

Feed Roll Does Not Rotate Either Way

1. With the engine (and hydraulic pump) running at any speed, manually shift the D03 valve both ways. If this does not cause the feed roll to turn, go to steps 2-6. If this does cause the feed roll to turn, skip to step 7.
2. Insure that the flow control valve for the feed roll is not shut off. Open the flow control valve sufficiently to insure that flow is permitted.
3. Check the chain coupler between the hydraulic feed roll motor and the feed roll shaft. Are the double roller chain and both sprockets intact and in good shape?
4. Check for a sheared key in the hydraulic feed roll motor shaft. If the hydraulic feed roll motor shaft is turning, but the chain coupler is not, you have sheared the key in the motor shaft.
5. Check for a sheared key in the feed roll shaft. If the chain coupler is turning, but the feed roll is not, you have sheared the key in the feed roll shaft.
6. You may have an obstruction in the hydraulic system. Disassemble the D03 valve and/or the hydraulic motor and check for contamination.
7. With the engine at operating speed, make sure the right indicator light on the Deep Sea speed switch module is illuminated, indicating that the engine is at operating speed and that voltage is being directed to control components. If it is not, raise the engine RPM until it comes on or adjust the Trip 2 potentiometer until it comes on. If the light still is not illuminated, continue to step 8.
8. Check the tachometer. Is it reading what would appear to be the correct RPM? If not, you probably have a faulty magnetic pickup on the engine flywheel. If the tachometer reading appears to be correct, continue to step 9.

9. With the start switch on, check for voltage at terminals 1 and 2 on the start switch and terminals 1 and 11 on the Deep Sea speed switch.
10. At operating RPM, check for voltage at terminal 10 on the Deep Sea speed switch and at the common terminal of both contact blocks on the back of the 3 position Feed Roll selector switch.
11. At operating RPM and with the 3 position Feed Roll selector switch in the appropriate position, check for voltage at the normally open terminals of both contact blocks on the back of the Feed Roll selector switch.
12. At operating RPM and with the 3 position Feed Roll selector switch in the FWD position, check for voltage at common terminal 9 on relay 5 and at terminal connector F.
13. At operating RPM and with the 3 position Feed Roll selector switch in the FWD position, check for voltage at terminal 1 on relay 5 and terminal connector block J, and with the 3 position Feed Roll selector switch in the REV position, check for voltage at terminal 5 on relay 5 and terminal block K.
14. Check for a good ground at both coils on the D03 valve and at terminals .
15. Check continuity of the cable to the coils of the D03 valve.
16. If you have adequate voltage to both coils of the D03 valve in step 13 and a good ground to both coils in step 14, the problem must be a failed coil (s).

Feeder Ram Will Not Cycle

1. Make sure the Feed Roll switch is in the FWD position. The Feeder Ram will not cycle unless the Feed Roll switch is in the FWD position.
2. With the engine (and hydraulic pump) running at any speed, manually shift the D05 valve both ways. If this causes the feeder ram to cycle, go to step 4. If the feeder ram does not cycle, go to steps 2-3.
3. Insure that the flow control valve for the feeder ram is not shut off. Open the flow control valve sufficiently to insure that flow is permitted.
4. You may have an obstruction in the hydraulic system. Disassemble the D05 valve and/or the hydraulic cylinders and check for contamination.
5. With the engine at operating speed, make sure the right indicator light on the Deep Sea speed switch module is illuminated, indicating that the engine is at operating speed and that voltage is being directed to control components. If it is not, raise the engine RPM until it comes on or adjust the Trip 2 potentiometer until it comes on. If the light still is not illuminated, continue to step 5.
6. Check the tachometer. Is it reading what would appear to be the correct RPM? If not, you probably have a faulty magnetic pickup on the engine flywheel. If the tachometer reading appears to be correct, continue to step 6.
7. With the start switch on, check for voltage at terminals 1 and 2 on the start switch and terminals 1 and 11 on the Deep Sea speed switch.
8. At operating RPM, check for voltage at terminal 10 on the Deep Sea speed switch and at the common terminals of the contact blocks on both the Ram Start (green) switch and the Ram Stop (red) switch.
9. At operating RPM, check for voltage at the normally open terminal of both the Ram Start (green) and the Ram Stop (red) switches.

10. At operating RPM and with the Ram Start (green) depressed, check for voltage at terminal B on relay 2 and terminal 8 on relay 3.
11. At operating RPM and with the Ram Stop (red) depressed, check for voltage at terminal 8 on relay 2.
12. At operating RPM and with the 3 position Feed Roll selector switch in the FWD position, check for voltage at common terminal 7 on relay 2, terminal 4 on relay 2 and common terminal 7 on relay 3.
- 13.