

PLANT RISK ASSESSMENT

Plant Assessed: Auger Drive Unit - Hydraulically Powered

Serial No.:

Model:

Scope: Drilling holes vertically into the ground

Date: 11 October 2005

Plant Checklist

A more detailed analysis is required if the shaded area is not ticked.

	Yes	No
Is the plant designed to perform the work outlined in the scope?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has the plant been modified from the original condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the plant in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>
Is the plant serviced and maintained according to the manufacturers specifications?	<input type="checkbox"/>	<input type="checkbox"/>
Are service records kept for this particular item of plant?	<input type="checkbox"/>	<input type="checkbox"/>
Does the plant create a risk of contact with:		
Overhead Power Lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Underground Cables?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does The Plant:		
Have Lifting attachments appropriate for the load?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have specified safe working limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have safe access and egress conditions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have sufficient work instructions?	<input type="checkbox"/>	<input type="checkbox"/>

RISK LEVEL FOR HAZARDS IDENTIFIED

LIKELIHOOD How likely could it happen?	CONSEQUENCES : How severely could it affect health and safety?			
	EXTREME - death or permanent disablement	MAJOR - serious bodily injury or serious work caused illness	MODERATE - injury or illness requiring casualty treatment	MINOR - injury or illness requiring first aid only, no lost time
VERY LIKELY - could happen frequently	1	2	3	4
LIKELY - could happen occasionally	2	3	4	5
UNLIKELY - could happen, but rare	3	4	5	6
VERY UNLIKELY - could happen, probably never will	4	5	6	7

The numbers (1-7) in this chart indicate the priority as follows:

- ☞ 1,2 or 3 - High Risk, do something about these risks urgently
- ☞ 4 or 5 - Moderate Risk, do something about these risks as soon as possible
- ☞ 6 or 7 Low Risk, these risks may not need your immediate attention

This Risk Assessment has been compiled by Hydrapower to assist the owner and operator of plant to identify risks. The operation and maintenance manual as well as the operator's own risk assessment should be used in conjunction with this supplied risk assessment to identify risk associated with your specific environment and safe work practices.

MODIFICATIONS VOID THIS RISK ASSESSMENT

Type Of Hazard	Yes/No	If the answer to the question is yes, Specify the part, plant or situation that could cause the hazard	Risk Level	Control Option	Control Type
A. MECHANICAL HAZARD					
1. Entanglement Hazard Is it possible to become entangled or drawn into moving components of the plant? Eg. Persons clothing, hair, body parts, jewellery, hand held cleaning equipment, etc.	YES	If a bystander is in close proximity to the rotating auger, clothing may get caught on the auger drawing the person in	3	Safety decal fitted to Auger Drive Unit advising the distance bystanders should be from the operating attachment.	A/T
2. Crushing Hazard Is it possible to be crushed due to:- Falling or moving objects or plant, between plant and immovable objects, plant tipping or rolling, etc.	YES	When connecting the attachment's hydraulic lines to the host machine, if the controls are inadvertently moved part of the body may be crushed by the quick coupler, tyres or tracks. In a skid steer loader, if the operator exits the loader with the loader arms raised, if the loader arms are not locked, and there is a hydraulic failure the operator may get crushed between the loader arms and loader.	3	Turn off the host machine when connect the hydraulic lines. Lower the loader arms prior to exiting the machine	A/T
3. Cutting Stabbing & Puncture Hazards Is it possible to be struck by or strike sharp objects in or ejected from plant	NO				
4. Shearing Hazard Is it possible to be injured between machine parts and work pieces or machine parts and structures.	YES	If part of the body is placed under the auger there is a risk of injury	3	Safety decal fitted to auger drive unit advising the distance bystanders should be from the operating attachment.	A/T
5. Friction Hazard Is it possible to receive abrasions or burns from contact with rotating parts of plant or surfaces or materials handled by the plant.	YES	If bystanders are in close proximity to the rotating auger they may come in contact with the auger or auger drive unit and sustain an injury	3	Safety decal fitted to auger drive unit advising the distance bystanders should be from the operating attachment.	A/T
6. High Pressure Fluid Hazard Is it possible that injury or illness may occur due to contact with fluids under pressure, through possible piping failure. misuse, etc.	YES	Failure of hydraulic hose as a result of fatigue, constant rubbing, misuse or pulling could release high pressure fluid.	5	Burst protection sleeve fitted to supply and return lines of attachment as these are the hoses at greatest risk of failure.	E
				Wear safety glasses when operating attachment	PPE
				Regular inspection of hoses as per maintenance manual	T

Control Legend: E – Engineering S – Substitution T – Training A – Administrative PPE – Personal Protective Equipment

7. Mobile Plant Hazards Is it possible for injury or illness through the operation of any mobile plant from rollovers, falling loads, crushing, striking, collisions, unsuitable or unstable plant etc.	YES	Travelling with attachment raised too high will change the centre of gravity of the host machine making the plant unstable or the auger may swing around violently	5	Friction washers fitted to auger unit yoke to dampen auger swing	E
				Auger head cradle incorporated into carrying frame to support auger unit when travelling	E
				Operator to lower loader arms or dipper arm when travelling	T
8. Vibration Hazard Is injury or illness possible from prolonged use of vibrating equipment or plant.	NO				
9. Striking Hazard Is it possible for someone to be struck by flying or moving objects due to:- Uncontrolled movement of plant, plant or parts of the plant or workplaces disintegrating, etc.	YES	Travelling with attachment unsupported may make the auger swing around violently	5	Friction washers fitted to auger unit yoke to dampen auger swing	E
				Auger head cradle incorporated into carrying frame to support auger unit when travelling	E
				Operator to lower loader arms or dipper arm when travelling	T

B. ELECTRICAL HAZARD					
1. Is there a possibility of plant contacting or coming with-in close proximity to powerlines.	YES	The exists the possibility of raising the attachment to high when beneath powerlines or drilling into subterranean powerlines	3	Prior to working in an area, the operator should check to ensure there are no electrical hazards	A/T
2. Is there a possibility of burns or electrocution from fault power leads, overloaded circuits, etc.	NO				
3. Is there a possibility of a fire starting from faulty electrical equipment	NO				

C. CHEMICAL HAZARD					
1. Fire or Explosion Hazard Is it possible that chemicals could explode or burn.	YES	Hydraulic oil escaping from a burst hose under pressure could form a fine mist which may ignite if the mist came in contact with a hot surface or flame.	5	Burst protection sleeve fitted to supply and return lines of attachment as these are the hoses at greatest risk of failure.	E
				Regular inspection of hoses as per maintenance manual	A/T
2. Exposure Hazard Is it possible that persons can be exposed to chemicals creating burns, respiratory problems or toxic affects through ingestion, inhalation, absorption or injection	YES	Hydraulic oil escaping from a burst hose under pressure could spray the operator or bystander with hot oil.	5	Burst protection sleeve fitted to supply and return lines of attachment as these are the hoses at greatest risk of failure.	E
				Wear safety glasses when operating attachment	PPE
3. Environmental Hazards Is it possible to create an environmental problem through chemical spillage, seepage, disposal, dumping, etc. of chemicals	YES	Hydraulic oil escaping from a burst hose could come in contact with the ground	5	Regular inspection of hoses as per maintenance manual. Safety decal fitted to attachment advising the distance bystanders should be from the operating attachment.	A/T
				Regular inspection of hydraulic hoses as per maintenance manual.	A/T

D. ERGONOMIC HAZARDS					
1. Workstation Design Is it possible for injury or illness to occur due to:- Posture, poor visibility, mismatch or workers and machines over reaching, lifting, bending, twisting, etc.	YES	It may be possible that the operator who needs to access the host machine by standing on the attachment slips and falls when entering or leaving the host machine.	5	Operator should review the procedure of entering and leaving the cab and ensure there are adequate handles on the host machine for support.	A/T
2. Overuse Syndrome Is it possible that injury or illness may result from repetitive movement involving lifting, twisting, etc.	NO				

E. BIOLOGICAL HAZARDS

1. Is it possible or injury or illness to occur through handling of clothing, PPE, housekeeping etc.	NO				
2. Is it possible for injury or illness to occur through the handling of waste product, unsterilised equipment etc.	NO				

F. SYSTEMS OF WORK

	YES	Operation manual was supplied with attachment from the manufacturer	N/A		
1. Are there SWI for this plant.					
2. Is it possible for someone to be injured or have ill health due to the process of the task due to the exposure to dust. Fumes, toxic gases, vapour, etc.	NO				
3. Is there a possibility of suffocation due to lack of oxygen or poisoning due to contaminated atmosphere.	NO				
4. Is there a possibility of burns or fire hazard due to extreme temperatures.	NO				
5. Is there a possibility of illness due to extremes in temperatures	NO				
6. Is there a possibility of illness due to poor housekeeping, storage of materials, slips, trips, falls, etc.	YES	Loose debris and unchecked oil leaks or dirt on the pick-up frame could increase the risk of slipping when entering or exiting the cab of the host machine.	4	The operate should keep the attachment clean in accordance with the maintenance schedule in the Maintenance Manual.	A/T

7. Is there a possibility of injury due to a fall from height, unprotected holes, inadequate guard rails, collapse of structures, etc.	NO			
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G. PLANT LOCATION (Environment)

Is it possible for injury, illness or damage to occur due to the location of the plant				
Sub-Terranean locations?	N/A			
Confined Spaces?	NO			
Near Excavations?	YES	Uneven ground could lead to host machine rolling over	4	The operator should inspect the area prior to commencing work A/T
On different levels of buildings?	NO			
On days of still climatic conditions?	NO			
On backfill or uncompacted ground?	YES	Uneven ground could lead to host machine rolling over		The operator should inspect the area prior to commencing work A/T
Has the plant an identified lifting point that is compatible to the weight being lifted?	YES	Quick coupler is fitted to the attachment	6	Operator should regularly inspect the condition of the quick coupler in accordance with the maintenance manual A/T

H. OTHER HAZARDS

Transportation	YES	If the attachment is not secured when transporting, there is a risk that it will fall off damaging property or personnel injury.	3	Operator to ensure that the attachment is adequately secured prior to transportation. A/T
Tyre failure due to condition	NO			
Loads falling on operator	YES	If attachment is raised without engaging the locking pins of the quick coupler, the attachment may fall off the quick coupler onto the operator or bystander	3	The operator should secure the quick couplers locking pins prior to lifting the attachment off the ground A/T
Inadvertent operations of controls	NO			