Range Road RR25T
Firewood Processor

User Manual

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This is the main operator panel for the machine, most of the control functions of the machine are located right here.

To operate the splitting ram; pull BOTH of these levers down at the same time.
When the ram reaches the end of its stroke, the left "splitter" handle will kick off automatically. The ram will then return automatically and once it is fully retracted, the right "return" lever will autmatically kick off. This will put both levers back into the center, neutral position.

The joystick functions are all laid out on the control panel. All functions should match the sticker description.

One thing to note is the saw and the clamp are operated by the same joystick function. They are on a sequence valve.

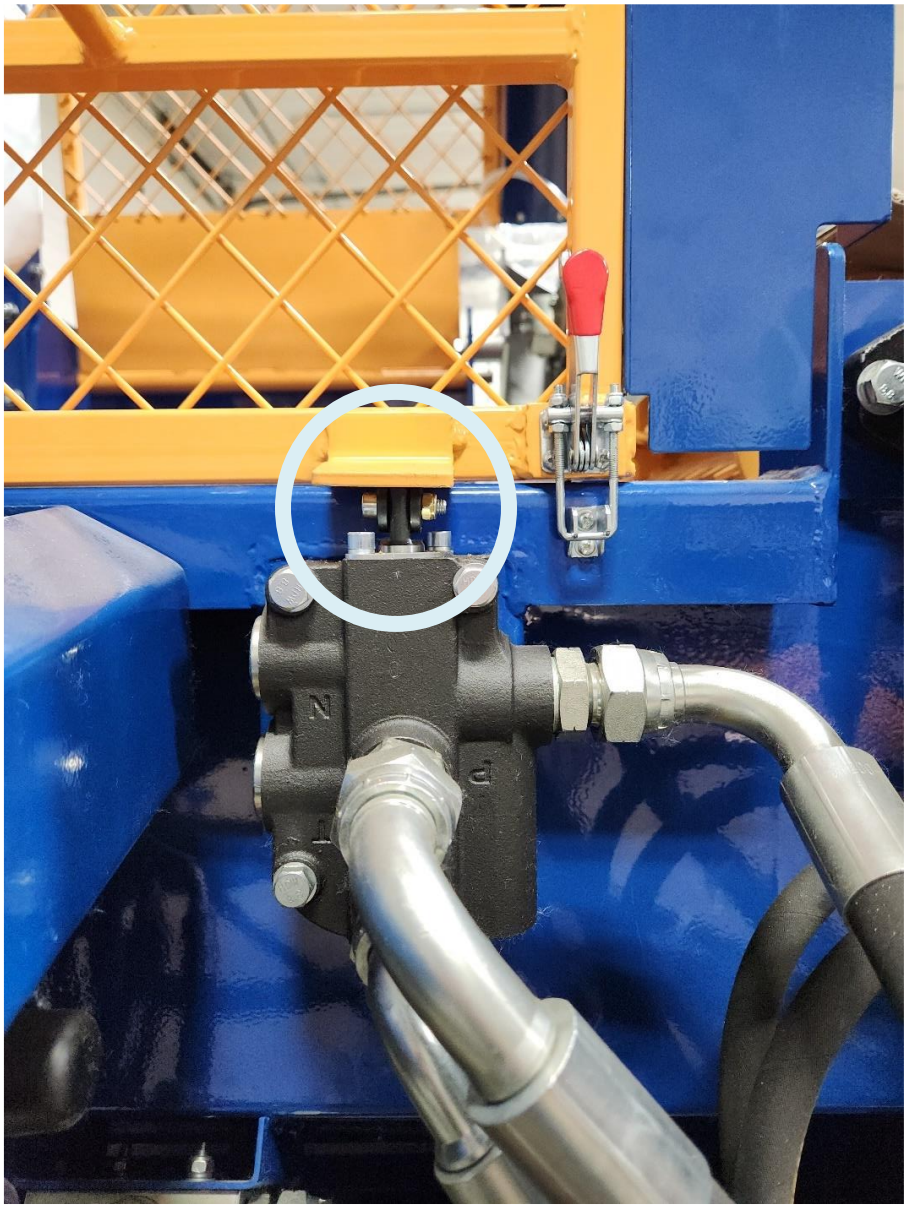
When the joystick is pulled down, the clamp will come down first and clamp the wood, continue holding he joystick down and the function will automatically switch to lowering the saw.
Same thing on the way up, the saw will raise, then continue holding up on the joystick, it will then bring the clmap up.

The adjustments for this will be outlined later in this manual.

The emergency kill switch is also located on this panel, once depressed, it will kill the engine.
To reset the kill switch, twist the red button clockwise until the button pops up.

This is the cage safety valve, when the cage is open it will stop the saw from running (the saw can be lowered but the chain will not turn)

If the saw appears to be running slow, it may be that the cage is not pushing down far enough on the valve. The orange tab can be adjusted to push down harder on the valve.



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There are many of these needle valve located on hydraulic motors or in line with the hydraulic lines. The purpose of these valves are to help manage the speed that some of these functions operate at.

If the operator feels that one or more of the hydraulic functions such as the wedge height adjustment or the infeed rollers are moving too quickly or too slowly, these valves can be adjusted to modify the operation speed.

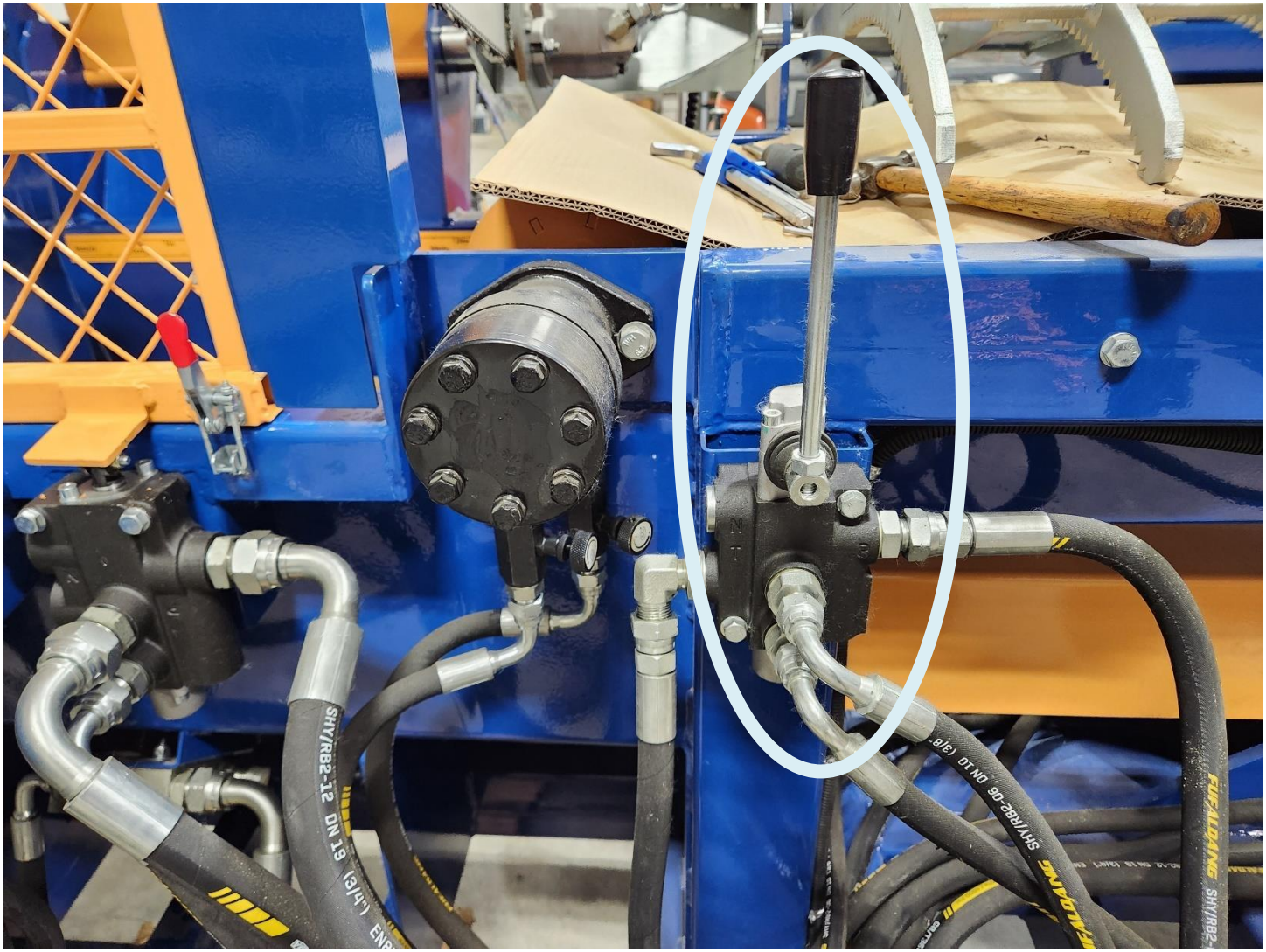
Turn the valve "in" to create a restriction and slow down functions or turn the valve "out" to reduce the retriction and speed up the functions.

The valve circled in white is for raising and lowering the log table.

The log table can be raised to 90° for transport.

There is a support bar on the front of the table that atatches to the machine with a bolt, to lock the table in place for transport or storage.

This valve is placed a small distance away from the main control panel as this function wont be used often once the machine is set in place.



The log stop on this machine is adjustable, in length via the two T-bolts shown in the picture.

Loosen the T-bolts, set the desired distance from the saw blade to this log stop, then tighten T-bolts to lock in place.

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The valve that is circled here is on the backside of the machine.

This is the saw valve. It works by stopping fluid flow to the saw when the saw is in the fully "up" position raised up or by allowing fluid to flow to the saw motor when the saw is lowered.

The silver plate shown above the valve is what turns the valve "on" or "off"

When the saw is in the "up" postion, the plate pushed down against the long bolt attached to the valve, which actuates the valve and stops the flow to the saw motor.

When the saw is pulled down via the joytick control, the plate releases off the valve, which allows it to actuate the opposite way and allows fluid to flow to the saw motor.

If the saw motor is not turning off when placed back in the "up" position, there is likely an adjustment that needs to be made with this bolt

Where the cylinder that raises and lowers the saw, meets the saw plate – there is a silver bracket on slotted holes.

This bracket is adjustable to allow the user to adjust the saw position.

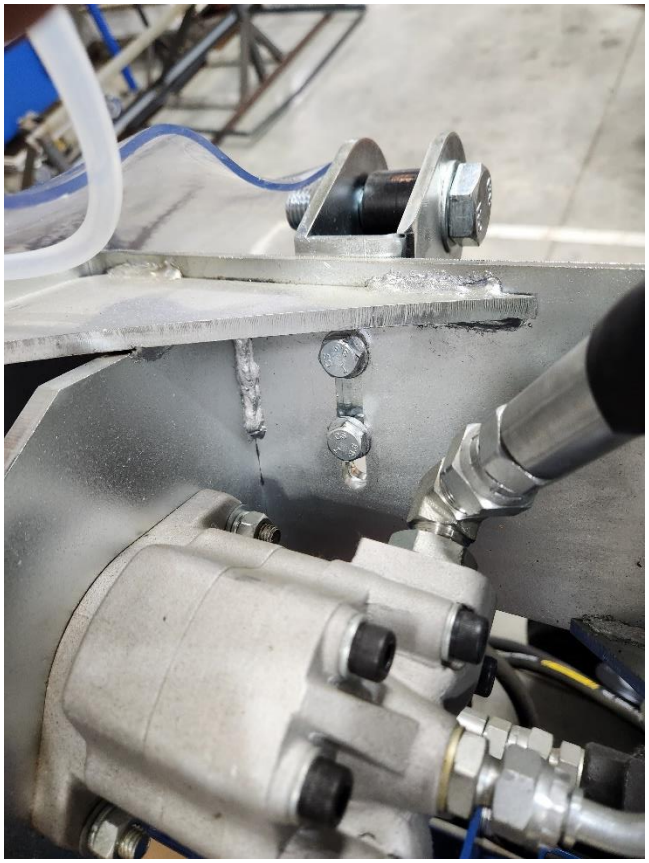
If the saw is not cutting all the way through your wood, this bracket will need to be adjusted.
It will directly affect how far the saw can go down.

The procedure for adjusting this is:
Start the machine and run the saw all the way down, until it is at its maximum lowest point(when the hydraulic cylinder that lowers the saw, will not move any further)

Then, turn the engine off to stop the saw from turning(do not simply open the cage, you must turn the engine off to avoid possible injury from a spinning saw)

Now that the saw is in its lowest position, an adjustment can be made at the rear bracket.
It will be easy to see the saw move up or down when this bracket is adjusted.

Set it so that your saw blade will go down just below the top of the infeed roller



The procedure for removing a chain or bar on this unit is outlined below.

The saw can be in any positoon(up, down, or anywhere in between)

Ensure that the machine is off.

Remove the 2 x 13mm nuts on the lubricator block.

Pull the block off the machine, remove chain and/ or bar.

Once the bar and or chain are replaced and the chain is ran around the sprocket, the lubricator block can be re-installed.

Take care to line up the small black pin on the inside of the block to the adjustment hole on the bar.

Re-install those 2 x 13mm nuts but do not tighten.

Adjust the allen head screw to tension of the chain to the desired tension.

Then, the 2 x 13mm nuts can be tighten to lock the bar in place.

The Bar oil tank is located on the backside of the blue chainsaw guard.

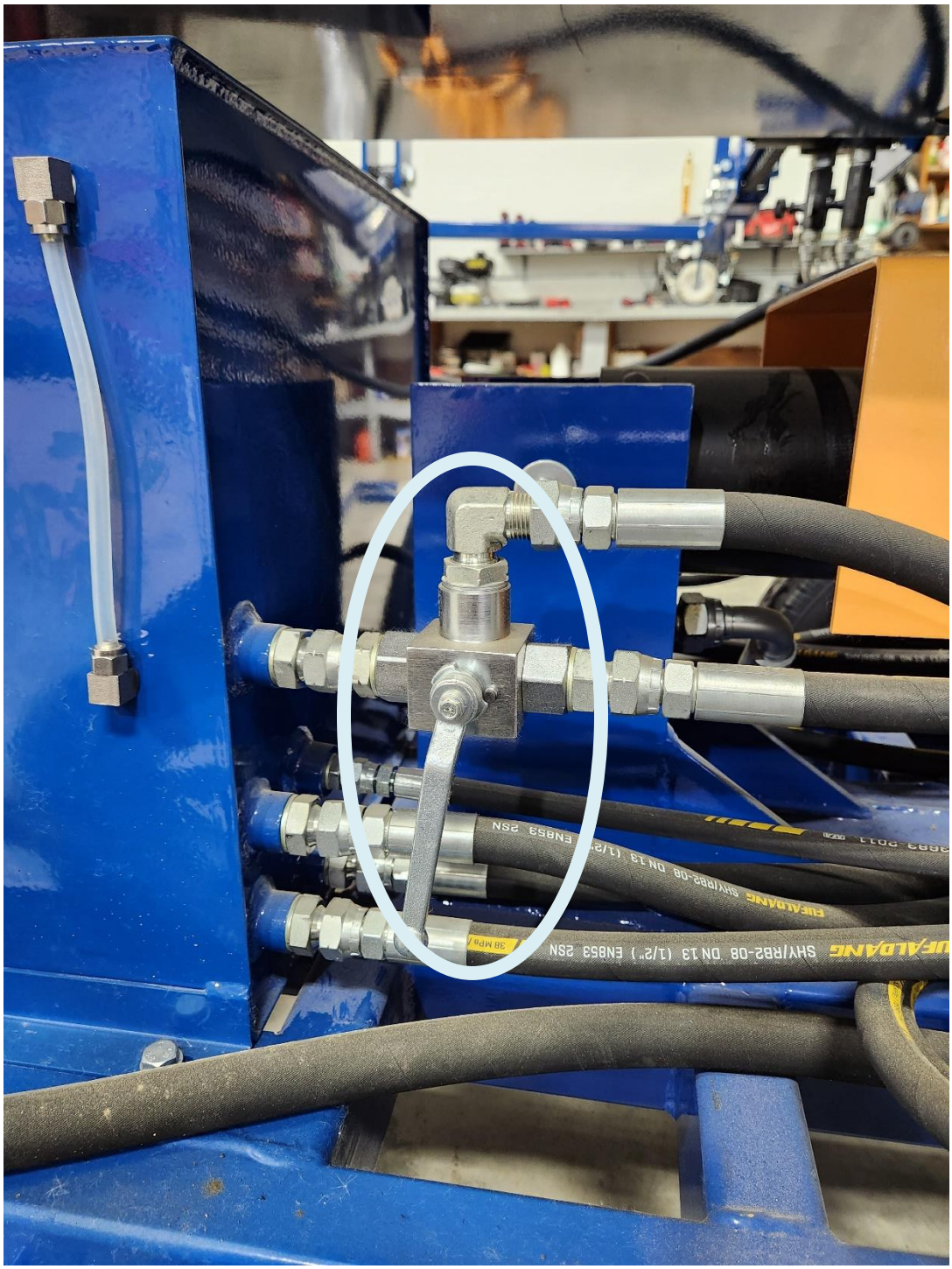
The clear hose is the sightglass for the fluid level.

The ball valve is what allows the bar oil to flow to the saw, this valve must be turned on and off manually.

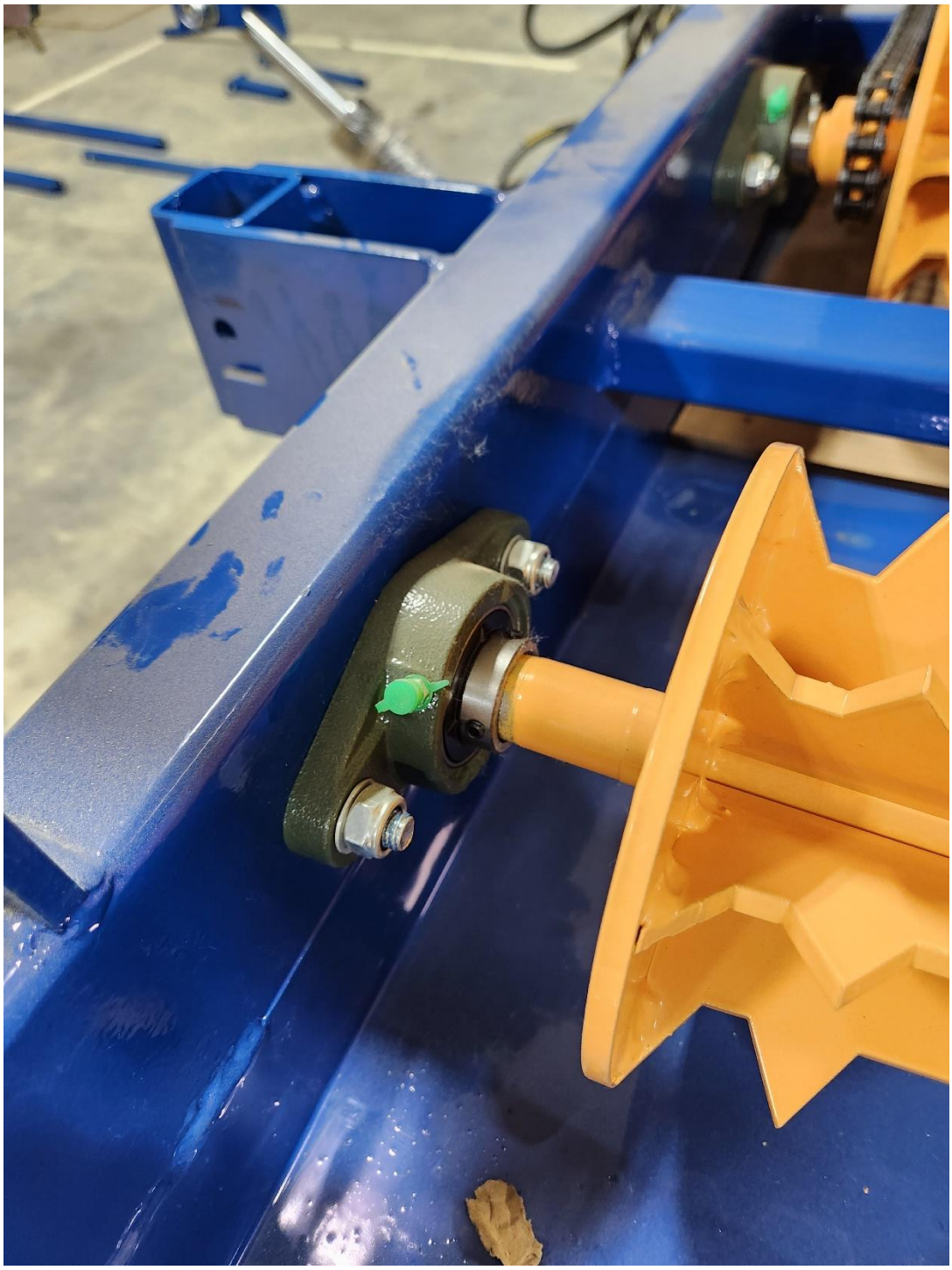
The rear conveyor has a shut-off valve located beside the hydraulic tank.

The valve can be turned to the full "on" or "off" position, but it can also be adjusted anywhere in between.

This is used for setting the conveyor chain speed to the desired setting of the operator.



The machine has 2 greasable bearings for each of the infeed rollers, as well as 3 greaseable bearings on the conveyor.

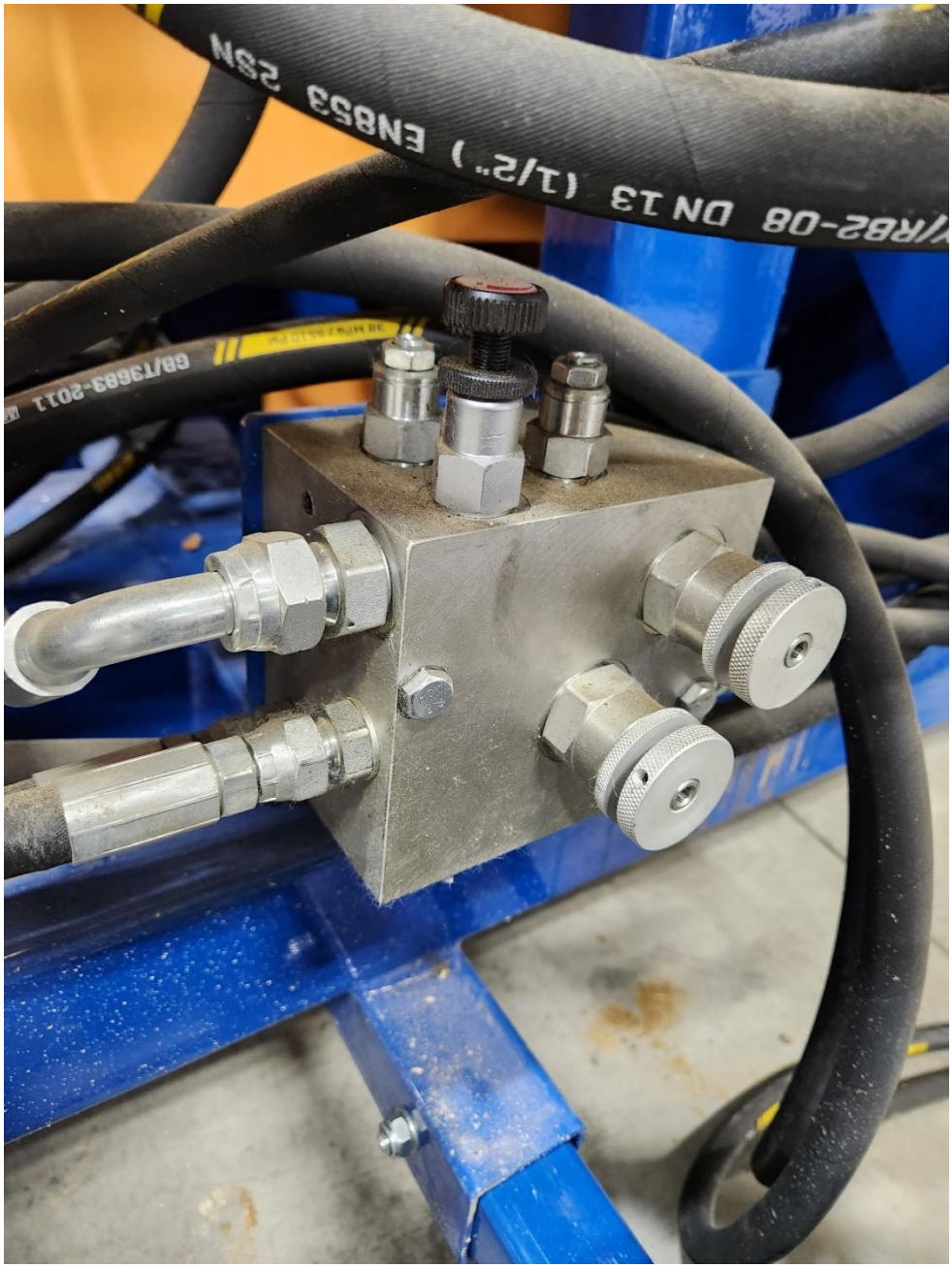


This is the hydraulic sequence block for the clamp and saw activation.

Because this unit uses one joystick function to operate both the clamp AND the saw, this block is used to allow the hydraulics to operate both functions. When a set pressure is reached inside this block, it will allow the function to change from the clamp to the saw automatically.

This block also controls the speed at which the saw descends by controlling the flow

It has multiple djustments on it that will be outlined in the next pages of this manual.

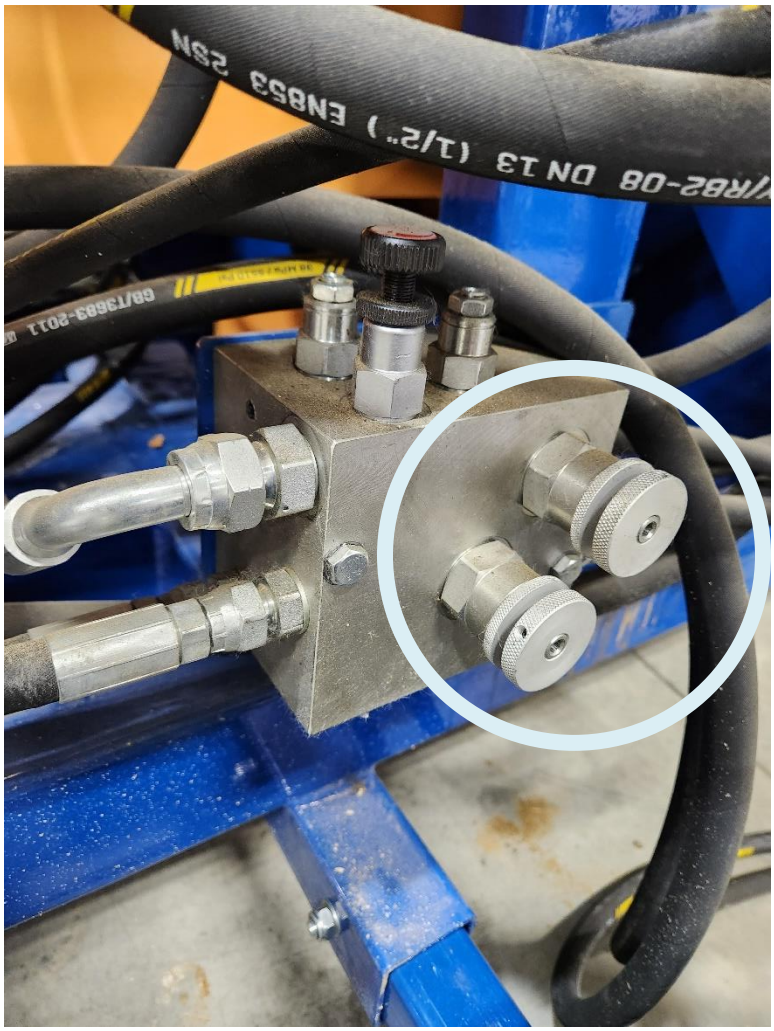


The two adjustments circled in the photo below, they are used to adjust which function operates first, when the joystick handle is pulled down.
These are adjusted at the factory, so the clamp always comes down first, then the saw. And vice-versa on the way up. Saw up then clamp up.
Adjusting these will likely disturb that relationship so these two knobs should not be adjusted unless advised by Range Road to do so.

Left, lower adjustment is used to set the clamp

Right, upper adjustment is used to set the saw

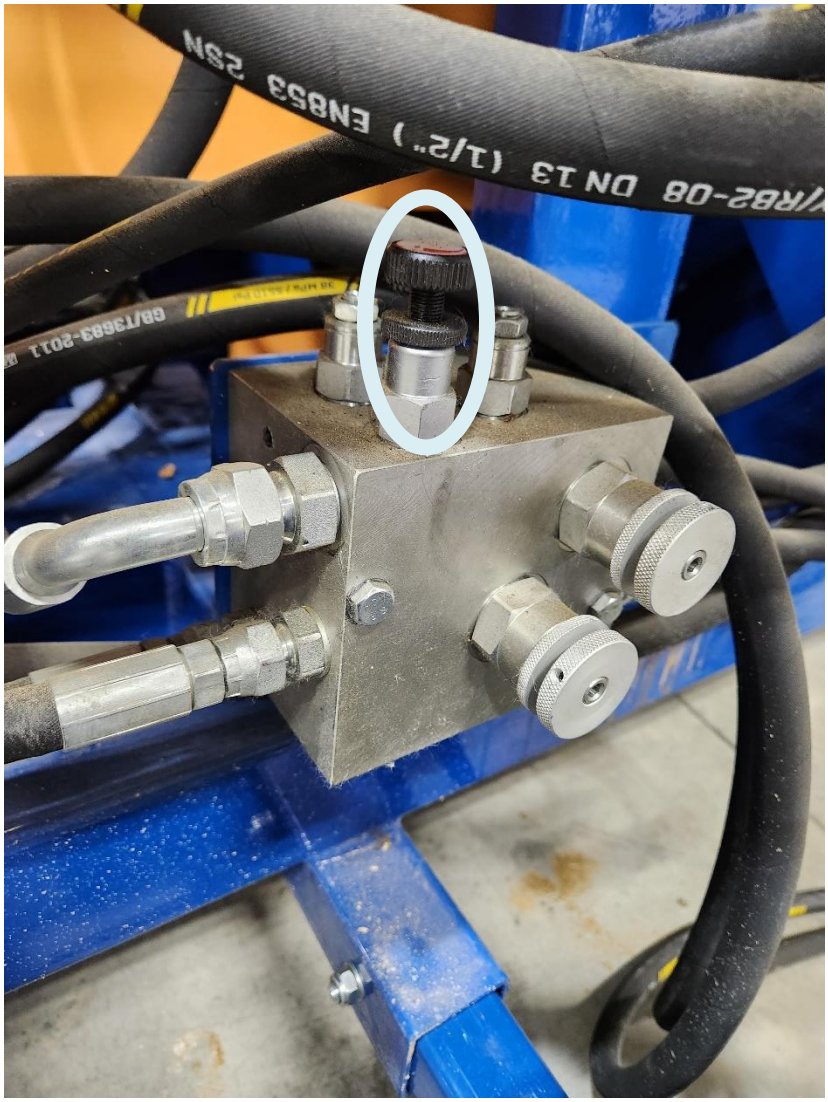
Again, these should not be adjusted unless the sequencing is out of order and you have spoken to a Range Road dealer about how to adjust them properly.



The adjustemnt knob shown in the picture is the saw "down" speed adjustment

Turning this adjustemnt "in" will allow the saw to come down slower or "out" will allow the saw to come down quicker.

Customer's should be adjusting this to fine tune the saw descent speed to their liking.



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These two adjstments are to set the pressures in which the seqence functions operate at.

The function of these allows you to increase or decrease the required pressure to switch from the clamp to the saw. And vice versa on the way up, the pressure to switch from saw up to clamp up

The Right side(closest to the rear of the machine) is used to adjust how much pressure the clamp cylinder sees before it switches to the saw.
Or in other words, how hard the clamp will "hold" onto the log, before the hydraulics switch to bringing the saw down.
This can be adjusted to give the clamp more clamping force by adjusting the allen head screw "in"

The Left side is used to adjust how much pressure the saw cylinder sees in the "up" position before it switches to the raising the clamp. This setting should not have to be adjusted unless advised by Range Road to do so.

If you think you are having issues with the sequencing or clamp holding pressure, it is always best to contact your Range Road dealer before making any adjustments.