

TROUBLE SHOOTING GUIDE

Feed Roll Runs Backwards Constantly

1. With the engine at an idle, manually shift the D03 valve, the valve mounted on the left side of the control panel, both ways to insure that the feed roll will run both directions. Insert a nail, small screwdriver or similar device in the hole at the end of both coils, shifting the valve spool. The feed roll should rotate both ways when the spool is shifted both ways.
2. Bring the engine up to operating speed. With the feed roll switch in the OFF position, observe the red LEDs in the terminal blocks at the bottom of the control panel. The normal status for this condition is:
 - A – on
 - B – off
 - C - off
 - D – on
 - E – off
 - F – off
 - G – off
 - H – off
 - I – depends upon the position of the feeder. Off unless the feeder is at the forward end of it's stroke
 - J - depends upon the position of the feeder. Off unless the feeder is at the rearmost end of it's stroke
 - K – off
 - L – off
 - M – off
 - N – off
 - O – on
 - P – on
 - Q – off
3. With the engine at operating speed, turn the feed roll switch to the FWD and REV positions. The feed roll should respond by rotating FWD and REV. With the switch in the FWD position, the red LEDs in terminal blocks G and M should come on. With the switch in the REV position, the red LEDs in terminal blocks H and N should come on.
4. If the feeder is at the rearmost position and remains there, while the feed roll runs only in the reverse direction, check the red LEDs on terminal blocks B and J. B should be off and J should be on.
 - a. If B is on, the control is getting a signal from one of the pressure switches that a high pressure condition exists in either the feed roll system of the feeder system, and is telling the feed roll and feeder to reverse. Remove both wires from the bottom of terminal block B. The red LED in terminal block B should go out and the system should begin

to function normally. Reconnect the wires one at a time to determine which pressure switch is the problem. When the problem reoccurs when you connect a wire, follow that wire to determine if it is the rear pressure switch on the D05 valve that controls the feeder or the front pressure switch on the D03 valve that controls the feed roll. Either pressure switch cause the same action – both the feed roll and feeder will reverse.

When you have identified the problem switch, you may try adjusting it by turning the collar in raising the pressure at which the switch closes, or replace the switch.

- b. If J is off, the control is not getting the signal from the rear limit switch that the feeder is at the rearmost position of its stroke. The rear limit switch may be out of adjustment or it may have failed. Another indication that the rear limit switch is not working is if the hydraulic pressure gauge is reading approximately 2500 psi and the hydraulic system is going over the relief valve. The feeder is still trying to go backwards but is against the positive stop.

Remove the cover from the rear of the hopper over the cylinders. Locate the rear limit switch on the right side down low. The feeder should contact the arm on the limit switch at the rear of its stroke causing the switch to close, illuminating the red LED on terminal block J and sending a signal to the control. Carefully reach in and pull the limit switch arm back and see if it reverses.