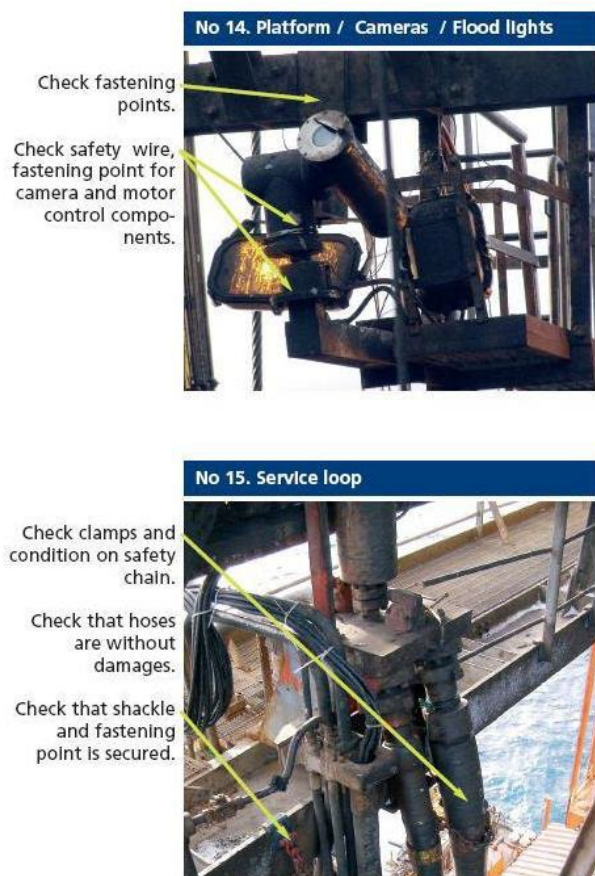
Item	Family	Frequency	Possible Fastening method	How to inspect
1	Cable trays, Cable conduit, pipe runs & cable	30 days	Pipe/cable tray clamped with lock washers or lock nuts to structure. Cables secured with stainless steel tie wraps. Other cables fed through pipe work which is beam clamped.	Check cables are secure, ensure all cable tray and conduit bolts/clamps/brackets are in place. Check for signs of corrosion.
2	Junction boxes	30 days	Bracketed to handrails and structure, complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure, check condition of brackets for signs of corrosion.
3	External fuse Boxes	30 days	Bolted complete with lock washers / nuts to frame which are welded to structure.	Check all bolts / lock washers / nuts are in place and secure, check all welds for signs of cracks / corrosion.
4	Ladders & Back scratchers (including Fall Protection System) walkways grating, rest platforms and hand rails	30 days	Bolted to structure. Fall arrest U-clamped to ladder. Back scratcher bolted to ladder framework. Handrail and grating framework welded together and welded/bolted to platform framework. Platform walkway bolted to structure. All bolts to have lock washer or lock nuts.	Check all bolts/lock washers/nuts are in place and secure, check condition of backscratcher and for signs of corrosion. Check condition of fall protection system. Check condition of welds for signs of corrosion, check all grating clips are secure.
5	Signs	30 days	Secured to structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
6	High Pressure lines	30 days	Secured to structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
7	Hydraulic lines	30 days	Secured to structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
8	Lights - flood and fluorescent	30 days	Bolted complete with lock washers or lock nuts to frame welded/bolted to structure, comes with safety sling and 4 part shackle.	Check condition of safety slings/shackles, ensure split pin fitted. Ensure both light and brackets are secured, check bolts on beam clamps are secure and for signs of corrosion.
9	Gauges	30 days	Secured to structure with "U" bolts complete with lock washers or lock nuts.	Check all bolts / lock washers / nuts are in place and secure. Check welds for signs of cracks / corrosion.
10	Speakers and horns	30 days	Bolted bracket with lock washers or lock nuts to structure complete with safety sling and 4 part shackle.	Check all bolts / lock washers / nuts are in place and secure. Check condition of safety slings, shackles, ensuring split pin fitted. Ensure both speaker and brackets are secured.
11	Access Hatch	30 days	Hinged with nut and bolt.	Check all welds and bracket bolts for signs of corrosion. Ensure nuts are secure to bolt.

AREA 10: Other Areas (as identified by the OIM or shore based rig management team (For example: specific machinery spaces, mud pump room, sack store, engine room, columns, etc.).

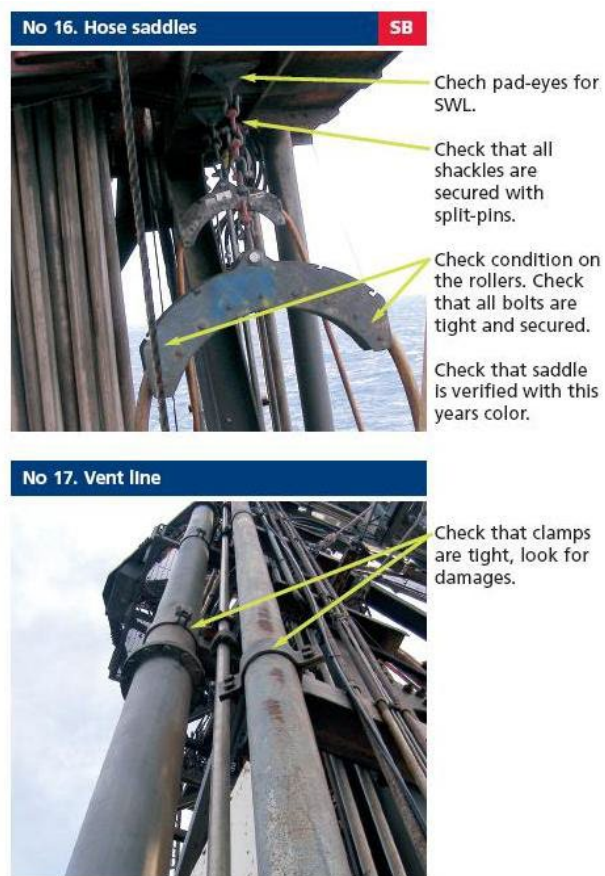
Item	Family	Frequency	Possible Fastening method	How to inspect

4.7 Example Visualised Inspection System Functional Requirements

The following provides an example of a Visualised Inspection System (otherwise known as a Picture Book). Based on DROPS Best Practice and widely adopted throughout the Drilling Industry, the principles may be applied to any asset.



20 From derrickman's cabin to fingerboard



From derrickman's cabin to fingerboard

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