



# Range Road RR503 Standalone Conveyor Owner's Manual





**WARNING:**

**Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.**

Thank you very much for choosing this product! For future reference, please complete the owner's record below:

Model: RR\_\_\_\_\_ Purchase Date:\_\_\_\_\_

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it. This product is designed for certain applications only. The manufacturer cannot be responsible for issues arising from modification. We strongly recommend this product not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted us to determine if it can or should be performed on the product.

For technical questions please visit [www.range-road.ca](http://www.range-road.ca) or [www.range-road.com](http://www.range-road.com).



## **GENERAL SAFETY RULES**

**WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.**

**CAUTION: Do not allow persons to operate or assemble this conveyor until they have read this manual and have developed a thorough understanding of how the conveyor works.**

**WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.**



## **WORK AREA**

Keep the work area clean, free of clutter. Cluttered and dark work areas can cause accidents. Keep children and bystanders away while operating the saw mill. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area. Be alert to your surroundings. Using a machine in confined work areas may put you dangerously close to rotating parts.

## PERSONAL SAFETY

**Stay alert.** Watch what you are doing and use common sense when using the conveyor. Do not use while you are tired or under the influence of drugs, alcohol or medication. Inattention while operating a machine may result in serious personal injury.

**Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

**Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use a dust mask if working in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.



## USE AND CARE

- **Do not modify the conveyor in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the equipment. There are specific applications for which the conveyor was designed.
- **Always check for damaged or worn parts before using the conveyor.** Broken parts will affect the operation. Replace or repair damaged or worn parts immediately.
- **Do not exceed the conveyors load capacity.**
- **Distribute the load evenly.** Uneven loads may cause the conveyor to tip, resulting in personal injury to the operator or others.  
**Use the conveyor on flat and level surfaces** capable of supporting the conveyor and its maximum load.
- **Pulling or pushing** a load on a slanted or uneven surface can result in loss of control. The conveyor needs to be on a flat and level surface before use.
- **Store idle conveyor.** When conveyor is not in use, store it in a secure place out of the reach of children.



## **IMPORTANT SAFETY INFORMATION**

**WARNING! Read all instructions. Failure to follow all instructions listed below may result in fire, serious injury and/or DEATH.** The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

### **Set Up Precautions.**

1. Gasoline fuel and fumes are flammable, and potentially explosive. Use proper fuel storage and handling procedures. Do not store fuel or other flammable materials near the machine.
2. Have fire extinguishers nearby.
3. Operation of this equipment may create sparks that can start fires around brush and dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
4. Set up and use only on a flat and level surface. Area must be well ventilated.
5. Wear ANSI-approved safety goggles, heavy-duty work gloves, and dust mask/respirator during set up.
6. Use only lubricants and fuel recommended in the engine manual or in the Specifications Chart of this manual.



## **CARBON MONOXIDE HAZARD !!!**

**Using an engine indoors  
CAN KILL YOU IN MINUTES.**

**Engine exhaust contains carbon monoxide.  
This is a poison you cannot see or smell.**



**NEVER use gas engines indoors  
EVEN IF doors and window are open.**



**Only use OUTSIDE and far away from windows,  
doors and vents.**

1. Keep children and bystanders away from the equipment, especially during operation.
2. Do not leave the equipment unattended when it is running. Turn off the equipment (and remove safety keys, if available) before leaving the work area.
3. Wear ANSI-approved safety glasses, hearing protection, and NIOSH-approved dust mask/respirator under a full face shield during use. Wearing steel toe shoes is also recommended.
4. Wear heavy-duty work gloves when handling the blades.



5. People with pacemakers should consult their physician before use. Electromagnetic fields in close proximity to a heart pacemaker could cause pacemaker interference or pacemaker failure. Caution is necessary when near the engine's magneto or recoil starter.

6. Use only accessories that are recommended by Range Road for your model. Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.

7. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Gasoline-powered engines may ignite the dust or fumes.

8. Stay alert, watch what you are doing and use common sense when operating this piece of equipment. Do not use this piece of equipment while tired or under the influence of drugs, alcohol or medication.

9. Do not overreach. Keep proper footing and balance at all times. This enables better control of the equipment in unexpected situations.

10. Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

11. Parts, especially exhaust system components, get very hot during use. Stay clear of hot parts.

12. Do not cover the engine or equipment during operation.

13. Keep the equipment, engine, and work area clean at all times.

14. Use the equipment, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of equipment, taking into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended could result in a hazardous situation.

15. Do not operate the equipment with known leaks in the engine's fuel system.

16. **WARNING:** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code § 25249.5, et seq.)

17. **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

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Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, et seq.)

18. This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5,



et seq.)

19. When spills of fuel or oil occur, they must be cleaned up immediately. Dispose of fluids and cleaning materials as per any local, state or federal codes and regulations. Store oil rags in a bottom-ventilated, covered, metal container.

20. Keep hands and feet away from moving parts. Do not reach over or across equipment while operating.

21. Before use, check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment serviced before using. Many accidents are caused by poorly maintained equipment.

22. Use the correct equipment for the application. Do not modify the equipment and do not use the equipment for a purpose for which it is not intended.

## Service Precautions

- Before servicing, maintenance or cleaning:
  - Turn the engine switch/key to its "OFF" position.
  - Allow the engine components to completely cool.
- Always keep all safety guards in place and in proper working order. Safety guards can include muffler, air cleaner, mechanical guards and heat shields, among other guards.
- Wear approved safety goggles, heavy-duty gloves, and a dust mask/respirator during service.
- Maintain all labels on the saw mill. These show important information. If unreadable, missing or damaged, contact Range Road for a replacement.
- Have the equipment serviced by a qualified repair person using only OEM replacement parts. This will ensure that the safety of the saw mill is maintained. Do not attempt any service or maintenance procedures not explained in this manual or any procedures that you are uncertain of your ability to perform in a safe or correct manner.
- Store all equipment out of the reach of children.
- Follow scheduled engine and equipment maintenance.
- **Refueling:**
  - Do not smoke, or allow sparks, flames, or other sources of ignition around the equipment, especially when refueling.
  - Do not refill the fuel tank while the engine is running or hot.
  - Do not fill fuel tank to the top. Leave a little room for the fuel to expand as needed.
  - Refuel in a well-ventilated area only





## **TO PREVENT SERIOUS INJURY:**

**Operate only with proper spark arrestor(s) installed. Operation of this equipment may create sparks that can start fires around dry vegetation and brush. A spark arrestor may be required. The operator should contact local agencies for laws or regulations relating to fire prevention requirements.**

## **Assembly**

**Read all of the safety precautions and warnings in this manual before setting up or using this product.**

**TO PREVENT SERIOUS INJURY:** The conveyor can be dangerous if assembled incorrectly. If you do not feel completely comfortable assembling it, please have a qualified technician assemble it.

Make sure you have a large area cleared to assemble the unit and open the crate.

It is best to pull the components out of the crate and lay them out so you can access them as needed.



Find the frame section that the hydraulic tank will mount to and the frame section that the wheel will mount to, remove the 4 bolts.



Take out the 4 bolts of this frame section.

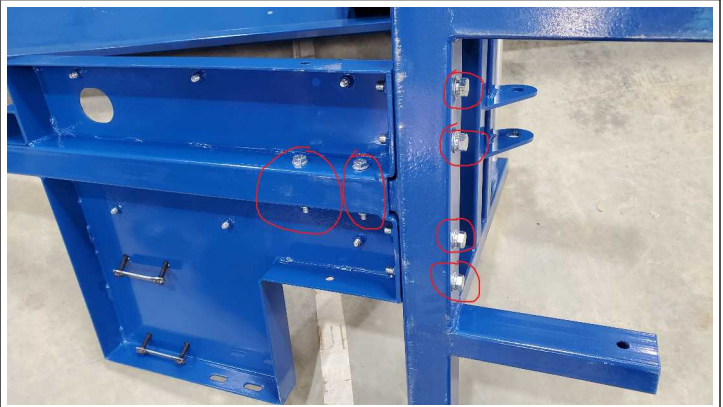


Put the 2 frame parts together and insert 4 bolts.





Lift the frame up and insert the 2 -16mm bolts with the 17mm nuts, tighten these and then tighten the 4 – 16mm bolts in the red circle as well.  
Set the frame back on the floor.



Install both axle stubs.



Tighten the swivel bolt until there is no up and down movement in the axle stub, but the axle stub must be able to move freely from side to side.





Mount the tires onto the stub axle and tighten the nut until you can insert the cotter pin into the castle nut. Put in the cotter pin and bend it so it will not interfere with the cap.



Install the hub caps.



Assembly should now look like this.





Remove the 4 – 13mm nuts from the engine mount studs, place the engine with the hydraulic pump positioned towards the wheels.



Push the studs up from the bottom through the holes in the base of the engine and attach the 13mm nuts. Once all 4 – 13mm nuts are threaded on, tighten them securing the engine into place.



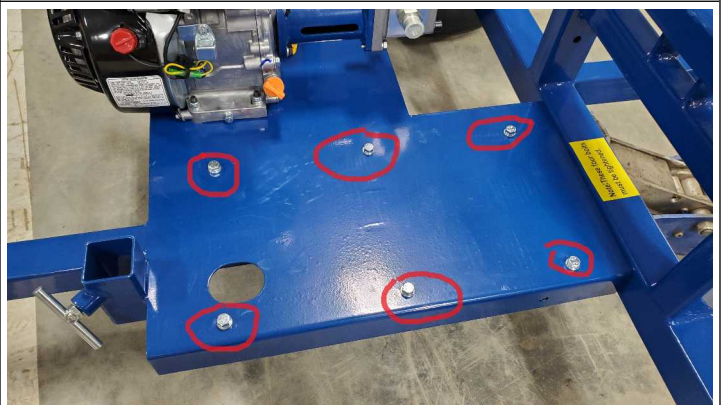
Find the exhaust protector bracket.



Install the exhaust protector bracket.



Remove these 6 bolts.



Install the hydraulic tank.



Find the front frame section. The longer section of frame tube faces the already built frame.



Take out the 2 bolts. Slide the front frame in to the tubing of the rear frame. Insert bolts and tighten them.



Find the rear cross frame that the cylinder attaches to and mount to the stubs on the frame behind the wheels. The 2 bolts must be loose enough so that the frame can move up and down without binding.



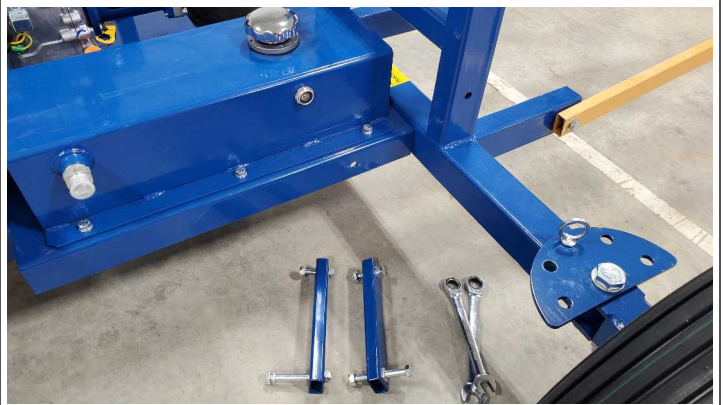




Remove the caps from the cylinder. Install the cylinder.



Install the 2 frame brackets. One on each side.







Install front draw bar. Take out the pin, slide the bar into the front frame and put the pin back in.



The 2 longer conveyor sections will have flanges that bolt together, remove the 7 - 16mm bolts x 17mm nuts, Place the 2 sections together, re-install the 7 bolts and nuts through the 2 sections and tighten.





Set the conveyor trough in place on the frame.



Find the 2 bolts with the square head.



On the lower end, loosen the bearing set screws, move the conveyor until the pins line up with the frame holes and insert the pin. Tighten the nut on the pins. Tighten the bearing set screws.



Set the last conveyor trough section in place, upside down. Insert the bolts and tighten, leave some looseness so the sections can swivel.



Find the conveyor motor.







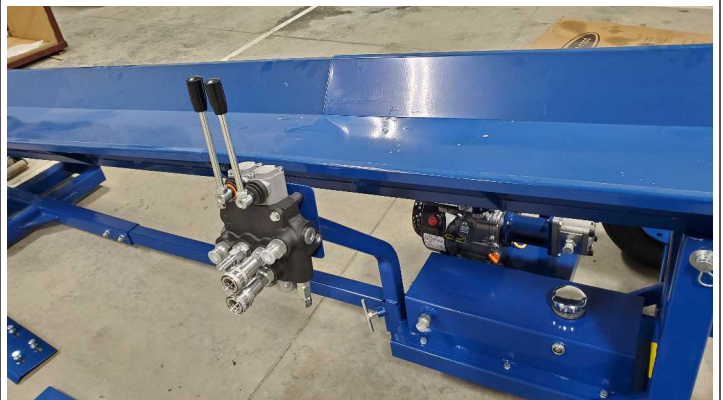
Install the motor. Tighten the 16mm Bolt x 17mm nut, tighten both allen keys on the coupler.



Insert the control T-Handle.



Install the control valve, the levers and tighten the lock nuts.



Install 2 jack mounts on the front frame.



Install the jacks.



Find the hydraulic hoses.

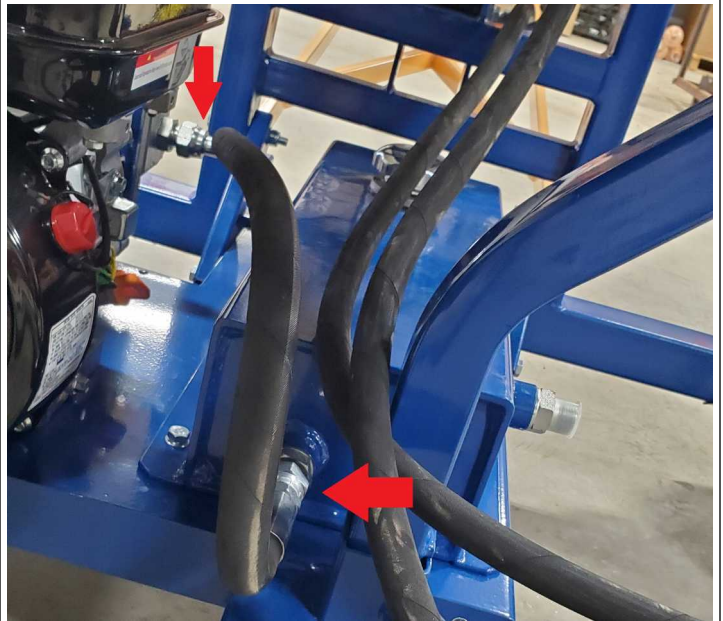
The hoses on the right side of the valve are for the cylinder, the top hose with the needle valve goes to the bottom of the cylinder, the lower hose goes to the top port on the cylinder.



The needle valve is used to control the speed that the conveyor goes up, it is best to start with the needle valve mostly closed and then adjust to your desired speed once you have the conveyor running.

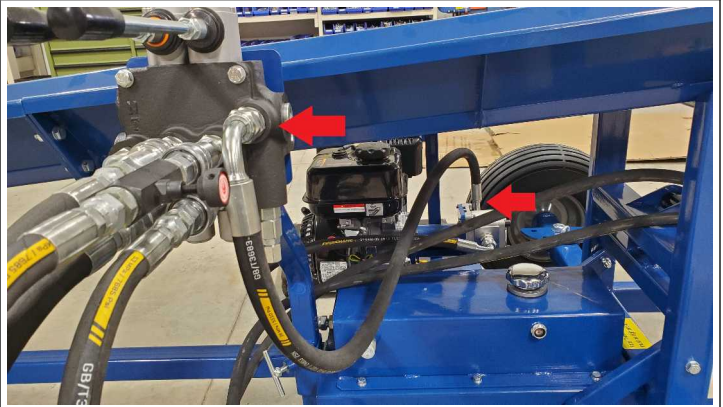


Install the suction hose between the tank and pump.





Install the pressure hose from the pump to the control valve.



Plug the conveyor motor hoses into the control valve using the quick connect fittings.



Install the motor hoses to the motor.





Install the top chain sprocket.



Tighten the 10mm nut and bolt, leave it loose enough that the roller can still slide when adjusting it.



Mount the 2 upper side extensions and tighten.





Fit the last 3 plates to the conveyor where the hydraulic motor is located.



Chain can now be installed.  
It is easier to install the chain if the conveyor is raised up.





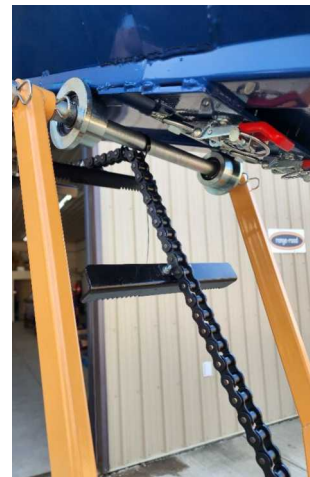
- Add 6L of AW32 Hydraulic Oil
- Add engine oil as per Engine Manual
- Grease all bearings
- Add Fuel to the engine

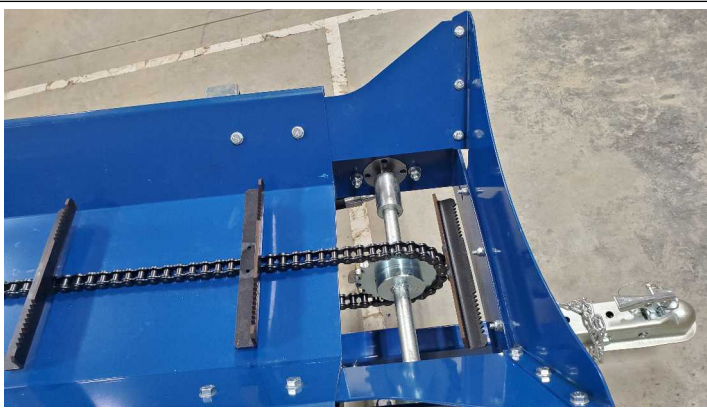
Start the engine and let it warm up for couple of minutes, once it is warm, engage the control valve levers in both directions. Shut off the engine and re-check the Hydraulic oil level.

The needle valve is used to adjust the speed at which the conveyor raises up, start at the closed or – position and slowly open it until it moves at the speed you are comfortable with.

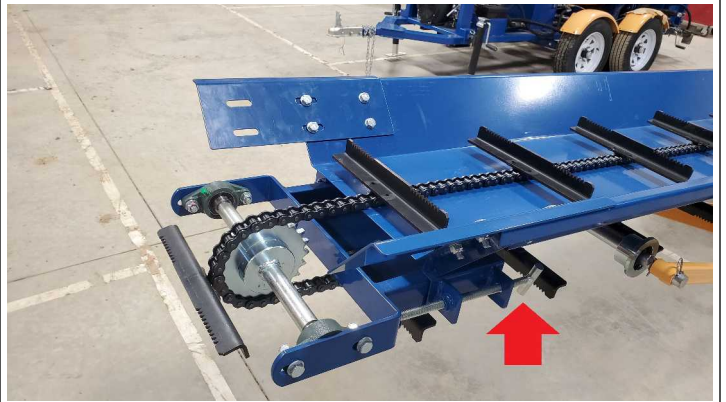


Raise the conveyor and install the chain.





Adjust both chain tensioner.





**Read all of the safety using this product. Inspect engine and equipment looking for damaged, loose or missing parts before operating. If any problems are found, do not use equipment until fixed properly.**

## Start Procedure



### **Before starting the engine:**

- A) Follow the Set Up Instructions to prepare the equipment. Follow all instructions in the separate engine manual provided with the engine.
- B) Inspect the equipment and engine.
- C) Fill the engine with the proper amount and type of fuel and oil.
- D) Read the Equipment Operation section that follows

1. Start and operate the engine according to the provided engine manual.
2. Replacement engine operating instructions can be obtained from the engine manufacturer.

**WARNING**

## Servicing

### **TO PREVENT SERIOUS INJURY FROM ACCIDENTAL STARTING:**

Turn the power Switch of the equipment to its "OFF" position and wait for the engine to cool before performing any inspection, maintenance or cleaning procedures.



## Maintenance Procedures

**Many maintenance procedures, including those not detailed in this manual, will need to be performed by a qualified technician for safety. If you have any doubts about your ability to safely service the equipment or engine, have a qualified technician service the equipment.**

**NOTE:** These procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the engine and equipment.

## Engine Maintenance and Service

Follow the instructions found in the included engine manual.

## Storage

1. Wait for engine to cool, then clean equipment with clean cloth.
2. Clean the engine and/or prepare it for storage according to engine manual instructions.
3. Apply a thin coat of rust preventive oil to all uncoated metal parts.
4. Cover and store in dry, well-ventilated area out of reach of children.
5. For cold weather operation, store the equipment in a cool dry area to prevent condensation and premature wear.

## Equipment Troubleshooting



**Follow all safety precautions whenever diagnosing or servicing the equipment or engine.**





## **PLEASE READ THE FOLLOWING CAREFULLY**

The Manufacturer and/or Distributor has provided the parts list and assembly diagram in this manual as a reference tool only. Neither the Manufacturer nor Distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he or she is qualified to replace any parts of the product. In fact, the Manufacturer and/or Distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts thereto, or arising out of his or her installation of replacement parts thereto.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

### **WARRANTY**

**One-year limited warranty**

For technical questions, please visit [www.range-road.ca](http://www.range-road.ca) or [www.range-road.com](http://www.range-road.com)