



Plant Hazard & Risk Assessment of the

Vermeer S 925 TX Mini Skid Steer

Prepared by:	Gerhard A. Hendricks (CPE)	Date:	Nov 24, 2017
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PLANT HAZARD CHECKLIST

Date:	November 24, 2017
Plant Name:	Vermeer S 925 TX Mini Skid Steer
Plant Location:	Vermeer Equipment Holdings (VIC) Pty Ltd – Derrimut, Victoria
Description:	Stand / Ride-on Mini Skid Steer that is designed to provide a high degree of versatility with respect to accessing difficult and tight areas.

Assessment Team:

Name	Position
Gerhard A. Hendricks (CPE)	Engineer / Ergonomist – GAH technical
Mr. Gavin London	Vermeer Area Manager - Environmental

Notes:

- Consider the hazards in relation to the affect they may have on plant operators, anyone working, or in the near vicinity of the plant, visitors and contractors
- Consider the hazards for the Start Up, Operation, Cleaning, Maintenance, Shut Down, and Modification phases.
- Refer to the Plant Regulations and associated Code of Practice for specific details.
- If 'yes' is the answer to a question in the following checklist, the plant, parts of the plant and/or the situation associated with the hazard, should be identified on the checklist.

PLANT HAZARD CHECKLIST

A	ENTANGLEMENT	
1	<p>Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?</p>	<p>YES.</p> <p>Entanglement is highly possible due to the following factors:</p> <ol style="list-style-type: none"> 1. Contact with body parts with the drive track assembly located at the base on either side of the mini skid steer plant. <p>(It is important to note that the re-configured design of the drive track assembly (as located on either side of the plant) incorporates exposed drive gears. These exposed drive gears are designed to greatly reduce the potential for a build-up of mud and debris in this section of the plant, thereby increasing the plant's operating efficiency and safety performance).</p> <ol style="list-style-type: none"> 2. Contact with body parts with the engine unit fan belts when the engine is in operation.

B	CRUSHING	
1	<p>Can anyone be crushed due to:</p>	
a.	<p>Material falling off the plant?</p>	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where items of equipment are stored on the plant when the engine is running and / or when the plant is in operation. 2. In the event where any one (1) of the proprietary based accessory attachments is not correctly fitted / secured to the plant prior to use. 3. In the event where the fitted counterweights fall from either side(s) of the plant in the event where the mounting fasteners are loose and / or damaged.

B	CRUSHING	
b.	Uncontrolled or unexpected movement of the plant or its load?	<p>YES.</p> <ol style="list-style-type: none"> 1. The potential exists in the event where the skid steer is operating on unstable surfaces or on surfaces with a steep incline. 2. In the event where the skid steer's engine speed is too high, the plant may accelerate too quickly, resulting in a potential loss of control by the operator of the plants' functions. <p>Note: An "Operator presence" safety device is installed to ensure that the operator cannot operate the plant without standing at the controls, although this safety device may be bypassed.</p>
c.	Lack of capacity for the plant to be slowed, stopped or immobilised?	<p>YES.</p> <p>The potential for an individual to be crushed exists in the event where they are standing too close to the skid steer when it is moving.</p>
d.	The plant tipping or rolling over?	<p>YES.</p> <p>In the event where the skid steer is being operated on a very steep incline or uneven surfaces, it may tip and crush either the operator and / or bystanders underneath the plant.</p>

B	CRUSHING	
e.	Parts of the plant collapsing?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where the accessory attachment is incorrectly fitted / secured to the front attachment mounting plate of the skid steer. 2. In the event where the skid steer is not maintained in accordance with the manufacturers' operating standards. 3. In the event where damage has occurred to the front mounted lifting arms and / or the plant's attachment mounting plate, resulting in structural failure. 4. In the event where the plant and the fitted accessory attachment is subjected to loads that exceed the manufacturer's safety design standards. 5. In the event where the RED coloured safety securing device is not installed on the front hydraulic actuator (when the front mounted lifting arms are elevated) during maintenance / repair operations. 6. In the event where the fitted counterweights fall from either side(s) of the plant in the event where the mounting fasteners are loose and / or damaged.

B	CRUSHING	
f.	Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where maintenance operations are being performed without first ensuring that the front mounted lifting arms (in the fully raised position) are not effectively supported with the RED coloured safety securing device to prevent a collapse of the structure. 2. In the event where maintenance operations are being performed on either the fitted accessory attachment and / or the skid steer when the power unit of the plant is in operation. 3. In the event where the front mounted lifting arms and the fitted accessory attachment (in the fully raised position) are being repaired / maintained. 4. In the event where the fitted counterweights fall from either side(s) of the plant in the event where the mounting fasteners are loose and / or damaged. 5. In the event where an individual places any of their body parts in close proximity to the lifting arms (and the fitted accessory attachment as fitted / secured to the lifting arms) of the mini skid steer plant when it is in operation.
g.	Being thrown off or under the plant?	<p>YES.</p> <ol style="list-style-type: none"> 1. If individuals (other than the skid steer operator) are riding on the plant. 2. In the event where the engine speed is too high, the plant may accelerate too quickly, resulting in a potential loss of control by the operator of the plants' functions. 3. In the event where the plant is being operated on a very steep incline or uneven surfaces, it may tip and crush either the operator and / or bystanders underneath the plant.

B	CRUSHING	
h.	Being trapped between the plant and materials or fixed structures?	<p>YES.</p> <ol style="list-style-type: none"> 1. If individuals are located between the skid steer and other items. I.e. trees, other plant and equipment etc. during operation of the plant. 2. The plant's tracks may run over the bystander(s) toes / feet resulting in a potential crush injury.
i.	Other factors not mentioned?	<p>YES.</p> <ol style="list-style-type: none"> 1. At no stage must passengers be standing on the skid steer when it is in operation or being driven to another location, apart from the plant operator. 2. The potential for the skid steer to become highly unstable (and possibly tip over) is accentuated when handling large (and heavy) items with the fitted accessory attachment (where applicable) when the fitted accessory attachment is elevated at it's highest point when traversing surfaces with an incline or a degree of instability. <p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>

C	CUTTING, STABBING & PUNCTURING	
1	Can anyone be cut, stabbed or punctured due to:	
a.	Coming in contact with sharp or flying objects?	<p>YES.</p> <ol style="list-style-type: none"> 1. The potential exists when performing any maintenance, replacement and / or repair based operations on the track drive assemblies that are fitted to either sides of the plant. 2. The potential exists when accessing the plant's engine components due to the numerous sharp edges that are incorporated in the design of these components.
b.	Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?	<p>YES.</p> <p>In the event where maintenance operations are being performed without first disabling the plant or if the maintainer is not trained to perform maintenance operations on the skid steer.</p>
c.	The plant, parts of the plant or work pieces disintegrating?	NOT APPLICABLE.
d.	Work pieces being ejected?	NOT APPLICABLE.
e.	The mobility of the plant?	NOT APPLICABLE.
f.	Uncontrolled or unexpected movement of the plant?	<p>YES.</p> <p>When performing maintenance operations on the plant when the power unit of the skid steer is in operation.</p>

g.	Other factors not mentioned?	ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.
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D SHEARING		
1	Can anyone's body parts be sheared between two parts of the plant, or between a part of the plant and a work piece or structure?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where contact with body parts is made with the numerous track drive components that are fitted at the base on either side of the skid steer. 2. In the event where an individual places any of their body parts in close proximity to the lifting arms (and the fitted accessory attachment as fitted / secured to the lifting arms) of the mini skid steer plant when it is in operation. 3. In the event where contact with body parts are made with the fitted accessory attachment when the plant is in operation. <p>NOTE: The potential for a shear-based injury to occur to an individual in these situations is extremely high!</p>

E FRICTION		
1	Can anyone be burnt due to contact with moving parts or surfaces of the plant, or material handled by the plant?	<p>YES.</p> <p>In the event where contact with internal workings of the plant is made during maintenance and / or inspection during normal operation.</p>

F	STRIKING	
1	Can anyone be struck by moving objects due to:	
a.	Uncontrolled or unexpected movement of the plant or material handled by the plant?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where the plant is being operated on unstable surfaces that can result in the tipping of the plant. 2. In the event where the fitted accessory attachment is incorrectly secured to the front attachment mounting plate of the plant. 3. In the event where the fitted counterweights fall from either side(s) of the plant in the event where the mounting fasteners are loose and / or damaged.
b.	The plant, parts of the plant or work pieces disintegrating?	NOT APPLICABLE.
c.	Work pieces being ejected?	NOT APPLICABLE.
d.	Mobility of the plant?	<p>YES.</p> <p>In the event where individuals are located between the plant and other items. I.e. trees, other plant and equipment etc.</p>
e.	Other factors not mentioned?	<p>YES.</p> <p>During maintenance based operations if tools and equipment and / or equipment are rested on the plant, they may potentially fall off.</p> <p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>

G HIGH PRESSURE FLUID		
1	Can anyone come into contact with fluids under high pressure, due to plant failure or misuse of the plant?	<p>YES.</p> <p>In the event where a hydraulic fluid hose(s) attached to the skid steer and / or the fitted accessory attachment fails due to poor condition (wear), mechanical damage or is incorrectly maintained and / or fitted.</p>

H ELECTRICAL		
1	Can anyone be injured by electrical shock or burnt due to:	
a.	The plant contacting live electrical conductors?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where contact is made with an overhead power supply by the fitted accessory attachment. 2. In the event where the plant is being loaded onto a trailer where an overhead power supply is located.
b.	The plant working in close proximity to electrical conductors?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where contact is made with an overhead power supply by the fitted accessory attachment. 2. In the event where the plant is being loaded onto a trailer where an overhead power supply is located.
c.	Overload of electrical circuits?	NOT APPLICABLE.
d.	Damaged or poorly maintained electrical leads and cables?	NOT APPLICABLE.
e.	Damaged electrical switches?	NOT APPLICABLE.
f.	Water near electrical equipment?	NOT APPLICABLE.

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H ELECTRICAL		
g.	<p>Lack of isolation procedures?</p>	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where contact is made with an overhead power supply by the fitted accessory attachment. 2. In the event where the plant is being loaded onto a trailer where an overhead power supply is located.
h.	<p>Other factors not mentioned?</p>	<p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>

I EXPLOSION		
1	<p>Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances, triggered by the operation of the plant or by material handled by the plant?</p>	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where contact is made with an overhead power supply by the fitted accessory attachment. 2. In the event where the plant is being loaded onto a trailer where an overhead power supply is located. 3. Where plant-refuelling operations are being performed near a potential ignition source.

J SLIPPING, TRIPPING & FALLING		
1	<p>Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:</p>	

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J SLIPPING, TRIPPING & FALLING		
a.	Uneven or slippery work surfaces?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where a build-up of spoil is permitted to accumulate around the skid steer and the working environment. 2. In the event where unprotected holes exist due to specific plant operations being performed.
b.	Poor housekeeping, eg. Swarf in the vicinity of the plant, spillage not cleaned up?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where a build-up of spoil is permitted to accumulate around the skid steer and the working environment. 2. In the event where unprotected holes exist due to the specific plant operations being performed.
c.	Obstacles being placed in the vicinity of the plant?	<p>YES.</p> <p>In the event where a build-up of spoil and / or equipment is permitted to accumulate around the skid steer and the working environment.</p>
d.	Other factors not mentioned?	<p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>
2	Can anyone fall from a height due to:	
a.	Lack of a proper work platform?	<p>YES.</p> <p>When standing on any part of the plant that is not designed to accommodate an individual(s), other than the designated operation work platform.</p>

J	SLIPPING, TRIPPING & FALLING	
b.	Lack of proper stairs or ladders?	<p>YES.</p> <p>When standing on any part of the plant that is not designed to accommodate an individual(s), other than the designated operation work platform.</p>
c.	Lack of guardrails or other suitable edge protection?	NOT APPLICABLE.
d.	Unprotected holes, penetrations or gaps?	NOT APPLICABLE.
e.	Poor floor or walking surfaces, such as the lack of a slip-resistant surface?	<p>YES.</p> <p>In the event where the rear mounted operator platform slip resistant surface has worn away, is damaged or where dirt has accumulated on it.</p>
f.	Steep walking surfaces?	NOT APPLICABLE.
g.	Collapse of the supporting structure?	<p>YES.</p> <p>In the event where the rear mounted operator platform has been damaged.</p>
h.	Other factors not mentioned?	<p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>

K	ERGONOMIC	
1	Can anyone be injured due to:	
a.	Poorly designed seating?	NOT APPLICABLE.
b.	Repetitive body movement?	<p>YES.</p> <p>When operating the plant, the potential exists for the plant operator to sustain a repetitive based injury over a sustained period.</p>
c.	Constrained body posture or the need for excessive effort?	<p>YES.</p> <p>The potential exists when the operator is operating the skid steer with a high engine speed, resulting in high forward and reverse accelerative forces from the plant. This practice results in the operator being required to apply excessive grip strength to the control unit in order to operate the plant.</p>
d.	Design deficiency causing mental or psychological stress?	<p>YES.</p> <ol style="list-style-type: none"> 1. Noise factor during operation of plant. 2. In the event where the plant operator and their assistants are not trained in the correct use and operation of the plant and the applicable fitted accessory attachment.
e.	Inadequate or poorly placed lighting?	<p>YES.</p> <p>When operating the plant, it is important to ensure that sufficient lighting levels are available at all times.</p>
f.	Lack of consideration given to human error or human behaviour?	<p>YES.</p> <p>In the event where the plant operator and their assistants are not trained in the correct use and operation of the plant and the applicable fitted accessory attachment.</p>

g.	Mismatch of The Plant with Human Traits and Natural Characteristics?	<p>YES.</p> <p>In the event where the plant operator and their assistants are not trained in the correct use and operation of the plant and the applicable fitted accessory attachment.</p>
h.	<p>other Factors not mentioned?</p> <p>(For more information on hazards associated with manual handling refer to the Victorian Manual Handling Code of Practice.)</p>	<p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>

L	SUFFOCATION	
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1	Can anyone be suffocated due to the lack of oxygen, or atmospheric contamination?	<p>YES.</p> <p>In the event where the plant is being operated in a confined environment where a build-up of exhaust fumes can occur.</p>
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M	HIGH TEMPERATURE FOR FIRE	
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1	Can anyone come into contact with objects at high temperatures?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where contact is made with the engine, the exhaust system and the hydraulic pump. 2. The potential to come into contact with the hot exhaust gases when standing beside the right-hand side of the plant.
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2	Can anyone be injured by fire?	<p>YES.</p> <ol style="list-style-type: none"> 1. In the event where the potential for battery fumes are allowed to accumulate. 2. In the event where refuelling operations contravene the manufacturers' safety recommendations.
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N	TEMPERATURE (THERMAL COMFORT)	
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1	Can anyone suffer ill health due to exposure to high or low temperature?	<p>YES.</p> <p>In the event where the plant is being operated in extreme temperatures i.e. Hot or cold environments.</p>
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O	OTHER HAZARDS	
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1	Can anyone be injured or suffer ill-health from exposure to:	
a.	chemicals?	<p>YES.</p> <p>The possibility exists in the event where contact is made with the diesel, hydraulic fluids and lubricants.</p>
b.	Toxic gases or vapours?	<p>YES.</p> <p>In the event where the plant is being operated within a confined environment.</p>
c.	Fumes?	<p>YES.</p> <p>Potential for a build up of exhaust fumes when operating in a confined environment.</p>
d.	Dust?	<p>YES.</p> <p>The potential for either the plant operator or personnel working around the plant to be subject to dust exposure and dirt in the eye exists.</p>

O OTHER HAZARDS		
e.	<p>Noise?</p> <p>(For more information on hazards associated with noise, refer to the Victorian Noise Code of Practice.)</p>	<p>YES.</p> <p>Please refer to the following noise emission readings:</p> <p>Noise @ control station = 91.7 dB (A)</p> <p>Noise @ exhaust outlet = 97.3 dB (A)</p> <p>Noise @ 1.0 Mtr.= 88.1 dB (A)</p> <p>Noise @ 2.0 Mtr.= 84.9 dB (A)</p> <p>Noise @ 3.0 Mtr.= 83 dB (A)</p> <p>Noise @ 5.0 Mtr.= 79.3 dB (A)</p> <p>Noise @ 7.0 Mtr.= 73 dB (A)</p> <p>Noise @ 10.0 Mtr.= 70.1 dB (A)</p>
f.	Vibration?	<p>YES.</p> <ol style="list-style-type: none"> 1. During operation of the skid steer, the operator is exposed to whole body vibration. 2. The extent of whole body vibration experienced by the operator can also be influenced by the nature of operations performed when using the fitted accessory attachment.
g.	Radiation?	<p>YES.</p> <p>The potential for the operator (and any assistant(s)) to be burned by ultra violet radiation from the sun is highly possible when using the plant in the external environment for un-defined periods of time.</p>
h.	Other factors not mentioned?	<p>ADDITIONAL NOTES BY OPERATOR TO BE INCLUDED IF APPLICABLE.</p>

**PLANT HAZARD CHECKLIST
ADDITIONAL COMMENTS/NOTES**

Due to the nature of work performed by this item of plant together with the nature of design features extreme care will need to be exercised by all persons who are required to operate the plant. This also includes any person(s) who may be assisting the plant operator.

PLANT HAZARD - RISK ASSESSMENT SUMMARY

A. ENTANGLEMENT

All persons (other than the actual mini skid steer operator) must keep well clear of the plant (and the fitted accessory attachment) at ALL times when it is in operation.

It is important to ensure that no contact is made with any of the moving parts of the plant (and the fitted accessory attachment) when it is in operation.

Particular attention must also be applied to the drive track assembly located at the base on either side of the mini skid steer as they are very clearly exposed in order to prevent a build-up of mud and debris. All body parts must be kept well clear from these components when the plant is in operation.

The power unit of the plant must be switched off before accessing any of the components for maintenance and / or inspection purposes, including the fitted accessory attachment.

All safety decals applied to the plant warning of the possibility of an entanglement hazard must be kept in a good condition at all times.

B. CRUSHING

All persons (other than the actual mini skid steer operator) must keep well clear of the plant (the fitted accessory attachment) at ALL times when it is in operation.

The fitted accessory attachment mounted to the front of the plant will need to be fitted in accordance with the manufacturers' recommendations at all times. This requirement includes ensuring that all of the hydraulic hoses and mechanical connections for the fitted accessory attachment are maintained to the manufacturer's standards at all times and are correctly (and securely) fitted at all times.

Plant operators must be experienced and conversant with the plant's safe operating procedures when negotiating difficult terrain or when working on an incline. It is also important to ensure that when operating the plant in difficult terrain the fitted accessory attachment (including any item being carried by this attachment) is kept at the lowest height possible due to the change in the Centre Of Gravity (COG) that the fitted accessory attachment (and its load) will have upon the actual mini skid steer plant.

The "operator presence" switch that is located beneath the operator's footplate must be checked on a regular basis to ensure that it operates in accordance with the manufacturers' operating specifications. AT NO STAGE must the plant be operated without the operator standing on the operators' footplate.

At no stage should persons ride on the plant when it is moving, except for the qualified operator who will be positioned on the mini skid steer.

No tools and / or equipment must be stored on the plant when it is in operation.

It is important to ensure that the fitted counterweights are securely affixed to either side of the plant (beside the operator platform) at all times. The factory fitted fastening bolts must be correctly secured at all times in order to ensure the correct fitting of these counterweights.

The **RED** coloured safety securing device (as supplied by the manufacturer) must be correctly installed onto either one of the front hydraulic actuators (actuators) when working on the elevated lifting arms for maintenance based operations on the mini skid steer. It is important to note that when performing this operation the fitted accessory attachment must be removed from the mini skid steer before such operations can commence.

UNDER NO CIRCUMSTANCES MUST THE FITTED ACCESSORY ATTACHMENT (INCLUDING ANY ITEMS HANDLED BY THIS ATTACHMENT) BE FITTED TO THE MINI SKID STEER WHEN THE RED COLOURED SAFETY SECURING DEVICE IS USED WHILST THE LIFTING ARMS ARE IN AN ELEVATED STATE!

C. CUTTING, STABBING & PUNCTURING

It is important to ensure that no contact is made with any of the moving parts of the plant including the fitted accessory attachment when it is in operation.

Persons performing maintenance operations on the plant must be trained and qualified to perform such operations and must not perform maintenance operations when the power unit of the plant is operating.

Persons performing maintenance and / or repair based operations on the plant must be provided with suitable Personal Protective Equipment (PPE) (such as gloves and eye protection) since many of the parts (including those associated with the fitted accessory attachment) can in fact be sharp.

It is recommended that the operator of the plant and their assistants be provided with Personal Protective Equipment (PPE) (such as eye protection) during the operation of the plant.

All persons (other than the actual mini skid steer operator) must keep well clear of the plant (and the fitted accessory attachment) at ALL times when it is in operation.

D. SHEARING

All persons (other than the actual mini skid steer operator) must keep well clear of the mini skid steer plant (and the fitted accessory attachment) at ALL times when it is in operation.

It is important to ensure that no contact is made with any of the moving parts of the mini skid steer plant (including the fitted accessory attachment) when it is in operation. Particular attention must also be applied to the drive track assembly located at the base on either side of the mini skid steer and the hydraulically powered lifting arms that support any one (1) of the proprietary based accessory attachments.

The **RED** coloured safety securing device (as supplied by the manufacturer) must be correctly installed onto either one (1) of the front hydraulic actuators when working on

the elevated lifting arms for maintenance based operations on the mini skid steer. It is important to note that when performing this operation the fitted accessory attachment must be removed from the mini skid steer before such operations can commence.

UNDER NO CIRCUMSTANCES MUST THE FITTED ACCESSORY ATTACHMENT (INCLUDING ANY ITEMS HANDLED BY THIS ATTACHMENT) BE FITTED TO THE MINI SKID STEER WHEN THE RED COLOURED SAFETY SECURING DEVICE IS USED WHILST THE LIFTING ARMS ARE IN AN ELEVATED STATE!

E. FRICTION

It is important to ensure that no contact is made with any of the moving / rotating engine components of the plant when it is in operation.

F. STRIKING

All persons (other than the actual mini skid steer operator) must keep well clear of the plant (and the fitted accessory attachment) at ALL times when it is in operation.

Tools and other ancillary equipment must not be stored on the plant when it is being operated.

In the event where maintenance operations are being performed, all tools must be placed in a secure and safe manner to prevent the possibility of them falling from a height.

The fitted accessory attachment mounted to the front of the plant will need to be fitted in accordance with the manufacturers' recommendations at all times. This requirement includes ensuring that all of the hydraulic hoses and mechanical connections for the fitted accessory attachment are maintained to the manufacturer's standards at all times and are correctly (and securely) fitted at all times.

Plant operators must be experienced and conversant with the plant's safe operating procedures when negotiating difficult terrain or when working on an incline. It is also important to ensure that when operating the plant in difficult terrain the fitted accessory attachment (including any item being carried by this attachment) is kept at the lowest height possible due to the change in the Centre Of Gravity (COG) that the fitted accessory attachment (and its load) will have upon the actual mini skid steer plant.

The **RED** coloured safety securing device (as supplied by the manufacturer) must be correctly installed onto either one of the front hydraulic actuators when working on the elevated lifting arms for maintenance based operations on the mini skid steer. It is important to note that when performing this operation, the fitted accessory attachment must be removed from the mini skid steer before such operations can commence.

UNDER NO CIRCUMSTANCES MUST THE FITTED ACCESSORY ATTACHMENT (INCLUDING ANY ITEMS HANDLED BY THIS ATTACHMENT) BE FITTED TO THE MINI SKID STEER WHEN THE RED

COLOURED SAFETY SECURING DEVICE IS USED WHILST THE LIFTING ARMS ARE IN AN ELEVATED STATE!

It is important to ensure that the fitted counterweights are securely affixed to either side of the plant (beside the operator platform) at all times. The factory fitted fastening bolts must be correctly secured at all times in order to ensure the correct fitting of these counterweights.

It is recommended that the operator of the plant and their assistants be provided with Personal Protective Equipment (PPE) (such as eye protection) during the operation of the plant.

G. HIGH PRESSURE FLUID

All hydraulic hoses and mechanical fittings / hydraulic connections must be inspected and maintained on a regular basis and in accordance with the manufacturer's recommendations in order to ensure the integrity and safe operation of the mini skid steer and the fitted accessory attachment.

Particular attention must be made when connecting and dis-connecting the hydraulic couplings between the mini skid steer and the fitted accessory attachment to ensure that they are connected and disconnected in accordance with the manufacturer's strict instructions.

In the event where damage is detected with the hydraulic hoses and mechanical fittings / hydraulic connections the mini skid steer plant and the fitted accessory attachment must not be used. The plant must be inspected and repaired by an authorised Vermeer Service technician before the plant can again enter service.

H. ELECTRICAL

All persons (other than the actual mini skid steer operator) must keep well clear of the plant (and the fitted accessory attachment) at ALL times when it is in operation.

Plant operator(s) must be made aware of any potential contact with overhead electrical cables prior to operating the plant.

Care must also be exercised when loading the mini skid steer and the fitted accessory attachment onto a trailer for transport reasons as the potential for the front mounted lifting arms (and the fitted accessory attachment) could come into contact with overhead power lines.

I. EXPLOSION

All persons (other than the actual mini skid steer operator) must keep well clear of the plant at ALL times when it is in operation.

The plant operator(s) must be made aware of any potential contact with overhead electrical cables prior to operating the plant. This factor also applies in the event where the fitted accessory attachment is being used to lift / handle items in the vicinity of any electrical installations.

Care must also be exercised when loading the mini skid steer and the fitted accessory attachment onto a trailer for transport reasons as the potential for the front mounted lifting arms (and the fitted accessory attachment) could come into contact with overhead power lines.

Plant re-fuelling operations must be performed in accordance with the manufacturers' safety instructions as outlined in the operating manual.

J. SLIPPING, TRIPPING & FALLING

All persons (other than the actual mini skid steer operator) must keep well clear of the plant (and the fitted accessory attachment) at ALL times when it is in operation.

All items, which could constitute a slipping, tripping and falling hazard, must be removed from the surrounding environment. These hazards include (but are not limited to) holes or depressions in the immediate and / or surrounding areas of the ground surface and an accumulation of spoil as a result of the operations using the mini skid steer.

It is important to ensure that the anti slip surface of the mini skid steer operators' footplate is maintained to a high standard at all times and kept clear of debris during the operation of the plant.

Removal of spoil following mini skid steer operations must be performed as soon as possible.

Under no circumstances must any individual stand on the mini skid steer plant (other than the plant operator) whilst the plant is in operation.

NOTE: Extreme care must be exercised by the operator when using the operator controls when the plant has no attachments fitted.

K. ERGONOMIC

Care must be exercised when performing operations using the mini skid steer for prolonged periods of time due to the potential for sprain and strain related injuries of the upper and lower limbs and the neck. Suitable rest breaks are advised when extended plant operations are being performed.

Prior to performing operations using the mini skid steer, it is important to ensure that the plant operator and all assistants are correctly trained in the safe use of the plant (and the fitted accessory attachment) and are made aware of the hazards associated with these operations.

Prior to the operation of the mini skid steer plant (and the fitted accessory attachment), it is important to ensure that sufficient lighting levels are available.

It is recommended that all persons associated with mini skid steer operations use suitable hearing protection due to the noise levels produced from the plant.

L. SUFFOCATION

Prior to performing operations using the mini skid steer, consideration must be given towards ensuring that the area offers effective levels of ventilation in order to minimize the potential for a build up of exhaust gasses.

M. HIGH TEMPERATURE FOR FIRE

Persons involved with the operation of the mini skid steer must not make any contact with either the exhaust system or any internal workings of the plant including the hydraulic pump at any stage, except where maintenance operations are to be performed by a qualified Vermeer Service Technician.

All refueling operations will need to comply with the manufacturers written safety instructions.

N. TEMPERATURE (THERMAL COMFORT)

The plant operator and all observers involved with operations using the mini skid steer will need to be aware of the climatic conditions when performing their operations and take the necessary safety precautions to protect themselves from potential extremes in temperature.

Persons must keep clear from the engine compartment at all times when the mini skid steer plant is in use.

O. OTHER HAZARDS

(CHEMICALS)

Plant operators or maintenance person(s) will need to wear suitable personal protective equipment when handling diesel, radiator coolant, lubricants or hydraulic fluids.

(TOXIC GASES OR VAPOURS)

All persons working on or near the plant will need to keep well clear of the exhaust gases when the plant is being operated.

Care must be applied at all times when handling the battery unit to ensure that no poisonous gasses are inhaled.

(FUMES)

All persons working on or near the plant will need to keep well clear of the exhaust gases when the mini skid steer plant is being operated.

(DUST)

All persons working on or near the plant will need to take appropriate care with potential dust exposure as a result of operations using the mini skid steer.

Suitable protective equipment must be worn in the event where the exposure to dust is experienced.

(NOISE)

It is recommended that an in-situ noise assessment be conducted in accordance with Victorian Occupational Health and Safety (Noise) Regulations 1992.

It is recommended that the plant operator and ALL persons involved in performing operations using the mini skid steer are provided with and wear suitable hearing protection at all times when the plant is in use.

(VIBRATION)

The potential for the plant operator to experience significant levels of “whole body” vibration when performing operations using the mini skid steer exists.

It is also recommended that the operator take regular rest breaks in an attempt to reduce the potentially harmful effects of “whole body” vibration when performing operations using the mini skid steer.

(RADIATION)

The potential for the plant's operator and / or assistant(s) to become exposed to ultra violet radiation emitted from the sun due to varying exposure levels does exist.

It is recommended that regular rest breaks are taken in order to reduce constant exposure to the sun and to apply suitable PPE (Personal Protection Equipment) that is designed to protect both the operator of the plant and any assistant(s) from the ultra violet radiation.

IMPORTANT INFORMATION

The above stated controls relate to the normal use of the plant as described from both the plant operator and those persons involved with performing operations using the mini skid steer plant.

In the event where maintenance and / or repair based operations are being performed on the mini skid steer plant (including the fitted accessory attachment), additional care will need to be applied at all times due to the fact that the maintainer is often exposed to higher levels of risk.

It is important to ensure that all auditory and visual warning devices as fitted to the plant for the purpose of warning individuals when the plant is in operation and when moving, be maintained to the manufacturers' operating standards at all times.

In an attempt to apply the appropriate risk controls, it is recommended that a fully trained and qualified Vermeer maintenance person be employed to perform the necessary repairs and/ or maintenance operations on the particular item of plant.

It should also be noted that all individuals who are required to operate this item of plant or who will be working in the vicinity of the plant will need to be provided with sufficient training to ensure that they are fully aware of all of the risks associated with the item of

plant and are well aware of the appropriate risk control strategies prior to the operation of the plant. This document, together with any additional information provided in the Vermeer Safety/ Operators User Guide will need to be provided as part of this training information that must be provided to all plant operators and their assistants.

SPECIAL NOTE:

In order to comply with the Victorian OHS Regulations (2007) for Plant (Section 3.5.7 Warning devices), the plant may need to be fitted with either a flashing light and / or an auditory warning device mounted at a conspicuous part of the plant for the purpose of warning an individual(s) when the plant is being moved. Either one of these devices (flashing lights and auditory warning) will need to be hard wired into the operator controls for automatic actuation.

Furthermore, either one of these two devices will need to be maintained to ensure that they operate (at all times) in accordance with their designated function.

Should you have any questions regarding the details contained within this report please do not hesitate to contact Gerhard A. Hendricks on 0418 100 902 at your earliest convenience.



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