



AUGER TORQUE



AUGER DRIVE UNIT OPERATOR'S MANUAL

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PRODUCT & MODEL :

SERIAL NUMBER :

Note: always quote the serial number in any communication with your dealer

SUPPLIER / DEALER :

.....
.....
.....

DATE OF DELIVERY / INSTALLATION :

MANUFACTURER / DISTRIBUTOR :



Auger Torque Australia Pty Ltd.
5A Priority Street ,
Wacol
Queensland 4076
Australia.
Ph. (07) 32711007
Fax. (07) 32711002

OWNER OR OPERATOR :

.....

PARENT MACHINE MAKE & MODEL :

Suppliers of both new and second hand machines are advised to retain documentary evidence that this manual was provided with the machine.

Auger Torque Australia Pty Ltd thank you for purchasing your new product. This operating manual has been prepared to enable you to operate the equipment in a safe manner.



Warning, Cautions and Notes

This symbol is used to highlight important messages. When you see this symbol, be alert to the possibility of injury to yourself or others. Carefully read the messages that accompany it.

NOTE:

This operating manual should be used in conjunction with the parent machine's operating instructions.

Instruction books should be regarded as part of the machine. They should always be kept safe with the machine for easy and quick reference.

New or extra copies can be obtained from your Auger Torque dealer or direct from Auger Torque Australia Pty Ltd.

Auger Torque Auger Drive Units have been designed for use with specific parent machines along with the Auger Torque range of mounting frames, augers, auger extensions and auger wearparts. Provided these are used and maintained correctly, they will provide a safe and reliable method of boring holes in the earth.

Auger Torque Australia Pty Ltd continually strives to improve and increase its range of products and therefore reserves the right to alter its specifications at any time without notice or obligation. The company accepts no responsibility for discrepancies which may occur between specifications of its machines and descriptions thereof contained in its publications.

When ordering spare parts please quote the serial number of the drive unit, which can be identified by the serial number plate.

SAFETY FIRST



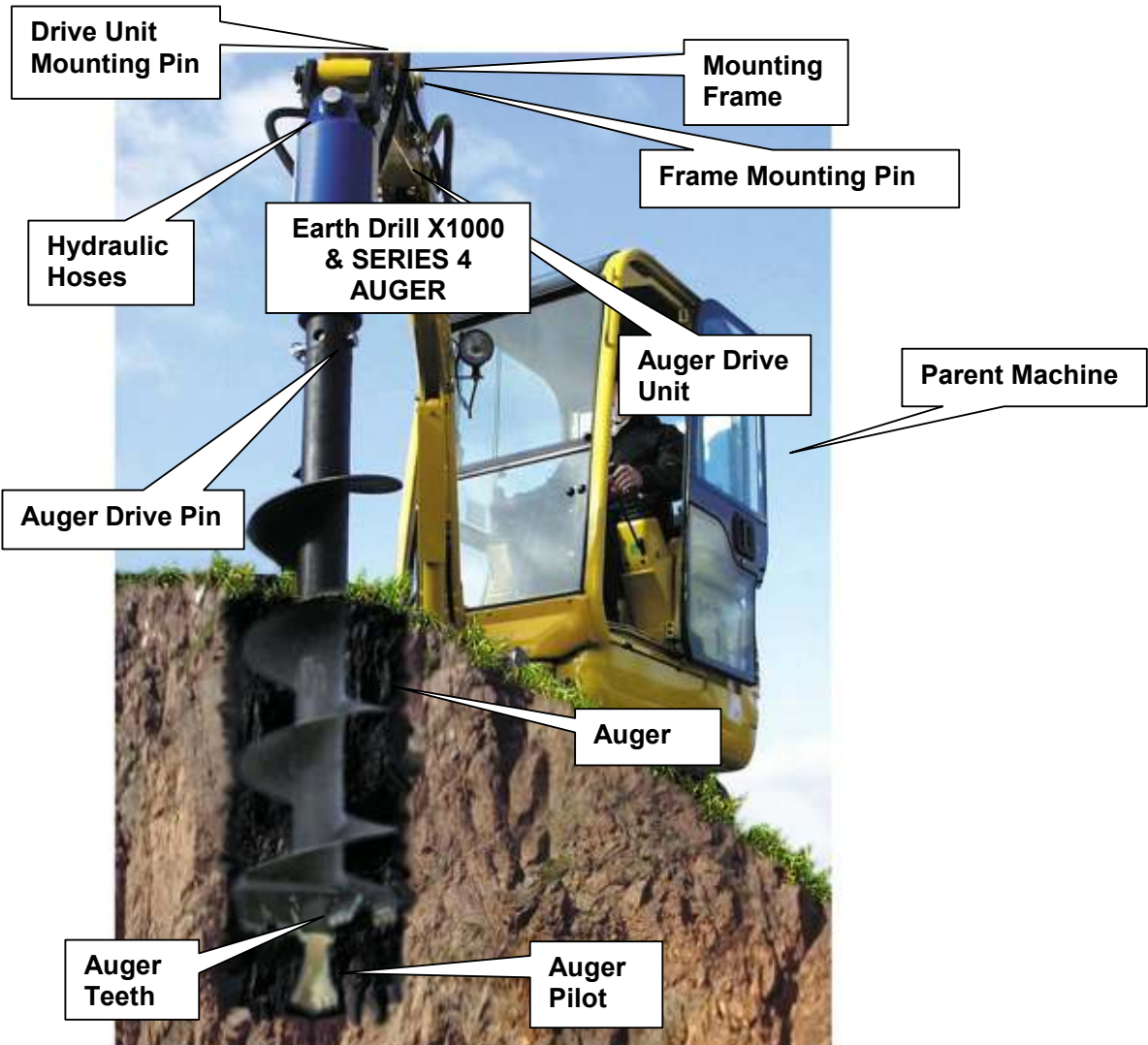
NEVER COMPROMISE ON SAFETY IT COULD CAUSE SERIOUS INJURY OR DEATH. All operators must read and ensure they fully understand all of the safety, operating and maintenance instructions **before** using the Auger Drive Unit.

If you are in any doubt as to any of the instructions or information provided you must contact your dealer or Auger Torque Australia Pty Ltd **before** attempting to use the Auger Drive Unit.

| | | | |
|--|----------------------|---------------------|----------------------|
| AUGER TORQUE | | | |
| Auger Torque Australia Pty Ltd. 5A Priority Street, Wacol, Qld 4076 www.augertorque.com.au | | | |
| Model | <input type="text"/> | Date Of Manufacture | <input type="text"/> |
| Serial No. | <input type="text"/> | | <input type="text"/> |
| Flow (max) | <input type="text"/> | Lpm | |
| Pressure (max) | <input type="text"/> | Bar | |
| Weight | <input type="text"/> | Kg | |



Data Plate
Enter product information for easy reference



Working with the Auger Drive Unit exposes the operator and others at the work site to workplace health and safety hazards. The table below describes these hazards and recommendations for their control.

| Hazard | Recommended Hazard Controls |
|---|---|
| Mechanical Hazards | |
| Damaged hydraulic hoses may eject fluid with enough pressure to penetrate the skin. | Ensure hydraulic hoses are regularly inspected and maintained. |
| Vehicular accident with persons or property. | Develop a traffic management program for the work site to prevent vehicles, people and property coming into contact. |
| Entanglement may occur with the rotating auger. | Enforce a 6 meter operating zone around operating plant. Erect barriers as required preventing persons coming into contact with operating machinery. Ensure any work done on the auger, or in close proximity to the auger is carried out while the auger is not in motion and cannot be accidentally put into motion. Use a 'lock out' system to prevent accidental operation of plant while maintenance is carried out. |
| Pinch points when attaching the auger drive unit, the auger and fitting the locating pins | Ensure hands are kept well clear of the point where the machinery is coming into contact and when using the locating pins. Where possible develop a process where the drive unit and the auger are held in position through jigs or other methods where the use of manual positioning is eliminated or minimised. |
| Impact with material ejected from plant when changing teeth | If the auger teeth must be removed using force use safety goggles to prevent eye injury. |
| Non-Mechanical Hazards | |
| Auger attachment may fall onto persons or property if not attached correctly | Follow the Auger Torque instructions for attachment of the auger. Ensure the attachment is secure before raising or moving. |
| Tripping hazard if auger and associated equipment is inappropriately stored | Ensure proper housekeeping on the work site. Create a designated storage area for equipment and keep walkways clear. |
| Electrocution by contact with overhead or underground powerlines and non-insulated nature of the plant item | Ensure site specific hazards are identified and safe methods of work are developed before operation of equipment. |

| Hazard | Recommended Hazard Controls |
|----------------------------|--|
| Use of oils and lubricants | Many oils and lubricants are hazardous substances. Obtain a Material Safety Data Sheet (MSDS) from the supplier or manufacturer for any chemicals used in the operation or maintenance of Auger Torque equipment. The MSDS will indicate if the substance is hazardous and if so, carry out a risk assessment on the use of those substances to identify and control health and safety hazards associated with their use. <i>(Note: Refer to the Code of Practice for Hazardous Substances for further information. Available from www.whs.qld.gov.au)</i> |
| Noise | Carry out noise level testing of the parent machine/s used with Auger Torque equipment. If the noise levels are above the exposure standard of $L_{Aeq,8h}$ of 85 dB(A) implement a hearing protection program. <i>(Note: Noise assessments should be carried out by a specialist. Refer to the Advisory Standard for Noise for further information. Available from www.whs.qld.gov.au)</i> |
| Ergonomics | |
| Manual handling | The use of team lifting is discouraged. Use the hitch to lift the auger drive unit. Implement a system that minimises or eliminates the need to manually lift or move the auger attachment or the drive unit. Risk assessments should be carried out on all manual tasks associated with Auger Torque equipment before they are used. This assessment should identify any manual handling or ergonomic hazards associated with the use of the equipment. Controls to reduce or eliminate this risk should then be developed implemented. <i>(Note: Refer to the Advisory Standard for Manual Handling for further information. Available from www.whs.qld.gov.au)</i> |
| Work Environment | |
| Working on hot parts | Operation of the equipment may create hot parts. Be aware of hot parts when handling the equipment and use non-slip gloves to protect hands where necessary. |
| Plant Controls | |
| Emergency stops | Ensure the parent machine has appropriate emergency stops fitted. Regularly test these to ensure they are working. |
| Plant Guarding | |
| Guarding | Ensure any guarding used remains in place and is regularly inspected to ensure serviceability and that it has not been tampered with. Additional guarding can be supplied with the trencher. Carry out risk management to identify if these or any other guarding is necessary to ensure a safety when using the trencher at your workplace. |

| Hazard | Recommended Hazard Controls |
|---|--|
| Other | |
| Licensing of persons operating mobile plant | Ensure persons operating the parent machine are appropriately licensed. |
| Competency of operators | Ensure persons operating the parent machine and any Auger Torque equipment are appropriately trained and competent. |
| General operation of plant | <p>Persons in control of plant at a workplace have workplace health and safety (WH&S) obligations under the WH&S Act 1997 to ensure the plant is safe and without risk to health and to ensure a safe workplace.</p> <p>Employers should carry out risk management in relation to plant at the workplace.</p> <p>This includes considerations for inspection, maintenance, repair, modification, servicing and cleaning.</p> <p>Ensure any hazards associated with use of Auger Torque plant at the workplace are identified and controlled.</p> <p>Employees also have obligations under the WH&S Act 1997. Inform employees about their obligation to:</p> <ul style="list-style-type: none"> • Comply with instructions for health and safety given by the employer or principal contractor. • Not wilfully or recklessly interfere with or misuse anything provided to ensure the healthy and safe use of plant at a workplace. • Not to wilfully injure themselves. • To use personal protective equipment if the equipment is provided and properly instructed in its use. <p><i>(Note: Refer to the Advisory Standard for Plant for further information. Available from www.whs.qld.gov.au)</i></p> |



Never operate or assemble the Auger Drive without fully understanding the operating instructions of both the Auger Drive Unit and the parent machine. Auger Torque Australia Pty Ltd recommend you receive dealer instruction before operating the Auger Drive Unit.

Never operate the Auger Drive unless you are in good physical condition and mental health.

Never operate the Auger Drive under the influence of any substance (including drugs & alcohol), which might impair vision, dexterity or judgement.

Always survey the work area before work. Boring below ground risks electrocution and explosion through contact with unseen hazards such as electricity cables and gas pipes.



Always ensure that the parent machine is secure and stable with its engine switched off before carrying out any maintenance work.

Never operate the Auger Drive with worn, damaged or missing parts. Only use genuine replacement parts.



Never allow bystanders (including animals) within 6 metres of the work area or allow minors to operate the Auger Drive Unit.



Never expose fuel or lubricants to any possible source of ignition.



Always protect yourself and the environment. Hydraulic oil, lubricants and exhaust fumes are toxic.



Always tie back long hair and remove jewellery before work. Wear suitable clothing that is close fitting whilst allowing freedom of movement.

Never wear clothing that could become entangled with the Auger or its drive.



Always protect hands - auger parts are sharp. Select gloves that are non-slip to improve grip and ones that protect against contact with oils and greases.



Always protect feet with safety boots (non-slip soles and steel-toe are recommended). Auger and drive parts are heavy and sharp.



Always wear head protection and eye protection when working on the Auger Drive.



Always follow parent machine instructions regarding NOISE protection



Auger Torque Auger Drive Units have been designed for use with specific Auger Torque mounting frames, augers, auger extensions and auger wearparts. Provided these are used and maintained correctly, they will provide a safe and reliable method of boring holes in the earth.

All Auger Torque Auger Drive Units require a 'flow' and 'return' of hydraulic oil from the parent machine's auxiliary hydraulic power supply to operate. All gearboxes are reversible, but require the host machine to be fitted with a two-way flow auxiliary circuit. (Check with parent machine dealer for advice). Ensure that the drilling rotation of the Auger Drive Unit is clockwise.

Some models of Auger Torque Auger Drive Units are supplied with hydraulic hoses and hydraulic Quick Release Couplers, which are required for connection to the parent machine. Check to insure the Couplers are compatible with those on the parent machine. The parent machine auxiliary hydraulic connections are normally located near the end of the loader arms, excavator dipper or truck crane booms.



It is critical that the supply of oil is within the stated limits for the particular drive unit. Flow (l/min) & pressure (bar).



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!

1

Fit Mounting Frame



Single Pin Hitch
(see pages 9 & 11)



Double Pin Hitch
(see pages 10 & 11)



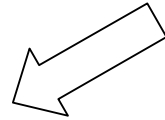
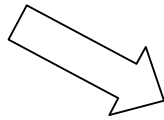
Double Pin Cradle Hitch
(see page 12)



Skid – Steer Mounting
Frame Hitch
(see page 13)

2

Fit Auger Drive Unit.



3

Fit Auger.



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- **Is in correct working order**
- **Is parked correctly on flat ground**
- **The hydraulic circuit is locked out and the engine switched OFF.**

Check that the mounting frame is of the correct model and type to fit the parent machine.

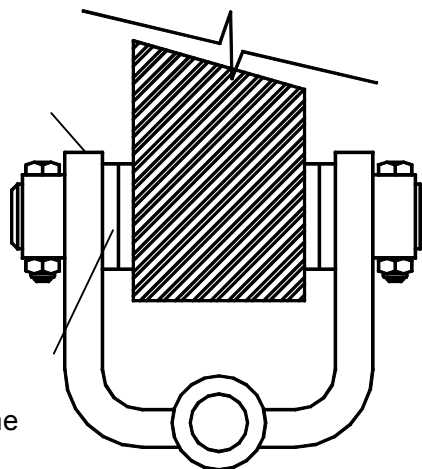
Ensure mounting frame and attachment points are clean before fitting.

Use suitably rated lifting equipment if required (**see data plate for weight**).

1

Fit mounting frame to parent machine

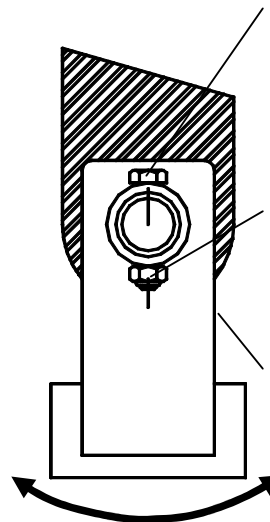
Use the spacers provided to centralise the frame (if required)



Align bolt location holes and fit location bolts and nyloc nuts.

Tighten nyloc nut to 26 Nm

Check single pin mounting frames are free to swing



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- Is in correct working order
- Is parked correctly on flat ground
- The hydraulic circuit is locked out and the engine switched OFF.

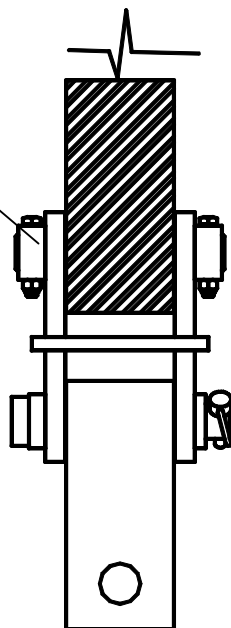
Check that the mounting frame is of the correct model and type to fit the parent machine.

Ensure mounting frame, and attachment points are clean before fitting.

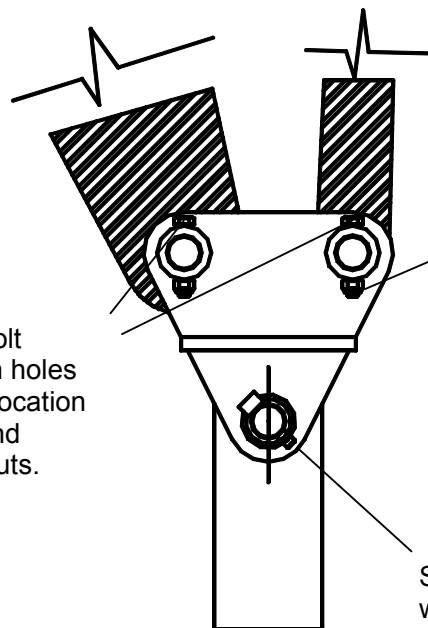
Use suitably rated lifting equipment if required (see data plate for weight).

22 **1**

Fit mounting frame to parent machine arms



Align bolt location holes and fit location bolts and nyloc nuts.



Tighten nyloc nuts to 26 Nm

Secure pivot with lynch pin



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- **Is in correct working order**
- **Is parked correctly on flat ground**
- **The hydraulic circuit is locked out and the engine switched OFF.**

Check that the Auger Drive is of the correct model and type to fit the parent machine.

Ensure that the Auger Drive Unit, and its connections are clean before fitting.

Use suitably rated lifting equipment if required (**see data plate for weight**).

1

Refer to the parent machine operator's manual for attaching accessories



Align the Auger Drive Unit and mounting frame pivot holes then locate and secure the Pivot Pin with its Lynch Pin

2

Locate the flow and return hydraulic pipes onto the Auger Drive Unit



Connect quick release couplers. Ensure drilling rotation is clockwise!



Grease location pin(s) (see lubrication section).

Check that hydraulic pipes are of sufficient length to allow the drive unit to articulate during work



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- **Is in correct working order**
- **Is parked correctly on flat ground**
- **The hydraulic circuit is locked out and the engine switched OFF.**

Check that the Auger Drive is of the correct model and type to fit the parent machine.

Ensure that the Auger Drive Unit, and its connections are clean before fitting.

Use suitably rated lifting equipment if required (**see data plate for weight**).

1

Align the Auger Drive Unit and mounting frame pivot holes then locate and secure the pivot pin with its lynch pin.

NOTE: It is good work practice to store the Auger Drive Unit on the cradle.

Locate the flow and return hydraulic pipes onto the Auger Drive Unit.

BEWARE: Some Auger Drive Units require a third drain line.



Refer to the parent machine operator's manual for attaching accessories.

Dipper Pin

Bucket Crowd Ram

2



With the Auger lying horizontally on the ground, use the excavator to move the Auger Drive Unit and Cradle Hitch to the auger. Rotate the Auger Drive Unit Output Shaft if necessary. Insert the auger pin and lynch pin.

Gently lift the Auger and retract bucket crowd ram, keeping the bottom of the auger close to the ground for stability, until the auger is in a vertical position.



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!

Auger Drive Operators Manual



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- **Is in correct working order**
- **Is parked correctly on flat ground**
- **The hydraulic circuit is locked out and the engine switched OFF.**

Check that the Auger Drive is of the correct model and type to fit the parent machine.

Ensure that the Auger Drive Unit, and its connections are clean before fitting.

Use suitably rated lifting equipment if required (**see data plate for weight**).

1



Refer to the parent machine operator's manual for attaching accessories



Earth Drill 3000

Align the Auger Drive Unit and mounting frame pivot holes then locate and secure the pivot pin with its lynch pin

2

Connect quick release couplers. Ensure drilling rotation is clockwise!



Locate the flow and return hydraulic pipes onto the Auger Drive Unit

Grease location pin(s).



Earth Drill 3000

Check that hydraulic pipes are of sufficient length to allow the drive unit to articulate during work



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!

Auger Drive Operators Manual



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- **Is in correct working order**
- **Is parked correctly on flat ground**
- **Has its hand brake ON and its engine switched OFF.**

Check that the Auger Drive is of the correct model and type to fit the parent machine.

Ensure that the Auger Drive Unit, and its connections are clean before fitting.

Use suitably rated lifting equipment if required (**see data plate for weight**).

1

Refer to the parent machine operator's manual for attaching accessories.

(Some cranes require an additional short manual extension for mounting the Auger Drive Unit.)



Remove the lifting hook, and insert the Linkage onto the hook pin. Now Align the Auger Drive Unit and the linkage holes. Locate and secure the pivot pin with its lynch pin

2

Grease location pin(s) (see lubrication section).

Locate the flow and return hydraulic pipes onto the Auger Drive Unit



Connect quick release couplers.

Ensure drilling rotation is clockwise!

Please Note: Crane mounted stowage devices are available for storage of the Auger Drive Unit on the crane when not in use. Please contact Auger Torque Australia Pty Ltd for further information.



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!



ALWAYS work in pairs (2 skilled operatives) whenever Auger Drive Unit components are being assembled or disassembled from the parent machine.

ALWAYS check parent machine:

- Is in correct working order
- Is parked correctly on flat ground
- The hydraulic circuit locked out and the engine switched OFF.

Check that the Auger is the correct model and type to fit the Auger Drive Unit.
Ensure that the Auger connections are clean before fitting.

Use suitably rated lifting equipment if required (see data plate for weight).

1

Position the Auger in the vertical work position



Ensure the Auger is in a stable condition and cannot fall over



2

Lower the Auger Drive Unit onto the Auger

Align the Auger Drive pin holes



3

Locate Auger drive pin



Secure Auger drive pin with lynch pin



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!



1



CONSIDER the topography (e.g. risk of subsidence, slope angle, position to embankments and any previous excavation)

NOTE the type of soil and its condition to enable selection of suitable teeth and pilot

ALWAYS carry out a site survey and risk assessment **BEFORE** starting work

AVOID underground hazards, such as Water / Gas / Electricity / Communication Lines etc.

If in doubt detection equipment and professional advice should always be considered before carrying out any work.

2



SET Auger in a vertical drilling position

ENSURE the direction of rotation of the Auger for drilling is **CLOCKWISE**.

ONLY start drilling after a site survey on a pre - marked safe spot.

3



GRADUALLY lower the parent machine arm(s) to apply down force to the Auger.

The harder the ground the more down force required.

Maintain drilling speed. **DO NOT CONTINUALLY STALL** the Auger Drive Unit with excessive down force, as this will overheat the hydraulic oil and could damage the machine.



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!

4

MAXIMISE efficiency and avoid damaging the Auger assembly by keeping the Auger vertical.



As many parent machine arm(s) travel through an arc, it maybe necessary to reposition the parent machine as the Auger lowers into the ground to maintain vertical drilling.



REGULARLY raise the Auger out of the ground to clear material from the Auger.

This will help maintain drilling effectiveness and ensure your machine does not become unstable.

5



NEVER leave the Auger assembly suspended.

ALWAYS park with Auger on ground



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!



When attached to the parent machine the standard Auger Unit is free to swing and can be extremely dangerous during transport.

TRANSPORTATION ON PUBLIC HIGHWAYS:








- **ALWAYS** remove the Auger and Drive Unit before driving or transporting the parent machine on public highways.
- **ALWAYS** store the Auger and Drive Unit securely and safely when removed from the parent machine taking special care of the hydraulic hoses and connections.

TRANSPORTATION WITHIN THE JOB SITE:

- **ALWAYS** operate the parent machine slowly when on site taking great care to avoid the Auger swinging.
- **RECOMMENDED:** where fitted use the hitch cradle (identified below) to support the Auger Drive Unit when manoeuvring or slewing when on site.



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!

| | |
|---|--|
|  | Safety at all times |
|  | Ensure environmentally safe disposal of waste oil: Do not pour down drain! |
|  | Avoid Fire or Explosion: Do not smoke near, or expose lubricants to, any possible sources of ignition (e.g. fire, electrical sparks or heat sources.) |
|  | All lubricants are toxic and potentially carcinogenic (cancer causing). |
|  | <ul style="list-style-type: none">• Avoid contact with skin and eyes: Wear suitable protective clothing and gloves. Always use a suitable barrier cream in case of skin contact.• Always wear eye protection: In the event of skin contact wash with soap and water. In the event of eye contact wash with water and seek medical advice.• Do not digest: If swallowed seek medical advice immediately. |
|  | |
|  | |

Auger Torque Auger Drive Unit features a sealed gear housing filled with gear oil to lubricate the planetary gearset components and bearings within the housing.

Auger Torque Auger Drive Units are low maintenance, however regular checks for oil leaks and following the service schedules are recommended to ensure a trouble free product.

Weekly:

Grease hitch and drive unit pivot pins.

After first 500 hours of use or six (6) months:

To maximise life and maintain warranty the Auger Drive Unit gear oil requires draining and replacing with Castrol SP320 (or equivalent) after the first 500 hours of use or six (6) months from date of purchase – which ever occurs first. (Note this first service is LABOUR FREE provided your Auger Torque dealer carries it out).

Important: To maintain product warranty your Auger Torque dealer must record proof of this first oil change.

Yearly or after every 2000 hours of use (whichever is sooner):

The Auger Drive Unit gear oil requires draining and replacing with Castrol SP320 (or equivalent) every twelve (12) months or 2000 hours – which ever occurs first. See Parts Manual for volumes.



IF IN DOUBT ASK YOUR AUGER TORQUE DEALER!

IF IN DOUBT ASK! - Seek Auger Torque/ parent machine dealer for advice & repair.
BE SAFE - only use genuine Auger Torque / parent machine spare parts.

| MOUNTING FRAME – ASSEMBLY | | |
|---|---|--|
| FAULT | POSSIBLE CAUSE | ACTION |
| Mounting frame does not fit parent machine | Incorrect or non- genuine mounting frame being used | Refer to both this manual <u>and</u> parent machine's operating assembly instructions |
| | Damaged / worn parts | Repair or replace with genuine mounting frame |
| MOUNTING FRAME - OPERATION | | |
| FAULT | POSSIBLE CAUSE | ACTION |
| Excessive movement in locating pins | Incorrect or worn locating pins | Replace with correct new genuine parts |
| | Parent machine pin location / linkage frame pin location worn | Seek advice from parent machine dealer |
| | Damaged parts | Seek advice from Auger Torque Australia Pty Ltd / parent machine dealer. Only use genuine spare parts |
| AUGER DRIVE UNIT - ASSEMBLY | | |
| FAULT | POSSIBLE CAUSE | ACTION |
| Auger Drive Unit will not fit mounting frame | Incorrect / incompatible or non-genuine mounting frame / Auger Drive Unit | Obtain & fit correct and compatible genuine parts |
| | Damaged parts | Seek advice from Auger Torque Australia Pty Ltd dealer. Only use genuine spare parts |
| Excessive movement in locating pins | Incorrect or worn pins | Replace with correct new genuine parts |
| AUGER DRIVE UNIT - OPERATION | | |
| FAULT | POSSIBLE CAUSE | ACTION |
| Auger drive output shaft does not rotate | No oil flow | <p>Check that quick release coupler(s) are correctly engaged to parent machine</p> <p>Check that parent machine hydraulic system is operating correctly and has sufficient oil of the correct grade (refer to parent machine operating instructions)</p> |

| AUGER DRIVE UNIT – OPERATION (Cont.) | | |
|---|---|---|
| FAULT | POSSIBLE CAUSE | ACTION |
| Auger Drive output shaft does not rotate | Parent machine pressure relief valve faulty or set too low | Test, reset or replace to parent machine's specification |
| | Auger Drive Unit seized | Seek advice from Auger Torque Australia Pty Ltd dealer |
| | Auger jammed in ground | Remove Auger from ground before starting machine |
| Slow digging speed / slow rotation of Auger Drive output shaft | Insufficient oil flow from parent machine | Check that parent machine hydraulic system is operating correctly and has sufficient oil of the correct grade |
| | Incompatible Auger Drive to parent machine combination | Check specification. Seek advice from Auger Torque Australia Pty Ltd dealer |
| | Incorrect Auger, boring teeth or pilot fitted or worn boring teeth / pilot | Ensure Auger size is compatible with Auger Drive Unit (not too large) and that boring teeth / pilot are suitable for the ground conditions and not worn |
| | Worn Auger Drive hydraulic motor possibly due incorrect or dirty oil supply | Seek advice from Auger Torque Australia Pty Ltd dealer. Only use genuine spare parts. Change parent machine hydraulic oil and filter <u>before</u> fitting replacement drive unit |
| Auger stalls during work | Parent machine pressure relief valve faulty or set too low | Reset / replace pressure release valve to parent machine's specification |
| | Restricted oil flow | Check for damaged or incorrect hydraulic hoses and connections. |
| | Blocked hydraulic filter | Change parent machine filter and oil. |
| | Excessive parent machine down force on Auger | Reduce down force |
| | Insufficient parent machine hydraulic pressure | Check that parent machine oil pressure meets with Auger Drive Unit requirements |
| | Incompatible Auger Drive / Auger size / parent machine combination | Check specification. Seek advice from Ltd Auger Torque Australia Pty dealer |

All new Auger Torque Australia Pty Ltd products are warranted to be free from defects in material and workmanship, which may cause failure under normal usage and service when used for the purpose intended.

Auger Torque Australia Pty Ltd warrants its equipment for a period of eighteen (18) months dating from delivery to original user. This warranty covers faulty workmanship and defective parts manufactured by Auger Torque Australia Pty Ltd. Liability is limited to repair or replacement of faulty parts at the discretion of Auger Torque Australia Pty Ltd.

The Warranty does not cover the following: -

1. Normal wear and tear.
2. Faults or failures due to incorrect dealer assembly, pre delivery inspection or installation.
3. Faults or failures due to use under load conditions greater than the design specification.
4. Hydraulic hoses or ground engaging parts such as auger flight, boring teeth or pilot.
5. Transportation costs of parts.
6. Consequential loss of any description.

Auger Torque Australia Pty Ltd equipment must be operated in accordance with the recommended procedures and within the ranges specified on the Auger Drive Unit and stated in the operating manual.

Any claims under this warranty must be made in writing within fourteen (14) days of the fault occurring. Any claims not received by Auger Torque Australia Pty Ltd within 14 days may be deemed invalid.

Auger Torque Australia Pty Ltd is not responsible for nor will accept any charges for work carried out by any unauthorised repairers. Charges, including those for spare parts, will not be accepted unless they have been authorised in writing by Auger Torque Australia Pty Ltd.

Any goods returned to Auger Torque Australia Pty Ltd by the customer, under warranty or for repair, must be freight paid unless authorised in writing by Auger Torque Australia Pty Ltd.