

WINCH SAFETY



NEUMANN *EQUIPMENT*



PREFACE

Proprietary Statement

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Description

Winch Safety - Typical

This Winch Safety guide does not replace the specific Operation and Maintenance Manual that was supplied with your Neumann Equipment Winch.

It is intended as a guide for those operating Neumann Equipment winches who need to develop their own workplace procedures. Please contact Neumann Equipment if any further information is required.

Revision History

Revision	Date	Details of Change
0.1	22/05/2013	Original Template
1.0	8/07/2018	Approved Issue for Release
1.1	17/09/2018	Review and Update
1.2	31/03/2021	Review and Updated



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CONTACT DETAILS

Neumann Equipment Head Office

Phone: Australia: (07) 5589 9275
 International: +61 7 5589 9275

Fax: Australia: (07) 5589 9273
 International: +61 7 5589 9273

Email: equipment@neumann.com.au

Web: www.neumannequipment.com.au
www.neumanncontractors.com.au

Postal: PO Box 8 Currumbin
 Queensland, 4223 Australia

Address: Nuban Street Currumbin
 Queensland, 4223 Australia



CHAPTER 1 – SAFETY

The safety section lists safety precautions required to be taken when operating or maintaining your winch. Read and follow all operating and safety instructions contained in this Manual and illustrated on the decals fitted to the equipment, and ensure that you assess the risk of any task by using the attached Job Safety & Environmental Analysis (JSEA) sheet (Appendix 1).

If you are unable to identify hazards or do not understand the process for use of the Risk Matrix (Table 2), stop the job and consult a qualified Occupational Health and Safety consultant.



IMPORTANT

This symbol has been used throughout this manual to highlight important safety information. Ensure you read and understand the information before embarking on any related task.



DANGER

This symbol highlights a particular hazard and is shown with an instruction on how to avoid risk exposure. Ensure you follow the guidelines within these signs.

Personal Protective Equipment Required



These symbols are pictograms and refer to compulsory Personal Protective Equipment (PPE) that must be worn and/or actions that must be taken by the operator to allow safe operation of the machine to occur.



Task Safety Process

To ensure work safety with Neumann Equipment winches - an operator should carry out a standard list of safety checks and questions BEFORE starting to operate any part of the machinery. Use a blank copy of the Job Safety and Environmental Analysis in Appendix 1 to assist in the safety planning for the job tasks. Use the Risk Matrix (Table 2) to help measure the severity of the risk and plan appropriate mitigation strategies to avoid risk exposure.

Plan Your Task

- List in order, the activities required to undertake the task
- Use a copy of the JSEA (Appendix 1) to assist with this process
- Use the Risk Assessment Process Chart (Figure 1) as a guide to help your process
- Communicate your intentions with all persons involved in the task

Identify the Risks

- What can happen? How can it happen?

Assess the Risks

- Use the Risk Matrix as a guide to measure the severity of the risk. Determine the existing controls use. Determine the likelihood and consequences of the risks involved to establish a level of risk.

Determine the Risk Score

- Set risk priorities

Implement Controls

- Can the risk be removed, reduced, or controlled to a safe acceptable level?
 - Use of aids, plant or equipment, specialist specific equipment/people
 - Guards, barriers, safety mechanisms, and/or operational procedures
 - Correct PPE

Can You Accept the Risks?

- If NO – formulate controls to remove/reduce the risk and re-assess the task.
- If YES – Organize the task, maintain controls, communicate instructions clearly, monitor and review progress.

Monitor and Review

- Work methodically
- Check on progress
- Communicate
- Is the plan being followed?
- Are controls adequate?
- Is further assessment required?
- Have conditions changed? – Stop – Review the plan

Refer to Figure 1 – for a visual overview of the Risk Assessment Process.

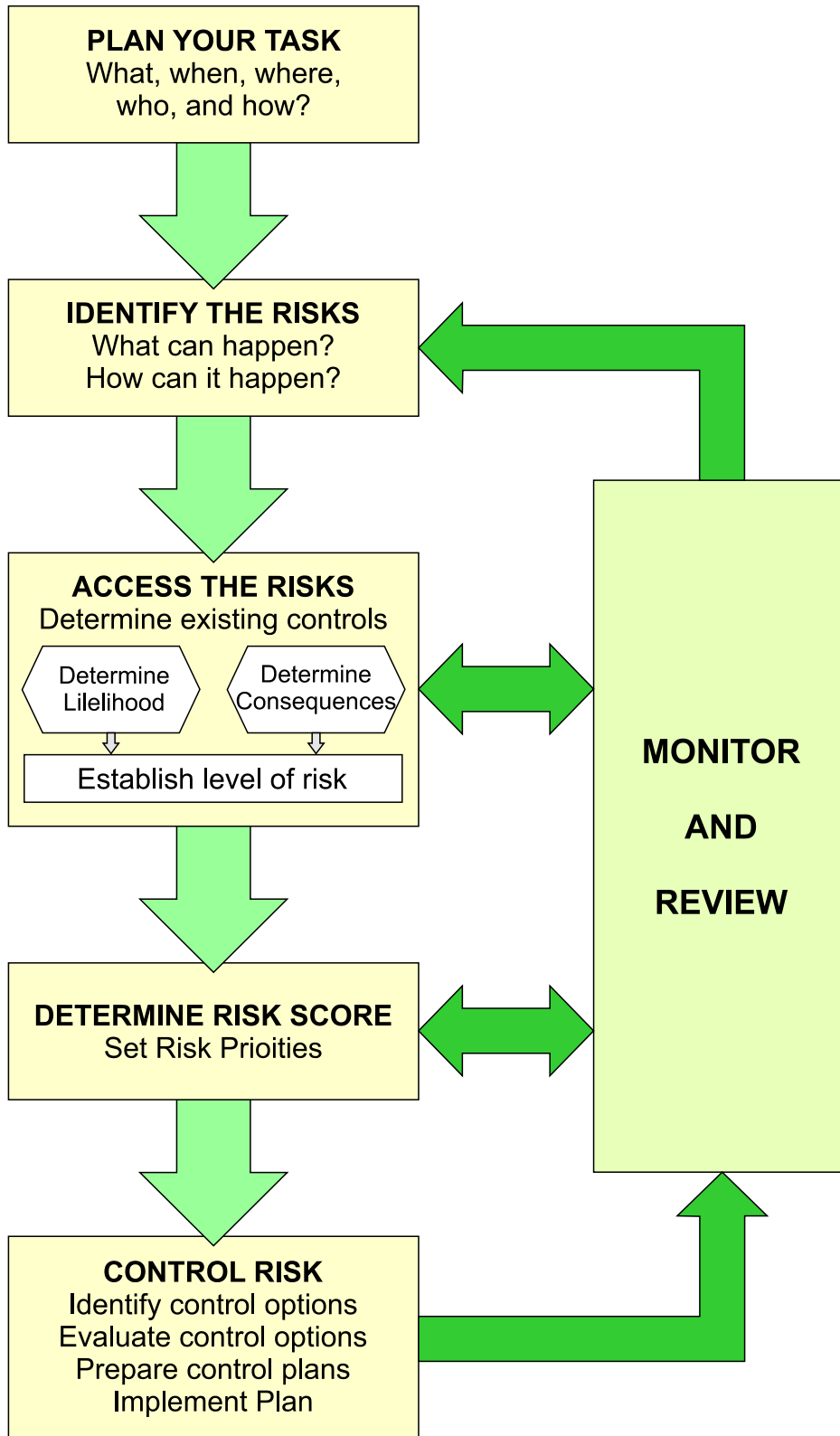


Figure 1 – Risk Assessment Process



How to Assess Risk

For each of the risks:

- Determine the likelihood and consequence of an incident occurring considering existing control measures.
- Combine the likelihood and consequence estimates to rate the risk.
- Using the ratings of each of the risk, develop a prioritised list of workplace risks requiring action.

Use the following descriptive scale to nominate the likelihood and consequence of an incident occurring at the workplace.

Table 1 – Likelihood and Consequences

Likelihood		Consequence	
Almost certain	Common occurrence	Catastrophic	Death or permanent disability, Irreversible severe environmental damage that violates law or regulation
Likely	Known to occur	Severe	Lost time injury, Reversible wide-spread and/or long-term damage that violates law or regulation
Possible	Could occur	Moderate	Medical treatment or restricted duties, Reversible impact extending beyond the local area
Unlikely	Not likely to occur	Minor	First aid injury, Local impact which is immediately containable and easily remediated
Rare	Almost impossible	Negligible	Not likely to cause injury or illness, Minor on-site impact able to be remediated

Table 2 – Risk Assessment Matrix

Likelihood: How likely could it happen?	Consequence: How severely could it hurt someone or damage property?				
	NEGLIGIBLE	MINOR	MODERATE	SEVERE	CATASTROPHIC
ALMOST CERTAIN	Significant	Significant	High	High	High
LIKELY	Significant	Significant	High	High	High
POSSIBLE	Low	Significant	Significant	High	High
UNLIKELY	Low	Low	Significant	Significant	High
RARE	Low	Low	Low	Significant	Significant

This stage of risk assessment gives a basis for ranking risks in terms of their priorities.

Table 3 – Risk Assessment Result

Action Key	High	Task is not to be undertaken. Implement additional control measures.
	Significant	Personnel are to be inducted into the required control measures. Hazards to be discussed during pre-start meetings. A check is to be undertaken to ensure that control measures are in place prior to commencement of this activity.
	Low	Personnel are to be inducted into the required control measures. Weekly monitoring of safety measures required.



CHAPTER 2 – INSTALLATION

Delivery Inspection

After the Neumann Equipment winch has been delivered, they should be inspected for any evidence of damage caused as a result of shipment before they are declared ready for use.

The preparation of the winch for use should only be undertaken by a responsible person who has read and understood the Operation and Maintenance Manual that was supplied with your winch. The requirements are simple and coupled with the use of good common sense, together with general occupational health and safety knowledge and a visual inspection, should not pose any problems. The following checklist provides suggestions for detecting defective or damaged parts.

Checks before use:

- 1) Remove the plastic wrap and other packaging material from the winch. **Note:** To maintain optimum corrosion resistance, care should be taken not to damage any paintwork on the winch.
- 2) Remove any clamping bands etc. on the pallet
- 3) Inspect the winch for any visible damage.
- 4) Visually inspect all components.
- 5) Inspect all areas for evidence of gearbox oil leaks.
- 6) Inspect for any damage to the hydraulic components, if applicable.
- 7) Inspect for any damage to the electrical components, if applicable.

Transportation Securing Points

Some larger winches are supplied with transportation securing points, usually in the base of the unit. These have been designed for lashing during transport only and must not be used for lifting or anchoring while in operation. All points are marked for lashing or lifting



IMPORTANT

UNDER NO CIRCUMSTANCES IS THE WINCH TO BE LIFTED USING THE TRANSPORTATION SECURING POINTS.



Mounting Points

Typically, all Neumann Equipment winch chasses are designed with foundation mounting holes along the bottom of the frame. Please ensure that all mounting points are used and that the mounting platform is a stable and suitable location to support safe operation.



IMPORTANT

UNDER NO CIRCUMSTANCE IS THE WINCH TO BE OPERATED WITHOUT ALL MOUNTING SECURELY FASTENED USING APPROPRIATE FESTENERS AND ALL MOUNTING POINTS.

To install the winch:

1. Place winch upon its intended mounting surface ensuring that the winch sits level and the mounting holes on the winch frame match the hole centres in the support structure.
2. Ensure that the winch is positioned to allow the rope and chain to feed off in the correct position.
3. Secure the winch using the mounting points with the appropriate fasteners, then torque as required, refer to Table 4 – Recommended Assembly Torques – Class 8.8 ISO Metric Coarse Bolts & Screws

Note: Appropriately sized and strength stainless steel bolts may be fitted instead to offer greater corrosion resistance.



Torque Settings

Table 4 – Recommended Assembly Torques – Class 8.8 ISO Metric Coarse Bolts & Screws

Diameter	Pitch(mm)	Bolt Tension Corresponding to 65% of Proof load	Recommended Assembly Torque
		kN (lbf)	Nm (lbft)
M4	0.70	3.32 (746)	2.7 (2.0)
M5	0.80	5.35 (1,203)	5 (3.7)
M6	1.00	7.54 (1,695)	9 (16.2)
M8	1.25	13.8 (3,102)	22 (16.2)
M10	1.50	21.9 (4,923)	44 (32.5)
M12	1.75	31.8 (7,149)	77 (57)
M14	2.00	43.4 (9,757)	122 (90)
M16	2.00	59.2 (13,309)	190 (140)
M18	2.50	74.8 (16,816)	269 (198)
M20	2.50	95.6 (21,492)	372 (274)
M22	2.50	118 (26,527)	519 (383)
M24	3.00	138 (31,024)	640 (472)
M27	3.00	179 (40,241)	967 (713)
M30	3.50	219 (49,223)	1,314 (969)
M33	3.50	270 (60,698)	1,782 (1,314)
M36	4.00	319 (71,714)	2,297 (1,684)
M39	4.00	380 (85,427)	2,970 (2,191)

Surface Condition Torque Adjustment Factors	
Plain Steel, as supplied	X 1.0
Plain Steel, degreased	X 2.0
Zinc Plated, as supplied	X 1.0
Zinc Plated, lightly oiled	X 0.9
Galvanised, degreased	X 2.1
Galvanised, lightly oiled	X 1.1
Heavily greased	X 0.7

CHAPTER 3 – SAFE OPERATION

Neumann Equipment winches are engineered to provide safe operation when used in accordance with established procedures and supported by Risk Assessment. To ensure the safety of operators and others, it is important to never exceed the capacity of the machine and that the equipment is operated appropriately within its design limits and intentions. Neumann Equipment strongly advises users to never operate the winch until all tasks associated with the work at hand have been documented and the relevant risk control measures implemented. Refer to Chapter 1 for further details on safety and how to assess risk.

To ensure the safe operation of your winch, the following basic Safety Rules must be understood and complied with at all times.

Safe Operation:

- Do not exceed the maximum line pull specified for the winch.
- Keep all body parts and clothing clear of winching cable.
- Never allow anyone to stand under a raised load or stressed line.
- Avoid sudden shock or jerking on the load.
- Use a slow speed with due care for personal safety and damage to equipment.

Before Commencing Work:

- Ensure all safety instructions are clearly understood, that operating manuals have been read and that operators are familiar with the controls of the winch and power pack.
- Ensure a thorough pre-operational inspection of working parts, ropes, controls, and associated equipment prior to commencing work. Check for loose or missing parts.
- Ensure that oil levels are within safe operating range and within service limitations.
- Visually check the power unit for signs of fluid leaks.
- Check all controls for proper response. Shut down the machine if a fault is detected, tag the machine out with an 'Out of Service' tag, remove the key and contact the Service Agent.
- Review the working site for hazards through the use of a JSEA and Risk Assessment and implement the risk control measures to eliminate or minimise their effects, such as:
 - Ensure there are no unused ropes, cables, or obstructions around the working area.
 - Be aware of vessel/vehicle movement.
 - Ensure personnel are correctly positioned and know what their involvement and tasks are in relation to the job at hand.
 - Ensure ropes or cables to be used are correctly rated for the task, are not damaged, or worn and where appropriate have the necessary test/examination certificates up to date.
- Watch your head. Don't stand under a load, or in areas where overhead equipment may swing and cause serious injury.
- Unused tools or gear should always be secured so they will not become an obstruction.
- Be aware of non-operating personnel in proximity to the equipment or work area through which the line is to be pulled.
- Ensure clear communication between all personnel involved in the operation of this winch system.



ALWAYS...

- Completely read and understand the Owner's Manual supplied with the winch.
- Undertake a Job Safety and Environmental Analysis (JSEA) and Risk Assessment before any use of the machine. A blank JSEA is provided in Appendix 1 for use. Photocopy as required.
- Use the Job Safety and Environmental Analysis Checklist to check that the relevant safety procedures are in place before work commences.
- Work at speeds suitable for the conditions and as determined by the task JSEA or Risk Assessment.
- Wear approved, appropriate Personal Protective Equipment (PPE), such as:
 - Hard Hat (as required),
 - Eye Protection – Safety Glasses,
 - Hearing Protection – Earmuffs/Plugs,
 - High Visibility Clothing/Vest,
 - Hand Protection - Gloves,
 - Long, Close Fitting Protective Clothing, and
 - Safety Footwear – Steel Caps,
- Keep hands, feet, and clothing away from all moving parts.
- Keep alert and avoid being distracted whilst operating the machine.
- Remove the key and shut down the engine whenever the machine is to be left unattended and/or unsupervised.



NEVER

- Operate the machine without undertaking a Risk Assessment or JSEA (see Chapter 2).
- Operate this machine without Personal Protective Equipment (PPE).
- Exceed the Rated Capacity.
- Place feet or hands in areas where there is a pinch risk.
- Smoke (or approach the machine with a naked flame) whilst operating.
- Leave the motor running whilst unattended.
- Tie or secure yourself to any part of the machine.
- Jerk the control levers. Always use a steady, even action to achieve proper control.
- Touch engine parts, hydraulic pipes and fittings, friction parts or guards.
- Remove safety decals.
- Remove safety guarding.



Operational Controls

Refer to the winch's Operation and Maintenance Manual for all operating procedures. If you have lost your supplied manual, please contact Neumann Equipment for a free replacement.

CHAPTER 4 – MAINTENANCE

Before any attempt is made to service this machinery, all personnel should familiarise themselves with the safety measures for dealing with heavy equipment of this type and ensure that the appropriate precautions are taken.

All tools should be examined for cleanliness and function before use and laid out in an accessible area. The location of all serviceable parts on this machine is illustrated in Chapter 3.

Daily Operator Maintenance

Before each day's operation of the machine, the operator **MUST** perform the inspection and checks as outlined below.

The purpose of the operator's inspection is to keep the equipment in a safe working condition and to detect any signs of malfunctioning during normal operations between scheduled maintenance checks.



While it may not be the operator's responsibility to perform mechanical maintenance, they should be thoroughly familiar with the unit, as this involves their own safety.

Many costly maintenance jobs can be prevented through observance of the following operator maintenance inspections and checks by winch operators.



CAUTION

DO NOT operate a machine that is known to be damaged or malfunctioning. Remove the key from the ignition and Tag Out the machine using an Out of Service tag and contact your Service Agent.

Defective components and/or equipment malfunctions can jeopardise the safety of the operator and other personnel and can cause extensive damage to the unit. Remember, a poorly maintained unit could become a great operational hazard.



CAUTION

Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pin hole leak can penetrate body tissues causing serious injury. Use a flat piece of wood or cardboard for example when looking for leaks. Never use hands or other parts of the body.

The components of the hydraulic system are precision mechanisms that depend upon the lubricating properties of the hydraulic fluid in the system for their continued operation. Contamination of any kind will reduce the service, life of these components. It is imperative that the fluid be kept clean and free of contaminants.



Table 5 – Daily Operator Maintenance Safety Checklist – Typical Diesel Hydraulic Winch Unit

DAILY CHECKS				
	Element	Yes	No	Comments
Fuel	Sufficient Quantity			
Engine Oil	Engine oil level is within operational specifications			
Engine Cooling System	Sufficient coolant level in radiator.			
Hydraulics	Good condition of hoses (check for leaks)			
	Good condition of casings (check for leaks)			
	Good condition of cylinders (check for leaks)			
	Adequate hydraulic oil level			
Controls	Correct operation			
	Responsiveness			
Structure	Adequate weld condition			
	Free of cracks/damage			
Bolts and Fasteners	Tight			
	None missing or damaged			
Safety Decals	Legible			
	All in place			
Operating Manual	Present with machine			



Table 6 – Daily Operator Maintenance Safety Checklist – Typical Electric Hydraulic Winch Unit

DAILY CHECKS				
	Element	Yes	No	Comments
Electrical	Motor and cables in good condition			
Hydraulics	Good condition of hoses (check for leaks)			
	Good condition of casings (check for leaks)			
	Good condition of cylinders (check for leaks)			
	Adequate hydraulic oil level			
Controls	Correct operation			
	Responsiveness			
Rope & Fittings	Rope in good condition			
	Hauling fittings, hooks, shackles etc, tested and tagged			
Structure	Adequate weld condition			
	Free of cracks/damage			
Bolts and Fasteners	Tight			
	None missing or damaged			
Safety Decals	Legible			
	All in place			
Operating Manual	Present with machine			

Table 7 – Daily Operator Maintenance Safety Checklist – Typical Hydraulic Winch Unit

DAILY CHECKS				
Element		Yes	No	Comments
Hydraulics	Good condition of hoses (check for leaks)			
	Good condition of casings (check for leaks)			
	Good condition of cylinders (check for leaks)			
	Adequate hydraulic oil level			
Controls	Correct operation			
	Responsiveness			
Transmission	No oil leaks			
Structure	Adequate weld condition			
	Free of cracks/damage			
Bolts and Fasteners	Tight			
	None missing or damaged			
Safety Decals	Legible			
	All in place			
Operating Manual	Present with machine			



Table 8 – Daily Operator Maintenance Safety Checklist – Typical Electrical Winch Unit

DAILY CHECKS				
Element		Yes	No	Comments
Electrical	Good condition of wiring			
	Good condition of control panel			
	Good condition of electrical motor			
Controls	Correct operation			
	Emergency Stop working			
Transmission	No oil leaks			
Dyneema Rope & Fittings	Dyneema rope in good condition			
	Lifting fittings, hooks, shackles etc., tested and tagged			
Structure	Adequate weld condition			
	Free of cracks/damage			
Bolts and Fasteners	Tight			
	None missing or damaged			
Safety Decals	Legible			
	All in place			
Operating Manual	Present with machine			

CHAPTER 5 – TROUBLESHOOTING

This section contains trouble-shooting information to be used for locating and correcting problems which may develop with the winch system. Note that before undertaking any troubleshooting, perform a complete shutdown and isolation procedure for safety purposes.



CAUTION Before attempting to undertake any work on the winch system:

- Lower or mechanically secure all suspended loads.
- Exhaust any hydraulic pressure locked in the system.
- Ensure the motor is turned off

Refer to the following table for a list of possible problems and the actions that can be attempted to remedy the issue.

Table 9 – Troubleshooting Guide

Problem	Probable Cause	Remedy
Excessive Noise from Pump	Cavitation	Try any or all of the following: <ul style="list-style-type: none"> • Replace dirty filters. • Wash strainers in solvent compatible with system fluid. • Clean clogged inlet line. • Clean reservoir breather vent. • Change system fluid. • Change to proper pump drive motor speed. • Check fluid temperature.
	Air in hydraulic system	Try any or all of the following: <ul style="list-style-type: none"> • Tighten leaky inlet connections. • Fill reservoir to proper level. • With few exceptions, all return lines should be below fluid level in the reservoir. • Bleed air from system. • Replace pump shaft seal. • Replace shaft if worn at seal journal.
	Pump worn or damaged	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
Relief valve noisy	Setting too low or too close to another valve setting.	<ul style="list-style-type: none"> • Install pressure gauge and adjust to correct pressure.
	Worn poppet and seat.	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
Hydraulic pump overheated	Hydraulic fluid overheated	<ul style="list-style-type: none"> • see "Hydraulic Fluid Overheated"
	Cavitation	Try any or all of the following: <ul style="list-style-type: none"> • Replace dirty filters. • Wash strainers in solvent compatible with system fluid. • Clean clogged inlet line. • Clean reservoir breather vent. • Change system fluid. • Change to proper pump drive motor speed.
	Air in hydraulic system	Try any or all of the following: <ul style="list-style-type: none"> • Tighten leaky inlet connections. • Fill reservoir to proper level.



Problem	Probable Cause	Remedy
		<ul style="list-style-type: none"> • With few exceptions, all return lines should be below fluid level in the reservoir. • Bleed air from system. • Replace pump shaft seal. • Replace shaft if worn at seal journal.
	Excessive load	Try any or all of the following: <ul style="list-style-type: none"> • Align unit • Check condition of seals, bearing, and coupling. • Replace pump shaft seal. Also replace shaft if worn at seal journal. • Locate and correct mechanical binding. • Check for workload in excess of circuit design.
	Relief valve set too high	<ul style="list-style-type: none"> • Install pressure gauge and adjust to correct pressure.
	Worn or damaged pump	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
Motor overheated	Hydraulic fluid overheated	<ul style="list-style-type: none"> • see "Hydraulic Fluid Overheated"
	Excessive load	Try any or all of the following: <ul style="list-style-type: none"> • Align unit • Check condition of seals, bearing, and coupling. • Replace pump shaft seal. Also replace shaft if worn at seal journal. • Locate and correct mechanical binding. • Check for workload in excess of circuit design.
	Relief valve set too high	<ul style="list-style-type: none"> • Install pressure gauge and adjust to correct pressure.
	Worn or damaged pump	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
Relief Valve overheated.	Hydraulic fluid overheated	<ul style="list-style-type: none"> • see "Hydraulic Fluid Overheated"
	Relief valve set too high	<ul style="list-style-type: none"> • Install pressure gauge and adjust to correct pressure.
	Worn or damaged pump	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
Hydraulic Fluid Overheated	System pressure too high	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
	Fluid dirty or low oil supply level	Try any or all of the following: <ul style="list-style-type: none"> • Replace dirty filters. • Wash strainers in solvent compatible with system fluid. • Clean clogged inlet line. • Clean reservoir breather vent. • Change system fluid. • Change to proper pump drive motor speed.
	Relief valve set too high	<ul style="list-style-type: none"> • Install pressure gauge and adjust to correct pressure.
	Worn or damaged pump	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
	Incorrect fluid viscosity.	Try any or all of the following: <ul style="list-style-type: none"> • Replace hydraulic filters. • Check system fluid viscosity and change if necessary. • Fill reservoir to correct level.
No hydraulic flow	Pump not receiving fluid	Try any or all of the following: <ul style="list-style-type: none"> • Replace hydraulic filters. • Clean clogged inlet line. • Clean reservoir breather vent.



Problem	Probable Cause	Remedy
		<ul style="list-style-type: none"> • Fill reservoir to correct level. • Tighten leaky inlet connections. • Bleed air from system.
	Pump drive motor turning in wrong direction	<ul style="list-style-type: none"> • Reverse rotation.
	Improperly assembled pump	Try any or all of the following: <ul style="list-style-type: none"> • Check for damaged pump or pump drive and replace parts as necessary. • Replace pump unit.
	Damaged pump	Try any or all of the following: <ul style="list-style-type: none"> • Replace parts as necessary. • Replace pump unit.
	Pump to drive coupling sheared	Try any or all of the following: <ul style="list-style-type: none"> • Replace parts as necessary. • Replace pump coupling.
	Entire flow passing over relief valve	<ul style="list-style-type: none"> • Install pressure gauge and adjust to correct pressure.
	Pump drive motor not operating	<ul style="list-style-type: none"> • Overhaul or replace defective parts.
	Direction control in wrong direction	Try any or all of the following: <ul style="list-style-type: none"> • Check position of manually operated controls. • Check electrical circuit and solenoid operated controls.



APPENDIX 1 – JSEA WORKSHEET

Person Responsible →		Team Members ↓
Task →		
Area Identification →		
JSEA Revision →		
Date →		

Team Leader ↓	First-Aid Co-Ordinator ↓	Emergency Co-Ordinator ↓

Equipment		Y/N
Condition	Daily Inspection	
	Service	
	Maintenance	
Ease of Use	Specialist Training	
Safe Use	Isolation	
	Shut Down	
	Crush, Pinch, or Impact	
Containment	Vibration	
	Barricades	
	Witches Hats	
Limitations	Area Demarcation	
	Capacity	
Emergency	Run Time	
	Power	
Fire	Extinguishers	
Injury	First-Aid	
	Ambulance	
Evacuation	Procedure	
	Assembly Point	
Services		Y/N
Type	Gas	
	Electrical	
	Sewage	
	Water	
	Communications	
	Roads	
Permits	Authorisation	
	No Go Areas	
Materials		Y/N
Handling	MSDS	
	Lifting/Moving	
	Waste	
	Storage	
OTHERS (List as required)		Y/N

Environment		Y/N	
Weather	Temperatures		
	Inclement Weather		
	Mud, Ice, Snow, Water		
	Light		
	Sun		
Environmental	Inclines		
	Height		
	Obstructions		
	Gas, Vapour, Fumes		
	Animals/Insects		
	Damage to Vegetation		
	Contaminants		
	Erosion		
Hazards		Y/N	
Air	Pollution		
	Dust		
	Gas		
Water	Pollution		
	Drains		
Noise	Pollution		
People		Y/N	
PPE Required	Gloves		
	Steel Cap Boots		
	Hard Hat		
	Eye Protection		
	Hearing Protection		
	Respirator		
	Clothing – Hi-Vis		
	Safety Induction		
	Posture		
	RSI		
Human	Hand Over Procedures		
	Record Keeping/Reporting		
	Scheduled Breaks		
	Bystanders		
	Traffic		
	OTHERS (List as required)		Y/N

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