RR150 Horizontal Log Splitter

Assembly Guide

Read this guide completely before assembly. Keep it with the machine and its engine instructions.



RR150 with the hydraulic loading table installed

About this guide

This guide covers unpacking, axle and hub assembly, wheels and fenders, the drawbar and support stands, the hydraulic loading table, battery connection, fluids, and checks before first use.

Complete the steps in order and match the photographs to your machine. If a part, fastener, or connection differs from the illustrations, contact your nearest dealer before proceeding.

NOTE This is an assembly guide. Obtain the operating instructions and become familiar with the controls and shutdown procedure before running the splitter or loading table. The photographs show component locations; they do not define lifting capacities or support ratings.

Safety and preparation

WARNING identifies a hazard that could cause death or serious injury. NOTICE identifies a risk of equipment damage.

WARNING Heavy assemblies can tip or fall. Use lifting equipment and mechanical supports rated for the load. Confirm the machine weight, approved lifting points, and support locations before lifting. Never stand or work beneath a suspended or unsupported machine.

WARNING Keep the engine off during assembly. Remove the starting key, if fitted, and disable starting as instructed in the engine manual. Keep the battery disconnected until Step 13. Secure raised parts and relieve stored hydraulic pressure by the approved machine procedure before opening a connection.

WARNING The splitting mechanism, folding rack, and loading table can crush or trap you. Support parts before removing restraints or fasteners. Keep hands and feet out of joints and movement paths. Never use fingers to align bolt holes.

WARNING Pressurized hydraulic oil can penetrate skin. Never use hands to find a leak or loosen a fitting to release pressure. Stop and isolate the machine before inspection. Seek emergency medical treatment immediately for a suspected injection injury.

Work area and tools

- Work on firm, level ground with room for lifting and the full movement of the loading table. Keep bystanders away, chock the wheels, and use the support stands.
- Wear safety glasses and protective footwear. Wear suitable gloves for sharp packing and stationary parts. Keep loose clothing and hair away from moving parts.
- Have correctly sized wrenches and sockets, a torque wrench suitable for 75 ft-lb, pliers, wheel chocks, and rated lifting equipment and mechanical supports ready.
- Keep supplied bolts, nuts, washers, spacers, and retaining parts together by location. Replace missing or damaged hardware before continuing.

Engine fuel and battery precautions

Run the engine outdoors, away from doors, windows, and air intakes. Exhaust contains carbon monoxide, which can kill. Never run it in a building or enclosed trailer. Keep clear of hot exhaust parts.

Refuel only with the engine off and cool. Keep flames, sparks, and smoking away from fuel and the battery. Remove metal jewelry and prevent tools from bridging battery terminals or a live terminal and the frame. Correct fuel leaks and clean spills before starting.

Step 1 Remove the shipping frame and unpack

Inspect the shipment for damage. Support loose parts, remove the upper steel shipping frame and wrapping, and lay out accessible components. Retain the assembly hardware and keep the main machine stable on its base until the lift is ready.



RR150 secured in its shipping frame

Step 2 Lift the machine from the base

WARNING Have a competent person control the lift. Confirm the lifting arrangement and keep slings or forks clear of hoses, controls, cylinder rods, and the engine. The photograph is a reference view, not an approved rigging specification.

Lift only enough to clear the shipping base. Lower the fixed frame onto suitable mechanical supports that provide access for the axle installation. Check stability before removing loose parts or working on the machine.



Machine being removed from the shipping base

Step 3 Unfold the discharge rack

With the machine securely supported, hold the rack while removing any shipping restraint. Unfold it under control to access the remaining packed parts. Keep hands clear of the hinge and support the rack in its intended position.





A Rack folded for shipping **B Rack unfolded to access the parts**

Remove the packed wheels, fenders, drawbar, stands, loading table, and other loose components. Check that the rack is supported and all packing has been removed.

Step 4 Prepare the axle

Locate the axle assembly and remove the two retaining bolts from the axle as shown. Keep the bolts and associated hardware together for reinstallation.



Axle retaining bolt location

NOTE Keep the axle, hubs, and bearings clean. Do not place exposed bearing surfaces or the spindle directly on the ground.

Step 5 Remove one hub

On one side of the axle, remove the cotter pin, spindle nut, washer, and hub. Keep the components in their removal order and protect the bearings and seal from dirt or damage.

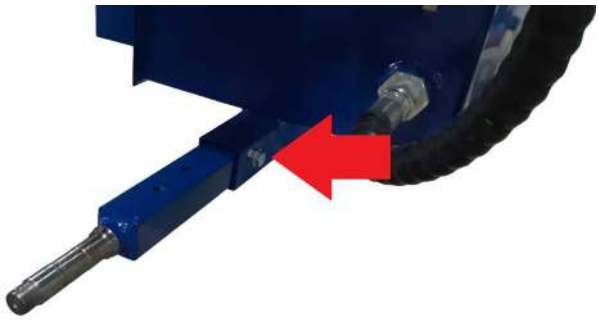




A Hub and spindle retaining hardware **B Removed hub and retaining parts**

Step 6 Install the axle and refit the hub

Slide the axle into the machine frame in the orientation shown. Align its retaining holes and reinstall the two axle bolts with their supplied hardware. Tighten the axle connections securely.





C Axle inserted into the frame **D Hub refitted to the axle**

Refit the hub, washer, and spindle nut in their original order. Set the bearing adjustment to the axle manufacturer's specification, then secure the nut with a serviceable cotter pin. Replace a damaged cotter pin.

WARNING The spindle nut sets the wheel-bearing adjustment. Do not use the 75 ft-lb wheel-nut torque on this nut. If the bearing setting is unavailable, contact your nearest dealer before completing the hub assembly. Do not lower the machine onto an unsecured hub.

After adjustment and retention, check that the hub turns smoothly and has no excessive looseness.

Step 7 Fit the hubcaps

Once both hubs are correctly assembled and retained, fit the hubcaps securely over the hub ends. Check that they seat evenly and protect the bearings.



A Hubcaps B Hubcap fitted

Step 8 Install the wheels and fenders

Fit each wheel to its hub and start all wheel nuts by hand. Tighten evenly in a crossing pattern, then torque the wheel nuts to 75 ft-lb. Attach the fenders using the supplied hardware and check tire clearance.



C Fenders D Wheels



Wheel and fender installed

Confirm the specified tire pressure before use. Keep the machine mechanically supported until the axle, hubs, wheels, drawbar, and stands are secure.

Step 9 Install the drawbar

Position the drawbar at the frame mounting location shown. Align the holes and install the supplied bolts, washers, and nuts. Tighten the mounting hardware and check the coupler and chains are attached securely.



Drawbar and supplied mounting bolts

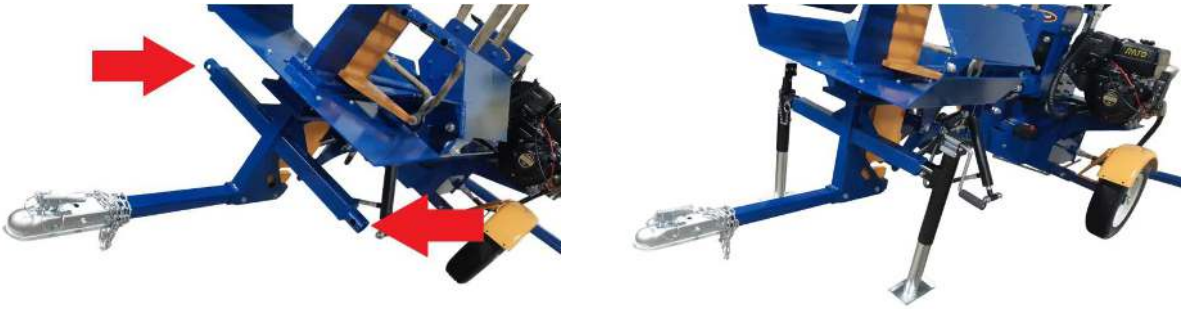


A Drawbar mounting location **B Drawbar installed**

NOTE The presence of a drawbar, coupler, and chains does not establish road-towing approval. Obtain the permitted transport method, attachment positions, and speed limits from your nearest dealer before moving the machine.

Step 10 Install both support stands

Fit a stand to each mounting location indicated below and secure it with the supplied retaining hardware. Position the stands for use and adjust them to support the machine firmly on level ground.



C Stand mounting locations **D Both stands installed**

Check that both stands are secure and the machine is stable before removing temporary mechanical supports. Keep both wheels chocked. Do not allow the machine to roll or tip while fitting the loading table.

Step 11 Prepare the loading table mounts

The frame provides mounting locations on either side of the machine. Select the intended side, then support the cylinder and remove the two table pivot bolts and cylinder attachment bolt shown below. Retain the hardware.

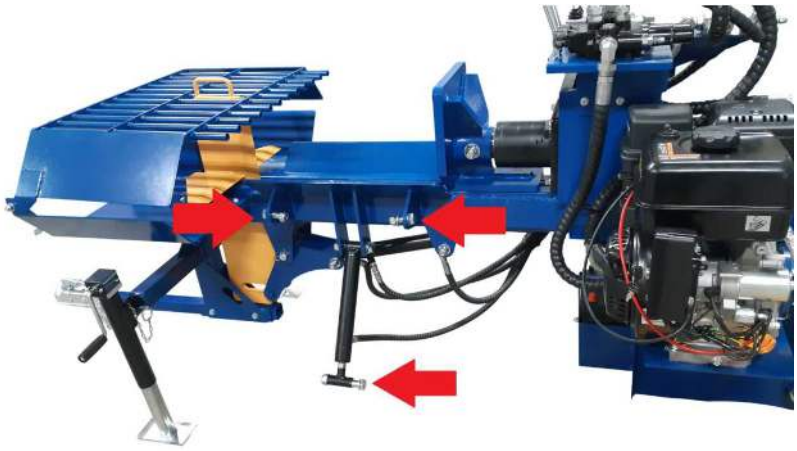


Table pivot and cylinder attachment bolt locations

Step 12 Fit the table and connect its cylinder

WARNING Support the loading table throughout installation. Keep hands clear of its pivots and cylinder connection. Do not use hydraulic power to align parts during assembly.

Align the table with the frame pivots and reinstall the pivot hardware. Align the cylinder end with the underside table bracket, install its attachment bolt, and secure the supplied retaining hardware.





A Table pivot connection **B Cylinder connected beneath the table**

Confirm that all connections are secure and the pivots are free to move as intended. Route hoses clear of sharp edges, the engine exhaust, and pinch points. If the hose routing does not suit the selected mounting side, contact your nearest dealer before operation.





C Loading table upper surface **D Cylinder bracket beneath the table**

Step 13 Connect the battery cable

With the engine switch off and the key removed, locate the wrapped cable end shown in Photo A. Remove the shipping wrap, inspect the cable and terminal, and route it to the battery location shown in Photo B.





A Wrapped battery cable end **B Battery location and cable routing**

WARNING Verify the cable identity and battery polarity from the terminal markings and engine wiring instructions before connecting it. Do not identify polarity from the photograph alone. Keep tools clear of the opposite terminal and frame.

Connect the identified cable to its specified battery terminal, tighten the connection, and refit the terminal cover. Ensure the battery is securely mounted and the cable cannot rub, pinch, or touch hot or moving parts. If the connection is unclear, contact your nearest dealer.

Check the completed assembly



RR150 with wheels stands and loading table fitted

Check the table, rack, stands, guards, and hose routing before adding fluids. Leave the engine off until the fluid and final inspection steps are complete.

Step 14 Add operating fluids

NOTICE Do not assume the machine contains operating fluids because it was factory tested. Check levels before starting. The hydraulic quantity below is approximate; use the specified level-checking method to avoid overfilling.

Fluid	RR150 filling requirement
Hydraulic oil	AW-32 hydraulic oil. Approximate initial quantity: 90 litres (about 23.8 US gallons). Confirm the correct reservoir level indicator and attachment positions for checking the level with your nearest dealer. Do not pour in the full estimated quantity without checking the level.
Engine oil	Conventional 5W-30 or 10W-30 engine oil. Use the fitted engine instructions for capacity and the correct level-checking method. Resolve any conflicting engine requirement with your nearest dealer before filling.
Gasoline	Use the fuel specified for the fitted engine. Refuel outdoors with the engine off and cool. Follow the engine's filling limit and secure the fuel cap.

Clean around each fill point before opening it. Use clean filling equipment and keep contaminants out. Refit caps or breathers correctly, clean spills, and check for leaks.

Before the first start

- Check the engine oil using the engine's specified method on level ground. Do not overfill.
- Check the hydraulic level with the machine and attachments in the specified checking positions. Obtain the approved initial filling and air-purging procedure if it has not been supplied.
- Confirm that every hydraulic hose and fitting is connected and secure. Never run the pump dry.
- Identify the splitting and loading-table controls, their neutral positions, and the normal and emergency stopping procedures. Obtain operating instruction if any function is unclear.

WARNING Do not start the engine until the machine is stable, the mechanical inspection is complete, fluid levels are correct, and the operator knows how to stop powered movement.

Step 15 Complete the final inspection

Inspect with the engine off

- Shipping restraints, packing, tools, and loose parts have been removed.
- Axle retaining bolts are secure. Hub bearings are correctly adjusted, spindle nuts are retained, and hubcaps are seated.
- Wheel nuts are torqued to 75 ft-lb. Tires are at the specified pressure and fenders are secure with adequate clearance.
- Drawbar connections and both support stands are secure. The machine is stable on firm, level ground with wheels chocked.
- Loading-table pivot and cylinder hardware is secure. The rack is supported and hoses remain clear of pinch points and hot parts.
- Battery connections are correctly identified, tight, covered, and routed safely.
- Engine and hydraulic oil levels are correct. There are no known fuel or hydraulic leaks, and guards and safety labels are in place.

Initial function check

Use the supplied operating instructions and keep everyone clear of the splitting and table movement areas. Start the engine outdoors. From the normal controls, check the splitting mechanism and loading table individually without a log. Follow the approved initial hydraulic filling and air-purging procedure.

Stop immediately for a leak, binding, unexpected movement, abnormal noise, or an unstable support. Shut down and correct the cause before continuing. Never reach into the mechanism or adjust hardware while it is running.

Initial operation recheck

After the first short period of operation, stop the engine, disable starting, and relieve hydraulic pressure by the approved procedure. Secure any raised part before inspection.

- Recheck hydraulic and engine oil levels using the specified checking methods; inspect for leaks.
- Recheck wheel-nut torque, axle and drawbar fasteners, stand retention, and table pivot and cylinder hardware.
- Inspect hose and cable routing through the movement areas and confirm that the rack and table remain secure.

Before each use, inspect supports, guards, fasteners, hoses, cables, and fluid levels. Follow the machine and engine maintenance schedules. For operating instructions, missing specifications, replacement parts, safety labels, or service assistance, contact your nearest dealer.