



**PADDOCK EXCAVATOR SERIES 10
- DIESEL ENGINE**

P/N – SPEX10SS

User and Maintenance Manual



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1. INTRODUCTION

Paddock™ Excavators are built to make light work of the toughest jobs. Quality components and smart engineering design delivers a high-performance excavator package. The excavator can be used with a full range of attachments for applications such as trenching, auguring, rock breaking and bulk materials transfer. This is the ideal machine for small business operators and acreage owners through to large construction companies needing a smaller footprint unit for tight area access.

Congratulations and thank you for choosing the Paddock Excavator. This manual is an important part of your machine. It provides critical safety information and operating instructions to help you use and maintain your excavator safely and correctly.

The Series 10 Paddock™ Excavator is the smallest in the range but still packs a punch combining the efficient diesel engine with powerful hydraulics.

The narrow width makes this machine ideal for tight access jobs of small to medium size. The unit is perfect for individual contractors as well as landowners who want the independence of working at their own pace without sacrificing capability.

- Simple and reliable air-cooled diesel engine
- Impressive 6.5kN excavating force
- Supplied with a 360mm bucket w/ teeth fitted
- Hydraulic Joystick control not seen on other machines
- Swing Boom (not shown in photo)
- Heavy duty steel construction with CNC laser cut build accuracy
- Full function with traverse, swing and dig capabilities
- Auxiliary hydraulic connection making it compatible with a range of attachments including augers, rock breakers and grapples etc.
- Simple key start ignition
- Upgraded quality oil pump and travelling motors
- 2yr warranty from an established Australian business

DIESEL ENGINE EXCAVATOR

The Series 10 runs a KOOP, 1 cylinder, air cooled diesel engine. These engines are nothing but exceptional and are extremely well proven throughout the Paddock product range. Whilst KOOP diesel engines are manufactured in China, it's hard to fault their performance and price point. The engine design is mechanical without complicated electronics making it very reliable. Service spares are common Australia wide and Scintex also carry a full range of genuine parts and consumables. Many parts and consumables are interchangeable with the Yanmar engine equivalent which also offers assurance supply will never be an issue.

Operating this excavator is very fuel efficient and users can expect to use only a few liters of diesel per hour operating under full load. Putting this excavator to work to make a financial return is simple and can be considered by private contractors or new business starters.

HIGH SPECIFICATION QUALITY COMPONENTS

The Paddock™ brand prides itself on offering exceptional value for money without sacrificing quality and this is achieved by upgrading key components to make the products offered 'better' than the competition. The Series 10 excavator is no exception and comes with a

upgraded high quality hydraulic oil pump. The hydraulic pump is the heart of the excavator as it generates the oil pressure to run the downstream rams and motors. Running a high quality hydraulic pump helps achieve the high performance this machine delivers.

The drive motors and swing motor on the Paddock™ Series 10 excavator are also upgraded to a premium solution. Having smooth, controllable, drive and swing motors makes this excavator one of the best in its class.

This machine runs a hydraulic joystick and control valves which when coupled with the upgraded pump and hydraulic motors delivers smooth performance for the operator. This type of control is only seen in more expensive machines and is not common in the more economical alternatives. The joystick controls will be familiar to experienced operators and the ability to work the foot peddles to traverse the machine whilst still swinging and working the boom increases efficiency.

HEAVY DUTY EXCAVATOR CONSTRUCTION

The Paddock™ Excavator range are built to the highest specifications with CNC laser cut steel sections making their build and assembly very accurate and ultimately extremely strong. The excavator designs are well proven meaning users are getting a machine that performs to the highest level when it's delivered.

Service and maintenance is simplified with the incorporation of grease injection nipples at pivot points. Access covers to the diesel engine simplifies routine maintenance meaning the excavator is not only simple to operate but also easy to maintain.

Use the power of hydraulics and the heavy duty build design to achieve the most from the Series 10 excavator.

AUXILIARY HYDRAULICS STANDARD

The Series 10 excavators by Paddock™ feature and include as standard auxiliary hydraulic connections that are easily accessible. This design makes it fast for the operator to switch between attachments that require hydraulics such as the post hole auger driver.

PADDOCK™ EXCAVATOR USES

Paddock™ excavators have a multitude of uses and experienced operators can achieve more from this machine than the average person would ever believe possible. New operators will quickly feel comfortable with the straightforward controls.

The narrow track width of the Series 10 machine makes it ideal for tight area access. Landscapers who need to access at the rear of houses and via gate access will love the manoeuvrability, functionality and simplicity.

Plumbers and electricians can excavate their own trenches even through narrow access areas. Pits can be excavated quickly greatly increasing the efficiency over manual labour alternatives. No longer are you waiting or dependent on a subcontractor to dig a trench for you.

Fencing contractors needing to auger holes will be impressed with the effortless digging capabilities once an auger drive kit is connected. The hydraulic motor powers the auger into the ground saving back-straining post hole digging.

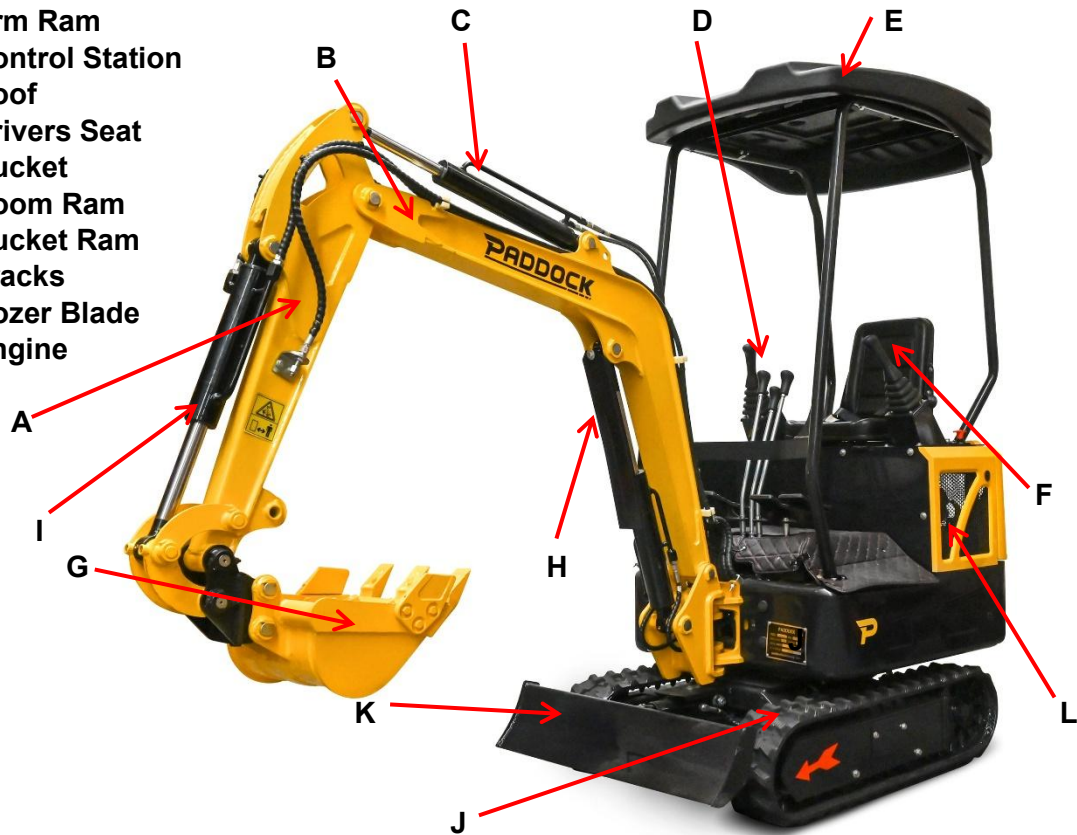
Landscapers can easily move bucket loads of material with the Paddock™ series 10 excavator and with the addition of the rock breaker attachment, there's very little this machine can't effortlessly work its way through. With an actuating grapple attachment, rocks, logs and many other objects can be individually grabbed and placed in location.

2. SPECIFICATIONS

SPEX10SS	
Bucket Excavating Force	7.5 kN
Lifting Capacity	50kg w/ extended boom 150kg w/ folded boom
Engine	11 hp – 9.9kw
	KOOP 192 FA 1 Cylinder Air Cooled Diesel Engine
	Electric key start
	5.5L fuel tank
Machine Weight	1,000 kg
Electrical System	12V
Controls	Hydraulic Joystick and Control Valves for the main digging and swing functions
Hydraulic System	20L/min / 18 MPA
	Air Cooled
Drive System	2-3 km/hr
	Dual levers and drive pedal design
Included Attachments	360mm Bucket w/ teeth
Max. Digging Depth	1,500mm
Max. Digging Radius	2,450mm
Max. Digging Height	2,500mm
Max. Dumping Height	1,820mm
Chassis Width	940mm
Track Length	1,200mm
Chassis Ground Clearance	380mm
Gradeability	30 degrees
Transport Dimensions	2,200mm L
	1200mm W
	2,500mm H
Warranty	2yr warranty

3. EXCAVATOR DIAGRAM

- A. Arm
- B. Boom
- C. Arm Ram
- D. Control Station
- E. Roof
- F. Drivers Seat
- G. Bucket
- H. Boom Ram
- I. Bucket Ram
- J. Tracks
- K. Dozer Blade
- L. Engine



PLEASE NOTE:

- Read this manual thoroughly before operating the machine.
- Store this manual with the excavator so it is always available for reference.
- Please understand and regular review of this manual to help ensure safe, efficient, and long-lasting use of your equipment.

4. SAFETY OPERATION

SAFETY IS THE RESPONSIBILITY OF THE OPERATOR

 **WARNING** - Before operating or maintaining the excavator, it is essential to follow all safety operation instructions. Read and understand the operator's manual, all safety labels, and decals on the machine.



All repairs, adjustments, maintenance, and operational checks must be carried out strictly in accordance with the manual.

Failure to comply may result in serious injury or death.

TRAINING RECOMMENDATION

This manual does **not** replace hands-on training. Operators are strongly encouraged to undergo third-party machinery training to ensure safe and competent operation.

SAFETY GUIDELINES

Most accidents can be prevented by following these basic rules:

- Read and understand all safety messages in this manual and on the excavator.
- Familiarize yourself with the controls, fuelling, and maintenance procedures.
- Comply with all operational and maintenance rules at all times.
- Never refuel a hot machine.

SAFETY SYMBOLS



- **CAUTION** – Take precautions to avoid minor or moderate injury.
- **WARNING** – Indicates a hazardous situation that may result in serious injury or death.
- **DANGER** – Indicates an immediate hazard that will result in death or serious injury if not avoided.
- **NOTE** – Highlights instructions to prevent machine damage or ensure best practice.

All symbols appear in the manual and on the excavator's safety labels.

BEFORE FIRST USE

Each excavator is fully tested and inspected before delivery. During the first 100 hours, operate with extra care to ensure a proper break-in period.

INITIAL OPERATION GUIDELINES:

- Warm up the machine for at least 5 minutes.
- Avoid full-speed operation early on.
- Minimize rapid acceleration, hard stops, or sharp turning.
- Regularly inspect filter elements based on work environment.
- Conduct a Job Safety Analysis (JSA) before starting work.
- Monitor the hour meter for scheduled maintenance intervals.

SAFETY LABELS AND DECALS

Excavators are equipped with clearly visible warning decals. These must be understood and never removed or defaced.

EXAMPLES OF DECALS:

- **DANGER:** Imminent hazard – will cause injury or death if ignored.
- **WARNING:** Potential hazard – may cause serious injury or death.
- **NOTE:** Advisory – follow instructions to avoid equipment damage.

ALWAYS REMEMBER

- All warnings exist for your safety.
- Never ignore a label, alarm, or safety notice.
- Stay alert. Work safe.



5. SAFETY – GENERAL PRECAUTIONS

You are responsible for adhering to all relevant safety regulations and legal requirements set by governing authorities. Always operate, inspect, and maintain machinery in accordance with the manufacturer's guidelines.

Many accidents are caused by a failure to follow basic safety procedures. Most incidents can be prevented by identifying potential hazards ahead of time.

BEFORE OPERATING THE MACHINE:

- Carefully read and understand all safety information.
- Ensure you are fully trained in the correct operation, inspection, and maintenance of the equipment.
- Do not operate the machine unless you are confident in doing so safely and correctly.

6. COMPLIANCE WITH ALL SAFETY REGULATIONS

Only trained and qualified personnel are permitted to operate, inspect, or maintain this machine.

During all machine operations, inspections, and maintenance activities, all applicable rules, regulations, precautions, and safety measures must be fully understood and strictly followed.

Do not operate, inspect, or maintain the machine under the influence of:

- Alcohol or drugs
- Extreme fatigue
- Lack of sufficient sleep

HANDLING ABNORMAL CONDITIONS

If any abnormalities are detected during operation or maintenance — such as:

- Unusual noise or vibration

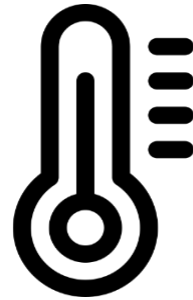
- Strange odours
- Oil leakage
- Error alarms

Immediately stop operation and contact the appropriate sales or service agent. Do not resume operation until the issue has been properly identified and resolved.

7. OPERATING TEMPERATURE RANGE

To maintain machine performance and prevent premature wear or damage, always observe the recommended operating temperature conditions:

- Do not operate the machine if the outdoor temperature is above +45°C or below -15°C.



OPERATING ABOVE +45°C:

- Engine may overheat, reducing oil effectiveness.
- Hydraulic oil can become excessively hot, potentially damaging hydraulic components.

OPERATING BELOW -15°C:

- Rubber components (such as gaskets) may harden, leading to accelerated wear or damage.

If operation is required outside these temperature limits, please consult your sales or service agent for guidance.

8. WEAR SUITABLE CLOTHING AND PROTECTIVE EQUIPMENT

To ensure personal safety and prevent accidents in the workplace, follow these clothing and PPE (Personal Protective Equipment) guidelines:

AVOID UNSAFE CLOTHING

- Do not wear loose clothing or accessories that could get caught in moving parts or control levers.
- Avoid clothing stained with oil or fuel, as it is highly flammable.



WEAR APPROPRIATE PROTECTIVE GEAR

- Based on your work environment and tasks, the following PPE should be worn:
- Safety shoes – to protect feet from falling objects and sharp items.
- Safety helmet – to prevent head injuries.
- Safety glasses or goggles – to protect eyes from dust, debris, or chemical splashes.
- Filter masks or respirators – especially when working in dusty or fume-filled environments.
- Thick gloves – for handling sharp, hot, or hazardous materials.
- Ear protectors or earplugs – when working in noisy areas to prevent hearing damage.

TASK-SPECIFIC PROTECTION

- When using tools like grinders, jackhammers, or compressed air, always wear:
- Safety spectacles to guard against flying particles.
- Filter masks to protect from dust and fumes.

NOISE PROTECTION

- Use hearing protection when operating loud machinery.
- Prolonged exposure to high noise levels can cause permanent hearing loss.

9. INSTALLATION OF FIRE EXTINGUISHERS AND FIRST AID KITS

To ensure a safe and prepared environment, follow these essential steps:

FIRE AND ACCIDENT PREPARATION

- Conduct regular risk assessments to identify hazards.
- Keep work areas clean and free of fire and accident risks.
- Develop and maintain a clear emergency response plan.



INSTALL AND LEARN TO USE SAFETY EQUIPMENT

- Install fire extinguishers in accessible, high-risk areas.
- Mount first aid kits where they are clearly visible and easy to reach.
- Ensure all staff are trained on:
- How to use fire extinguishers properly.
- Basic first aid techniques for common injuries.

FIRE AND ACCIDENT RESPONSE TRAINING

- Train staff on how to:
- Safely extinguish small fires.
- Respond calmly and effectively to accidents.
- Evacuate the premises quickly and safely if needed.



EMERGENCY CONTACT PROTOCOL

- Create an up-to-date emergency contact list including:
- Local fire and ambulance services
- Nearest hospital or emergency centre
- Key internal contacts (e.g. safety officer, first aider)
- Display contact information clearly near phones, exits, and in common areas.

DO NOT DISMANTLE SAFETY DEVICES

- Never remove or bypass any safety device, except when required for maintenance — and only by qualified personnel.
- Ensure all protective barriers and safety guards are properly installed and securely fastened before operating the machine.
- Inspect the machine for any damaged parts. Repair or replace them before use.
- Use all provided safety devices to ensure safe and proper machine operation at all times.

SIGNALING AND COMMUNICATION PROTOCOLS

- Be familiar with standardized hand signals or gestures required for specific job functions.
- Clearly identify the designated signal person for each task.
- All personnel must understand and correctly interpret the required gestures.
- The machine operator must respond only to the designated signaller's instructions—except in the case of a "STOP" gesture, which must be obeyed immediately, regardless of who gives it.
- The signaller must always position themselves clearly and visibly to the operator when signalling.

10. AVOID FIRE AND EXPLOSION HAZARDS



To ensure a safe working environment and prevent fire-related accidents, follow these critical safety practices:

SAFE HANDLING OF FLAMMABLE MATERIALS

- Keep fuel, lubricants, grease, and antifreeze away from open flames, hot surfaces, and electronic components.
- Do not smoke or use lighters, matches, or any open flame when handling fuel or near fuel systems.
- Never leave the work area while refuelling or adding lubricants.
- Only refuel when the engine is turned off and fully cooled.
- Wipe up spills immediately and dispose of oil-soaked rags and waste properly.

LEAK AND FIRE HAZARD CHECKS

- Inspect for leaks in fuel and lubrication systems before operation.
- Repair any leaks and clean affected areas thoroughly before restarting the machine.
- Keep machines clean—remove trash, oily rags, and other flammable materials daily.

WELDING & CUTTING PRECAUTIONS

- Move flammable materials to a safe area before performing welding or grinding.
- Never cut or weld on containers, pipes, or tanks unless they are thoroughly cleaned with non-flammable solvents.
- Ensure the work area is well ventilated and use fire-resistant barriers if necessary.

ELECTRICAL SAFETY

- A short circuit can cause fire—inspect wiring daily.
 - Look for loose connections, damaged wires, and worn insulation.
 - Tighten connectors and repair or replace any damaged wiring immediately.

HYDRAULIC AND FUEL LINE SAFETY

- Ensure hoses, pipe clamps, and protective covers are securely fastened.
- Loose components can result in high-pressure leaks, which may spray flammable fluids on hot parts—leading to fire or injury.

USE OF CLEANING SOLVENTS

- Never use fuel to clean parts.
- Always use non-combustible solvents in a well-ventilated area.
- Dispose of chemicals and containers according to manufacturer instructions and local safety regulations.

11. **WARNING: ENGINE EXHAUST GAS IS POISONOUS**

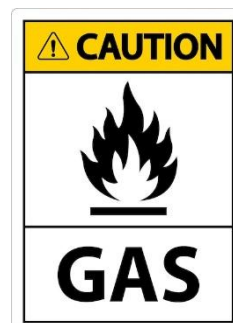
Engine exhaust contains carbon monoxide (CO) — a colourless, odorless, and deadly gas.

DO NOT:

- Operate the engine in enclosed or poorly ventilated areas.
- Ignore early symptoms of CO exposure such as dizziness, headache, or nausea.

ALWAYS:

- Ensure the area is well ventilated when running the engine indoors or in semi-enclosed spaces.
- If natural ventilation is not possible, install exhaust fans, extend exhaust pipes, or use other mechanical ventilation systems to remove fumes safely.
- Monitor air quality in confined spaces during extended engine operation.



FAILURE TO FOLLOW THESE GUIDELINES CAN RESULT IN SERIOUS INJURY OR DEATH.

12. TREATMENT OF ASBESTOS DUST

INHALING ASBESTOS DUST CAN CAUSE SERIOUS HEALTH ISSUES, INCLUDING LUNG CANCER.

When working with or near asbestos-containing materials, the following precautions must be strictly followed:

DO NOT:

- Do not use compressed air to clean asbestos-containing parts or areas.
- Do not polish, sand, or grind any material that may contain asbestos.

USE SAFE CLEANING METHODS:

- Use vacuum equipment with a HEPA (High-Efficiency Particulate Air) filter for cleaning.
- If vacuuming is not possible, use wet cleaning methods and wear a certified respirator.

CONTROL DUST EXPOSURE:

- Install ventilation systems with polymer filters when working indoors.
- Ensure dust is contained and does not spread beyond the work area.



RESTRICT ACCESS:

- Limit access to the work zone. Do not allow unauthorized personnel in the area.
- Post clear signage warning of asbestos work in progress.

FOLLOW REGULATIONS:

- Always comply with local laws, environmental standards, and safety procedures for asbestos handling and disposal.

13. BE CAREFUL TO AVOID CRUSHING INJURIES

Serious injury or death can occur if body parts are caught between moving components. Always stay alert and follow these precautions:

**DO NOT PLACE HANDS, FEET, OR BODY PARTS:**

- Between the machine body and the undercarriage or tracks
- Between the machine frame and working attachments
- Between the hydraulic cylinders and surrounding parts
- Between any moving or pivoting components

WHY IT'S DANGEROUS:

- As the machine operates, gaps can suddenly close due to movement or hydraulic action.
- What seems like a safe space can quickly become a crushing point.

STAY SAFE BY:

- Staying clear of pinch points and moving parts at all times.
- Ensuring no one is in the danger zone before operating any machinery.
- Using lockout/tagout procedures when performing maintenance.

USE OF OPTIONAL PRODUCTS

- Before installing any optional products or attachments, consult our company to ensure compatibility and safety.
- Depending on the type or combination of attachments, some may come into contact with parts of the cab or other machine components.
- Always confirm that attachments are secure and free of interference with other parts before use.
- Do not use any accessories or attachments that have not been approved by our company.
 - Using unauthorized products may compromise safety, reduce operating efficiency, or shorten the machine's service life.
- Our company accepts no responsibility for injuries, accidents, or machine damage resulting from the use of non-approved accessories.

DO NOT MODIFY THE MACHINE

- Unauthorized modifications to the machine can result in serious injury or death.
- Never attempt to modify, alter, or transform any part of the machine without formal approval from the manufacturer.

- Unauthorized modifications may also void the warranty and compromise compliance with safety regulations.

14. SAFETY DEVICES AND SIGNALING PROCEDURES



DO NOT DISMANTLE SAFETY DEVICES

- Never remove or bypass any safety device, except when absolutely necessary for maintenance.
- All protective guards and barriers must be properly installed and securely fastened before operating any machinery.
- Inspect equipment before use. Repair or replace any damaged safety components immediately.

MAINTAIN SAFETY SYSTEMS

- Use all installed safety devices to always ensure safe working conditions.
- Ensure machinery is equipped with warning signals and signal systems, where required.

SIGNALLING & GESTURE COMMUNICATION

Clear and correct hand signals are essential for safe operations in noisy or complex environments.

KNOW YOUR ROLE

- Learn and use the standardized hand signals required for your job.
- Identify the designated signal person(s) before beginning work.

RESPONSIBILITIES

- All team members must fully understand and recognize the standard gestures.
- The operator must follow the signals given by the designated signal person.
- Any "stop" gesture must be obeyed immediately, regardless of who gives it.

STAY VISIBLE

- The signaller must always remain in clear view of the operator when signalling.

15. SAFETY MARKS (LABELS)



To ensure the safety of operators and personnel in the surrounding work area, safety signs and labels must be correctly placed on designated parts of the machine.

REVIEWING SAFETY MARKS

- Use this manual to walk around the machine and locate each safety sign.
- Review the content and purpose of each sign together with the machine operator.
- Ensure all safety instructions and labels are fully understood before operation

MAINTENANCE OF SAFETY SIGNS

- Keep all safety signs clean, clearly visible, and legible.
- If any label is faded, damaged, peeling, or missing, it must be replaced immediately.
- When ordering replacement labels, please provide the product serial number to our service team for accurate identification.

REPLACING PARTS WITH SAFETY LABELS

- If any part of the machine with a safety label is replaced, a new safety label must be applied to the replacement part.

16. MACHINE SAFETY LABELS AND WARNING SIGNS

To ensure operator and workplace safety, the following safety labels are placed at key points on the machine. Operators must understand, check, and comply with each warning before operation.



1. OPERATING DEVICE INSTRUCTIONS

- Location: Front of the cab
- Warning: Ensure the machine's control mode matches the label. If different, update the label accordingly.

FAILURE TO OPERATE THE MACHINE AS SPECIFIED MAY RESULT IN SERIOUS INJURY OR DEATH.

2. CRAWLER TENSION ADJUSTMENT WARNING

- Location: Both sides of the crawler beam
- Notice: The track tension hydraulic cylinder contains high pressure. Adjust or disassemble only according to the operator manual.

Incorrect procedures can result in serious personal injury.

3. GENERAL OPERATIONAL & LOADING WARNINGS

- Location: Lower right corner of the cab
 - Includes: Operational mode check
 - Transport vehicle loading/unloading procedures
 - Avoidance of overhead lines and blind spots
 - Emergency awareness
 - Key Points: Always sound the horn before movement.
 - Confirm the area around the machine is clear.
 - Use guides or watchmen in low-visibility areas.
 - Never touch levers while standing — accidental movement can cause serious injury.

4. ROTARY AREA HAZARD

- Location: Rear counterweight
- Warning: Stay clear of the swing radius.

5. FUEL IDENTIFICATION

- Location: Fuel tank
- Warning: Shut off the engine before refuelling.
Keep away from flames, sparks, and ignition sources.

6. REFUELING PRECAUTIONS

- Location: Near the fuel tank
 - Notice: No smoking during refuelling.
 - Only refuel outdoors.
 - Ensure engine is off.
 - Avoid fuel spills near heat or electrical components.

7. BATTERY HAZARD

- Location: Lower right platform & cab
 - **DANGER:** Battery gases are explosive – keep away from flames.
 - Maintain proper ventilation.
 - Do not place metal tools on or near the battery.
 - Electrolyte is corrosive. If contacted:
 - Rinse with water immediately.
 - Use baking soda or lime to neutralize.
 - Rinse eyes for 10–15 minutes and seek medical care.

8. OPERATIONAL RANGE WARNING

- Location: Both sides of the boom
- Notice: Do not enter the machine's active operation range.

9. DIGGING RANGE CAUTION

- Location: Both sides of the bucket
- Warning: Stay clear of the digging range during operation.

10. CRAWLER TENSION REMINDER (REPEATED)

- Location: Crawler beam (also listed as #2)
- Note: See warning under #2 above.

11. SHOVEL OPERATION NOTICE

- Location: Front of the cab
- Reminder: Review and follow the shovel operation instructions.

12. ACCUMULATOR MAINTENANCE WARNING

- Location: Upper right corner of rotary platform
- Warning: Follow correct maintenance procedures to avoid injury.

13. ENGINE AREA HAZARDS

- Location: Engine hood
 - Warning: Do not open the hood while the engine is running.
 - Avoid contact with the exhaust pipe — risk of burns.

14. HYDRAULIC OIL IDENTIFICATION AND NOTICE

- Location: Hydraulic tank
 - Warning: Stop engine before opening the hydraulic tank cap.
 - Open slowly to release pressure and avoid hot oil burns.

15. BOARDING AND EXITING THE MACHINE

- Location: Inside of the cab door
 - Instructions: Face the machine while boarding/exiting.
 - Use three-point contact (two hands and one foot or vice versa).
 - Never jump or get on/off while the machine is moving.
 - Do not use control levers as handholds.

16. ELECTRIC SHOCK HAZARD

- Location: Right side of the cab
- DANGER: Stay clear of high-voltage power lines. Contact may cause electrocution or serious injury.

17. MANUFACTURER SAFETY LABEL

- Location: Front hood
- Purpose: Identifies the manufacturer's standard warning label location.

18. DANGEROUS AREA CLEARANCE

- Location: General hazard zones
- Reminder: Always stay out of hazardous zones during operation.

17. PRECAUTIONS BEFORE OPERATION

UNDERSTAND THE WORK AREA

Before beginning any operation, it is essential to assess the work area for safety. This includes:

- Inspecting terrain and ground conditions to identify any instability or risk.
- For indoor operations, review the building structure and take necessary precautions.
- Identify and avoid hazards such as:
 - Gutters
 - Underground pipelines
 - Trees or stumps
 - Cliffs or steep slopes
 - Overhead power lines
 - Landslide-prone or unstable areas

COORDINATE WITH SITE ADMINISTRATORS

- Check the location of buried utilities such as gas lines, water pipes, and power cables.
- Consult with the site administrator when needed and establish any required safety measures prior to beginning work.

ROADSIDE OPERATION

- Prioritize the safety of pedestrians and vehicles during road work.
- Use signage, signals, or designated flaggers to warn and direct traffic.
- Prevent access by unauthorized personnel to the operation area with proper barricades and signage.

OPERATION IN OR NEAR WATER

- When operating in shallow water or near water bodies, check:
 - Water depth
 - Ground firmness
 - Water flow speed

Ensure the area is stable and safe before proceeding.

BRIDGE AND STRUCTURE SAFETY

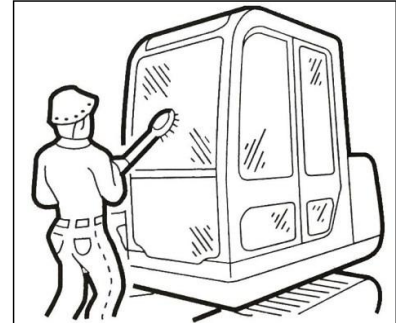
- Before crossing a bridge or elevated structure, confirm the load capacity is suitable for the machine.
- If necessary, reinforce the bridge or structure to ensure safe passage

KEEP THE MACHINE CLEAN AT ALL TIMES

Maintaining cleanliness is essential for safe and efficient operation. Follow these precautions to reduce the risk of accidents or damage:

PREVENT SLIPS AND FALLS

- Immediately wipe away any lubricating oil, grease, mud, snow, or ice from walkways, steps, and handholds to prevent slipping hazards.



REMOVE UNNECESSARY ITEMS

- Clear out all loose tools, parts, and unnecessary devices from inside and around the machine.
- Keep the operator's seat and foot area clean and free of clutter to ensure safe and unobstructed operation.

PREVENT FIRE HAZARDS

- Clean off dust, oil, and grease from engine components, wiring, and exhaust areas.
- Regular cleaning reduces the risk of overheating or fire caused by buildup of flammable materials.

DAILY INSPECTION AND MAINTENANCE

- Always perform the required daily inspections before starting the machine.
- Identify and repair any issues immediately. Failure to do so may lead to accidents or equipment failure.
- If the machine becomes inoperable or the engine fails:
 - Shut down the machine following the proper shutdown procedure.
 - Ensure the machine is safely parked and secured until repairs are completed.



SAFETY IN THE DRIVER'S CAB

- Before entering the cab, clean dirt, grease, or mud from your shoes.
 - Contaminants on footwear can cause slipping on pedals, leading to accidents.
- Do not place tools, parts, or personal items around the operator's seat.
- Avoid bringing plastic bottles or attaching suction cups inside the cab.
 - These can act as magnifying lenses, creating a fire hazard if exposed to sunlight.

SAFE ENTRY AND EXIT PROCEDURES

- Always use the three-point contact method (two hands and one foot, or two feet and one hand) when mounting or dismounting the machine.
- Do not jump on or off the machine and never attempt to board or exit a moving machine.
- When opening the cab door:
 - First lock it securely in the open position.
 - Check and confirm the door is stable and cannot swing shut.
- Use only the designated steps and handrails to climb on or off the machine.
 - Do not use control levers or rods for support.

18. PRE-START SAFETY CHECKS

To ensure the safety of all personnel, follow these steps before starting the machine:



1. CLEAR THE AREA

- Ensure all unauthorized personnel have left the work zone before starting the machine.
- Walk around the machine and visually inspect the surroundings.
- Warn nearby maintenance staff or pedestrians to move away from the machine.

Do not start the machine until the area is confirmed clear.

2. INSPECT FOR WARNING SIGNS

- Check the cab, controls, and ignition switch for any warning tags or signs such as:
 - "Caution"
 - "Do Not Operate"
- If any warning sign is present:
 - Do not start the engine.
 - Do not touch any control levers or joysticks.
 - Report to a supervisor or maintenance personnel.

3. SIGNAL BEFORE STARTING

- Sound the horn before starting the machine to alert anyone nearby.
- Only proceed to start the machine once it is safe and the area is fully clear.

19. ENGINE START PROCEDURE (FROM DRIVER'S SEAT)

To ensure safe machine operation, follow these steps when starting the engine:

1. SECURE YOUR POSITION

- Sit properly on the driver's seat.
- Adjust the seat and lock it securely in place.
- Fasten your safety belt before proceeding.

2. CHECK CONTROLS AND SAFETY DEVICES

- Confirm that the parking brake is engaged.
- Ensure that all control levers and pedals are in the neutral (centered) position.
- Visually check that no one is near the machine.

3. SAFE STARTING

- The machine must only be started and operated from the driver's seat.
- Do not attempt to start the engine by bypassing the system (e.g., shorting the starter terminals).

DOING SO IS EXTREMELY DANGEROUS AND MAY RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE.

20. ENGINE START-UP PROCEDURE

After starting the engine, perform the following checks in a safe, personnel-free area:

1. INITIAL SAFETY CHECK

- If any abnormalities or faults are observed:
 - Shut down the machine immediately following the correct shutdown procedure.
 - Report the issue to maintenance personnel before resuming operation.

2. WARM-UP PROCEDURE

- Preheat the engine and hydraulic oil to ensure proper function.
 - Cold oil or components may cause the machine to respond slowly or unpredictably.

3. FUNCTION CHECKS

- Verify all gauges, warning lights, and alarms are functioning correctly.
- Listen for unusual noises (e.g., knocking, grinding, high-pitched whines).
- Test the engine speed control and ensure it responds smoothly.
- Move the control levers to confirm proper function and movement.
-

21. COLD WEATHER SAFETY PRECAUTIONS

When operating in cold climates, take extra precautions:

- Be alert for frozen or slippery surfaces on the ground, pedals, and handholds.
- Do not touch metal parts with bare hands in extremely cold temperatures — skin can freeze to the metal, causing serious injury.
- Never use ether or starting fluid to start the engine.

USE OF STARTING FLUID CAN LEAD TO EXPLOSION, SEVERE INJURY, OR DEATH.

- Ensure adequate preheating of the engine and hydraulic system before operation.

- Operating without proper preheat may result in machine malfunction or accident.

22. OPERATING INSTRUCTIONS

1. STARTING THE ENGINE

- Ensure all controls are in the neutral position.
- If starting in cold conditions, use the preheat function as necessary.
- Move the throttle to the half-open position.
- Turn the ignition switch to the START position and release once the engine starts.

2. EMERGENCY SHUTDOWN

- Pull the stop wire or cable to shut down the engine.

3. GENERAL DRIVING OPERATION

- Pull the lift arm control to raise the mount plate and any attached equipment off the ground.
- Move both wheel drive controls forward or reverse to begin movement.
- Adjust the throttle as needed for appropriate speed and power.

4. SLOPE OPERATION GUIDELINES

NOTE: Keep the attachment or load low to the ground when operating on a slope. Always drive slowly and cautiously.

- Operate up and down slopes with the heavy end of the unit uphill.

NOTE: The heavy end depends on load and attachment. An empty bucket makes the rear heavier; a full bucket or most attachments make the front heavier.

- Avoid starting, stopping, or turning on slopes. If turning is necessary, keep the heavy end uphill.
- Do not park on slopes without first:
 - Lowering the attachment to the ground
 - Returning all controls to neutral
 - Turning the ignition switch to STOP
 - Applying chock blocks to the wheels or tracks

 **WARNING:** The maximum slope angle is 12°. Exceeding this may cause fuel leakage.

5. SHUTDOWN PROCEDURE

- Lower the lift arms to the ground.
- Move all controls to the neutral position.
- Let the engine idle at low speed for three minutes to cool down.
- Turn the ignition switch to STOP.
- Remove the key from the ignition.

⚠ CAUTION: Do not park on a slope unless chock blocks are used. Always return all controls to neutral when the machine is stationary.

23 OPERATION GUIDE

Read this manual before using the excavator. **Take care within the first 100 hours.**

FOR NEW EXCAVATORS:

Excavators have a 100-hour run-in period designed to enhance their performance and extend service life. During this period, new excavators should be operated according to the following three steps.

Hours	Load
Within 10 hours	About 60%
Within 100 hours	About 80%
After 100 hours	100%

24. DAILY CHECKS:

- Engine cooling system for leaks or damage
- Tyres and tyre pressure / Track Tension
- Any loose or damaged parts
- Safety decals & labelling
- Control station
- Check level of engine oil, hydraulic oil, fuel and look for any leaks.
- Check the lubricating oil regularly and replenish.
- Check gauges and lights when running.
- Check if excavator is working well when running.
- Add grease to lubricating points every day.
- Check for bolts which may have vibrated loose.



25. WHEN THE MACHINE IS FOUND TO BE ABNORMAL

If any abnormalities are detected during the operation, inspection, or maintenance of the machine — such as unusual noise, vibration, odours, oil leakage, or error alarms — stop using the machine immediately. Notify the sales or service agent without delay and take appropriate corrective measures.

Do not resume operation until the issue has been fully resolved.

26. SAFETY DRIVE

⚠ CAUTION: Match your driving speed to the condition

The excavator's centre balance point changes when lifting and lowering the arms and attachments, take care especially if operating on slopes. Keep the excavator on level ground when operating and turning. Lower lift arms entirely when moving and lift bucket to proper height, to avoid obstacles.

**DANGER - TAKE CARE TO LOWER OPERATING SPEED IF ARMS ARE RAISED.
AVOID SUDDEN CHANGES IN DIRECTION AS THIS CAN CAUSE A ROLL OVER.**



WARNING: This product manual can't teach you how to safely operate a complex excavator. Users should consider undergoing training by a 3rd party provider who specialises in small machinery prior to operation.

Avoid overloading the excavator as this has potential to bend the excavator's hitch plate. Examples of ways to overload the excavator are as follows:

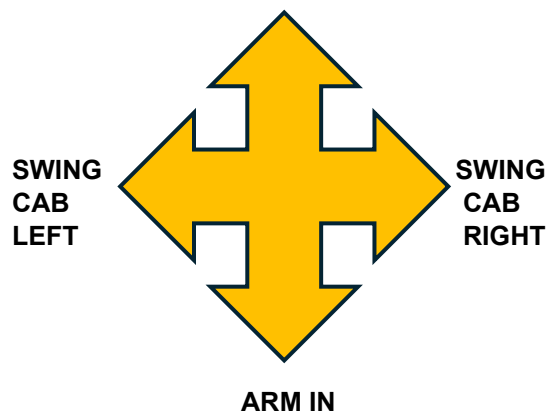
1. Driving a bucket into heavy wet soil and lifting the arms vertically. In this work method the bucket is lifting greater than its intended capacity. A good work method sees the bucket tilted backwards and the excavator in reverse as the arms are lifted, ensuring a low risk of overload.
2. Augering holes in hard dirt or sticky clay, avoid letting the auger bog down and simply lifting the excavator arms vertically, this has potential to overload the excavator and bend the hitch plate. Allow the auger to clear itself if the ground is dense and boggy. Ensure the auger is retracted vertically which involves tilting the hitch plate as the auger clears the hole.
3. Take extreme care when operating on slopes and in wet conditions. Again, this manual can't teach safe operation and users should seek specialised 3rd party excavator training prior to operation

27. CONTROL SYSTEM



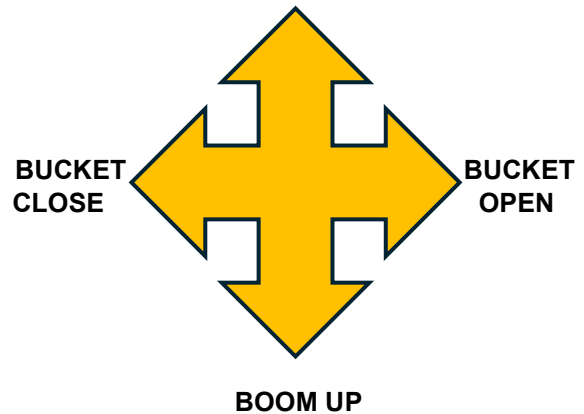
(LEFT HAND)

ARM OUT



(RIGHT HAND)

BOOM DOWN



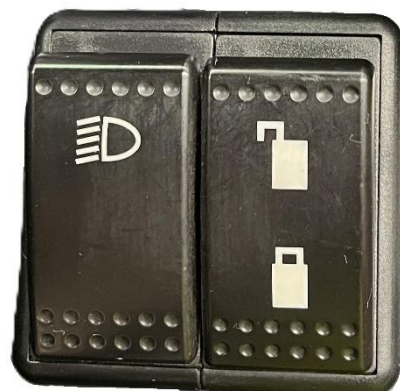
(LEFT HAND) SWING BOOM - Press top button & hold while moving hand control left & right

SAFETY LOCK/UNLOCK SWITCH

- Once seated, press the unlock button to operate machine
- Press lock button to disable the machine

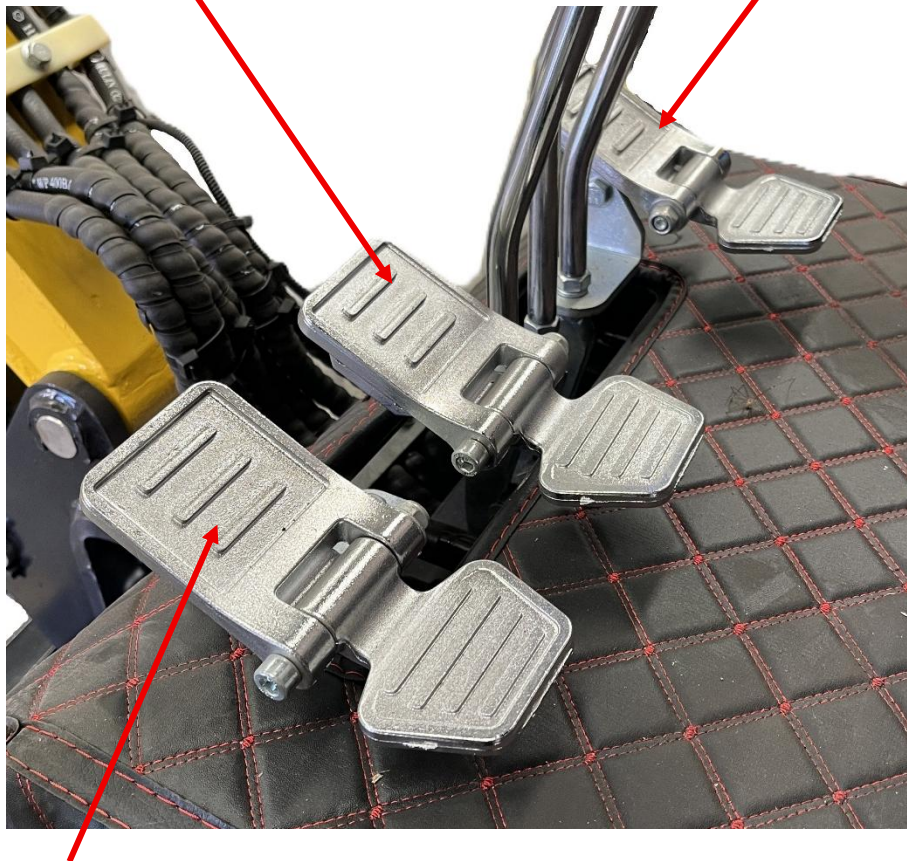
LIGHT SWITCH

- Press light switch to operate LED work light



Left Track Forward/Reverse

Right Track Forward/Reverse



AUX Hydraulic Control

LEVER CONTROL

Left Track Forward/Reverse

Dozer Blade Up & Down

Right Track Forward/Reverse





THROTTLE CONTROLLER

Forward and back operation starting the machine.



IGNITION SWITCH

Turn key left to "HEAT" for 10sec before



HYDRAULIC OIL LEVEL GAUGE



POWER ISOLATION SWITCH

Power on – turn clockwise to turn power on.

Power off – turn anticlockwise to cut off power.

CAUTION: Isolate the power when the excavator is not in use.



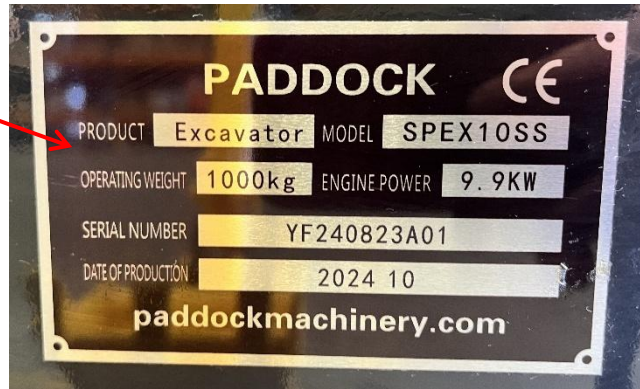
DASH CLUSTER



WORK LIGHT SWITCH & LED WORK LIGHT

COMPLIANCE PLATE

- Each excavator comes with a compliance plate attached.
- Keep this attached for warranty purposes



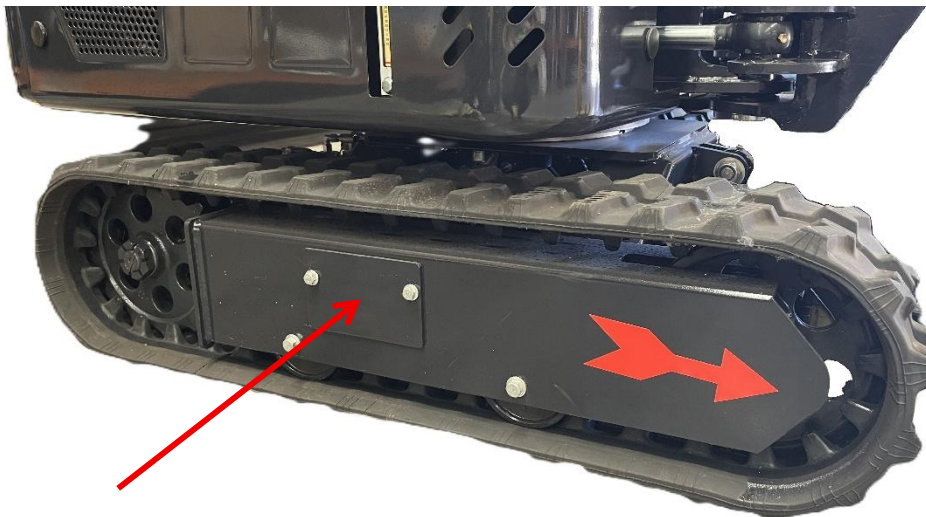
NOTICE:

- Wear personal protective equipment including hard hat, safety eye wear, and hearing protection.
- Do not wear jewellery or loose clothing.
- Notify One-Call and companies which do not subscribe to One-Call.
- Comply with all utility notification regulations before digging or drilling.
- Verify location of previously marked underground hazards.
- Mark jobsite clearly and keep spectators away.
- Remember, jobsite is classified by hazards in place - not by line being installed.

28. TRACK TENSIONING

The tracked excavator is supplied with the correct track tension. Please observe this as too much or too little tension can cause the excavator to lose drive. Correct tension is when you can stand on the track and get ~40mm of track deflection (based on 90kg operator).

Track tension will slowly be lost with use, a small amount of adjustment may be required to maintain the required tension. Take care not to over tighten the track tensioner as this will over-tension the track and cause poor performance.



29. CONNECTING ATTACHMENTS

ONLY USE APPROVED PARTS:

- Always use manufacturer-approved parts and accessories to ensure the machine operates safely and efficiently.
- Non-approved parts may compromise the integrity of the machine, leading to potential malfunctions, safety hazards, or voiding of warranties.

RISKS OF USING NON-APPROVED PARTS:

- Reduced machine performance and efficiency.
- Increased wear and tear, potentially shortening the machine's lifespan.
- Increased risk of accidents or injuries.

29a. HOW TO USE QUICK HITCH

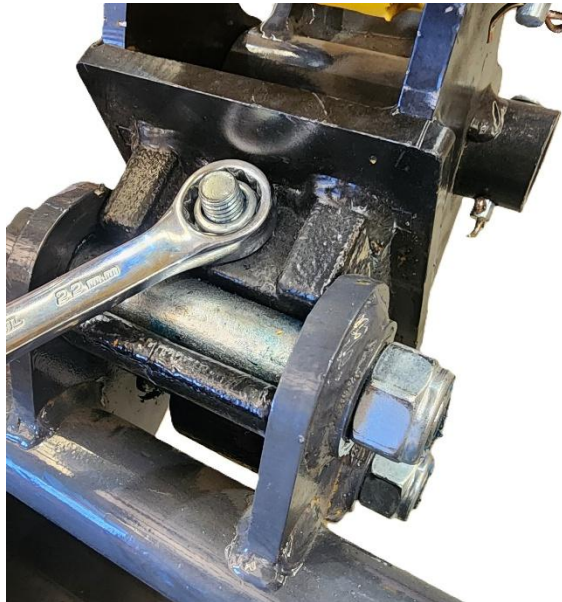
1. Raise the arm off the ground to a workable height.



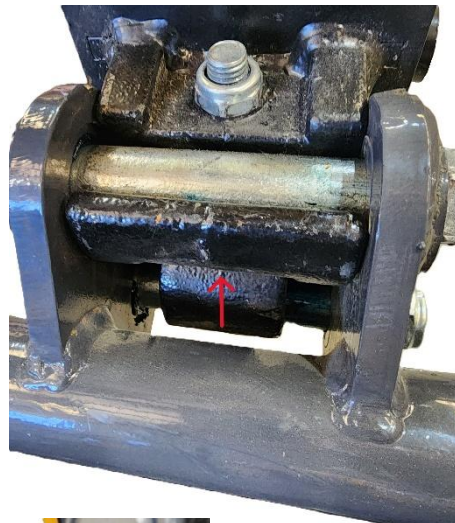
2. Tilt the bucket to ensure it doesn't fall once the mounting is loose.



3. Using the 22mm spanner loosen the nyloc nut on the top of the quick hitch.



4. Loosen the head of the bolt on the bottom of the quick hitch. Doing this will raise the bottom jaw, once the jaw has moved enough off of the bottom bolt on the bucket you should be able to lift the bucket and still have it pivoting in the top jaw.



5. Lower the bucket onto the ground and reverse the steps to install a new bucket.



30. EXCAVATOR ATTACHMENTS AND ACCESSORIES

The full functionality of these machines is in the accessories and available attachments. Paddock™ excavators feature a quick coupling design meaning you can buy or rent attachments and interchange depending on the job. Additional attachments can always be purchased later to increase the functionality of the machine. Each machine comes fitted with a 400mm bucket. Users can then select any additional attachments as optional extras for their particular application.

BUCKET ATTACHMENT

The Series 17 machines can run buckets in 200mm/400mm. It is not suggested to use digging buckets greater than 400mm + in size due to the reduced performance outside this range. However, 600-800mm Mud Buckets without teeth can be used for scraping and levelling.



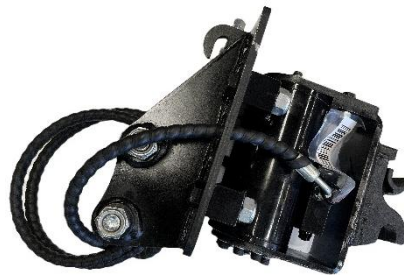


AUGERS FOR DIGGING HOLES

The Series 17 excavator is available with an auger drive that will turn augers up to 400mm in diameter in most ground types.

TILTING HITCH

A mini excavator tilt hitch attachment (also called a tilting quick hitch or tilt coupler) is an accessory fitted to the end of a mini excavator's arm that allows the operator to tilt buckets or other attachments left or right — typically up to ± 45 degrees — without repositioning the entire machine.



ROCK BREAKER

Adding a rock breaker attachment allows for large rocks otherwise too large to be moved to be broken into manageable pieces. The breaker can be used for busting up old concrete driveways and footpaths so they can be lifted, pushed and maneuvered with ease. The rock breaker utilises the auxiliary hydraulic connections and attaches via the quick coupling at the hitch.



ACTUATING GRAPPLE

The grapple is like a 4 in 1 bucket for your excavator and allows objects to be gripped, lifted, rolled and maneuvered into position. It's ideal for users clearing bush and needing to drag logs and branches. Attaching the grapple takes a little more time as it utilises the excavator's ram to function and therefore needs pins knocked in and out rather than utilising the quick hitch connection like other attachments.



RIPPER ATTACHMENT

The ripper attachment is ideal for loosening hard ground and busting through tough tree roots. The hardened steel ripper tip is reinforced with heavy steel plates to ensure it can handle the tough work.



EXCAVATOR RAKE

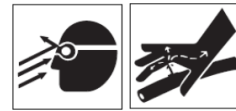
The rake attachment is ideal for forestry work where green waste is to be piled for decomposition or burning. The rake can be used for clearing problem vegetation such as lantana.



DON'T COMPROMISE QUALITY

When working with machinery, equipment quality should not be compromised, cheap copy machines breakdown costing you money. Paddock™ only use the highest quality materials making them a machine for life.

31. HYDRAULIC HOSES



WARNING

If attachment requires hydraulic power for operation, connect hydraulic hose. Fluid or air pressure could pierce skin and cause injury or death. Keep away.

NOTE:

1. Escaping pressurised fluid can cause injury or pierce skin and poison.
2. Before disconnecting a hydraulic line, turn engine off and operate all controls to relieve pressure. Lower, block, or support any raised component with a hoist. Cover connection with heavy cloth.
3. Before using system, check that all connections are tight, and all lines are undamaged.
4. Fluid leaks can be hard to detect. Use a piece of cardboard or wood, rather than hands, to search for leaks.
5. Wear protective clothing, including gloves and eye protection.
6. If you are injured, seek immediate medical attention from a doctor familiar with this type of injury.



CAUTION: Hot parts may cause burns, do not touch until cool.



CAUTION: Hydraulic couplers, hoses and fluid may be hot. Wear gloves when connecting and disconnecting hydraulic hoses and wait until unit has cooled before touching hydraulic components.

1. Cycle attachment drive control to relieve residual pressure at hydraulic couplers.
2. Ensure that all controls are in neutral position.
3. Remove dirt and debris from hydraulic couplers.
4. Connect male coupler on attachment to female coupler on unit.
5. Connect coupler on attachment to male coupler on unit.
6. Connect female coupler on case drain hose to case drain coupler on unit, if attachment requires it.
7. Ensure that connections are secure by pulling on hoses

AUX HYDRAULIC COUPLER FITTING

- M14 X 1.5 (Top)



32. DO NOT MODIFY THE MACHINE

UNAUTHORIZED MODIFICATIONS ARE STRICTLY PROHIBITED

Altering or modifying any part of this machine without prior manufacturer approval is dangerous and may result in:

- Serious injury or death
- Failure of safety systems
- Compromised structural integrity
- Loss of control or unintended operation
- Voiding of the manufacturer's warranty

ALWAYS:

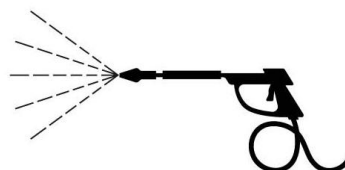
- Operate the machine only as intended by the manufacturer.
- Obtain written approval from the manufacturer or qualified personnel before making any changes.
- Adhere to all safety, service, and operation procedures provided in the official documentation.

UNAUTHORIZED MODIFICATIONS ARE NOT COVERED UNDER WARRANTY.

33. EXCAVATOR STORAGE

RINSE OFF EQUIPMENT

- Use water to remove dirt and mud, especially at undercarriage. Only clean unit when it is cool.



CAUTION: Do not spray water onto operator's console. Electrical components could be damaged. Wipe down instead.

- Open hood and remove debris from inside of unit.

DISCONNECT ATTACHMENTS

- Lower attachment to the ground.
- Ensure that all controls are in neutral.
- Turn off engine.
- Disengage lock pins by turning handles away from centre of attachment.
- Cycle attachment drive control and disconnect hydraulic hoses, if used.
- Release chock brake.
- Start engine.
- Tilt mount plate forward and back unit away from attachment.

STOW TOOLS

- Make sure all tools and accessories are loaded on trailer.

34. SAFETY SERVICE & MAINTENANCE

The Paddock™ Excavator is designed for reliable operation and ease of maintenance. Like all small engines, engine oil should be changed at the recommended service intervals. Hydraulic fluid levels must also be monitored regularly and replaced as required.



Grease nipples are located throughout the machine, and it is recommended that a small amount of grease be applied to all pivot points as part of your daily pre-start checks to ensure long-term performance and durability.

Only basic mechanical knowledge is required to maintain these machines effectively. All Paddock equipment must meet the minimum maintenance requirements as set out in this manual to maintain the supplier's warranty. Paddock excavators are built to strict quality control requirements meaning if the reasonable maintenance practices set out in this manual are followed, users are highly unlikely to need warranty assistance. Sometimes things do go wrong however and if an item does require repair or replacement under warranty, please contact your place of purchase to discuss.

ENGINE

Your engine is covered under the engine manufacturer's warranty. Please refer to the engine manufacturer's specific requirements set out in the engine manufacturer's manual supplied with your excavator. The below maintenance requirements will make no mention to engine specific maintenance to avoid possible conflicts.

EXCAVATOR (EXCLUDING ENGINE) MAINTENANCE PHILOSOPHY

A maintenance logbook is included below which sets out the minimum requirements for servicing and maintaining your excavator.

Paddock understands it is unreasonable for owners to be able to visit certified service centres when their excavator may operate in remote parts of Australia hundreds of kilometres from registered agents. Therefore, Paddock takes a new age approach to who

qualifies as a servicing agent. Essentially, owners can have their excavator serviced by any suitably qualified person operating a registered business in Australia without voiding their warranty.

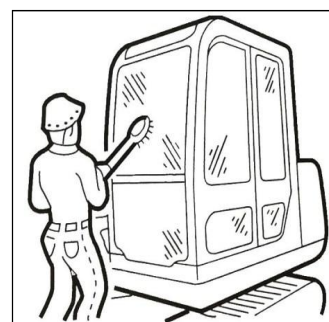
Businesses should be asked if they feel they are qualified to perform the works set out in the excavator's logbook and if they have prior experience maintaining similar types of equipment.

If owners are unsure if a specific business is suitably qualified to perform the logbook servicing, they should seek guidance and approval from their place of purchase. The following are considered examples of suitably qualified service agents.

- Maintenance and repair businesses who work with excavators and hydraulics, tractor and mower repair businesses may qualify.
- Businesses dealing in hydraulic system maintenance and repairs.
- Large machinery maintenance and repair businesses

DAILY CLEANING CHECKLIST:

- Wipe away lubricating oil, grease, dirt, snow, or ice from walkways and surfaces to prevent slips and falls.
- Remove loose objects and unnecessary tools from inside and around the machine to avoid interference with operation.
- Clean engine components regularly to prevent build-up of dust, oil, or grease, which could lead to fire hazards.
- Keep the operator's seat and cabin area clean—remove trash, tools, or any items not required for operation.



Regular cleaning also improves machine performance and makes it easier to spot leaks, wear, or damage.

A CLEAN MACHINE IS A CLEAN IMAGE OF YOUR BUSINESS AND WORK.

35. SAFETY SERVICE PRECAUTIONS

WARNING:

- Incorrect procedures could result in death, injury, or property damage. Learn to use equipment correctly.

CAUTION:

- Unless otherwise instructed, all maintenances should be performed with engine off.
- Stop engine and apply chock brake before opening hood for inspection or service.
- Allow engine to cool before performing any maintenance.
- Refer to engine manufacturer's manual for engine maintenance instructions.
- Before maintaining equipment, lower unstowed attachments to ground.



WORKING UNDER RAISED LIFTING ARMS



Crushing weight could cause death or serious injury. Use proper procedures and equipment or stay away.



CAUTION: Support both lift arms before working under raised lift arms.



Explosion possible. Serious injury or equipment damage could occur. Follow directions carefully.



CAUTION:

1. Sparks can cause battery to explode.
2. Electronic components can be easily damaged.

36. MAINTENANCE TIPS

LUBRICANTS

Proper lubrication and maintenance protects equipment from damage and failure. Service intervals listed are for minimum requirements. In extreme conditions, service excavator more frequently. Use only recommended lubricants.



CAUTION:

1. Use only genuine parts, filters, and approved lubricants.
2. Use the "Service Record" to record all required service to your excavator.

LUBRICATION AREA

- Lubricating zerks/nipples throughout the excavator
- Clean before lubricating to avoid any dust or dirt entering joints.
- Replace the parts if it is lost or damaged.



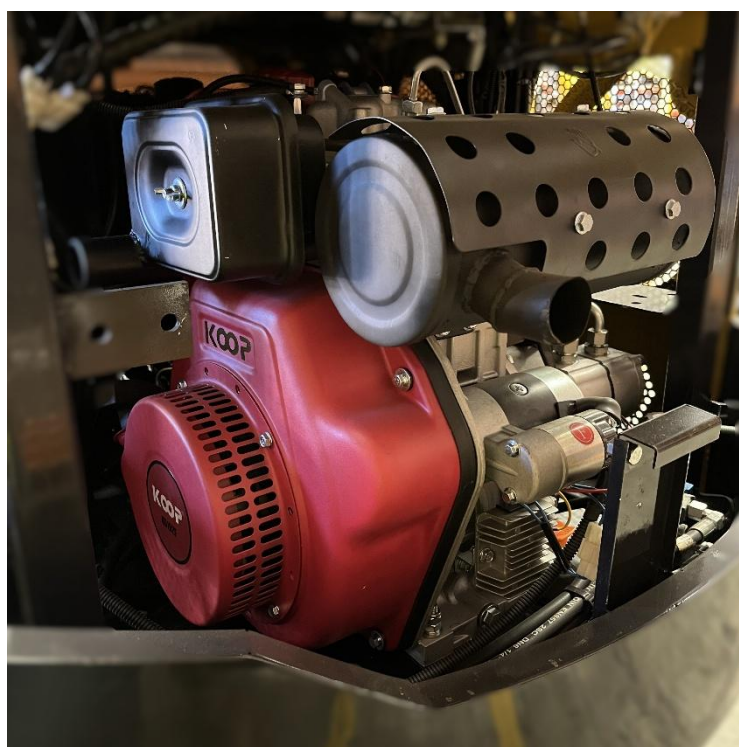
37. MAINTENANCE

10 HOUR

- Check Engine Oil Level
- Check engine oil level at dipstick opening every 10 hours.
- Oil level should be at top of marking, if low, add 10W30.
- Check with unit on level surface and at least 15 minutes after stopping engine.



IMPORTANT: Use oil specified in “Engine Oil Temperature Chart”



CHECK HYDRAULIC FLUID LEVEL

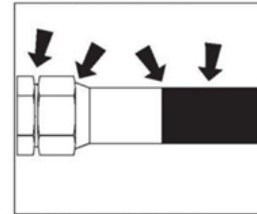
- Check hydraulic fluid level every 10 hours.
- Maintain fluid level at halfway point on gauge, when engine is off, and fluid is cool. If low, add THF at fill.



CHECK HYDRAULIC HOSES

- Check hydraulic hoses for leaks every 10 hours.

WARNING: Fluid or air under pressure can pierce the skin and cause serious injury or death. Keep clear of pressurised leaks or systems.

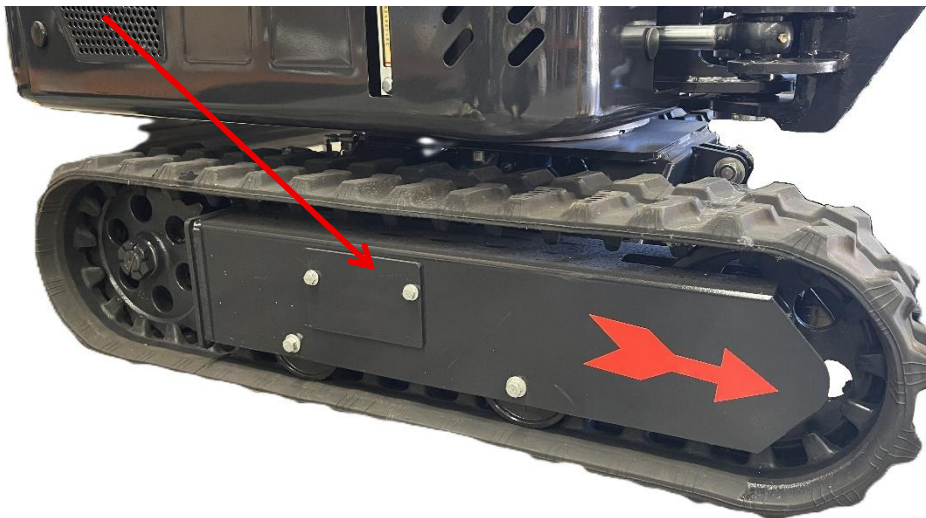


NOTICE:

1. Escaping pressurised fluid can cause injury or pierce skin and poison.
2. Before disconnecting a hydraulic line, turn engine off and operate all controls to relieve pressure.
3. Lower, block, or support any raised component with a hoist. Cover connection with heavy cloth and loosen connector nut slightly to relieve residual pressure. Catch all fluid in a container.
4. Before using system, check that all connections are tight, and all lines are undamaged.
5. Fluid leaks can be hard to detect. Use a piece of cardboard or wood, rather than hands, to search for leaks.
6. Wear protective clothing, including gloves and eye protection.
7. If you are injured, seek immediate medical attention from a doctor familiar with this type of injury.

CHECK RUBBER CRAWLER'S TENSION

- Check the rubber crawler tension at startup and every 10 hours and adjust as needed.



50 HOUR

Location	Task	Remarks
Drive	Check battery	
	Check drive belt	
	Check air filter	
	Check oil cooler	
	Check hydraulic filter	

- Clean oil cooler every 50 hours. Clean more frequently if operating in dusty conditions.
- Clean with compressed air or low-pressure water.

NOTICE: Be careful not to damage cooler fins.

CHANGE HYDRAULIC FLUID FILTER (BREAK IN ONLY)

- Change hydraulic fluid filter at 50 hours for break in process, then change every 250 hours.

100 HOUR

- Change Engine Oil
- Change engine oil every 100 hours.
- Drain oil at drain plug and add GEO 10W30 at filler until oil level is seen at marking.



IMPORTANT: Use oil specified in “Engine Oil Temperature Chart”

200 HOUR

- Check Spark Plugs and Gap
- See engine operator’s manual for instructions.

CHANGE OIL FILTER

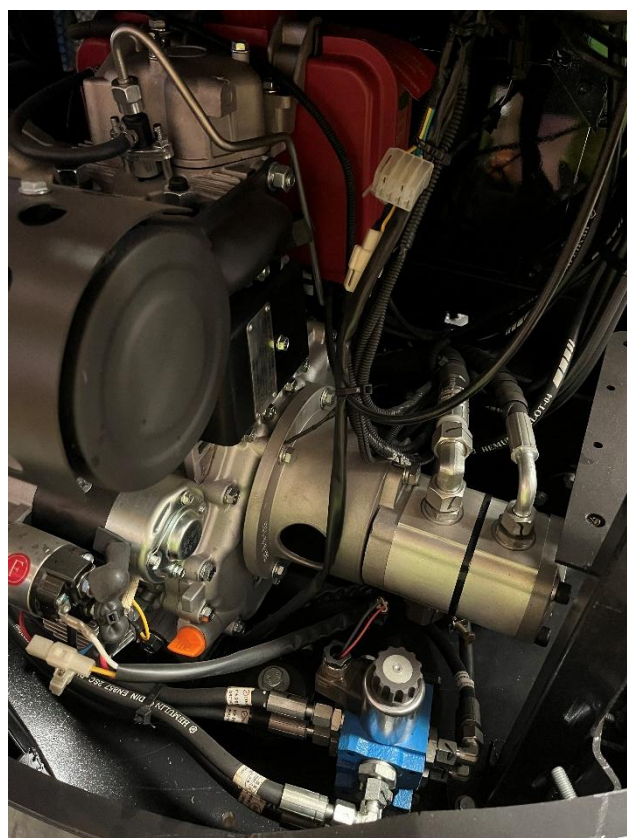
- Change hydraulic fluid filter every 200 hours.

250 HOUR

Location	Task	Remarks
Traction unit	Change hydraulic fluid filter	
	Change air filter, check inner element	

CHANGE HYDRAULIC FLUID FILTER

- Change hydraulic fluid filter every 250 hours



500 HOURS

CHANGE HYDRAULIC FLUID

- Change hydraulic fluid every 500 hours. Drain fluid at drain plug and add THF at filler unit fluid level is at halfway point on sight glass. Then start engine, running idle for 2 minutes, then check the gauge and make sure the level is in the middle of gauge.
- Use Hydraulic Oil 46.

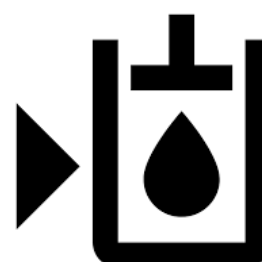


WARNING

Hot parts may cause burns or injury. Do not touch until cooled.

NOTICE: Allow engine to cool before touching parts or performing any service.

- Stop engine and allow to cool before attempting service
- Remove key from ignition switch.
- Adjust belt tension.





WARNING

Moving parts could cause injury or death. Always stay clear.

NOTICE: Do not open hood for inspection or service with engine running.



WARNING

Runaway possible. Excavator could run over you or others. Learn how to use all controls.

Start and operate only from operator's position.

NOTICE: Do not leave operator station with engine running.

- Start engine and check operation.
- Stop engine open hood, and re-check belt alignment.
- Close hood.

JUMP START UNIT



WARNING

Incorrect procedures could result in death, injury, or property damage. Use equipment correctly.

NOTICES:

- Park on level area
- Put all drive controls in neutral.
- Lower all unstowed attachments.
- Turn off all electrical loads.
- Turn off engine and remove key from ignition.
- Block wheels or tracks.



WARNING

Explosion possible. Severe injury or equipment damage could occur. Follow instructions to operate carefully.

CAUTIONS:

1. Lead-acid batteries vent explosive hydrogen gas when charging.
2. Do not smoke, create sparks, or use flames around batteries.

3. Never lean over battery when making connections.
4. Do not allow vehicles to touch when jump starting.
5. Wear eye protection and remove metal jewellery and watches.
6. Do not attempt to jump start a battery that is leaking, bulging, heavily corroded, frozen, or otherwise damaged.
7. Never short-circuit battery terminals for any reason.
8. Never hammer on battery posts or cable terminals.

BEFORE YOU START

Electronic components can be easily damaged by electrical surges. Jump starting can damage electronics and electrical systems and is not recommended except in extreme circumstances. Use quality large diameter jumper cables capable of carrying high currents (400 amps or more). Cheap cables may not allow enough current flow to start a dead/discharged battery.

Read all steps thoroughly and review illustration before performing procedure.

WARNINGS



DANGER

Digger teeth are extremely sharp and dangerous. Do not operate near bystanders, failure to do so could cause injury or death. Always stay clear.



DANGER

Turning shaft could cause injury or death. Always stay clear.



DANGER

Electric shock. Contacting electrical lines will cause death or severe injury. Know the location of lines and always stay clear.



DANGER

Deadly gases. Lack of oxygen or presence of gas will cause sickness or death, provide ventilation and ensure PPE is worn



WARNING

Jobsite can be hazardous locations and could cause death or severe injury. Use correct equipment and work methods. Use and maintain proper safety equipment.



WARNING

Crushing weight could cause death or severe injury. Use proper procedures and equipment or stay away.



⚠ WARNING

Moving parts could cause injury or death. Always stay clear.



⚠ WARNING

Explosion possible. Severe injury or equipment damage could occur. Follow directions carefully.



⚠ WARNING

Incorrect procedures could result in death, injury, or property damage. Learn to use equipment correctly.



⚠ WARNING

Improper control function could cause death or severe injury. If control does not work as described in instructions, stop excavator and have it serviced.



⚠ WARNING

Looking into fibre optic cable could result in permanent vision damage. Do not look into ends of fibre optic or unidentified cable.



⚠ WARNING

Fluid or air pressure could pierce skin and cause injury or death. Always stay clear.



⚠ WARNING

Excavator runaway is possible. Excavator could drive over you or bystanders. Ensure instructions are read and confidently understood. Start and operate only from operator's position.



⚠ WARNING

Fire or explosion possible. Fumes could ignite and could cause burns. No smoking, no flame, no spark.



⚠ WARNING

Moving traffic - hazardous situation. Death or severe injury could result. Avoid moving vehicles, wear high visibility clothing, post appropriate warning signs.



⚠ WARNING

Flying objects may cause injury. Wear PPE, hard hat and safety glasses always.



⚠ WARNING

Hot parts may cause burns or injury. Do not touch until excavator has cooled.



⚠ WARNING

Exposure to loud noises may cause hearing loss and irreversible damage. Always wear hearing protection.



⚠ WARNING

Fall possible. Slips or trips may result in injury. Keep area clean.



⚠ WARNING

Battery acid may cause burns. Avoid contact.



⚠ WARNING

Improper handling or use of chemicals may result in illness, injury, or equipment damage. Follow instructions on labels and in material safety data sheets (MSDS).

EMERGENCY PROCEDURES

Before operating any equipment, review emergency procedures and check that all safety precautions have been taken.

EMERGENCY SHUTDOWN



ELECTRIC STRIKE DESCRIPTION

When working near electric cables, remember the following:

Electricity follows all paths to ground, not just path of least resistance.

- Pipes, hoses, and cables will conduct electricity back to all equipment.
- Low voltage current can injure or kill. Almost one-third of work-related electrocutions result from contact with less than 440 volts.

Most electric strikes are not noticeable, but indications of a strike include:

- Power outage
- Smoke
- Explosion
- Popping noises
- Arcing electricity

IF ANY OF THESE OCCUR, ASSUME AN ELECTRIC STRIKE HAS OCCURRED.

IF AN ELECTRIC LINE IS DAMAGED

If you suspect an electric line has been damaged and you are on excavator, **DO NOT MOVE.**

Remain on it and take the following actions. The order and degree of action will depend upon the situation.

- Warn people nearby that an electric strike has occurred. Instruct them to leave the area and contact utility.
- Raise attachments and drive from immediate area.
- Contact utility company to shut off power.
- Do not return to jobsite or allow anyone into the area until the utility company has given permission.

If you suspect an electric line has been damaged and you are off excavator, **DO NOT TOUCH EXCAVATOR.** Take the following actions. The order and degree of action will depend upon the situation.

- LEAVE AREA. The ground surface may be electrified, so take small steps close together to reduce the hazard of being shocked from one foot to the other.
- Contact utility company to shut off power.
- Do not return to jobsite or allow anyone into the area until the utility company has given permission.

IF A GAS LINE IS DAMAGED

If you suspect a gas line has been damaged, take the following actions. The order and degree of action will depend on the situation.

- Immediately shut off engine(s) if this can be done safely and quickly.
- Remove any ignition source(s) if this can be done safely and quickly.
- Warn others that a gas line has been cut and that they should leave the area.
- Leave jobsite as quickly as possible.
- Immediately call your local emergency phone number and utility company.
- If jobsite is along street, stop traffic from driving near jobsite.
- Do not return to jobsite or allow anyone into the area until the utility company has given permission.

IF A FIBER OPTIC CABLE IS DAMAGED

Do not investigate cut ends of fibre optic or unidentified cable. Vision damage can occur.

IF EXCAVATOR CATCHES ON FIRE

Perform emergency shutdown procedure and then take the following actions. The order and degree of action will depend on the situation.

- Immediately move battery disconnect switch (if equipped) to disconnect position.
- If fire is small and fire extinguisher is available, attempt to extinguish fire.
- If fire cannot be extinguished, leave area as quickly as possible and contact emergency personnel

38. ADDITIONAL WARRANTY INFORMATION

The below information is an addition to information covered under the standard Terms and Conditions of sale at your place of purchase.

ENGINE – Refer to specific Engine manufactures, typically 1yr, refer to engine manufactures terms and conditions of warranty.

EXCAVATOR PARTS - 2Yrs or 1,000hrs (whichever comes first) from date of purchase. Customer is responsible for advising place of purchase of the defective part. Generally, photographic evidence of the defective part will be required, in some situations; customer may be required to return the defective part to place of purchase for inspection. Part will be assessed and either repaired or replaced. Place of sale will cover freight cost for return of item to customer. Labour costs associated with the repair of the warranted item will only be covered by the seller if the item is returned to the place of purchase.

ACCESSORIES AND ATTACHMENTS – 12 months or 1,000hrs (whichever comes first) from date of purchase.

BATTERY – 3-month warranty from date of purchase.

ELECTRICS – Excavator electrics are warranted for manufacturing faults and defects for a period of 12 months from date of purchase.

HOSES – Hydraulic hoses are warranted against manufacturing defects for a period of 1yr or 1,000hrs (whichever comes first) from date of purchase.

EXCLUSIONS - Normal wearing parts and consumables are not covered by warranty. Examples include: oil filters, oil, muffler, belts, chains, cutting teeth, blades, tires, tracks, sprockets. Equipment damaged, misused, not maintained, adjusted incorrectly, effected by fire, rain, accident or flood will not be covered by warranty.

39. SUPPORT INFORMATION

SALES ENQUIRIES:

P: 1300 246 406

E: info@paddockmachinery.com

SUPPORT REQUESTS

Via the website support request - www.paddockmachinery.com

ADDRESS:

47 Eagleview Place
Eagle Farm QLD 4009
Australia

EXCAVATOR MAINTENANCE LOG BOOK

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