

ILLUSIONS AUSTRALIA

SAFE WORK PROCEDURE

SWP 045 – LOG SPLITTER

1. PURPOSE AND SCOPE

Minimum requirements for safe operation of the hydraulic petrol log splitter at Illusions Australia.

Applies to the Bigger Boyz Toyz BBT 40/65 Ton Hydraulic Petrol Wood Log Splitter with 15 hp electric-start engine (BBT-LS-40T-ES), and to equivalent log-splitting activities only where the equipment, capacity and controls are comparable.

2. AUTHORISATION AND COMPETENCY

Only trained, competent and authorised workers may operate the log splitter.

Operators must understand the machine controls, emergency stopping, hydraulic hazards, crushing and pinch points, log positioning, exclusion zones, petrol-engine hazards and the manufacturer's operating instructions.

3. REQUIRED PPE

The following PPE must be worn as appropriate:

- Safety footwear with protective toe caps.
- Safety glasses or other suitable eye protection.
- Safety gloves suitable for handling timber, kept clear of the splitting wedge and all pinch/crush zones.
- Hearing protection where noise levels require it.
- Close-fitting work clothing; secure loose clothing, jewellery and long hair.
- High-visibility clothing where the splitter is being used around vehicles, mobile plant or site traffic.

4. PRE-START CHECKS

Before commencing work, confirm that:

- The log splitter is on firm, level and stable ground and cannot move unexpectedly.
- Guards, controls, engine stop and operating levers are present, undamaged and functioning correctly.
- Hydraulic hoses, fittings, cylinder and connections show no leaks, abrasion, bulging or damage.
- The splitting wedge, beam, log supports/cradle and retaining components are secure and serviceable.
- The engine, fuel tank, cap and fuel lines show no signs of leakage or damage.
- The work area is clear of combustible materials, trip hazards and unnecessary persons.
- Adequate ventilation is available; the petrol engine must not be operated in an enclosed or confined area.
- Logs are suitable for the machine and can be positioned without hands entering the crushing or splitting zone.
- The operator has a clear escape path and an exclusion zone is established around the machine.

5. SAFE OPERATING PROCEDURE

1. Position the splitter on firm, level ground and establish the exclusion zone.
2. Complete the pre-start inspection and confirm the machine is configured for the intended splitting position.
3. Start the petrol engine in accordance with the manufacturer's instructions and allow the hydraulic system to stabilise.

4. Select one log at a time and inspect it for unstable shape, knots, embedded metal, foreign objects or defects that may cause unexpected movement.
5. Position the log squarely against the support/end plate and keep hands clear of the wedge, ram, end plate and pinch points.
6. Stand in the designated operator position and ensure all other persons are outside the exclusion zone.
7. Operate the control lever(s) as designed. Maintain clear sight of the log and splitting wedge throughout the cycle.
8. Stop the cycle immediately if the log twists, lifts, ejects, jams or begins to move unpredictably.
9. Allow the ram/wedge to stop or return fully before removing split timber or positioning another log.
10. Use appropriate mechanical assistance or team handling for logs that cannot be safely lifted or controlled by one person.
11. Stack split timber so it cannot roll, collapse or obstruct access around the machine.
12. Shut down and isolate the machine before clearing jams, inspecting faults, refuelling, cleaning or maintenance.

6. PROHIBITED PRACTICES

Workers must not:

- Place hands, fingers, feet or any body part between the log, wedge, ram, end plate or other moving components.
- Hold a log in position by hand while the splitting cycle is operating.
- Reach across, step over or straddle the machine while it is operating.
- Attempt to split more than one log at a time.
- Split logs that are positioned at an angle or cannot be supported securely.
- Use hands or feet to dislodge a jammed log while hydraulic power is available.
- Bypass, defeat or modify controls, guards or safety devices.
- Operate the splitter where visitors or unauthorised persons can enter the operating area.
- Operate the petrol engine indoors or in an enclosed/confined area.
- Smoke, use flames or create ignition sources during refuelling or near stored petrol.
- Refuel while the engine is running or hot.
- Use the machine with hydraulic leaks, damaged hoses, loose fittings, fuel leaks or other safety-critical defects.

7. CRUSH, PINCH AND AMPUTATION HAZARDS

The ram, wedge, end plate and moving log can create severe crushing, trapping and amputation hazards.

- Keep hands and feet outside the splitting and return paths at all times.
- Use the machine controls only from the intended operator position.
- Do not attempt to catch or steady a moving or falling log.
- Wait for all movement to stop before handling split material.

8. LOG MOVEMENT AND EJECTION

Irregular, knotted or poorly positioned timber can twist, split suddenly or be ejected from the machine.

- Position logs squarely and use the machine's supports/cradle.
- Keep the exclusion zone clear of other persons.
- Stand clear of the likely ejection path and never lean over the log.
- Stop and reposition any unstable log before applying full splitting force.

9. HYDRAULIC SYSTEM

Hydraulic fluid under pressure can penetrate skin and cause serious injury.

- Never use hands or skin to check for hydraulic leaks.
- Do not operate with damaged, leaking or abraded hoses or fittings.
- Depressurise and isolate the machine before hydraulic inspection, adjustment or repair.
- Any suspected hydraulic injection injury requires immediate medical attention.

10. PETROL ENGINE, FIRE AND CARBON MONOXIDE

Petrol is highly flammable, engine exhaust contains carbon monoxide, and engine/muffler surfaces become hot during and after operation.

- Operate outdoors or in a genuinely well-ventilated open area; never run the engine in an enclosed or confined space.
- Keep the operating engine clear of buildings, equipment and combustible materials in accordance with the manufacturer's instructions.
- Stop the engine and allow it to cool before refuelling.
- Refuel only in a well-ventilated area away from smoking, flames, sparks and other ignition sources.
- Do not overfill the tank. Secure the fuel cap and clean any spill completely before restarting.
- Avoid contact with the muffler and other hot engine components; allow the engine to cool before transport or indoor storage.

11. FAULTS, DAMAGE AND ABNORMAL CONDITIONS

Stop operation immediately for hydraulic leaks, hose damage, abnormal engine operation, damaged controls, guard failure, unstable logs, jammed material, fuel leakage, unusual noise/vibration or any uncontrolled movement.

Shut down, isolate and prevent further use until the defect or unsafe condition has been assessed and corrected.

12. SHUTDOWN AND HOUSEKEEPING

- Allow the splitting cycle to finish and return moving components to the safe parked position.
- Stop the engine and isolate the machine.
- Allow hot engine components to cool before moving or storing the splitter.
- Remove loose timber, bark and debris from the work area.
- Stack split timber safely and keep access routes clear.
- Clean up fuel or hydraulic fluid spills using the appropriate spill-response procedure.
- Report defects and secure the equipment against unauthorised use.

13. EMERGENCY AND INCIDENT RESPONSE

1. Stop the equipment or activity immediately.
2. Shut down the engine and isolate hydraulic/mechanical hazards where safe to do so.
3. Provide or obtain first aid as required.
4. Treat crush injuries, hydraulic injection injuries, significant lacerations, burns or suspected carbon-monoxide exposure as urgent medical matters.
5. Notify the Foreman, Leading Hand or other authorised Illusions Australia representative.
6. Call emergency services where required.

7. Do not recommence until the incident, defect or unsafe condition has been addressed.

14. STOP WORK REQUIREMENT

Work must stop where:

- The operator is not trained, competent or authorised.
- A safety control, guard, hydraulic component or engine component is defective.
- The log cannot be positioned or supported safely.
- Another person enters the operating/exclusion zone.
- Fuel or hydraulic fluid is leaking.
- Ventilation is inadequate for petrol-engine operation.
- The ground or machine position is unstable.
- A jam cannot be cleared without entering the danger zone while energy remains available.

No production requirement or deadline takes priority over safe work.

DOCUMENT CONTROL

Document	SWP 045 – Log Splitter
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Prepared By	Aidan McDonnell
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