

HAZARD IDENTIFICATION, RISK CONTROL DOCUMENT for PLANT

DATE OF ASSESSMENT: SEPTEMBER, 2015	PLANT DESCRIPTION : GENERIC RISK ASSESSMENT for COMPACT UTILITY LOADER TRACTION UNITS of following Models: TORO TRACKED MODELS: [Diesel Powered] TX1000 - Operation from Stand-On Platform Model Nos. 22327 and 22328; Serial Nos. 315000001 and Up	ORGANISATION : TORO Australia Pty Ltd
ASSESSMENT BY : HEALTH & SAFETY ENGINEERING Pty. Ltd	HAZARD IDENTIFICATION, RISK CONTROL ASSESSMENT METHOD USED : SAFETY REVIEW	ADDRESS : Unit 1/13 Downard St., Braeside Vic. 3195

NOTES:

1. This Generic Risk Assessment is ONLY for the models of Traction Units referred to in the title block above when used as “Stand Alone” equipment. This document does not purport to address the Risks associated with the use of these Traction Units IN COMBINATION WITH any of the OEM attachments with which these Traction Units might be fitted. When using OEM attachments in combination with any of these Traction Units, the Risk Assessment documents for the individual attachments must also be read in conjunction with this document in order to understand and deal with the Risks involved in the use of these Traction Units combined with any of those attachments. NO Attachments other than OEM attachments should be used with these Traction Units.
2. Management of the unit” means the “person” legally responsible for the use of the unit; it generally means the employer, the company or the legal entity that has responsibility under the Health and Safety legislation in the State or Territory in which the unit is being used. “Management of the unit” must ensure that operators are given sufficient information, instruction, training **AND SUPERVISION** as is necessary to safely perform their role.
3. Some Items refer to Hazards, which can exist if the unit is not adequately maintained – eg. Guards not fitted, gauges fail to correctly display readings etc.. The measures listed to control risks arising from this type of hazard include reference to operating procedures. Operating Procedures cannot make operators responsible for inadequate maintenance/repairs etc. This reference is only intended to ensure that the procedures include the need for all operators to report any faults detected by him/her
4. Although every attempt has been made to identify reasonably foreseeable circumstances, no guarantee as to the completeness of this assessment is implied or provided. This Hazard Identification, Risk Control Document has been prepared based on information available at the date of publication and it therefore has a limited lifespan. This HID/RC document **MUST** be reviewed by all stakeholders and revised :
 - (a) At least annually and after any accident or near miss,
 - (b) According to the particular circumstances under which the plant and/or process is used and maintained,
 - (c) As new hazards are identified or as risks are reassessed,
 - (d) As new or revised control measures are implemented,
 - (e) As and when work procedures are altered.

5. *This document does not purport to be a record that the proposed Risk Controls have been implemented. In order for it to become a complete record that the practicable Risk Controls proposed in Columns C and D have been implemented, the “Management of the Unit” should sign and date Column X against each Item. Until that step is complete, the document simply records that the foreseeable Hazards (see Note 4 above) have been identified and that practicable Risk Controls have been proposed **BUT STILL REMAIN TO BE IMPLEMENTED** at the time of publication. For all the above reasons, the “INVALID” watermark cannot be removed until all Risk Controls (either as proposed in the document or other practicable alternatives) are implemented **and the document completed**.*
6. *In this Hazard Identification, Risk Control Document, the hazards are identified according to the information available to **Health and Safety Engineering Pty. Ltd** and according to our own experience and expertise. There has been no attempt to prioritise the hazards or the risks arising from them, either in relation to each other or in relation to the company’s budgetary position. It is the view of **Health and Safety Engineering Pty. Ltd** that such rankings are the prerogative of the company management after appropriate consultation.*

A	B	C	D	E	F	X
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Describe the Risk Control measures ALREADY implemented	Proposed SUPPLEMENTARY Risk Control Measures	Are the control measures practicable? Yes/No	For Action by whom	Confirmation that the necessary action has been completed
1. GENERAL RISKS ASSOCIATED WITH THE USE OF THESE COMPACT UTILITY LOADER TRACTION UNITS:						
1.1	Persons could be injured or injure others if the operator follows an unsafe, badly designed or ineffectively implemented system of work in relation to the operation of this machine.	As part of the supply package, TORO provides an “Operation & Maintenance Manual” to <u>ALL</u> new owners, AND As part of the supply package, TORO provides <u>ALL</u> new owners with a copy of the relevant Hazard Identification, Risk Control (HID/RC) document for Plant.	Ensure the Operation and Maintenance Manual is accurate and is able to be easily understood. AND The “Management of the Unit” (see appended Notes) should prepare a SAFE WORK PROCEDURE (SWP) based on the Manufacturer’s or Supplier’s information and recommendations as well as on pertinent information about local conditions. AND <u>ENSURE UNAUTHORISED PERSONS CANNOT ENTER THE WORK AREA WHICH MUST BE BARRICADED TO EXCLUDE ALL PERSONNEL OTHER THAN THE OPERATOR</u>	Y	TORO must inform new owner.	

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1.2	Persons could be injured or injure others when operating the unit without sufficient information, instruction, training and supervision. <i>(See above Notes for further explanation about this aspect)</i>	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - The SWP (that includes appropriate information about local operating conditions) is effectively implemented - Operators are competent, have read and understand the information, instructions and training provided (which should include both the Manufacturer’s and local information), - The competence of the operator is verified - Appropriate levels of supervision are exercised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
1.3	Persons may injure themselves or may injure others if the unit is used in inappropriate or unsafe locations or operating conditions	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - The location in which the attachment operates is assessed by a competent person before the operations commence. - SWP (that includes appropriate information about the work areas) is developed and implemented; - Operator is instructed that SWP is to be followed at all times; - Operators are provided with clear instructions about procedures to be adopted if an accident or other dangerous situation occurs, - Operators are adequately informed, instructed, trained and supervised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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1.4	Persons may injure themselves or may injure others if - a machine that is known to be faulty is operated. - the machine or attachment is damaged or develops a fault during operation, - critical parts deteriorate to the point where they are unsafe, or compromise the safety of other components, - critical adjustments to assemblies or components are not maintained within manufacturer's tolerances	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners Where practicable, guards have been installed by the manufacturer.	Management of the unit must ensure that: - Machine is properly maintained in safe operating condition, - SWP (that includes clear instructions relating to procedures to be adopted if any part of the attachment is damaged or becomes unsafe or unserviceable) is developed and implemented, Operators must be trained and instructed that if the machine is not maintained in a safe operating condition, they are to report the unsafe fault to a supervisor, remove ignition key, lock ignition, AND, if necessary Attach to the faulty machine a " DANGER – DON'T USE " tag. The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
1.5	Persons may injure themselves or may injure others if anyone other than the operator rides on the machine	THESE MACHINES DESIGNED AS RIDE-ON EQUIPMENT FOR OPERATORS ONLY. • "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	OPERATORS ARE INSTRUCTED NOT TO CARRY PASSENGERS UNDER ANY CIRCUMSTANCES. Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWP's are to be followed at all times, - Operators are adequately informed, instructed, trained and supervised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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1.6	Persons may injure themselves or may injure others if controls are inadvertently activated directly or indirectly by Operator's loose clothing	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners Where practicable, guards have been installed by the manufacturer. All controls are remote from moving parts and are "Hold to Run" controls	OPERATORS ARE INSTRUCTED TO WEAR CLOTHING APPROPRIATE TO HIS/HER DUTIES. Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWPs are to be followed at all times, - Operator adequately informed, instructed, trained and supervised - Operators are instructed to exclude all other people from the operating area by the use of barricades The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner..	
1.7	Persons could be injured by becoming trapped in moving mechanical parts while wearing long, uncontrolled hair or loose clothing	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners. Where practicable, guards have been installed by the manufacturer. All controls are remote from moving parts and are "Hold to Run" controls. In order to operate most attachments capable of being fitted to these units, operator must move to the opposite end of the unit remote from attachment	OPERATORS are INSTRUCTED to WEAR HAIR APPROPRIATELY TRIMMED, or OTHERWISE CONTROLLED for HIS/HER DUTIES. Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWPs are to be followed at all times, - Operator adequately informed, instructed, trained and supervised - any person with long hair has his/her hair trimmed to a safe length, wears a hair net or uses other appropriate restraining device The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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1.8	Persons may injure themselves or may injure others if: - an operator loses concentration or if any careless operations, stunt driving and horseplay is permitted to occur, - an operator loses control of the unit., - they operate these machines while suffering from excessive tiredness, fatigue, being unwell, or while under the influence of drugs, or alcohol.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners. Where practicable, guards have been installed by the manufacturer.	Management of the unit must ensure that: - The location in which the unit operates is assessed by a competent person prior to the commencement of the operations. - SWP that includes appropriate information about the work areas is developed and implemented; - Operators are instructed that SWP's are to be followed at all times; - Clear instructions are provided to operators about procedures to be adopted if a dangerous situation occurs, - Operators are adequately informed, instructed, trained and supervised - Operators are informed, instructed, trained and supervised to the extent that they are prevented from operating a machine when they have lost concentration or from indulging in careless operations, stunt driving or horseplay - Operators are instructed and supervised to the extent that they are prevented from driving while suffering excessive tiredness, being unwell, or while under the influence of drugs, or alcohol, - Operators are instructed that he/she must report to the supervisor if suffering from poor health to the extent safe operating performance could be affected. - Supervisor decides fitness and capacity of operators for work. The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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2. SPECIAL RISKS ASSOCIATED WITH PARTICULAR CONDITIONS OF USE OF THESE COMPACT UTILITY LOADER TRACTION UNITS						
2.1	Persons may injure themselves or may injure others if the machine or the attachment is deployed where: - Low headroom can compromise safety, such as low tree branches, tunnels, low doorways, underpasses, low electrical conductors - The operator is distracted by noise. - The operator or other persons in the vicinity could suffer hearing loss as a result of excessive noise levels, - The unit is operated in a small, restricted, or confined space - The unit is operated in a location where falling objects such as tree branches, other unrestricted or uncontrolled objects (site debris etc.) can be dislodged or otherwise fall and injure the operator or other people in the vicinity	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners. Where practicable, guards have been installed by the manufacturer.	Management of the unit must ensure that: - The SWP (addressing local operating conditions) is effectively implemented, - Noise levels are within the local statutory requirements for that jurisdiction, - Operators are instructed that SWP's are to be followed at all times, - All operators are instructed to wear earmuffs or some other form of suitable hearing protection. - Particular SWP's are developed and implemented to deal with small working areas from which escape or rescue is difficult, or in which persons may be trapped or suffer the effects of exhaust emissions), - If necessary, barricade or restrict entry to the location where operations occur, - Unauthorised persons cannot enter the restricted work area without adequate controls being in place, - Operators are competent, have read and understand the information, instructions and training provided (which must include Manufacturer's and the local information), - The competence of the operator is verified, - Appropriate levels of supervision are exercised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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2.2	Persons may injure themselves or may injure others if the unit or an attachment strikes an unseen, unrecognised, or unfamiliar object: - While operating below ground level [such as gas or other pressurised fluid lines, electrical supply lines, etc] - While operating in areas where overhead electrical supply, gas (or other pressurised fluid) supply lines are below safe height restrictions or limits - While operating in conditions of low visibility such as fog, heavy rain, snow storms, blizzards etc.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners. Where practicable, guards have been installed by the manufacturer.	Management of the unit must ensure that: - the SWP (addressing particular local operating conditions) is effectively implemented - operators are competent, have read and understand the information, instructions and training provided (which must include Manufacturer’s and the local information), - The competence of the operator is verified - Appropriate levels of supervision are exercised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
2.3	Persons may injure themselves or may injure others if the operator’s vision is impaired by sunlight or bright lights in close proximity.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - All operators are instructed to wear sunglasses or other form of suitable eye protection OR - if protection unavailable, to discontinue operation.	Y	TORO must inform new owner.	
2.4	Persons may injure themselves or may injure others if the unit or the attachment becomes overloaded.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWP’s are to be followed at all times, - Operator adequately informed, instructed, trained and supervised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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2.5	Persons may injure themselves or may injure others if the unit rolls over, trapping or crushing them, particularly in areas around open excavations, embankments, dams, rivers and lakes, or where other subsidence may occur.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - the SWP (addressing particular local operating conditions) is effectively implemented - if necessary, barricade or restrict entry to the location where operations occur - operators are competent, have read and understand the information, instructions and training provided (which must include Manufacturer’s and the local information), - The competence of the operator is verified - Appropriate levels of supervision are exercised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
2.6	Persons may injure themselves or may injure others if unit is operated on an incline sufficient to render the equipment unstable	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners. • Operation Manual makes particular reference to operating on inclines and includes an “aid” to judging safe operating conditions.	Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWP’s are to be followed at all times, - Operator adequately informed, instructed, trained and supervised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
3. PARTICULAR RISKS ASSOCIATED WITH THE MAINTENANCE, ASSEMBLY OR SET-UP OF THESE COMPACT UTILITY LOADER TRACTION UNITS						
3.1	Persons may injure themselves or may injure others: - If the maintenance and/or service personnel do not understand the workings of the machine, - During the assembly, or while fitting or attaching the attachment to the Traction unit.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners. New owner advised that only qualified personnel should maintain and service the machine.	Management of the unit must ensure that: - the maintenance and service personnel read and understand the machine's Maintenance Manual. - Safe work procedures are implemented, - Service & maintenance personnel are instructed that SWP’s are to be followed at all times, - Service & maintenance personnel are adequately informed, instructed, trained and supervised The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	

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3.2	Persons could be injured if the structural members of the unit fail.	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	The unit has been designed and manufactured in accordance with normal commercial standards. It is warranted to be free from defects in materials and workmanship for a specified period. Maintenance schedules are stipulated in Operations Manual.	Y	TORO must inform new owner.	
3.3	Persons may be injured if the structure or operating systems are modified in a way which is outside the design and manufacturing specification.	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	Management of the machine is to ensure that no modifications are made without the approval of the designer or manufacturer.	Y	TORO must inform new owner.	
3.4	Persons may injure themselves or may injure others if the hydraulic hoses are incorrectly coupled to attachments	• Couplings of a different design which prevent inadvertent wrong connection of hoses are installed on OEM attachments • "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWP's are to be followed at all times, - Operator adequately informed, instructed, trained and supervised - Maintenance and service personnel read and thoroughly understand the machine's operation, instruction and maintenance manual. The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
3.5	Persons may injure themselves or may injure others if attachment is not cleaned using appropriate methods or cleaning products or left partially covered with debris such as grease, leaves or grass.	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - All operators and supervisors are instructed to ensure as far as practical that the attachment is to be left in good condition after use, to report faults to maintenance, and to check the unit before use as per Operator's manual. Management of the unit should also provide a logbook for use by operators and service personnel (Sample in the Manuals)	Y	TORO must inform new owner.	

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3.6.	Persons may injure themselves or may injure others if the machine is inadvertently started while storing, adjusting or servicing the attachment.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWP’s are to be followed at all times, - Operator adequately informed, instructed, trained and supervised - Maintenance and service personnel read and thoroughly understand the machine’s operation, instruction and maintenance manual. The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
3.7	Persons may injure themselves or may injure others if: - the unit is operated when the traction control interlock switch is absent or faulty, - if the interlock fails and allows the engine to start when the traction control is in any position other than neutral.	• “Operation and Maintenance Manual”, and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - Safe work procedures are implemented, - Operators are instructed that SWP’s are to be followed at all times, - Operator adequately informed, instructed, trained and supervised - Maintenance and service personnel read and thoroughly understand the machine’s operation, instruction and maintenance manual. - the safety devices are present, operating, adjusted and calibrated as recommended by the manufacturer. The above are ALL the responsibility of the Management of the Unit.	Y	TORO must inform new owner.	
3.8	Persons may injure themselves or may injure others; - if the unit is operated without the guards which have been supplied and fitted by the manufacturer, - or by debris that is ejected the attachment.	- Where practicable, guards installed over dangerous parts - Unit undergoes pre-delivery inspections (controlled by supplier’s checklist) Certificate covering these inspections provided to customer at delivery	• “Operation and Maintenance Manual”, • HID/ RC document are provided to ALL new owners. Advice provided that equipment is not to be operated unless guards and suitable barricades are in place and in good condition.	Y	TORO must inform new owner.	

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3.9	Persons may injure themselves or may injure others: - by incorrectly fitting attachments, - due to leakage of hydraulic oil, - if the unit is operated without all the guards & warning decals supplied being maintained in place, - if any of the gauges fail to correctly display readings.	Hoses, pipes, fittings and attachments appropriate for the "duty" for which the machine is designed, have been selected by designer and installed by the manufacturer. • "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	Management of the unit must ensure that: - the maintenance and service personnel read and thoroughly understand the machine's Maintenance Manual. - Safe Work Procedures are implemented (operators and service personnel to check hydraulic components using appropriate methods - see pre-operational checks, N.B. Oil under high pressure may not always be visible), - Service & maintenance personnel are instructed that SWP's are to be followed at all times (operators and service personnel to report all oil leaks to the supervisor, AND to clean up all spilt oil using appropriate methods and equipment.), - Service & maintenance personnel are adequately informed, instructed, trained and supervised, The above are ALL the responsibility of the Management of the Unit. NOTE: This HID/RA/RC document does not apply if the attachment is used with a Traction Unit other than an OEM Unit.	Y	TORO must inform new owner.	
3.10	Persons could be injured if the machine is being repaired, maintained or serviced on an incline.	• "Operation and Maintenance Manual", and • HID/ RC documents are provided to ALL new owners.	Instruct all operators (SWP) that the machine should be set up on firm level ground for service and general maintenance. If this is not practical, as in the case of emergency repair, the wheels must be adequately chocked or machine towed or pushed to level position. See Operators' Manual for directions.	Y	TORO must inform new owner.	