DIGGA®

TERMINATOR STUMP GRINDER

OPERATORS MANUAL

REVISION TABLE

DATE	REVISION NUMBER	CHANGE DESCRIPTION	CHANGED BY
23/06/2014	1.0	MANUAL CREATED	L.S

DELIVERY SHEET

Owner:	Date:
Address:	
City:	Post Code:
State/Territory:	Email Address:
Owners Phone No: ( )	Mobile:
Dealer/Delivered By :	
Terminator Stump Grinder Serial No:	

Customer's name) ……..…… Salesman/Owner to initial

1. Accept delivery of the equipment as detailed above. All equipment has been inspected and is accepted. ☐ ☐
2. Have had the operational and safety procedures explained to me for the Loader and attachments and have been provided a copy of these procedures for reference and use. ☐ ☐
3. Have received a copy and understand the Operators Manual and safety information contained therein for all equipment and attachments supplied. ☐ ☐
4. Understand that I am required to perform a risk assessment/JSEA covering all tasks before I operate this machine and/or any attachment. ☐ ☐
5. Understand the warranty conditions and maintenance requirements for the Loader and attachments. ☐ ☐

Comments:

_____

_____

_____

_____

Purchaser's Signature: Date:

……..…….. ……/……/…….

FORWARD AS INDICATED OVERLEAF

Once you have Read the Warranty section of this Manual please complete the **Warranty Registration Form** below. And check the details then return within 30 days of the delivery date to the address as indicated below the respective country of purchase on the Registration Form.

Owner:	Phone: ( )
Address:	Mobile:
Town/City:	Fax: ( )
Country:	Post Code:
Delivery Date:	SERIAL NO:
Email:	
DIGGA Agent/Sales Person:	

I (The Purchaser) have read and fully understand the Operator's Manual, Safety Instructions and warranty conditions.

Warranty will only be accepted if this Certificate is completed and returned to:

DIGGA AUSTRALIA:
4 Octal St, Yatala QLD 4207

Email: info@digga.com
Phone: (07) 3807 3330
Fax: (07) 3807 1499

WITHIN 30 DAYS OF DELIVERY DATE

PURCHASER'S SIGNATURE: ……..	DATE: ……

TERMINATOR STUMP GRINDER CHECKLIST

MODEL: _____ INSPECTOR'S NAME: _____

SERIAL No.: _____ MACHINE BUILT BY: _____

ENGINE No.: _____ DATE: _____

VISUAL CHECKS	✓	✗	OPERATIONAL CHECKS	✓	✗
1. Damage			1. Check that slew cylinder stops in correct position		
2. Loose bolts/nuts			2. Attachment Plate		
3. Rust			3. Throttle Lever (not too tight or loose)		
4. Oil leaks.			4. Levers and linkages (Aux Stop Cable adjustment)		
5. Wiring.			5. Unusual noises or vibrations		
6. Paint work			6. Petrol engine Idle 1350-1450 RPM		
7. Any untidy weld spots or runs			7. Petrol engine max 3550-3650 RPM		
8. Check of fittings alignment			8. Is engine easy to start?		
9. Is Terminator clean and tidy?			9. Is Hour Metre working? Test time = hrs		
10. Are hoses secured?			GUIDANCE	✓	✗
SERVICE	✓	✗	1. Correct stickers applied (UK C/E sticker)		
1. Ensure cutter wheel bolts are torqued to 355Nm (260lbft)			2. Correct safety stickers attached		
2. Correct Attachment Plate/ operation ok with test jig			3. Correct serial number stamped.		
3. Lubricate Terminator, grease all linkages			4. Safety/Operating Manual		
4. All pins and bushes fitted and tight			5. Engine Manual (Honda Warranty Form)		
5. Belt tension fan/alternator			Fluid Compartment Check		
6. Are cutter wheel and teeth holders tight?			1. Engine oil level		
7. Air element and hose clearance and connections tight.			2. Inspect fuel tanks for leaks (If Auxiliary Supplied)		
8. Is engine EPA compliant?			OTHER	✓	✗
9. Are QRCs correctly aligned and covers fitted?			1. Is the "Passed By" sticker attached and signed?		
10. Ensure control knobs are not split and are secured			2. Check Terminator to be shipped against order.		
			3. Is teeth gauge attached?		

CUSTOMER'S COMMENTS: _____

_____

_____

_____

INSPECTOR'S COMMENTS: _____

_____

_____

_____

"Received the above TERMINATORand documentation as stated above in good condition. The correct operation of the Terminator has been explained to our satisfaction. We understand that this attachment should be operated by a properly trained operator. We are aware that the use of this Terminator in any manner or place for which it is not designed will render it unsafe."

DISTRIBUTOR'S NAME: _____ INSPECTOR'S SIGNATURE: _____

FOREWORD

We thank you for choosing the DIGGA TERMINATOR STUMP GRINDER. This machine is the result of extensive design and development, and is acknowledged as being a superior product in its category. We congratulate you on your discerning choice and wish you many years of productive service.

Read this manual carefully before operating your machine it contains important technical information, safety precautions and operating instructions. Compliance with Safety Precautions and Risk Management standards together with the correct operation and attention to maintenance procedures are necessary to ensure a long, SAFE and trouble free working life for your DIGGA TERMINATOR.

Some illustrations in this publication show details or attachments that may be different from your machine. Guards and covers may have been removed for illustrative purposes, however, the machine in its operational state must always be operated with all guards and safety controls in place.

Continuing improvement and advancement of product design may have caused changes to your machine which are not included in this publication. We advise you to read, study and understand this manual before undertaking any maintenance, and to keep it with your machine at all times as a ready reference.

SAFETY

The safety section lists basic safety precautions. In addition, this section identifies the text and locations of warning labels used on the machine.
Read and understand the basic precautions listed in the safety section before operating or performing lubrication, maintenance and repair on this product.

DISCLAIMER
While all care has been taken in the development of this product, no loss of any kind is accepted by Digga Australia Pty Ltd or its agents arising from the use of this document.

Digga Australia Pty Ltd makes no representations or warranties with respect to the contents of this document, and specifically disclaims any express or implied warranties or fitness for any particular purpose. Further, Digga Australia Pty Ltd reserves the right to revise this publication and to make changes to its contents, at any time, without obligation to notify any person or entity of such revisions or changes.

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HOW TO CONTACT US

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vic@digga.com
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SAFETY

The safety section lists safety precautions ***required*** to be taken when operating or maintaining your DIGGA TERMINATOR. Read and follow ***all*** operating and safety instructions contained in this Manual and illustrated on the decals fitted to the Loader and attachment, ensuring that you assess the risk of any task by use of the attached Job Safety & Environmental analysis (JSEA) sheet.

If you are unable to identify hazards or do not understand the process for use of the JSEA chart, stop the job and consult a qualified Occupational Health and Safety consultant.

DANGER **THIS SYMBOL HAS BEEN USED THROUGHOUT THIS MANUAL TO HIGHLIGHT CRITICAL SAFETY INFORMATION TO PREVENT DEATH AND INJURY.**

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.

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.

SAFE OPERATION

The DIGGA TERMINATOR STUMP GRINDER is a versatile machine, capable of performing a variety of tasks in a safe and effective manner, when used in accordance with established procedures and supported by Risk Assessment. However, to ensure the safety of operators and others, it is important to ensure that the capacity of the machine is not exceeded and that the Loader is operated appropriately, and only after all tasks associated with the work at hand have been documented and the relevant risk control measures implemented.

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

SAFE LOADING/UNLOADING AND TRANSPORTATION:

- When loading/unloading the DIGGA TERMINATOR from a trailer, it is important that the trailer remains attached to the towing vehicle on a firm level surface.
- Never unload a trailer positioned on a slope.
- Ensure the angle of ascent/descent is within safe operational limitations.
- Ensure bystanders are sufficiently clear.
- All loading/unloading is to be carried out at a slow speed with due care for personal safety and damage to equipment. Practice the manoeuvres first on flat ground if necessary.
- When lifting the machine, use appropriately rated slings and shackles and attach securely to the lifting point on the top of the machine.
- Always use the tie down points on each side of the machine to secure the Loader when transporting.
- Always use witches hats, signage and traffic signals to control the unloading/loading zone, particularly when in close proximity to operational roads.

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 DIGGA TERMINATOR..
- Ensure that the daily inspection routine has been successfully conducted. It is particularly important to ensure that all attachment Locking Pins are fully engaged and secure.
- Ensure the driving platform is free from dirt, grease or mud before use.
- 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 local Service Agent.
- Review the working site for hazards through the use of a Job Safety Analysis and/or Risk Assessment and implement the risk control measures to eliminate or minimise their effects, such as:
    - Overhead power lines
    - Underground services
    - Excavations
    - Slopes or adverse cambers
    - Confined spaces
    - Other obstructions
    - Other people or animals accessing the working area or machine

ALWAYS

- Completely read and understand the Operator's Manual supplied with the machine.
- Undertake a Job Safety and Environmental Analysis (JSEA)and/or Risk Assessment before any use of both the Digga Terminator and the trailer upon which the Loader and/or attachments are carried. A blank JSEA is provided in Appendix A 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.
- Position the trailer carrying the loader in an area free from traffic, establish a traffic control plan/zone, chock the wheels and ensure that people are not placed in a position where they can be struck by vehicles or equipment being loaded or unloaded.
- Demarcate the work area with barricades and/or witches hats before using the Digga Terminator.
- Identify, mark and delineate **all** underground services before any work commences.
- Have both feet planted firmly on the driving platform at all times when operating the Digga Terminator. This is especially important when carrying loads, as body weight provides additional counter-balance to the bucket load.
- Come to a complete stop before changing direction from forward to reverse and vice versa. Failure to do so can affect the stability of the Loader and may also damage the drive of your machine.
- Come to a complete stop before operating other hydraulic controls.
- Reverse down slopes at slow speed when carrying loads.
- Ensure the machine is fully stopped and turned off before alighting or exiting the machine. Never use control levers as hand holds, instead utilize the handholds, using the thumbs and forefingers to operate the control levers.
- Travel at speeds suitable for the conditions and as determined by the task JSEA or Risk Assessment.
- When traveling over undulating surfaces and/or rough terrain, it is essential that the operator ensures that the speed is appropriate to suit conditions and to creep over uneven terrain at minimum speed. The recommended normal operating speed is between 2/3 to 3/4 throttle; at a lower speed the noise levels are reduced to both the operator and bystanders.
- Wear approved, appropriate Personal Protective Equipment **(PPE)**, ***such as:***

  - o Hearing protection
  - o Safety footwear
  - o Eye protection
  - o Hard hat
  - o Long, close fitting protective clothing
  - o A high visibility vest or clothing, etc.

- Keep hands, feet and clothing away from all moving parts, including hydraulic rams.
- Keep body parts within the confines of the machine.
- Keep alert, and avoid being distracted whilst operating the loader.
- Remove the key and chock the wheels whenever the Loader is to be left unattended and/or unsupervised.

NEVER

- Operate this machine or the trailer without undertaking a Risk Assessment or JSEA.
- Operate this machine without Personal Protective Equipment (PPE).
- Exceed the Safe Working Load (SWL) of your machine. Check your operators manual.
- Carry passengers on any part of the Loader or attachments.
- Place feet under the driving platform.
- Smoke (or approach the Loader with a naked flame) whilst operating or refuelling.
- Leave the engine running whilst refuelling.
- Tie or secure yourself to any part of the machine or attachment.
- Fool around while operating the Loader or attachments.
- Carry a load with the bucket raised. Carry all loads as close to the ground as practicable.
- Traverse across slopes, especially on uneven ground.
- Jerk the control levers. Always use a steady, even action to achieve proper control.
- Touch exhaust, engine parts, hydraulic pipes and fittings, drive chains, friction parts or guards.
- Park or leave Loader unattended on a slope.
- Remove safety decals.
- Remove safety guarding.
- During operation use mobile telephones or portable radios.
- Operate machine for extended periods at full throttle.

CAUTION

Always exercise care when operating on slopes. The Digga Terminator has been designed to be able to access restricted areas, due to its minimal width. This, however, reduces its stability when crossing slopes.

The Digga Terminator is designed to operate on slopes to a maximum of 20°, under no circumstance is this to be exceeded. The actual safe slope angle may need to be reduced depending on a number of variables, such as site conditions, attachments, condition and configuration of machine and operator experience.

Crossing slopes should be avoided wherever possible. If it is not possible, slopes should be traversed with loads lowered as far as possible, reduced speed and extreme caution.

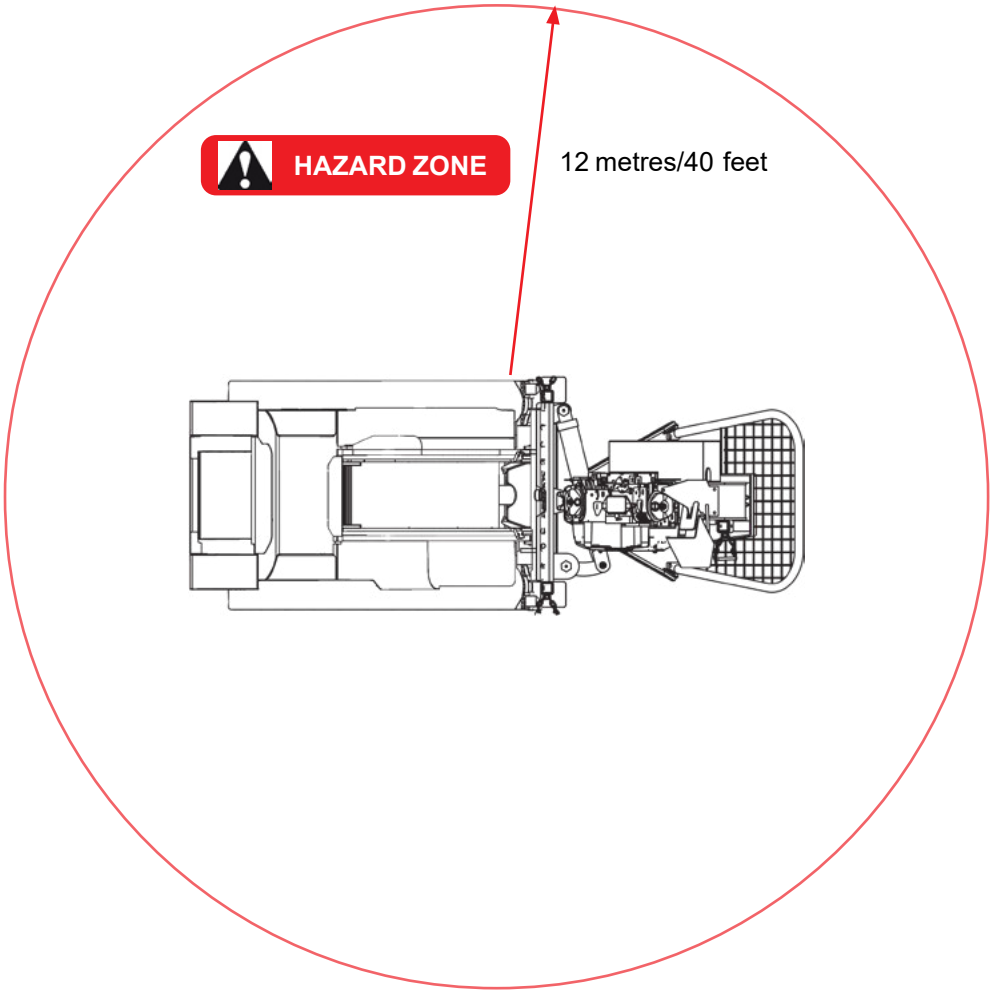
WARNING

Never lift the Digga Terminator Stump Grinder more than 60cm (2ft) off the ground as it may cause the machine to become unstable. Check your machines Safe Working Load (SWL) before connecting the Digga terminator to ensure your machine is suitable for this attachment.

MACHINE HAZARD ZONE

A minimum hazard zone of 12 Metres/40 feet; surrounding the machine must be established. Operating the machine with personnel, animals or property inside this zone could result in serious injury or death to personnel from flying debris. Assistants and other personnel must not be in the immediate area. If working in the vicinity of personnel or property, a protective screen must be erected around the machine and the immediate work area. e.g. star pickets driven into the ground around the area and surrounded with a substantial screen mesh 1.8m (6 feet) high and secured to the pickets.

It is critical that all safety rules are adhered to meticulously by the operator.



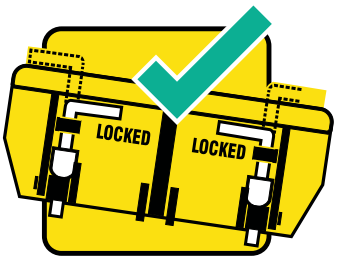
SAFETY SUMMARY

DANGER

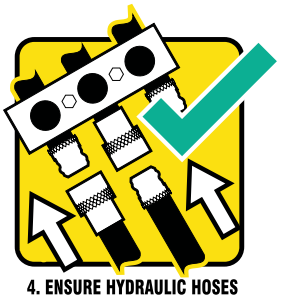
FAILURE TO READ THESE SAFETY RULES PRIOR TO ANY MACHINE OPERATIONS MAY LEAD TO SERIOUS INJURY, PROPERTY DAMAGE OR DEATH

1. READ OPERATORS MANUAL PRIOR TO USE

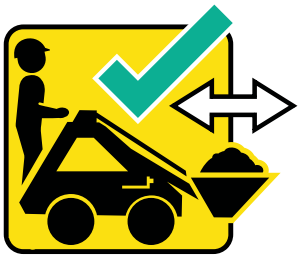
2. DAILY INSPECTION



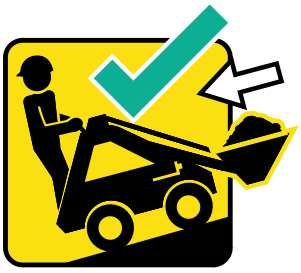
3. ENSURE BOTH (2) ATTACHMENT LOCK PINS ARE FULLY ENGAGED



4. ENSURE HYDRAULIC HOSES ARE CLEAN AND ATTACHED

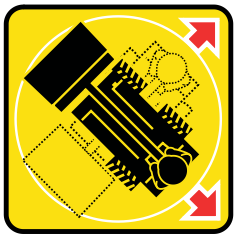


5. TRANSPORT MATERIAL WITH BUCKET DOWN AND LEVEL



6. ALWAYS REVERSE DOWN SLOPES

7. WEAR APPROPRIATE PROTECTION



8. NO PERSONNEL WITHIN A 4M (12 ft.) DIAMETER

9. NO SMOKING WHILE FILLING

12. AVOID TRAVELLING ACROSS SLOPES

13. NO PERSONNEL IN BUCKET OR ATTACHMENTS

14. PAY ATTENTION

NO GO ZONES FOR UNDERGROUND UTILITY SERVICES

No work is to commence on any worksite until you have checked if it contains underground services. Here is how you can find out.

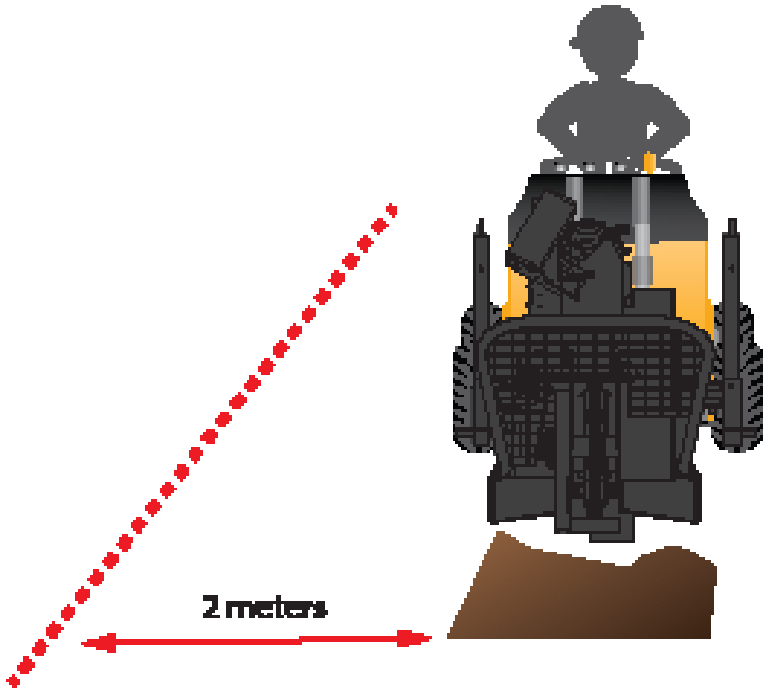
- The “Dial Before You Dig” service (in Australia), **dial 1100**, provides free and easy access to the records of a large number of organizations, including telecommunications, water, electricity and gas.
- To see a list of organizations registered with the service or to log an enquiry electronically, visit the Dial Before You Dig website at *www.dialbeforeyoudig.com.au*, or telephone 1100 (otherwise consult with your local environment department).

If underground services are present, you must comply with the No Go Zones.

If the worksite contains or is suspected to contain ANY underground services, before any work commences, you must follow the relevant No Go Zone safety procedures:

- No Go Zone safety procedures are available from all gas, water, telecommunications and electricity companies.
- You must follow these safe systems of work at all times. If you cannot comply with these safety procedures, then **NO** work shall be undertaken without written permission being received from the utility company.
- The Digga Terminator must be kept a minimum distance of 2 metres from all underground services.

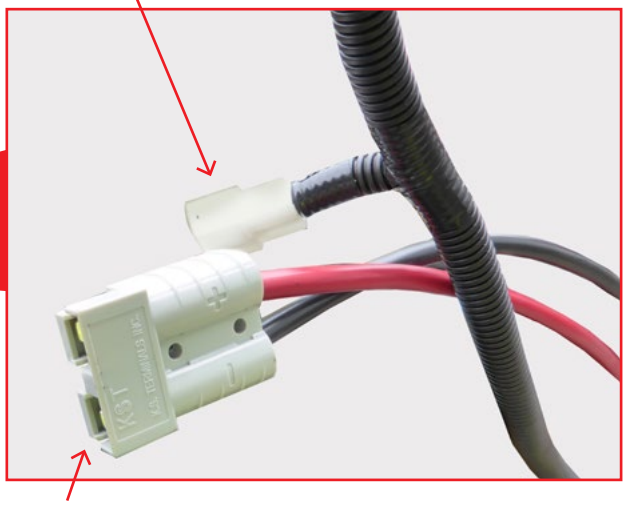
MAINTAIN A MINIMUM OF 2 Metres DISTANCE FROM ANY UNDERGROUND SERVICE.



BEFORE USE

The Digga Terminator Stump Grinder must be connected to the machines power supply (battery) and to the loaders auxiliary cut out system (deadman switch) by your loader dealer or auto electrician.

2 Pin Utilux plug for connection to loaders auxiliary cut out system



Anderson plug for connection to loaders power supply

DANGER

NEVER OPERATE THE DIGGA TERMINATOR STUMP GRINDER WITHOUT CONNECTING THE AUXILIARY CUT OUT SYSTEM. FAILURE TO DO SO MAY LEAD TO INJURY.

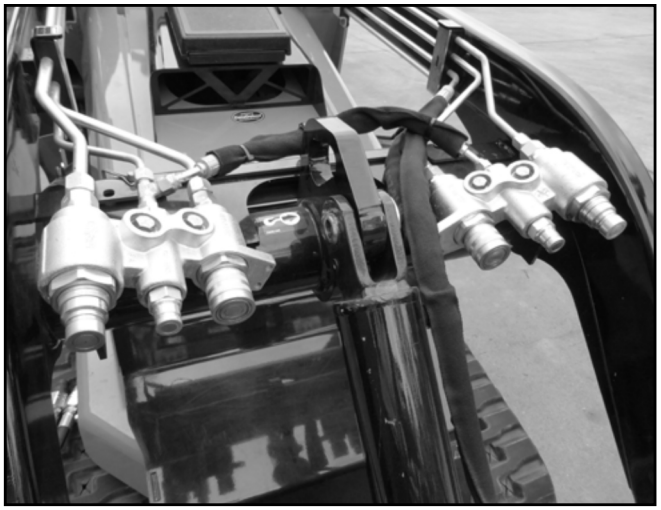
CONTROLS

The Digga Terminator Stump Grinder is started / turned off and it's speed / RPM is controlled via the loader arm mounted control box.

The loader controls are used to operate the up / down and slewing operation of the Digga Terminator.

The Digga Terminator is supplied with 2 hydraulic hoses and couplers which are to be connected to the loaders hydraulic remotes. This will operate the slewing motion.

Check your loaders operators manual to determine which remotes to use and how to connect the couplers onto the machine.



OPERATING INSTRUCTIONS

NOTE

THESE OPERATING INSTRUCTIONS ARE SPECIFICALLY DESIGNED FOR THE TERMINATOR STUMP GRINDER. YOU SHOULD READ THESE INSTRUCTIONS TOGETHER WITH THE APPROPRIATE MANUAL RELEVANT TO THE LOADER BEFORE STARTING.

ENSURE YOU READ AND UNDERSTAND ALL SAFETY INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THE TERMINATOR.

NOTE:

Check the fuel level and fill up if necessary. Ensure that the fuel is the correct type, free from impurities or water. Check that both the crankcase oil and hydraulic oil levels are within operating limits.

CAUTION

THESE CONNECTING INSTRUCTIONS ARE SPECIFICALLY DESIGNED FOR THE STUMP GRINDER. YOU SHOULD READ THESE INSTRUCTIONS TOGETHER WITH THE APPROPRIATE MANUAL RELEVANT TO THE LOADER BEFORE STARTING.

CAUTION

ENSURE YOU READ AND UNDERSTAND ALL SAFETY INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THE DIGGA TERMINATOR THE STUMP GRINDER.

CAUTION

ENSURE THAT ALL LEVERS ARE IN THEIR NEUTRAL POSITION.

CAUTION

DO NOT MOVE ANY OF THE CONTROL LEVERS UNLESS STANDING WITH BOTH FEET ON THE DRIVING PLATFORM AND HOLDING THE GRIP HANDLES, ENSURING NON-OPERATING PERSONNEL ARE CLEAR OF THE LOADER.

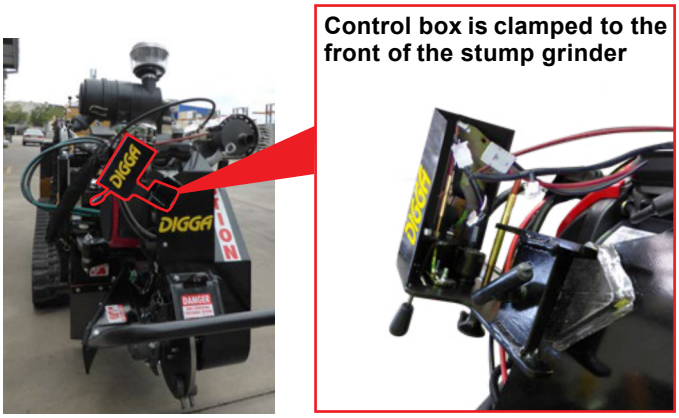
1. Drive the loader to the Terminator and engage the attachment plate to the attachment mount. Press the attachment locking pins into position ensuring the attachment locking pins are securely fitted.

2. Switch off the loader at the loader ignition and remove the key.

3. Detach the terminator remote control box from its stored position located at the front of the attachment **(Figure 1)**. Affix the Terminator control box to the right hand loader arm as shown below **(Figure 2)**. A butterfly bolt is provided for convenience and alleviates the necessity for tools. Ensure the bolt is tightened securely. Make sure the umbilical sleeve is routed on top of the arm and not subject to any crush points.

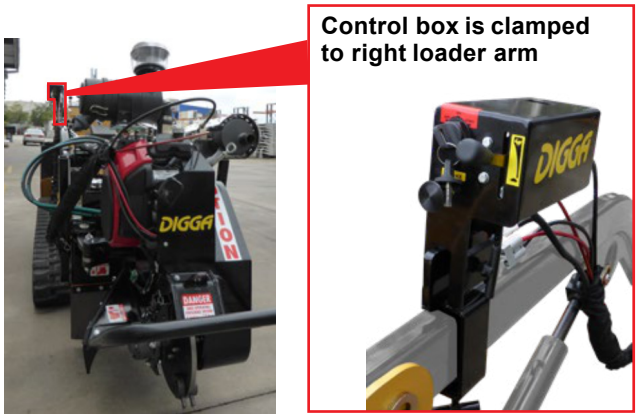
4. Plug the Auxiliary Cut out Connection firmly into the corresponding plug on the loader.

STORED POSITION



(Figure 1)

OPERATING POSITION



(Figure 2)

5. Plug in the battery lead connection ensuring correct alignment of the terminals.

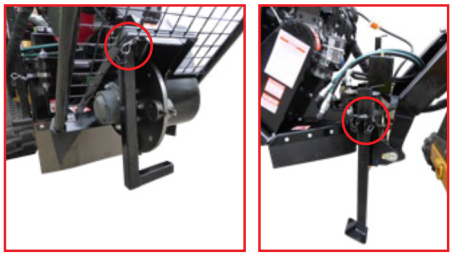
6. Attach Quick Release Couplers to loader according to loaders operators manual.

7. Ensure hoses are free from pinching and rubbing on loader tyres or track.

8. Move the front leg and the back legs into operating position by removing the pin and R Clip holding them in place (Figure 1). Place the front leg on top of the safety guard and slide the rear legs upwards (Figure 2). Once in position secure with pin and R Clip.

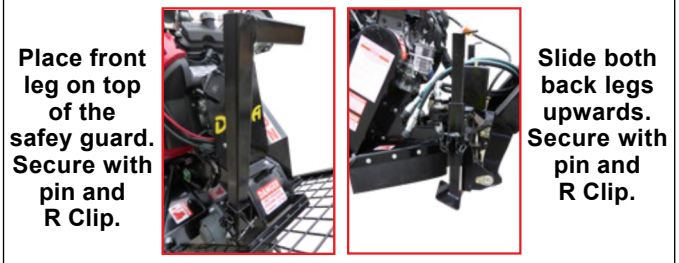
9. Ensure non-operating personnel are at least 12 metres/40 ft from any point of the Loader or Terminator.

LEGS IN STORED POSITION



(Figure 1)

LEGS IN OPERATING POSITION



(Figure 2)

10. Ensure there are no obstructions around the Loader or Terminator. Remove any wheel chocks.

11. Do not operate any of the Loader or attachment control levers including auxiliary power take-off unless you are standing with both feet on the platform of the Loader. Keep hands, feet and clothing away from all moving parts, including hydraulic rams and keep all body parts within the confines of the Loader.

12. Start the loader and then start the Terminator engine by engaging the key switch. Refer to the engine manual for correct throttle starting positions in warm and cold conditions. Turn starter key switch to start engine.

13. Using low engine speed on the Loader (Smooth idle RPM for the sweep action), and 1/3 to ½ throttle, on the Terminator using slow smooth movements; test all controls and functions of both the Loader and Terminator ensuring correct operation. Warning: Ensure the teeth do not come into contact with any material other than wood.

14. The Stump Grinder Throttle is to be set at about ¾ for normal grinding operations.

15. When detaching and storing the the attachment, ensure that the rear legs are fully extended to stabilise the attachment.

MAINTENANCE

INSPECTION AND CHECKS

Before each day's operation of the Digga Terminator, 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 Digga Terminator operators.

For expert advice and quality service, consult an expert repairer, we recommend an authorised Digga service dealer.

The owner should retain evidence that proper maintenance has been performed as prescribed.

A claim against a warranty will not qualify if it results from lack of maintenance and not from defective material or authorised workmanship.

CAUTION

DO NOT OPERATE A DIGGA TERMINATOR 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

ENSURE THE STUMP GRINDER IS NOT RUNNING OR CONNECTED TO ANY POWER SOURCE, OR A LOADER WHEN UNDERTAKING ANY CHECKS OR MAINTENANCE ON THIS ATTACHMENT.

DAILY OPERATOR MAINTENANCE/SAFETY CHECKS

1	Inspect the machine frame for any visible damage.
2	Check that the teeth and wheel are tight and secure and that there are no obstructions or entanglements around the teeth or wheel.
3	Check all linkage pins for greasing.
4	Check Drive Belts for wear and tear.
5	Check cutting teeth are the same length with Teeth Gauge.
6	Visually inspect all components to ensure they are firmly attached.
7	Visually inspect electrical wiring loom, remote start switch, and dead man foot pedal for signs of damage and functionality.
8	Ensure there are no fuel leaks.
9	Check the engine oil levels are within operating limits as marked on the dip stick. (Both Loader and Terminator)
10	Ensure the arm lock is securely and correctly positioned.
11	Check fuel levels for both the Terminator and Loader.
12	Protection devices condition e.g. rubber flaps, guards, covers etc.
13	Personal Protection Equipment. Safety Glasses, Ear Protection, Safety Boots, High Visibility Vest, Respirator, Long Close Fitting Protective Clothing.
14	Safety Decals and Operator's Manual in place.

SERVICE CHART

ACTIVITY HOURS	20	120	220	320	420	520	620	720	820	920	1020	1120	1220	1320	1420
ENGINE OIL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ENGINE OIL FILTER		R	R	R	R	R	R	R	R	R	R	R	R	R	R
ACTIVITY HOURS	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
AIR FILTER	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACTIVITY HOURS	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
AIR FILTER*		R		R		R		R		R		R		R	
FUEL FILTER *	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IDLE SPEED		X		X		X		X		X		X		X	
SPARK PLUGS	X	R	X	R	X	R	X	R	X	R	X	R	X	R	X
VALVE CLEARANCE		X		X		X		X		X		X		X	
GREASE ALL PINS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DRIVE BELTS**	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CUTTING TEETH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CLUTCH					X/R					X/R					
VISUAL CHECK	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SERVICE STAMP															
DATE SERVICED															

NOTES

- The warranty on the equipment is subject to the periodic maintenance being carried out at the intervals specified. If a service provider other than Digga is used, maintenance records from the trade qualified provider may be required to support any claim.
- Only genuine spare parts should be used during servicing.
- Where X/R appears in the chart, a service or replacement would be necessary depending on the condition of the unit and the operating environment in which the unit is being used.
- *Replace the air and/or fuel filter sooner if dusty conditions are encountered often.
- **Replace as required.

SERVICE INTERVALS

The following service work should only be carried out by a qualified Service Technician at intervals indicated on the Service Chart.

The operating hours are displayed by the Hour Metre on the TERMINATOR.The display will flash for 2 hours when a service is due. The flashing will cease after a two hour operating period has passed.

SERVICE TASKS - ENGINE

ENGINE OIL
Change the engine oil after the first 20 hours of operation and thereafter after every 100 hours.
Generally engine oil type SAE 10W-30 is recommended. See Engine Manual for details.

ENGINE OIL FILTER
Replace the oil filter after every 100 hours of operation. See Engine Manual for details.

AIR FILTER
Service and clean the air filter every 8 hours. Replace the air filter after every 200 hours of operation.

FUEL FILTER
Replace the fuel filter after every 100 hours.

IDLE SPEED
Check engine idle speed after every 200 hours of operation, and adjust if out of specification. See Engine Manual for details.

SPARK PLUGS
Replace after every 200 hours.

VALVE CLEARANCES
Check and adjust engine valve clearances after every 200 hours of operation. See Engine Manual for details.

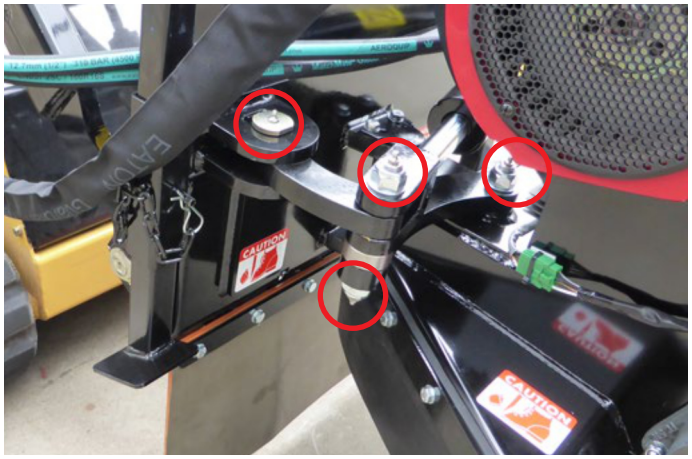
SERVICE TASKS - GREASE NIPPLES

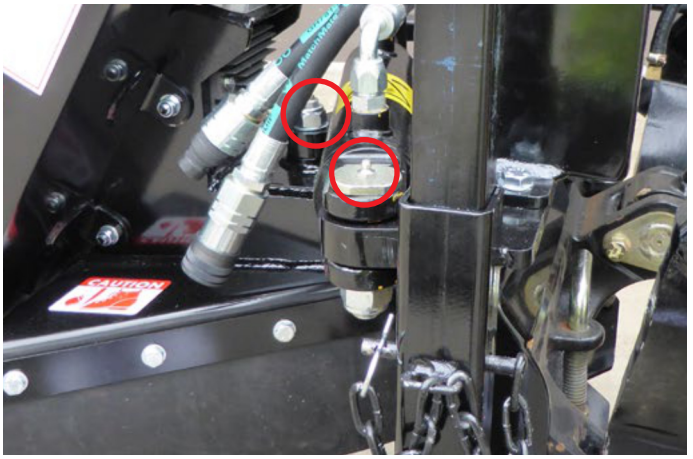
GREASE
Grease* all pins after every 8 operating hours and inspect for wear all linkage pins every 100 operating hours. (Grease type castrol apx t or equivalent)

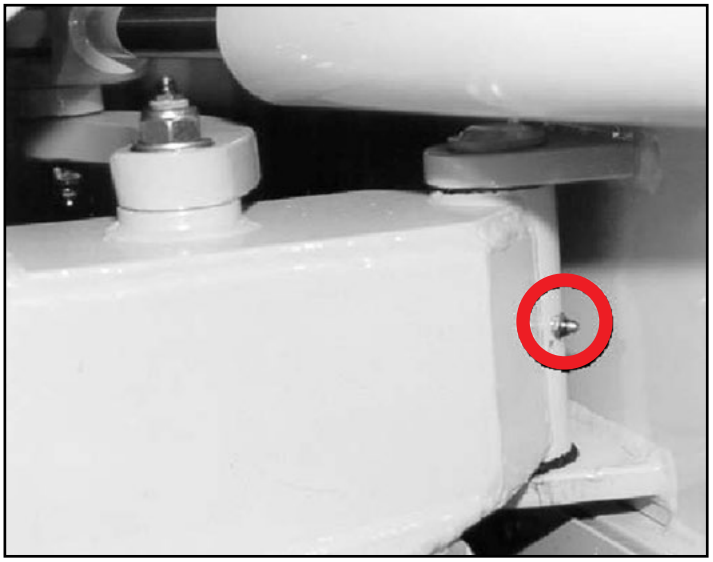
* The frequency for regreasing depends on the workload and the severity of the working conditions. Regreasing during the day of operation may be necessary (see daily checks page).

NOTE
Replace the oil filter after every 100 hours of operation. See Engine Manual for details.

SHOWS LOCATION OF GREASE NIPPLES







SERVICE TASKS - CUTTERS

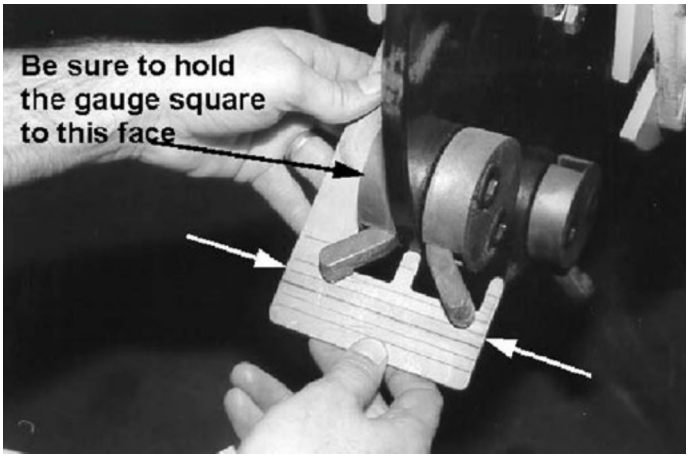
GREASE
Check cutter teeth daily for wear and damage as part of the daily checks. Replace worn or damaged teeth. There is a pair of cutter teeth located in 4 positions around the cutter wheel. It is essential that these teeth are correctly positioned and securely retained.

From the factory, the cutter wheel is supplied with 4 pairs of straight cutters. Cranked right and left hand cutters can be fitted by the operator to suit the application.

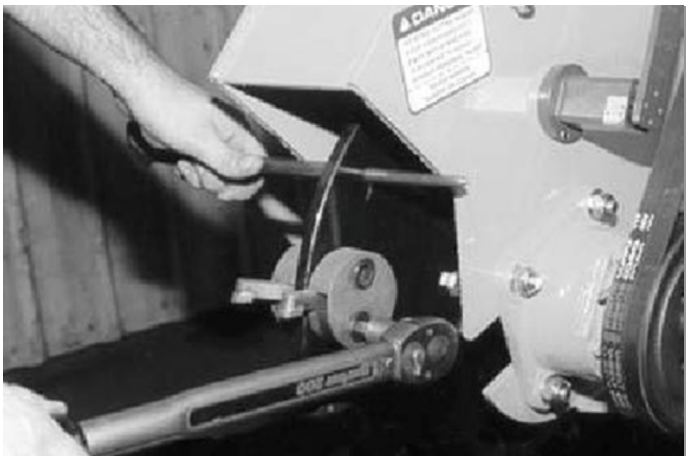
When mixing straight and cranked cutters it is important to make sure that the grinder wheel stays balanced. This means that the same cutter combination is installed in the diametrically opposed po-sition on the grinder wheel.

CUTTER PROJECTION
It is important that all cutters project the same distance from the grinder wheel. This can be achieved with the use of a gauge plate supplied.

Replace teeth as necessary when badly worn, damaged or uneven.



ALL CUTTER TEETH MUST PROJECT TO THE SAME GAUGE GUIDE LINE



ALL 8 BOLTS TO BE TIGHTENED TO 355NM (260 LB FT).

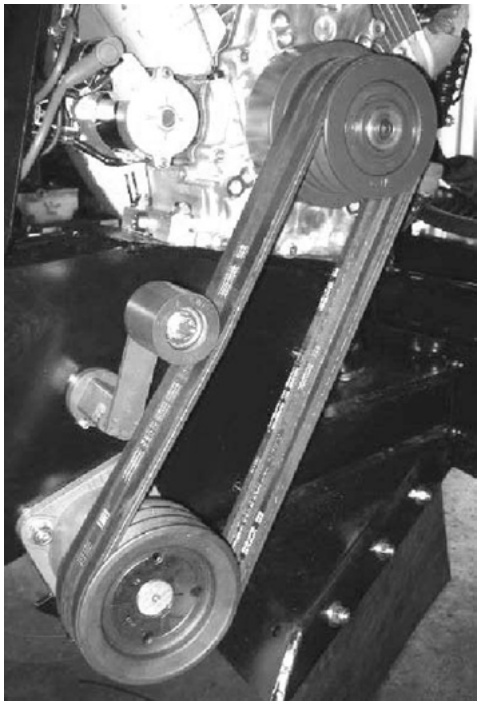
SERVICE TASKS - VISUAL

VISUAL CHECK
Check all over machine for loose bolts, cracks and dents on a daily basis. Tighten loose bolts, and replace if worn or damaged.

Ensure all Safety Decals are clean and legible

SERVICE TASKS – DRIVE BELTS

NOTE
The belt tensioner is self adjusting; remove it to change belts. Check belts on a daily basis for wear and tear and replace as necessary. To ensure even tension and wear, replace all 3 belts together.



REMOVE BELT GUARD AND SAFETY BAR TO GET ACCESS TO DRIVE BELTS

SPARE PARTS

For further information on spare parts please contact your nearest Digga Dealer

DIGGA HEAD OFFICE - BRISBANE
4 Octal St, Yatala QLD 4207

PH: (07) 3807 3330

EMAIL: info@digga.com

DIGGA NEW SOUTH WALES
19 Mckay Close,
Wetherill Park, NSW 2164

PH: 1300 2 DIGGA

EMAIL: nsw@digga.com

DIGGA VICTORIA
17-21 Babbage Drive,
Dandenong, VIC 3175

PH: 1300 2 DIGGA

EMAIL: vic@digga.com

WEB: www.digga.com

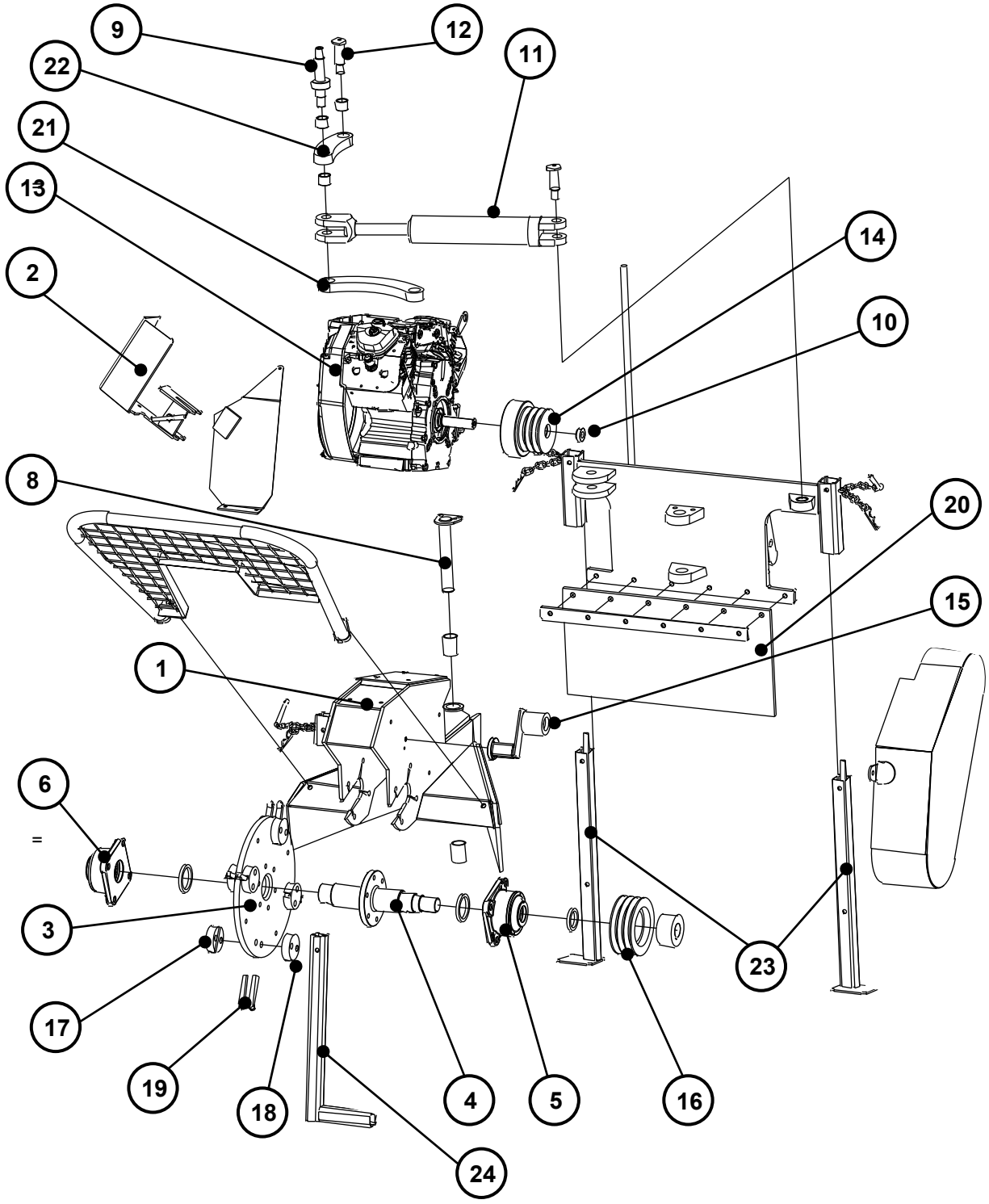
TROUBLESHOOTING

This section contains trouble-shooting information to be used for locating and correcting problems which may develop with your TERMINATOR STUMP GRINDER.

Troubleshooting and maintenance information relating to the engine are contained in the Engine Manual.

TROUBLE	PROBABLE CAUSE	REMEDY
Engine will not crank over	Low battery output	Recharge or replace battery.
	Loose, disconnected, or broken battery cables.	Inspect cable(s) and tighten all connections. Repair or replace cables as necessary.
	Faulty Starter	Repair or replace starter
	Faulty Dead-man switch	Check operation with continuity tester. Replace as necessary
	Faulty circuit wiring	Check wiring continuity
	Engine flooded	Remove spark plug and crank
Engine cranks but doesn't fire	No fuel in tank.	Refill fuel tank
	Spark plug fouled	Check spark plug gap and clean or replace spark plug.
	Dirty fuel filter	Clean filter.
	Carburettor flooded	Clear carburettor
	Fuel valve closed	Open valve
Engine runs but stalls	Spark plug fouled	Check spark plug gap & clean or replace
	Fuel valve closed	Open valve
	Low battery output	Recharge or replace battery.
	Power take-off engaged	Shift power take-off lever into neutral

MAIN FRAME - PARTS LIST



MAIN FRAME - PARTS LIST

NO.	STOCK CODE	DESCRIPTION	QTY
1	0K70002	UNI STUMP GRINDER FAB	1
2	0K70041	STUMP GRINDER/SLASHER THROTTLE MOUNT	1
3	0K70101	STUMP GRINDER WHEEL 380 OD 24 HP	1
4	0K70202	STUMP GRINDER SHAFT 24 HP	1
5	0K70311	BEARING HOUSING STUMP GRINDER LH 510	1
6	0K70312	BEARING HOUSING STUMP GRINDER RH 510	1
8	0K72100	MAIN PIVOT PIN [SG] 1-1/4 2 BOLT CLEVIS	1
9	0K72400	LINKAGE CONECTION PIN [SG]	1
10	0K73200	STUMP GRINDER CLUTCH RETAINER WASHER	1
11	0K10198	CYLINDER PETROL STUMP GRINDER [PAINTED]	1
12	L110900	PIN C (60MM)	2
13	L116050	ENGINE 24HP HONDA INC MUFFLER GX670	1
14	L173110	CLUTCH SUIT 24HP 3B SECTION S/G 1-1/8 B	1
15	L173410	ROLLER TENSIONER SUIT 24HP S/G	1
16	L173612	PULLEY 180MM BOTTOM SUIT RETRO FIT	1
17	L171100	POCKET THREADED	4
18	L171000	POCKET COUNTERSUNK	4
19	L171400	TOOTH STR STD STUMP GRINDER	8
20	L171601	SKIRT 461 x 175 x 10	2
21	0K72300	STUMP GRINDER LARGE BANANA	1
22	0K72500	STUMP GRINDER SMALL BANANA	1
23	0K72700/800	STUMP GRINDER LEG RH/LH	1
24	0K72900	STUMP GRINDER FRONT LEG	1
	0K19010	THROTTLE LEVER	1
	0K19020	THROTTLE BRACKET	1
	0K19025	THROTTLE BRACKET HONDA	1
	0K19052	STUMP GRINDER CHOKE BKT	1
	0K19210	FRICTION WASHER 4MM (THROTTLE LEVER)	1
	0K20373	AIR CLEANER PLATE 24 HP	1
	0K20375	STUMP/G DONALDSON AIR CLEANER BKT	1
	0K22000	U-BEAUT BRACKET BARE	1
	0K70003-1	CARBIE BREATHER KIT PETROL STUMP GRINDER	1
	0K70006	STUMP GRINDER ARM LOCK	1
	B2BNAN10	AN 10 BEARING NUT	2
	H1HOSEGUARDNYLON-12	HOSE GUARD NYLON RH31 3/4 HOSE PER MTR	3
	H1HOSEGUARDNYLON-16	HOSE GUARD NYLON RH46 1 HOSE PER MTR	2
	H1SA22MMDOUBLE	22MM DOUBLE HOSE SADDLE SMOOTH [PR]	2
	H1SATPDOUBLEGROUP3	SADDLE TOP PL DOUBLE GROUP 3 19 TO 25.4	2
	HAHTST-BT-M04M04	HOSETAIL M-1/4 BSPT X M-1/4 HOSE	1
	HAST-UJ-M12M12	NIPPLE M-3/4 UNO X M-3/4 JIC	2
	KL500HGSPIRAL50MM	HOSE GUARD SPIRAL 50MM [44MM ID] 500 L	1
	L110030G	BOLT KIT THROTTLE	1
	L114450	PIPE CLIP 8 MM ID	4
	L115570	KEY STEEL/STICK SP1/4X1/4X1FT	25mm
	L115941	FILTER HONDA KID FUEL	1
	L115942	FILTER Z15 FUEL INLINE	1
	DE-000047	DECAL DIGGA AUST	2
	L118557	DECAL DANGER ROTATING BLADE	1
	L118558	DECAL HIDDEN BEARING	1
	L118559	DECAL CAUTION/BOOT	3

NO.	DESCRIPTION	QTY
L118561	DECAL CRUSH TRIANGLE	1
L118566	DECAL S/G SAFE OPERATING RANGE	2
L118567	DECAL DANGER NO PERSONNEL	2
L118570	DECAL TERMINATOR INSTRUCTIONS 2 PER	1
L119021	BALL JOINT	2
L119027	CLAMP CABLE CASING	1
L119050	CABLE THROTTLE STUMP GRINDER	1
L119051	CABLE CHOKE STUMP GRINDER	1
L119200	RETAINER CABLE	1
L119220	ROUND KNOB THROTTLE	1
L119900	QRC 1/2 MALE PIN TYPE	1
L119910	QRC 1/2 FEMALE PIN TYPE	1
L119920	QRC COVER 1/2 SUIT MALE QRC	1
L119930	QRC COVER 1/2 SUIT FEMALE QRC	1
L119950	QRC COVER 1/4 SUIT MALE QRC	1
L119960	QRC 1/4 MALE PIN TYPE	1
L120322	HOSE SUIT 90 DEG 5 DONALDSON AIR CLEANER	1
L120350	HOSE CLAMP 34MM-57MM [HSO28P]	1
L120355	HOSE CLAMP 40MM-64MM [HSO32P]	1
L120360	HOSE CLAMP 6MM-16MM [MH004P]	3
L120381	ADAPTOR TO SUIT GX 670 K1	1
L120382	SEAL SUIT 670 ADAPTOR	1
L120383	INSERT 24 HP ADAPTOR	1
L120667	AIR CLEANER 90 DEG 5 DONALDSON COMPLETE	1
L120691	ELEMENT SAFETY SUIT 5 DONALDSON	1
L121540	HOUR 806-103-3044 CLOCK/TACHO	1
L122210	HOSE RFUEL06 FUEL 1/4	2
L170010-1	HOSE ST/GRINDER24HP QRC TO TOP CYL	1
L170010-2	HOSE ST/GRINDER24HP QRC TO BOTTOM CYL	1
L170030	BOLT KIT STUMP GRINDER	1
L170420	BEARING SPHERICAL 22210EJW33C3+11	2
L170630	TAB WASHER AW10X	2
L170710	SPACER SR90X10	1
L170820	SEAL VITON SUIT 60 MM SHAFT	2
L170830	SEAL VITON SUIT 45 MM SHAFT	1
L171390	GAUGE TEETH STUMP GRINDER	1
L171500	BOLTS 5/8 UNF x 1 3/4 SHCS	8
L171610	SKIRT 600 x 300 x 10	1
L171611	SKIRT 630 x 300 x 10	1
L172200	KEY 10 x 8 MAKE A KEY	0
L173312	BELTS B53 SUPER 2 SUIT 180MM PULLEY	3
L173500	ELEMENT TENSION	1
L173710	BUSH TAPER LOCK SUIT 24HP SG	1
L174001	LOOM ELECTRICAL KIT STUMP GRINDER	1

SPECIFICATION
TERMINATOR STUMP GRINDER

PERFORMANCE		
MAX RPM	3,600	
OPERATING WEIGHT	173 Kg	381 lbs
ENGINE		
MANUFACTURER	Honda GX690	
POWER	17.9 kW	24 hp
DRIVE SYSTEM		
SLEW CONTROL	Via Loader Controls	
THROTTLE CONTROL	Hand Lever	
DIMENSIONS		
WIDTH	840mm	33”
HEIGHT	1350mm	53”
LENGTH	1160mm	46”
WEIGHT		
TERMINATOR	248Kg	546lbs
AUX FUEL TANK	9Kg	20lbs
OPERATIONAL		
VARIABLE TILT	90deg	
BLADE DIA	380mm	15”
TEETH (PRS)	4	

WARRANTY

All new Digga products are warranted to be free from defects in materials or workmanship, for a period of twelve (12)months from date of original purchase, which may cause failure under normal usage and service when used for the purpose intended. In the event of failure within twelve (12)months from initial retail sale, lease or rental date (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, blade cutting edges, pilot bits, auger teeth, auger heads & broom bristles), if after examination, Digga determines failure was due to defective material and/or workmanship, parts only will be repaired or replaced. Digga may request defective product or products be returned prepaid to them for inspection at their place of business at 4 Octal Street Yatala, Queensland, or to a location specified by Digga. The warranty will be considered void if the product or any part of the product is modified or repaired in any way not expressly authorized by Digga, or if closed components are disassembled prior to return. Closed components include, but are not limited to: gearboxes, hydraulic pumps, motors, cylinders and actuators. Any goods returned to Digga by the customer under warranty or repair must have all freight charges prepaid for on the customers account. Any claims under this warranty must be made within fifteen (15)days after the Buyer learns of the facts upon which such claim is based. All claims not made in writing and received by Digga outside the time period specified above shall be deemed waived.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL DIGGA BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGE. DIGGA'S LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES TO BUYER, RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING DIGGA'S NEGLIGENCE, IRRESPECTIVE OF WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCTS WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED, OR, AT THE ELECTION OF DIGGA, THE REPAIR OR REPLACEMENT OF DEFECTIVE OR DAMAGED PRODUCTS.

JOB SAFETY AND ENVIRONMENTAL ANALYSIS WORKSHEET

JOB SAFETY AND ENVIRONMENTAL ANALYSIS(JSEA) WORKSHEET														
PROJECT/AREA								**SITE NAME:**						
Workplace/Area						**This JSEA Covers:**						**JSEA No:**		
JSEA Team ***(Attach separate sheet if required)*****:**								**Reviewed By:**				**Date:**		
Isolation Plan Ref:								**Authorised By:**				**Date:**		
Type of Permit/Licence/Plan Required														
	Yes	**No**		**Yes**	**No**		**Yes**	**No**		**Yes**	**No**		**Yes**	**No**
None			Penetration			Gas			Gast Test Required			Solid/Lucid Waste		
Hot Work			Excavation			Isolation			Explosives]			Lifting Analysis		
Cold Work			Confined Space			Electric Isolation			Air/Water Emissions			Traffic Control Permit		
Engineering			Heights			High Voltage			High Pressure Water			Complex Isolations (plan required)		
PPE Requirements (Additional to standard site PPE requirements)												**SMP Requirements**		
	Yes	**No**		**Yes**	**No**		**Yes**	**No**		**Yes**	**No**		**Yes**	**No**
Chemical Goggles			Respirator (P1/P2 Mask)			Barricading/signs/ Witches Hats			Chipper Screens			Emergency Response Plans		
Face Shield			Safety Helmet			Fire Blankes/ Spark Containment			Electrical Safety(eg gloves & live line rescue)			Plant & Equipment Condition		
Respirator (full face/half face)			Gloves			Extinguishers/ Charged Fire Hoses			Material Safety Data Sheets (MSDS)			Task Specific Training/Induction		
Other:														
Ensure prior to the commencement of operations this area is reviewed by all personnel for any inclusions to the required PPE for the job.														

Potential Environmental Hazards (This item requires continual review to include the specific area or activity requirements)						**Hazardous Materials/Substances** (List any hazardous material/substances to be used or that may affect operaitons – reference chemwatch I.D.'s)	**Fire/Emergency Equipment Requirements** (Consider fire extinguishers, rescue equipment etc)
	Yes	**No**		**Yes**	**No**		
Air Pollution (dust,fumes)			Spills to ground				
Noise (plant & equipment)			Soil Erosion				
Spills to Drains/Waterways			Hazard to Flora or Fauna				
Details of special precautions to be taken:							

Available through

earthmovingwarehouse.com.au

0459927346 (0459 WAREHOUSE)
Shed C1/C2 194 Zillmere Road,
Boondall Brisbane 4034
QLD