

User's Guide

RAPIDTOOL Portable Electric Rebar Benders

WARNING: PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THIS MACHINE

Machine is not rated and should not be used for commercial rebar production purposes.

1. Safety

This machine is a high performance, electric tool. Failure to follow safety instructions may result in serious injury.

- 1. Authorized personal protective equipment must be worn when operating machine (minimum requirement protective gloves).
- 2. Take note of all warning signs on machine.
- 3. Keep body parts well clear of moving parts when machine is switched on.
- 4. Do not touch pump housing after use as it will be hot. Wait for machine to cool.
- 5. Use away from others, particularly children.
- 6. Never attempt to bend rebar outside of models prescribed diameter range (refer to table in Specifications & Parts section).
- 7. Hold bender firmly and maintain proper footing and balance. Do not use at heights.
- 8. Never operate machine in wet or damp conditions.
- 9. Never attempt to service machine (other than general maintenance procedures outlined in Maintenance section). Contact supplier if issues arise.
- 10. Only use RAPIDTOOL approved spare parts and accessories with machine.
- 11. Do not bend short lengths.
- 12. Keep away from sparks and naked flames.
- 13. Always check power cord for damage and safe placement prior to use.
- 14. Disconnect bender from power outlet when not in use.
- 15. Inspect bender before each use (refer to Maintenance section). Do not use when quality has been compromised.
- 16. Do not cover air vents on machine.
- 17. Store out of reach of children.

2. Specifications & Parts

Power Supply:

Ensure machine is connected to correct power supply (check machine label to confirm power supply).

Extension Leads:

Where possible, connect machine directly to power outlet. If an extension lead is required, ensure lead is under 35m in length. Minimum extension lead diameter are prescribed below:

Extension Lead Length (m)	Min Wire ø (mm²)
25m	1.0
35m	1.5

Machine Specifications

MODEL	ERB-16	
Input Voltage -Single Phase*	220-240V AC ~50Hz	110-120V AC ~60Hz
Power Consumption	850W (220-240V)	1000W (110-120V)
Net Weight	15kg	
Dimensions (cm)	60L x 17W x 20H	
Bending Range	4-16mm**	

* Check machine label to determine correct power supply.

**Refer to machine model data sheet for maximum tensile strength/grade.

Machine Parts

Installing Additional Bend Module and Bend Die

- 1. Disconnect from power supply.
- 2. Unfasten bend module bolt and remove existing bend module.
- 3. Fit additional bend module over dabber and securely fasten additional bend module bolt (bolt must line up with groove in dabber).
- 4. Fit additional bend die over existing machine head and securely fasten additional bend die bolt.



3. Operating Machine

Pre-use Checks:

- 1. Check oil level (refer to Maintenance section).
- 2. Check condition of bend module and tightness of bend module bolt (refer to Maintenance section).
- 3. Check power supply is properly earthed.
- 4. Check that power cord is undamaged and plug is not loose (also applies for extension leads).

Warm Up:

In cold weather, warm up unit for 60 seconds to ensure hydraulic oil reaches proper viscosity. Pull trigger to extend dabber and release when dabber finished full stroke. Repeat bend cycle without rebar 15-20 times.

Bending Procedure:

- 1. Insert rebar between bend module and machine head.
- 2. Pull and hold trigger while dabber advances and bends rebar to required angle.
- 3. Pull release lever to open position once rebar has been bent (allows dabber to retract).

Note: Power will be compromised if hydraulic oil exceeds 70 °C. Allow machine to cool before resuming operation.

4. Maintenance

Bend Module:

Check bend module and machine head for damage before each use.

Check bend module bolt for tightness before each use.

When using additional bend module and bend die, check bolts for tightness before each use.

Cleaning:

Clean machine after each use.

Use protective gloves when cleaning to protect hands from metal splinters.

Do not use air gun as this may cause dust and metal filings to enter vents.

- 1. Extend dabber and disconnect from power source.
- 2. Wipe or brush away all dust and metal filings. Pay particular attention to lower half of dabber.
- 3. Pull release lever to complete bend cycle.

Oil Level Check:

Check oil before each use. Hydraulic oil is highly flammable; keep away from sparks and naked flame. In case of ingestion or eye contact, consult a physician immediately.

- 1. Make 3-4 bends.
- 2. Fully bend next bit of rebar without pulling release lever. Unplug machine from power source.
- 3. Turn unit over so oil plug is uppermost (if machine is hot allow to cool down first).
- 4. Remove oil plug and seal washer (never remove when machine is hot).
- 5. Check oil is level with bottom of plug hole. If oil is too low, top up with approved ISO VG46 oil.
- 6. Remove air bubbles gently tilt bender lengthways and return to level position. Top up and tilt bender in opposite direction. Repeat this process until all air has been extracted.
- 7. Replace seal washer and oil plug.
- 8. Connect to power source and pull release lever to complete cycle.

Oil Change:

Change oil at least once a year or sooner if it appears dirty.

- 1. Unplug machine from power source.
- 2. Turn unit over so oil plug is uppermost (if machine is hot allow to cool down first).
- 3. Remove oil plug and seal washer (never remove when machine is hot).
- 4. Turn bender over and drain oil into a suitable receptacle. When oil ceases to drain, tilt machine to rear to allow oil trapped in piston housing to drain out. When housing is empty, tilt unit in the opposite direction to empty the residue in the pump case.
- 5. Once all oil has been drained from the machine, turn unit over so oil plug is uppermost.
- 6. Slowly fill the machine with fresh oil and replace seal washer and oil plug.
- 7. Connect machine to power source and follow procedure for Oil Level Check.

Note: Dispose of hydraulic oil in accordance with local regulations.

Bolt Tightness:

All bolts should be checked for tightness on a weekly basis or after every 500 bends (whichever comes first).

Carbon Brushes:

Inspect carbon brushes on a monthly basis. Worn brushes will result in power loss and cause irreparable damage to the armature's commutator. Check brushes immediately if a loss of power or electrical fault is experienced.

Replacing Carbon Brushes:

- 1. Unplug machine from power source.
- 2. Locate the brush caps on both sides near the back of the motor housing.
- 3. Open the brush caps with a screwdriver and remove carbon brushes from the machine.
- 4. Inspect the carbon brushes and replace where worn or damaged.
- 5. Reinstall new carbon brushes and brush caps securely.



www.rapidtool.com.au